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**EULOPHIDAE OF COSTA RICA
(HYMENOPTERA: CHALCIDOIDEA), 5**

The genus *Galeopsomyia* Girault

by

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**EULOPHIDAE OF COSTA RICA
(HYMENOPTERA: CHALCIDOIDEA), 5
THE GENUS *GALEOPSOMYIA***

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ABSTRACT

The genus *Galeopsomyia* Girault is revised for the first time. All 19 previously described species are treated, and 302 new species are described and imaged. All species are listed in Appendix A. The species are divided into six species groups, with 11 species unplaced. All new species are based on females, the male is associated with the conspecific female and described (including images) in 48 species. *Galeopsomyia* is confined to the New World with its main distribution in subtropical and tropical parts. Of the previously described species five were described from the Nearctic region and 14 from the Neotropical region, three of the Nearctic species were from Florida, a subtropical part of the Nearctic region. All new species are from the Neotropical region, mainly from Costa Rica but also with material from Belize, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru, and the West Indies (St Vincent, Trinidad & Tobago). A new set of characters is introduced to define *Galeopsomyia* on a morphological basis. These characters include three pairs of holes in the cuticle on the head, holes that are covered by a membrane, and a swelling close to two of these holes. The function of this character set is unknown. A key with subkeys is presented, including all known species. Hosts (in many cases presumed) and/or host plants are known for 50 species and the overwhelming majority of the species are associated with galls. The one exception is *G. fausta* LaSalle that targets Lepidoptera leafminers, e.g. the citrus leafminer (*Phyllocnistis citrella* Stainton). A lectotype is designated for *Galeopsomopsis multisulcata* Girault. The species *Galeopsomopsis squamosus* Girault belongs in *Galeopsomyia* but it was not possible to incorporate into this study because too many parts are missing from the type specimen. The species *G. glypta* Perito, Costa & Lara is not a *Galeopsomyia* and is not included, but the current placement is left open as it does not readily fit any described genus of Tetrastichinae.

RESUMEN

El género *Galeopsomyia* Girault se revisa por primera vez. Las 19 especies descritas anteriormente son tratadas, y 302 nuevas especies son descritas e ilustradas. Todas las especies están listadas en el Apéndice A. Las especies se dividen en seis grupos de especies, con 11 especies sin colocar en grupo. Todas las nuevas especies se basan en hembras, el macho se asocia con la hembra conespecífica y se describe (incluidas imágenes) en 48 especies. *Galeopsomyia* se encuentra solamente en el Nuevo Mundo con su distribución principal en las regiones subtropicales y tropicales. De las especies descritas anteriormente, cinco fueron descritas de la región Neártica y 14 de la región Neotropical, tres de las especies Neárticas eran de Florida, una parte subtropical de la región Neártica. Todas las especies nuevas son de la región neotropical, principalmente de Costa Rica, pero también con material de Belice, Bolivia, Brasil, Colombia, Ecuador, México, Perú y las Indias Occidentales (San Vicente, Trinidad y Tobago). Se introduce un nuevo conjunto de caracteres para definir *Galeopsomyia*,

basado en la morfología. Estos caracteres incluyen tres pares de agujeros en la cutícula de la cabeza, agujeros que están cubiertos por una membrana y con una hinchazón cerca de dos de estos agujeros. Se desconoce la función de este grupo de caracteres. Se presenta una clave con subclaves, incluyendo todas las especies conocidas. De lo que se conoce de la biología es que la gran mayoría de las especies están asociadas con agallas. Se conocen los hospederos de 50 especies, aunque en muchos casos están basados en evidencia indirecta. La única excepción a la asociación con agallas es *G. fausta* LaSalle que ataca a los minadores de hojas de Lepidoptera, por ejemplo, el minador de hojas de cítricos (*Phyllocnistis citrella* Stainton). Un lectotipo se designa para *Galeopsomopsis multisulcata* Girault. La especie *Galeopsomopsis squamosus* Girault pertenece a *Galeopsomyia*, pero no fue posible incorporarla a este estudio porque faltan demasiadas partes en el espécimen tipo. La especie *G. glypta* Periotto, Costa & Lara no es una *Galeopsomyia* y no está incluida, pero la ubicación actual se deja abierta ya que no se ajusta fácilmente a ningún género descrito de Tetrastichinae.

SUMÁRIO

O gênero *Galeopsomyia* Girault é revisado pela primeira vez. Todas as 19 espécies descritas anteriormente são tratadas e 302 novas espécies são descritas e fotografadas. Todas as espécies estão listadas no Apêndice A. As espécies estão divididas em seis grupos de espécies, com 11 espécies não classificadas. Todas as novas espécies são baseadas em fêmeas, o macho está associado à fêmea coespecífica e descrito (incluindo imagens) em 48 espécies. *Galeopsomyia* está confinada ao Novo Mundo com sua distribuição principal em partes subtropicais e tropicais. Das espécies previamente descritas, cinco foram descritas da região Neártica e 14 da região Neotropical, três das espécies Neárticas eram da Flórida, uma parte subtropical da região Neártica. Todas as novas espécies são da região Neotropical, principalmente da Costa Rica, mas também com material de Belize, Bolívia, Brasil, Colômbia, Equador, México, Peru e Índias Ocidentais (São Vicente, Trinidad e Tobago). Um novo conjunto de caracteres é introduzido para definir *Galeopsomyia* em uma base morfológica. Esses caracteres incluem três pares de orifícios na cutícula da cabeça, orifícios cobertos por uma membrana e um inchaço próximo a dois desses orifícios. A finalidade deste conjunto de caracteres é desconhecida. Uma chave com subchaves é apresentada, incluindo todas as espécies conhecidas. Hospedeiros (em muitos casos presumidos) e/ou plantas hospedeiras são conhecidos para 50 espécies e a esmagadora maioria das espécies está associada a galhas. A única exceção é *G. fausta* LaSalle que tem como alvo lepidópteros minadores, por ex. minador-dos-cítricos (*Phyllocnistis citrella* Stainton). Um lectótipo é designado para *Galeopsomopsis multisulcata* Girault. A espécie *Galeopsomopsis squamosus* Girault pertence a *Galeopsomyia*, mas não foi possível incorporá-la neste estudo porque muitas partes estão faltando no espécime-tipo. A espécie *G. glypta* Periotto, Costa & Lara não é uma *Galeopsomyia* e não está incluída, mas a colocação atual é deixada em aberto, pois não se encaixa facilmente em nenhum gênero descrito de Tetrastichinae.

Key words

Tetrastichinae, parasitoids, galls, leaf mines, host plants, natural history, nearctic, neotropics, new species

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INTRODUCTION

The genus *Galeopsomyia* is one of several groups in subfamily Tetrastichinae found exclusively or predominantly in the neotropics, none of which has been comprehensively investigated. Prior to this study 20 nominal species of *Galeopsomyia* were known, five from the Nearctic and 15 from the Neotropical region. Most *Galeopsomyia* species were described in the late 19th century, with only four species described in the (late) 20th century. Thus very little has been done with this genus for more than a century. The known species were described in thirteen different papers, but they have never been treated comprehensively. Apart from species descriptions *Galeopsomyia* has been included in a key to world genera of Tetrastichinae (Bouček 1977), and in a study of the Nearctic genera of Tetrastichinae (LaSalle 1994). The status of the name *Galeopsomyia* was uncertain, involving both Aphelinidae and Eulophidae, until LaSalle & DeBach (1982) sorted out the nomenclature. Later, LaSalle & Schauff (1992) synonymized *Galeopsomopsis* Girault with *Galeopsomyia*. Hosts were known for six of the species.

This is the first comprehensive study of *Galeopsomyia* and it is based on a large amount of material from the Neotropical region, mainly from Costa Rica. Altogether 321 species are included, of which 302 are described here. The material included from other parts of the neotropics outside of Costa Rica is quite small, but still diverse in species. Therefore it is anticipated that this study includes only a minor part of the total number of species of *Galeopsomyia*. Even though the majority of species included here are recorded only from Costa

Rica, the extensive distribution for some of the species, from the West Indies to South America, indicates that many of the species are widely distributed.

The species are based exclusively on females. Males are distinctly less common in the samples and they are included only if they can be linked to conspecific females by way of biology (reared from same host), or if collected during same collecting event and then only if there are females of just one species present in the sample, or if linked by molecular data (CO1). Males have been associated with females for only 48 of the species. Morphological characteristics in the female are usually found in the antennae or in the gaster and since males have different antennae and gasters these characteristics are unique to females. Unless distinguishing features are found in other body parts, e.g. the mesosoma, it is not possible to link sexes of the same species using morphological features.

This is the fifth major contribution to knowledge of the Eulophidae in the Neotropical region with focus on the Costa Rican fauna. The previous four contributions are in Hansson (2002, 2004, 2009, 2022a). Other smaller contributions to this group in Costa Rica are in Hansson (2005, 2010a&b, 2011a&b, 2012, 2020a, b, c, 2021, 2022b, 2023), Hansson & LaSalle (2003), and Hansson *et al.* (2015, 2021).

BIOLOGY

Of the 321 species of *Galeopsomyia* treated here, rearing records exist for 50 (Table 1), that is, 16% of the species. The vast majority have been reared from galls and more than half of the rearing records are from galls induced by Cecidomyiidae (Figs 1–7). Less common hosts include galls induced by Tephritidae, Agromyzidae (Diptera), Triozidae (Hemiptera), Braconidae, Cynipidae, and (possibly) Eurytomidae (Hymenoptera). A few species have been reared from galls where the gall-inducer is unknown and only a host plant record exists. In the vast majority of cases the exact biology of *Galeopsomyia* within the gall is not known, i.e. whether it is a parasitoid of the gall-inducer or another occupant of the gall, or whether it is an inquiline that feeds on gall tissue, or both. One of the few species for which more detailed information exists is *G. philodendrae*, which appears to be a parasitoid of the gall-inducing braconid (Infante *et al.* 1995). It should be noted that the record of *Galeopsomyia* from a trioqid gall on *Psidium* (Myrtaceae) in Brazil (Carneiro *et al.* 2013) is some other genus of Tetrastichinae (identification error by P.E.H.).

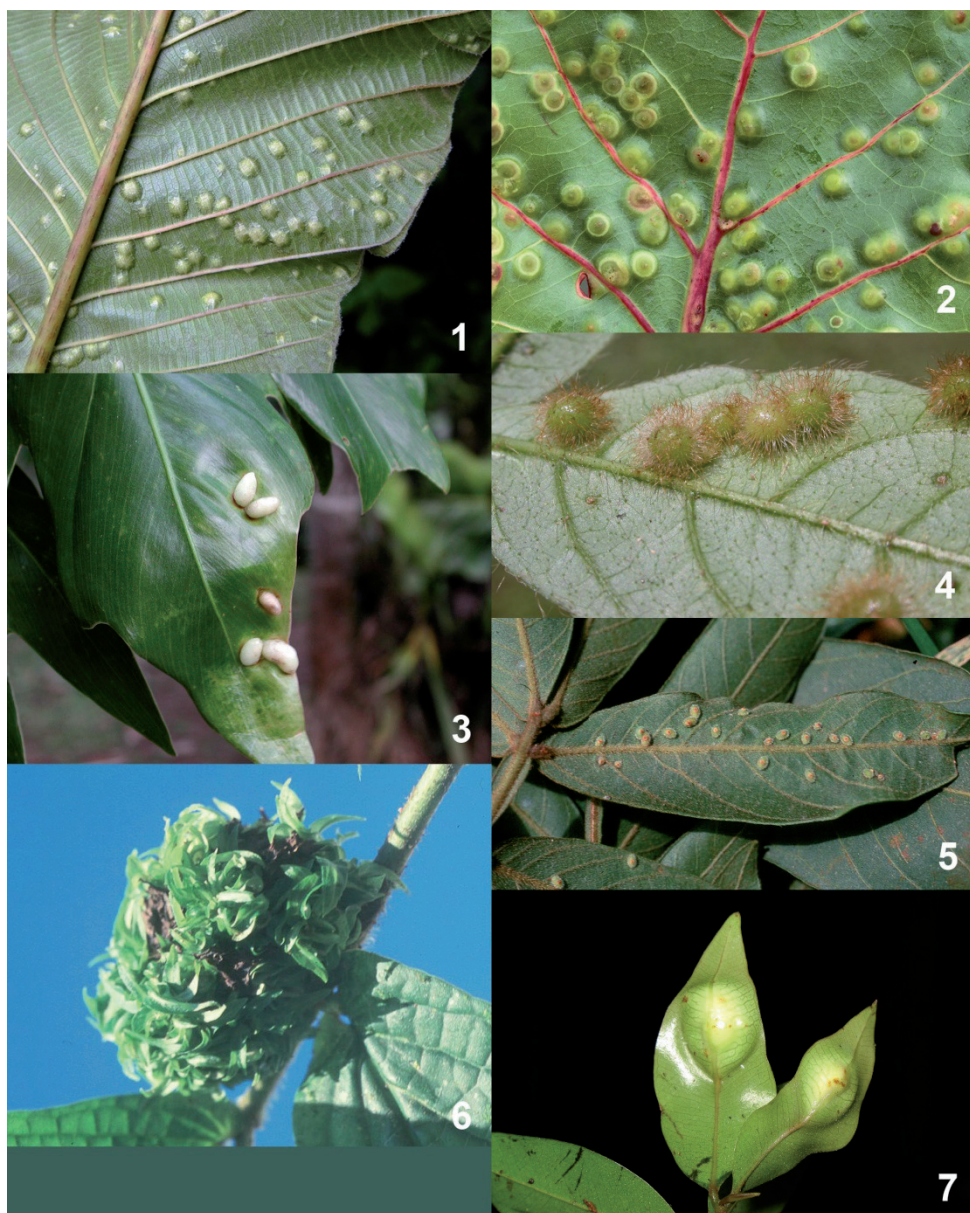
It is interesting to note that in several cases multiple species of *Galeopsomyia* have been reared from the same gall at the same location. For example, two species (*G. admirabilis*, *G. insignis*) have been reared from *Zalepidota* (Cecidomyiidae) galls on *Piper crassinervium* (Piperaceae), two species (*G. fieris*, *G. schefflerae*) from cecidomyiid galls on *Schefflera rodriguesiana* (Araliaceae), and two species (*G. melasoma*, *G. roupalae*) from cecidomyiid galls on *Roupala* sp. (Proteaceae). In the case of the latter, preliminary observations suggest that one of the species might be an inquiline (P. Hanson, unpublished). Three species (*G. candica*, *G. cissusae*, *G. loboii*) have been reared from *Cissus verticillata* (Vitaceae) fruits; preliminary observations suggest that an undetermined species of Cecidomyiidae induces galls in the fruit while an unknown gall-inducer occurs in the seeds. Four species (*G. druparum*, *G. gonzalezi*, *G. leonae*, *G. perseae*) have been reared from small, deformed avocado (Lauraceae: *Persea americana*) fruits. At least some of these are probably parasitoids or inquilines of *Bruggmaniella perseae* (Cecidomyiidae); the larva of this cecidomyiid feeds in the ovary of a young fruit and the infested fruit (less than 2 cm long) falls from the tree shortly after adult

emergence (Gagné *et al.* 2004). Preliminary observations suggest that *G. leonae* emerges in large numbers from a single fruit, more individuals than can be accounted for by feeding on the single cecidomyiid larva that is present (P. Hanson, unpublished). In Guatemala three unidentified species of *Galeopsomyia* have been reared from another cecidomyiid species, *Asphondylia websteri* Felt, in immature avocado fruits (Hoddle *et al.* 2009). Further research is required to elucidate the biology of all these species.

Among the non-gall records, the most common are from seeds, and it is possible that the host in most of these cases is a phytophagous hymenopteran. *Galeopsomyia itauna* was reared from seeds of *Ilex affinis* (Aquifoliaceae), and is presumably a parasitoid of *Prodecatoma juliae* (Eurytomidae) (Perioto *et al.* 2009). *G. myrsineae* was reared from *Myrsine juergensenii* and *M. coriacea*; the actual host is unknown, but seeds of the latter harbour an undescribed, phytophagous species of *Megastigmus* (Megastigmidae) (P. Hanson, unpublished). *Galeopsomyia carinifer* has been reared from seeds of various species of *Palicourea* and *Psychotria* (Rubiaceae); the actual host is unknown but several other species in these plant genera harbour species of *Allorhogas* (Braconidae) that are probably phytophagous (Zaldívar-Riverón *et al.* 2018). Hymenopteran larvae that feed in developing seeds are quite similar to gall formers in terms of their biology (Jansen-González *et al.* 2020) and it is thus not surprising that some *Galeopsomyia* are associated with these hosts.

The biology of *Galeopsomyia fausta* deviates from that of the other species, and it is also quite distinct morphologically (e.g. mediobasal part of first gastral tergite with strong transverse ridge from which short carinae extend posteriorly). It is the only species in the genus currently known to parasitize leafminers. The biology of this species is better known than that of any other species of *Galeopsomyia* because of its use in biological control of the citrus leaf miner, *Phyllocnistis citrella* (Gracillariidae). The latter was accidentally introduced into the Americas from Asia (Heppner 1993), and thus parasitization by *G. fausta* is an example of a native parasitoid recruited onto an invasive pest. Until now native hosts of this parasitoid were unknown, but we here provide the first record of a native host, *Phyllocnistis* sp. on *Trichilia havanensis* (Meliaceae).

Llácer *et al.* (2005) summarized the biology of *G. fausta* and provided detailed descriptions of the immature stages; the following is derived from their publication. The female wasp generally attacks the pupal stage and apparently does not paralyze the host, but rather attaches its egg to the inner leaf surface of the pupal chamber. This oviposition behavior is not known to occur in any of the other parasitoids of the citrus leafminer. Upon emergence from the egg, the first instar larva moves onto the host, which dies soon afterwards (despite the enormous size difference between parasitoid and host). The larva feeds as a solitary ectoparasitoid and has three instars.



Figs. 1–7. A selection of galls from which *Galeopsomyia* specimens have been reared – (1) *Cecropia obtusifolia* (Urticaceae) leaf gall, host of *G. cecropiae*, (2) *Coccoloba uvifera* (Polygonaceae) leaf gall, host of *G. coccolobae*, (3) *Philodendron radiatum* (Araceae) leaf gall, host of *G. philodendrae*, (4) *Inga vera* (Fabaceae), fuzzy spherical gall, host of *G. ingae*, (5) *Inga vera* (Fabaceae), capsule-shaped gall, host of *G. ingae*, (6) *Piper sinugaudens* (Piperaceae), stem gall, host of *G. piperiae*, (7) *Myrcia splendens* (Myrtaceae) leaf gall, host of *G. myrciae*. Fig. 6 photo P. Hanson, remaining photos K. Nishida.

<i>Galeopsomyia</i> species	Host/Host plant
<i>G. admirabilis</i>	<i>Zalepidota</i> (Diptera: Cecidomyiidae)/ <i>Piper crassinervium</i> (Piperaceae), from galls on leaf veins, petiole and stem
Hansson sp.nov. <i>G. ambigua</i>	<i>Procecidochares</i> sp. (Diptera: Tephritidae)/ <i>Ageratina</i> sp. (Asteraceae), from stem gall
Hansson sp.nov. <i>G. bidensiae</i>	Unknown/flowers of <i>Bidens</i> sp. (Asteraceae)
Hansson sp.nov. <i>G. blakeae</i>	Unknown/ <i>Blakea grandiflora</i> (Melastomataceae), from stem gall
Hansson sp.nov. <i>G. burra</i>	Unknown/from large fruit of <i>Eugenia monteverdensis</i> (Myrtaceae)
Hansson sp.nov. <i>G. candida</i>	Unknown/ <i>Cissus verticillata</i> (Vitaceae), from fruit gall
Hansson sp.nov. <i>G. carinifer</i>	Unknown/ <i>Palicourea lasiorrhachis</i> , <i>Palicourea padifolia</i> , <i>Psychotria elata</i> , <i>Psychotria valeriana</i> (Rubiaceae), <i>Myrsine juergensenii</i> (Myrsinaceae), from seeds (fruits)
Hansson sp.nov. <i>G. cecropiae</i>	Cecidomyiidae/ <i>Cecropia obtusifolia</i> (Urticaceae), from leaf gall (Fig. 3)
Hansson sp.nov. <i>G. cissusae</i>	Unknown/ <i>Cissus verticillata</i> (Vitaceae), from fruit gall
Hansson sp.nov. <i>G. clematisae</i>	Cecidomyiidae/ <i>Clematis haenkeana</i> (Ranunculaceae), from petiole gall
Hansson sp.nov. <i>G. coccolobae</i>	Cecidomyiidae (probably <i>Ctenodactylomyia</i>)/ <i>Coccoloba uvifera</i> (Polygonaceae), from blister gall on leaf (Fig. 4)
Hansson sp.nov. <i>G. crotonae</i>	Cecidomyiidae/ <i>Croton schiedeanus</i> (Euphorbiaceae), from spherical leaf gall
Hansson sp.nov. <i>G. druparum</i>	Unknown/ <i>Persea americana</i> (Lauraceae), from fruit gall
Hansson sp.nov. <i>G. epidius</i> (Walker)	<i>Asphondylia</i> sp. (Cecidomyiidae)/ <i>Ambrosia psilostachya</i> (Asteraceae); unidentified Cecidomyiidae on <i>Xanthium</i> sp. (Asteraceae)
<i>G. fausta</i> LaSalle	new records <i>Phyllocnistis citrella</i> Stainton (Lepidoptera: Gracillariidae) (Cobo Nuñez 1996, as <i>Galeopsomyia</i> sp.; LaSalle & Peña, 1997); new records : <i>Phyllocnistis</i> sp./ <i>Trichilia havanensis</i> (Meliaceae); Lepidoptera leafminer/ <i>Persea</i> sp.
<i>G. fieris</i>	Cecidomyiidae/ <i>Schefflera rodriguesiana</i> (Araliaceae), from spherical leaf gall
Hansson sp.nov. <i>G. gallarum</i>	Unknown (probably Cecidomyiidae)/ <i>Ludwigia</i> sp. (Onagraceae), from fruit gall
Hansson sp.nov. <i>G. gonzalezi</i>	Unknown/ <i>Persea americana</i> (Lauraceae), from fruit gall
Hansson sp.nov. <i>G. gouamide</i>	Unknown (probably Cecidomyiidae)/ <i>Gouania</i> sp. (Rhamnaceae), from blister-like leaf gall
Hansson sp.nov. <i>G. grandis</i>	Unknown/ <i>Piper obliquum</i> (Piperaceae), from gall
Hansson sp.nov. <i>G. haemon</i> (Walker)	<i>Asphondylia borrichiae</i> Rossi & Strong (Stiling <i>et al.</i> 1992), <i>A. helianthiglobulus</i> Osten Sacken (Burks 1979), <i>Rhopalomyia</i> sp. (Burks 1979). All hosts are Cecidomyiidae (Diptera)
<i>G. illydris</i>	Unknown/ <i>Hoffmannia longipetiolata</i> (Rubiaceae), from fruits-seeds
Hansson sp.nov. <i>G. ingae</i>	Cecidomyiidae/ <i>Inga vera</i> (Fabaceae), from various types of small leaf galls (blister-like, capsule-shaped, spherical fuzzy) (Figs 6, 7).
Hansson sp.nov. <i>G. insignis</i>	<i>Zalepidota</i> (Cecidomyiidae)/ <i>Piper crassinervium</i> (Piperaceae), from galls on leaf veins, petiole and stem
Hansson sp.nov.	

G. itauna Perioto & Costa	<i>Prodecatoma juliae</i> Perioto & Lara (Eurytomidae)/ <i>Ilex affinis</i> (Aquifoliaceae), from seeds (Perioto <i>et al.</i> 2009).
G. leonae	Unknown/ <i>Persea americana</i> (Lauraceae), from fruit gall
Hansson sp.nov. G. lobo	Unknown/ <i>Cissus verticillata</i> (Vitaceae), from fruit gall
Hansson sp.nov. G. lunanide	Cecidomyiidae/ <i>Lunania mexicana</i> (Salicaceae), from spherical galls on leaves, flowers and young stems
Hansson sp.nov. G. macaxetra	<i>Iatrophobia brasiliensis</i> (Rübsaamen) (Cecidomyiidae)/cassava (Euphorbiaceae: <i>Manihot esculenta</i>), from leaf galls
Perioto, Costa & Lara	
G. majalis	Cecidomyiidae flower gall on <i>Inga punctata</i> (Fabaceae), Cecidomyiidae leaf gall on <i>Cissampelos</i> sp. (Menispermaceae)
Hansson sp.nov. G. mandrindra	Unknown/possibly <i>Inga</i> sp. (Fabaceae), from large leaf gall
Hansson sp.nov. G. melasoma	Cecidomyiidae/ <i>Roupala</i> sp. (Proteaceae), from blister-like leaf gall
Hansson sp.nov. G. myrciae	Unknown, but possibly induced by a Eurytomidae/ <i>Myrcia splendens</i> (Myrtaceae), from large spherical leaf galls (Fig. 9)
Hansson sp.nov. G. myrsineae	Unknown/ <i>Myrsine coriacea</i> and <i>M. juergenseni</i> (Myrsinaceae), from seeds
Hansson sp.nov. G. nigrocyanus (Ashmead)	<i>Belonocnema treatae</i> Mayr (Hymenoptera: Cynipidae)/ <i>Quercus</i> sp. (Fagaceae). (Gordh 1979)
G. ocoteae	Cecidomyiidae/ <i>Ocotea tenera</i> . (Lauraceae), from flower gall that resembles a fruit even though the gall was from a male tree.
Hansson sp.nov. G. osaensis	Triozidae (Hemiptera)/ <i>Pseudolmedia spurea</i> (Moraceae), from leaf gall
Hansson sp.nov. G. perasphondyliae	" <i>Perasphondylia odoratum</i> " (Cecidomyiidae)/Unknown. This record should probably be <i>P. reticulata</i> Möhn/ <i>Chromolaena odorata</i> (Asteraceae) (see text)
Hansson sp.nov. G. perseae	Unknown/ <i>Persea americana</i> (Lauraceae), from fruit gall
Hansson sp.nov. G. philodehdrae	<i>Monitoriella elongata</i> Hedqvist (Hymenoptera: Braconidae)/ <i>Philodendron radiatum</i> (Araceae), from leaf gall (Fig. 5)
Hansson sp.nov. G. piperae	Cecidomyiidae/ <i>Piper sinugaudens</i> (Piperaceae), from detachable gall on stem (spherical gall and covered in green bracts) (Fig. 8)
Hansson sp.nov. G. roupalae	Cecidomyiidae/ <i>Roupala</i> sp. (Proteaceae), from blister-like leaf gall
Hansson sp.nov. G. scarpia	<i>Procecidochares</i> sp. (Diptera: Tephritidae)/ <i>Ageratina</i> sp. (Asteraceae), from stem gall
Hansson sp.nov. G. schefflerae	Cecidomyiidae/ <i>Schefflera rodriguesiana</i> (Araliaceae), from spherical leaf gall
Hansson sp.nov. G. seminarum	Unknown/ <i>Portulaca oleracea</i> (Portulacaceae), from seeds
Hansson sp.nov. G. transcarinata (Girault)	<i>Asphondylia websteri</i> Felt (Cecidomyiidae)/alfalfa (Fabaceae: <i>Medicago sativa</i>), from flower-fruit galls (Gahan, 1919, Gagné & Wood 1988).
G. triozae	Triozidae (Hemiptera)/ <i>Pseudolmedia glabrata</i> (Moraceae), from leaf gall
Hansson sp.nov. G. ventrosa	Agromyzidae (Diptera)/ <i>Casearia commersoniana</i> (Salicaceae), from leaf gall
Hansson sp.nov. G. verbessinae	Cecidomyiidae/ <i>Verbesina turbacensis</i> (Asteraceae), from leaf gall
Hansson sp.nov. G. weinmanniae	Cecidomyiidae/ <i>Weinmannia</i> sp. (Cunoniaceae), from stem gall
Hansson sp.nov.	

Table 1. Host/host plant records.

GEOGRAPHICAL DISTRIBUTION

The genus *Galeopsomyia* is a group with its distribution confined to the Americas, with the vast majority of species found in the tropical and subtropical parts. In tropical America *Galeopsomyia* is one of the most commonly encountered eulophid groups, represented by numerous species, possibly over a thousand species. Three hundred and twenty one (321) nominal species of *Galeopsomyia* are treated in this volume. Two-hundred and sixty-four (264) species are recorded exclusively from Costa Rica, 13 species from Costa Rica and other Neotropical countries, one species from Costa Rica+other Neotropical countries+the U.S., 39 species from other Neotropical countries (mainly from Brazil with 20 species) but thus far not from Costa Rica; four species are exclusively recorded from the Nearctic.

MORPHOLOGICAL TERMS AND ABBREVIATIONS

Terminology (Figs 10–14)

The terminology follows LaSalle (1994), with the following exceptions and additions:

adnotaular setae = setae on midlobe of mesoscutum close to notauli

C1–3 = clavomeres 1–3

costulae = short transverse or longitudinal carinae

F1–7 = flagellomeres 1–7 (excl. anelli)

Gt_{1,7} = gastral tergites 1–7

gonoplac = apical part of ovipositor sheaths (according to Grimaldi & Engel 2005)

lateral part on mesoscutellum is the part between submedian grooves and lateral margin of the mesoscutellum

median part on mesoscutellum is the part between submedian grooves

mesoscutellum is used instead of scutellum

submedian grooves on mesoscutellum is used instead of submedian lines

T1–4 = tarsomeres 1–4

The width of median and lateral parts of the mesoscutellum is measured in the median part (Fig. 13). The number of setae given for the midlobe of mesoscutum, lateral parts on mesoscutellum and propodeal callus is for one side only.

The label data for the species have been standardized: COUNTRY, more specific location, coordinates of location, altitude above sea level in meters, date(s) of collecting, collecting method or biological information (if any), collector(s).

In relative measurements “nm” stands for “not measureable”.

In the legends the type of material that has been imaged is sometimes abbreviated to save space: ht = holotype, pt = paratype, n-t = non-type. The images of female antennae (Figs 689–884, 999–1106) are of holotypes, except those of *G. abatis* and *G. camacho* which are of paratypes.

Abbreviations of museums

CNC = Canadian National Collection of insects, Ottawa, Canada

MZLU = Biological Museum, Entomology, Lund University, Sweden

MZSP = Museo de Zoología da Universidade de São Paulo, Brazil

MZUCR = Museo de Zoología, Universidad de Costa Rica, San Pedro, Costa Rica

NHMUK = Natural History Museum, London, United Kingdom

USNM = United States National Museum of Natural History, Washington, D.C., USA

MATERIALS AND METHODS

The material from Costa Rica forming the bulk for this revision has been obtained through extensive collecting projects. These include mainly Malaise trapping and sweeping, especially screen sweeping, starting in 1985 and continuing through different projects to this day. Noyes (2010) described Malaise trapping, screen sweeping and other collecting techniques that have been used to collect material in Costa Rica. The localities for collecting in Costa Rica (Figs 8, 9) have been chosen to cover as many habitats as possible. Localities chosen for the early Malaise trapping programme were briefly described by Gauld (2000). Most of the specimens reared from plant galls resulted from a survey of the galls of Costa Rica (Hanson *et al.* 2014).

Imaging

The colour images were made using a Canon camera equipment including an EOS 5D Mark IV body, MP-E 65 macrolens, or a Canon telezoom lens 70–300mm (but using only 135 & 200mm) with a 5× or 10× Mitutoyo microscope lens attached, and a macro twin lite MT-24 EX for illumination. The camera was attached to a Cognisys stackshot macrorail system. The picture stacking was done with Helicon Focus version 6 software, and Adobe Photoshop was used for image processing. The SEM micrographs are from uncoated specimens and were done with a Hitachi SU 3500 microscope, in low vacuum and using a backscatter detector.

DNA barcoding

A small amount of *Galeopsomyia* specimens have been DNA barcoded through the BioAlpha barcoding project in Costa Rica by Daniel Janzen and Winnie Hallwachs (Janzen & Hallwachs 2023). Several of these specimens have not been associated with morphologically defined species in this paper due to the poor state of the barcoded specimens, which are frequently broken and with parts missing. All barcoded material is deposited in MZLU.

About names and etymology

Names for the new species are either descriptive, based on type locality, collector or person who has been otherwise important for this project, host or host plant, and these names are explained under “Etymology” for each species. However, many names are arbitrary combinations of letters without any meaning intended, “nonsense” names, and there is no “Etymology” part for these species names. All new names without explained etymology are to be treated as arbitrary combinations of letters. Thus these names will not change should the species be transferred to a genus of different gender at any time in the future.

Genus *GALEOPSOMYIA* Girault

Trichoporus Förster, 1856:84. Type species: *Euderus columbianus* Ashmead (subsequent monotypy by Ashmead, 1900:561). Placed on Official Index of Rejected and Invalid Generic Names in Zoology (ICZN, 1985).

Trichoporus Ashmead, 1900:561. Incorrect subsequent spelling of *Trichoporus* Förster. Placed on Official Index of Rejected and Invalid Generic Names in Zoology (ICZN, 1985).

Galeopsomyia Girault, 1916:348. Type species: *Euderus columbianus* Ashmead (1888) [= *G. haemon* (Walker)], by original designation.

Galeopsomopsis Girault, 1917a:1. Type species: *Galeopsomopsis multisulcata* Girault (1917a:1), by original designation. Synonymized by LaSalle & Schauff (1992:29).

Diagnosis. Body strongly sclerotized, gaster not collapsing in dried specimens, all gastral tergites at least partly reticulate, usually strongly so. Head with a subocular fovea that is usually reticulate at the bottom (Figs 15–17). Propodeum (Fig. 22) with a strong median carina and with strong paraspiracular carinae, also with 1–2 transverse carinae on either side of median carina, one close to posterior margin (always present) and one in the middle (Fig. 22) (not present in all species). Female gaster short ovate to very elongate, 1.1–4.6× as long as wide in dorsal view.

All species included here have a unique set of features on the face below the toruli and eye (Figs 29–34). These features include three white areas (1–3) on dried specimens, and a swelling below the eye (4). The white areas are possibly membranes. When the head is treated with 10% KOH, to remove soft parts, these white areas appear as holes in the cuticle (Fig. 33). The swelling below the eye is possibly connected to the white areas, together forming a system with an unknown function. None of these features are present in any other group of the Eulophidae.

Description. Antennae in both sexes attached in lower half of frons; scape not reaching to upper level of vertex, flagellum with two short anelli; females with three funiculars and three clavomeres with variation in the delimitation between C1 and C2, and rarely also between C2 and C3, from no constriction (solid clava) (Fig. 37) to having a strong constriction between clavomeres (Fig. 38); regardless, the flagellum is here regarded as always having three clavomeres, C3 with a ±distinct apical spicule; males either with a dorso-basal whorl of long setae on F1–F4 and on C1–C2, sometimes with a ventro-basal whorl of long setae on C1 & C2, and sometimes with a dorso-basal whorl of long setae present only on F1 & F2, these setae usually much longer than the flagellomere to which they are attached (Fig. 953), or with scattered short setae on all flagellomeres (Fig. 975); males with a dorso-basal whorl of long setae on the flagellomeres have four funiculars and three clavomeres, with clava usually very long and narrow (Fig. 953), males with scattered setae on the flagellomeres have only six flagellomeres (clava undifferentiated) (Fig. 975); male scape with a sensory plaque on ventral margin, usually situated in apical half of scape (Fig. 971), or extending along ±entire length of scape (Fig. 965). Head with malar sulcus complete and straight; with a subocular fovea (a.k.a. malar pit/malar fovea) that is reticulate at the bottom; with or without genal carina (Figs 15–17), if present then varying in length from very short and situated close to mouth opening (Fig. 16), to extending from mouth opening up to above level of lower margin of eye (Fig. 17); clypeal margin bidentate (Fig. 30). Head below level of toruli with weak to strong

reticulation but with clypeal area smooth or with very weak reticulation, frons with strong reticulation to rugose between eyes and antennal scrobes, scrobes usually with small-meshed weak (usually) to strong (rarely) reticulation; with scattered setae, except scrobes which are always bare; face with pale areas and swelling as described above under diagnosis. Vertex usually with strong reticulation outside ocellar triangle, inside ocellar triangle with wrinkled sculpture or reticulation, usually with a carina between lateral ocelli in posterior part, and with a strong sulcus from eye margin to lateral ocelli and continuing from there to median ocellus (Figs 933–950). Occipital margin usually rounded, but in some species with a carina or sharp edge. Pronotum with strong reticulation, meshes isodiametric, with posterior margin smooth, always without a transverse carina on collar. Mesoscutum with an incomplete (present in posterior part) to complete median groove, or median groove absent; midlobe with a varying number of setae close to notauli (adnotaular setae), some species with setae in a single (Fig. 152) or scattered row close to inner margin of notauli (Fig. 250), and a few species with setae scattered all over midlobe (Fig. 636); many species with part of midlobe close to notauli papillate, i.e. with attachment points of setae as small nobs (Fig. 620), or rugose. Axillae with strong reticulation and advanced $\frac{1}{3}$ – $\frac{1}{2}$ their length in front of transscutal articulation. Mesoscutellum transverse to elongate, usually convex but in a few species \pm flat; submedian grooves usually present and separating a median part from lateral parts; with a \pm wide groove along posterior margin that is usually subdivided by longitudinal short carinae (costulae) (Fig. 911). The submedian grooves of the mesoscutellum can be distinct with both inner and outer margins distinct and complete (Fig. 926), with inner margin distinct but outer margin indistinct or missing (Figs 917, 920), or with both inner and outer margins indistinct (Fig. 908); straight or curved, parallel, diverging towards posterior part, or diverging towards both anterior and posterior parts, with (Fig. 916) or without (Fig. 915) transverse costulae. Setation on the mesoscutellum is usually confined to the lateral parts and there may be several setae scattered over entire lateral part, or with two pairs of setae – one pair always attached close to posterior margin (these setae are always the longest) and one pair either attached in median or in anterior part of mesoscutellum; a few aberrant species have setae over the entire surface of the mesoscutellum (Fig. 932). Dorsellum varying from shiny with weak sculpture to strongly reticulate or with other strong sculpture, with (Fig. 22) or without a complete median carina. Propodeum with a complete and strong narrow to wide median carina, usually expanding both in posterior and anterior parts, also with a strong and curved paraspiracular carina on either side, and a transverse carina close to posterior margin, and many species also have a median transverse carina reaching from paraspiracular carina towards median carina; part between median carina and paraspiracular carina either with strong reticulation (Fig. 144), or a combination of strong reticulation and strong irregular carinae (Fig. 146); spiracles covered by a small flap on the outer side of spiracle; callus with 2–11 setae. Coxae with very weak to very strong reticulation, mid coxa usually with weakest reticulation; some species with a sharp edge along posterior margin of fore coxa and/or a carina along posterior margin of hind coxa (Figs 18, 19); hind coxa with (Fig. 21) or without (Fig. 20) a carina along posterior margin. Wings usually completely hyaline, but in a few species with infusate parts, veins yellowish-brown to yellowish-white; fore wing with 2–13, but usually 4–5, setae on dorsal surface of submarginal vein, sometimes with different number of setae on left and right wing on same specimen (given as $x \& x$); costal cell with a row of setae on ventral surface (here referred to as *costal setal row*), row either *unbroken* (Fig. 35) or with setae absent in median part (Fig. 36) and then referred to as *broken*; postmarginal vein absent or very short, always

distinctly shorter than stigmal vein; costal cell 10–27× as long as wide; speculum closed, or open below and/or towards base of wing. Petiole varying from very short, just a narrow band, to about 0.5× as long as wide with dorsal part with or without strong irregular sculpture or a few longitudinal carinae. Female gaster 1.1–4.6× as long as wide, strongly sclerotized and not collapsing after death, with strong or weak reticulation; medio-basal Gt_1 with an incision that can be either \pm semicircular (Fig. 23, 42) or \pm rectangular (Fig. 43), in the latter case there are usually flat areas on either side of the incision (Fig. 43), with (Figs 24, 41, 42) or without (Figs 23, 43) a transverse carina or edge above attachment point of petiole, this part sometimes with short longitudinal carinae (Figs 27, 28); with longest cercal seta usually at least twice as long as next longest, and curved or sinuate but never kinked. Female hypopygium reaching about half the length of gaster.

Many important distinguishing characters for the species are found in the female only, in the antennae and the gaster, i.e. sexually dimorphic characters. As males do not have these features it is difficult to link female and male of the same species based on morphological characters. Unless males can be linked to conspecific females by way of non-sex related morphological characters or through the biology (specimens reared from the same host and collecting event) only females are described and included here. As most males are unknown it seems pointless to include them in an identification key. However, all known males are included in the descriptions.

Distribution. The New World, being most abundant and diverse in the subtropical and tropical parts. Very few species are recorded from temperate parts of North America and none thus far from temperate parts of South America.

Biology. Associated with galls and seeds, either as inquilines (Hawkins & Goeden 1984) or as parasitoids (Table 1). The species *G. fausta* is an exception as it targets leafmining Lepidoptera (Cobo Nuñez 1996, LaSalle & Peña, 1997). See above under “Biology”.

CLASSIFICATION

In a recent phylogenomic study of the Eulophidae including molecular data from Ultraconservative Elements (UCEs) (Rasplus *et al.* 2020), two unidentified species of *Galeopsomyia* were included. They were placed in the “*Aprostocetus*-group” and together with *Neohyperteles* De Santis and *Oxypracetus* LaSalle formed a clade within that group. These three genera are exclusively found in the Americas, *Neohyperteles*, including two species, from South America (Argentina, Brazil) (De Santis 1957, De Santis *et al.* 1973), *Oxypracetus* with one species from eastern North America (LaSalle 1994), and *Galeopsomyia* throughout the Americas with the majority of species found in tropical parts. Species of *Galeopsomyia* and *Neohyperteles* are associated with galls in some way, while the biology for the single known species of *Oxypracetus* is unknown.

THE SPECIES-GROUPS

The genus *Galeopsomyia* is a very species-rich group which makes it difficult to get an overview of the genus. To make *Galeopsomyia* easier to handle we have therefore separated this large group into six informal species-groups. Apart from the species-groups there are 11

unassigned species. These species do not fit into any of the species-groups but have their own set of diagnostic characters.

Species-group *haemon*. Vertex with strong reticulation throughout; mesoscutellum (Figs 45, 58) \pm uniformly reticulate with strong reticulation, with two pairs of setae, one pair close to posterior margin of mesoscutellum and one pair medially or in anterior part, submedian grooves weak and indistinct or missing, running close to and parallel with lateral margins of mesoscutellum and thus diverging towards posterior part; frenal groove wide and subdivided by carinae; dorsellum usually without median carina; metacoxae with or without a carina or sharp edge along posterior margin; propodeum short with strong reticulation but without irregular carinae, median carina variable in shape and important for species distinction; propodeal callus with 2–8 setae, usually with two; the shape of medio-basal Gt_1 is very important for the identification of species: smoothly rounded, with a transverse edge or carina dorsally, or with a semicircular or rectangular incision and then with upper margin smoothly rounded; Gt_2 usually short and Gt_4 usually long. The incision in anterior part of Gt_1 is linked with shape of petiole: petiole transverse with sculpture, with a rectangular incision; petiole short, just a narrow band, with a semicircular incision or no incision. Male antennae with a row of subbasal long setae on F1–F5 (Figs 951–954). This group includes the type-species for *Galeopsomyia* (*Tetrastichus haemon*).

Species-group *lasallei*. Antenna long and slender (Fig. 215), pedicel+flagellum 1.4–2.0 \times as long as width of mesoscutum, clava with distinct constriction between C1 and C2; head without genal carina, subocular fovea very large; pronotum (Fig. 214) with strong reticulation and long, 0.6–0.7 \times as long as wide, with \pm parallel sides; mesosoma long, 1.6–1.8 \times as long as wide; mesoscutellum (Fig. 214) with two pairs of setae, one pair close to posterior margin of mesoscutellum and one pair in median part, median part with very weak reticulation; dorsellum without median carina; propodeum (Fig. 214) with a groove on either side of strong and narrow median carina, this groove with several transverse carinae, area lateral to groove with strong reticulation, callus with two setae; fore wing with 2–3 weak setae on dorsal surface of submarginal vein, and with costal setal row broken; petiole and petiole attachment area on Gt_1 yellowish-brown (Fig. 214). Males are present in the material but it is not possible to associate them with conspecific females; antennae with a row of subbasal long setae on F1–F5 (Fig. 959).

Species-group *admirabilis*. Antennal clava (Fig. 730, 731) with distinct constriction between C1 and C2, C2 and C3 yellowish-white to yellowish-brown; frons with transverse carinae (Fig. 891); pronotum very large with sides parallel (Fig. 932); mesoscutellum (Figs 232, 234) with two pairs of setae on lateral parts, one pair close to posterior margin of mesoscutellum and one pair placed medially; fore wing (Figs 233, 235) with a large fuscous spot medially; propodeum (Figs 232, 234) with a very strong but narrow median carina, and with strong reticulation but without irregular, callus with two setae; petiole (Figs 232, 234) transverse with longitudinal carinae. Males with subbasal whorls of long setae on F1–F5 (Figs 960, 961).

Species-group *cuprea*. Mesoscutellum with 3–20 scattered setae on lateral parts, median part without setae, submedian grooves present and usually with at least inner margin \pm distinct and complete; midlobe of mesoscutum with setae confined to parts close to notauli; propodeum *usually* with a mix of irregular carinae and reticulation. Males with subbasal whorls of long setae on F1–F5 (Fig. 966), or with scattered setae (Fig. 975).

Species-group *aspratilis*. Mesoscutellum (Fig. 642) with two median grooves, submedian grooves absent. Midlobe of mesoscutum and mesoscutellum (Fig. 642) with strong irregular sculpture and covered with setae, i.e. similar to unplaced species above. Gaster (Fig. 640)

circular, Gt_1 large, covers half the length of gaster. Males are not known in this group.

Species-group *alveolus*. Large frontal orifices elongate, reaching from just below and lateral of toruli down to clypeus (Fig. 904), i.e. not circular as in remaining species of the genus. Frons, midlobe of mesoscutum and mesoscutellum (Fig. 644, 646) with large pits around attachment points of setae. Males are not known in this group.

KEY TO FEMALES OF *GALEOPSOMYIA*

1. Antenna with apical two flagellomeres predominantly to completely yellowish-white or yellowish-brown (Figs 730, 731, 761).....2
- Antenna with apical two flagellomeres brown to black, or entire antenna yellowish-brown.....4
- 2 (1) Fore and hind coxae predominantly black and \pm metallic (Fig. 327).....
.....*carballoi* Hansson **sp.nov.** (p. 264)
- Fore coxa usually white and hind coxa always white (Figs 233, 235)3
- 3 (2) Antenna long (Fig. 730), flagellum+pedicel 1.6 \times as long as width of mesoscutum, F3 3.0 \times as long as wide; mesoscutellum with frenal groove very wide (Fig. 232).....*admirabilis* Hansson **sp.nov.** (p. 184)
- Antenna shorter (Fig. 731), flagellum+pedicel 1.5 \times as long as width of mesoscutum, F3 2.2 \times as long as wide; mesoscutellum with frenal groove narrow (Fig. 234)*insignis* Hansson **sp.nov.** (p. 186)
- 4 (1) Mesoscutellum with two pairs of setae, one pair close to posterior margin and one pair in median or anterior part, with submedian grooves *usually* weak and indistinct (grooves absent, or distinct in a few species), wide apart and \pm parallel with lateral margins of mesoscutellum (e.g. Fig. 114) (mainly species-group *haemon*)..... **Subkey A**
- Mesoscutellum usually with at least three scattered setae on parts lateral to submedian grooves, *or* completely covered with setae, *if* with two pairs of setae then with distinct and \pm parallel submedian grooves on mesoscutellum5
- 5 (4) Fore wing speculum missing, this part completely setose (Figs 588, 589)6
- Fore wing speculum present (as in Fig. 307).....7
- 6 (5) Large species, 3.5–4.1mm; gaster 4.0 \times as long as wide (Fig. 588); mesoscutum and mesoscutellum metallic (Fig. 588).....*piperae* Hansson **sp.nov.** (p. 446)
- Small species, 1.2mm; gaster 1.3 \times as long as wide (Fig. 642); mesoscutum and mesoscutellum dark brown non-metallic (Fig. 642)
.....*curiosa* Hansson **sp.nov.** (p. 484)

- 7 (5) Petiole and petiole attachment area on Gt_1 yellowish-brown (Fig. 214); pronotum long, with \pm parallel sides (Fig. 214); antenna long and slender, pedicel+flagellum 1.4–2.0 \times as long as width of mesoscutum (mainly species-group *lasallei*)....
..... **Subkey B**
- Petiole and petiole attachment area on Gt_1 *usually* brown to metallic, if yellowish-brown (few species) then either mesoscutum covered with setae, *or* pronotum *or* antennae shorter8
- 8 (7) Fore wing with two infusate spots, one around and below stigmal vein and one weaker spot at upper-apical margin (Fig. 307).....
..... *bimaculata* Hansson **sp.nov.** (p. 250)
- Fore wing completely hyaline, or with one infusate spot medially or apical to stigmal vein9
- 9 (8) Medio-basal part of Gt_1 with a strong transverse carina or sharp edge dorsally and with short longitudinal carinae pointing backwards from transverse carina (Fig. 25).....10
- Medio-basal part of Gt_1 with or without transverse carina/edge dorsally, but if with carina/edge then without short longitudinal carinae pointing backwards from carina/edge17
- 10 (9) Mesoscutellum with strong reticulation and rugosity, without submedian grooves, midlobe of mesoscutum and mesoscutellum \pm evenly covered with setae (Fig. 628).....11
- Mesoscutellum with different sculpture and/or submedian grooves present, midlobe of mesoscutum and mesoscutellum with median part without setae12
- 11 (10) Mesoscutellum with a median narrow stripe without setae and with different sculpture from remaining parts of mesoscutellum (Fig. 636).....
..... *papillosa* Hansson **sp.nov.** (p. 480)
- Mesoscutellum with uniform sculpture and setation (Fig. 628)
..... *capillosa* Hansson **sp.nov.** (p. 474)
- 12 (10) Gaster 3.3 \times as long as wide (Fig. 688)
..... *macaxeira* Perioto, Costa & Lara (p. 199)
- Gaster 1.8–2.5 \times as long as wide13
- 13 (12) Flagellum long and slender, 1.2–1.3 \times as long as width of mesoscutum, and F3 1.7–2.3 \times as long as wide14
- Flagellum shorter and more stout, 1.0–1.1 \times as long as width of mesoscutum, and F3 1.0–1.3 \times as long as wide16
- 14 (13) Thoracic dorsum black non-metallic (Fig. 240)
..... *morula* Hansson **sp.nov.** (p. 397)
- Thoracic dorsum with metallic blue tinges15

- 15 (14) Gaster 2.5× as long as wide with weak reticulation (Fig. 246).....
 *actis* Hansson **sp.nov.** (p. 211)
 – Gaster 1.9× as long as wide with strong reticulation (Fig. 574).....
 *pava* Hansson **sp.nov.** (p. 437)
- 16 (13) Midlobe of mesoscutum with scattered setae, apart from a narrow bare median
 stripe (Fig. 568); lateral parts of mesoscutellum with coarse irregular sculpture
 (Fig. 923)..... *palotis* Hansson **sp.nov.** (p. 433)
 – Midlobe of mesoscutum with setae confined to parts close to notauli (Fig. 660);
 lateral parts of mesoscutellum with reticulation (Fig. 660)
 *fausta* LaSalle (p. 197)
- 17 (9) Mesoscutellum with three complete longitudinal carinae medially, without subme-
 dian grooves (Fig. 930); gaster circular, 1.1–1.3× as long as wide; with weak
 reticulation, Gt_1 large, covers half of gaster length (Figs 640, 642)18
 – Mesoscutellum without three longitudinal carinae medially, submedian grooves
 present or absent; gaster usually longer and Gt_1 smaller.....19
- 18 (17) Petiole black..... *aspratilis* Hansson **sp.nov.** (p. 482)
 – Petiole yellowish-brown *curiosa* Hansson **sp.nov.** (p. 484)
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Subkey B

- B1 [7] Mesosoma dark brown, non-metallic (Fig. 230); dorsellum concave with strong sculpture (Fig. 230)..... *anomala* Hansson **sp.nov.** (p. 189)
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 *fabia* Hansson **sp.nov.** (p. 177)
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 – Gonoplac 0.9× as long as hind femur *rosea* Hansson **sp.nov.** (p. 173)

Subkey C

- C1 [30] Fore coxa with a carina along anterior and/or posterior margin (as in Figs 18, 19); Gt₂₋₇ with weak reticulation.....2
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- Gaster 2.2× as long as wide, Gt₁ with sides diverging backwards from base (Fig. 350); petiole 0.4× as long as wide with strong sculpture on dorsal surface....
..... *cortina* Hansson **sp.nov.** (p. 282)
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..... *eximia* Hansson **sp.nov.** (p. 305)
- Antennal clava solid, or with a weak constriction between C1 and C2.....5
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..... *gonzalezi* Hansson **sp.nov.** (p. 320)
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- D6 (5) Mesoscutellum 0.9× as long as wide with strongly elongate meshes, thus appearing striate (Fig. 368); medio-basal part of Gt_1 with a transverse edge dorsally (as in Fig. 42).....*diriaensis* Hansson **sp.nov.** (p. 294)
 – Mesoscutellum 1.0× as long as wide, not appearing striate (Fig. 464); medio-basal part of Gt_1 without edge dorsally (as in Fig. 23).....
 *liria* Hansson **sp.nov.** (p. 361)
- D7 (4) Mesosoma with metallic blue tinges (Fig. 526).. *nana* Hansson **sp.nov.** (p. 403)
 – Mesosoma black non-metallic (Fig. 378)..... *eridana* Hansson **sp.nov.** (p. 301)
- D8 (3) Petiole yellowish-brown (Fig. 324)..... *cararaensis* Hansson **sp.nov.** (p. 263)
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 *ladrona* Hansson **sp.nov.** (p. 350)
 – Mesoscutellum with median part with weak reticulation10
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Subkey F

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- Mesoscutellum black with metallic tinges (Fig. 438); submedian grooves on mesoscutellum converging towards posterior part (Fig. 438); mid coxa dark brown (Fig. 439).....*jaymesonesae* Hansson **sp.nov.** (p. 343)
- F25 (9) Gaster 2.8–3.2× as long as wide, Gt_7 1.4–1.6× as long as width at base26
- Gaster 1.9–2.7× as long as wide, but if 2.7× as long as wide then Gt_7 1.0× as long as width at base29
- F26 (25) Propodeal callus with seven setae.....27
- Propodeal callus with two setae.....28
- F27 (26) Mesoscutellum with weak reticulation on median part (Fig. 352); gaster 3.0× as long as wide (Fig. 352).....*cosidis* Hansson **sp.nov.** (p. 283)
- Mesoscutellum with strong reticulation on median part (Fig. 584); gaster 2.8× as long as wide (Fig. 584).....*picuda* Hansson **sp.nov.** (p. 444)
- F28 (26) Antennal flagellum slender, e.g. clava 3.6× as long as wide (Fig. 1070); gonoplac pale brown (Fig. 321).....*burra* Hansson **sp.nov.** (p. 260)
- Antennal flagellum more stout, clava 2.6× as long as wide (Fig. 818); gonoplac black (Fig. 461).....*leonae* Hansson **sp.nov.** (p. 358)
- F29 (25) Medio-basal part of Gt_1 with a transverse edge/carina dorsally, or with a carina shaped like an inverted U (as in Fig. 42); mesoscutellum with a weak to strong median groove30
- Medio-basal part of Gt_1 with dorsal part smoothly rounded, with or without longitudinal carinae/edges laterally (as in Figs 23, 27); mesoscutellum with or without a median groove35
- F30 (29) Mesoscutellum with lateral parts with about 15 white setae (Fig. 308); gonoplac pale brown, distinctly paler than Gt_7 (Fig. 308)
*blakeae* Hansson **sp.nov.** (p. 252)
- Mesoscutellum with lateral parts with at most ten brown to black setae; gonoplac dark brown to black, with same colour as Gt_731
- F31 (30) Propodeal callus with 2 setae.....*teronadis* Hansson **sp.nov.** (p. 457)
- Propodeal callus with 5–6 setae.....32
- F32 (31) Median propodeum with strong reticulation.....33
- Median propodeum with a mix of irregular carinae and reticulation34
- F33 (32) Gaster 2.6–2.7× as long as wide, tergites with small meshes (Fig. 522).....
*myrciae* Hansson **sp.nov.** (p. 400)

- Gaster 2.4× as long as wide, tergites with larger meshes (Fig. 454)
 *lealis* Hansson **sp.nov.** (p. 354)
- F34 (32) Gaster 2.0× as long as wide and 1.3× as long as mesosoma; gastral tergites with
 very strong reticulation (Fig. 346); mesoscutum predominantly metallic purple
 (Fig. 346)..... *copala* Hansson **sp.nov.** (p. 279)
- Gaster 2.2× as long as wide and 1.5× as long as mesosoma; gastral tergites with
 weaker reticulation than in alternate (Fig. 244); mesoscutum metallic bluish-
 green (Fig. 244)..... *abraxas* Hansson **sp.nov.** (p. 209)
- F35 (29) Mesoscutellum with a complete and strong median groove (Fig. 268); scape pre-
 dominantly dark brown (Fig. 747) *ambigua* Hansson **sp.nov.** (p. 225)
- Mesoscutellum without, or with a very weak median groove, if with a weak groove
 then scape is yellowish-brown36
-
- F36 (35) Mesosoma dark brown with metallic blue tinges37
- Mesosoma metallic green to blue38
- F37 (36) Antennal clava with constriction between C2 and C3 (Fig. 1078); mesoscutellum
 1.1× as long as wide (Fig. 438); gaster 2.7× as long as wide (Fig. 438).....
 *jaymesonesae* Hansson **sp.nov.** (p. 343)
- Antennal clava without constriction between C2 and C3 (Fig. 847); mesoscutellum
 1.3× as long as wide (Fig. 536); gaster 1.9× as long as wide (Fig. 536).....
 *nicoyae* Hansson **sp.nov.** (p. 411)
- F38 (36) Mesoscutellum 1.0× as long as wide (Fig. 546)
 *oasis* Hansson **sp.nov.** (p. 418)
- Mesoscutellum 1.1–1.3× as long as wide39
- F39 (38) Propodeal callus with 5–6 setae.....40
- Propodeal callus with 2–3 setae.....42
- F40 (39) Mesoscutellum with median part 2.6× as long as wide (Fig. 266); gaster 2.2× as
 long as wide, Gt₁ with weak reticulation (Fig. 266).....
 *altura* Hansson **sp.nov.** (p. 224)
- Mesoscutellum with median part 3.0–3.3× as long as wide; gaster 2.5–2.7× as long
 as wide, Gt₁ with strong reticulation (Figs 496, 522).....41
- F41 (40) Median propodeum with strong reticulation (Fig. 522).....
 *myrciae* Hansson **sp.nov.** (p. 400)
- Median propodeum with a mix of irregular carinae and reticulation (Fig. 496) ..
 *meleadis* Hansson **sp.nov.** (p. 383)
- F42 (39) Mesoscutellum with median part 2.6× as long as wide (Fig. 518); antennal clava
 with apical spicule long and slender (Fig. 843)
 *moradis* Hansson **sp.nov.** (p. 397)

- Mesoscutellum with median part 3.0–3.3× as long as wide; antennal clava with apical spicule shorter and stouter than in alternate (e.g. Fig. 805).....43
- F43 (42) Scape predominantly dark brown (Fig. 805); mesoscutellum with median part 3.0× as long as wide (Fig. 434); propodeum with median carina narrow (Fig. 434), about 13× as long as median width; Gt₁ with strong reticulation (Fig. 434) ..
.....*ira* Hansson **sp.nov.** (p. 340)
- Scape predominantly to completely yellowish-brown; mesoscutellum with median part 3.2–3.3× as long as wide; propodeum with median carina wide, about 7× as long as median width; Gt₁ with weak reticulation (Figs 440, 488).....44
- F44 (43) Mesoscutellum 1.3× as long as wide with median part 3.3× as long as wide (Fig. 440); gaster 2.4× as long as wide (Fig. 440)...*juni* Hansson **sp.nov.** (p. 344)
- Mesoscutellum 1.2× as long as wide with median part 3.2× as long as wide (Fig. 488); gaster 1.9× as long as wide (Fig. 488).....
.....*matearis* Hansson **sp.nov.** (p. 378)

Subkey G

- G1 [42] Gaster 3.1× as long as wide and Gt₁₋₄ with a smooth median line (Fig. 578).....
.....*perasphondyliae* Hansson **sp.nov.** (p. 439)
- Gaster 1.4–2.8× as long as wide and Gt₁₋₄ without a smooth median line.....2
- G2 (1) Antennal clava asymmetric (Fig. 1056)..... *ajax* Hansson **sp.nov.** (p. 215)
- Antennal clava symmetric.....3
- G3 (2) Antenna with funiculars short, F2 1.0–1.5× and F3 1.0–1.2× as long as wide...4
- Antenna with F2 1.6–2.1× and F3 1.3–1.8× as long as wide.....9
- G4 (3) Mesoscutellum with median part with strong reticulation/rugosity, hence dull (Fig. 480).....*malandrina* Hansson **sp.nov.** (p. 372)
- Mesoscutellum with median part with weak reticulation and shiny (e.g. Fig. 274)
.....5
- G5 (4) Weakly metallic species (e.g. Fig. 590)6
- Bright metallic species (e.g. Fig. 500)8
- G6 (5) Gastral tergites with relatively weak reticulation with small meshes (Fig. 590)..
.....*preta* Hansson **sp.nov.** (p. 448)
- Gastral tergites with very strong reticulation with large meshes (Figs 274, 508)
.....7
- G7 (6) Antennal flagellum longer, e.g. F1 1.8× as long as wide (Fig. 741); gaster 2.5× as long as wide with dorsal part predominantly dark brown with metallic tinges (Fig. 274).....*anis* Hansson **sp.nov.** (p. 229)
- Antennal flagellum shorter, e.g. F1 1.1× as long as wide (Fig. 840); gaster 1.6× as long as wide with dorsal part metallic bluish-green (Fig. 508).....
.....*miliaris* Hansson **sp.nov.** (p. 391)

- G8 (5) Mesoscutum with sidelobes golden-green and midlobe golden-red, mesoscutellum and propodeum golden-red (Fig. 500)..... *mesana* Hansson **sp.nov.** (p. 385)
 – Mesosoma metallic bluish-green with golden tinges (Fig. 570).....
 *paradis* Hansson **sp.nov.** (p. 434)
- G9 (3) Mesoscutellum with median part narrow, 3.9–4.6× as long as wide10
 – Mesoscutellum with median part 2.2–3.6× as long as wide12
- G10 (9) Gastral tergites with weak reticulation (Fig. 490).....
 *maya* Hansson **sp.nov.** (p. 379)
 – Gastral tergites with strong reticulation (Figs 274, 596)11
- G11 (10) Mesoscutellum with median part rugose (Fig. 596); mesosoma black with metallic tinges (Fig. 596) *roupalae* Hansson **sp.nov.** (p. 452)
 – Mesoscutellum with median part with weak reticulation (Fig. 274); mesosoma metallic bluish-green (Fig. 274)..... *anis* Hansson **sp.nov.** (p. 229)
- G12 (9) Mesoscutellum with median part rugose (Figs 270).....13
 – Mesoscutellum with median part with weak to strong reticulation14
- G13 (12) Medio-basal part of Gt_1 with a sharp transverse edge dorsally (as in Fig. 24); gaster 2.4× as long as wide (Fig. 270)..... *amphis* Hansson **sp.nov.** (p. 226)
 – Medio-basal part of Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 42); gaster 2.0× as long as wide (Fig. 502)..... *methea* Hansson **sp.nov.** (p. 387)
- G14 (12) Mesoscutellum with median part with strong reticulation (e.g. Fig. 534).....15
 – Mesoscutellum with median part with weak reticulation (e.g. Fig. 468)21
- G15 (14) Mesoscutellum 0.9× as long as wide, without median groove16
 – Mesoscutellum 1.0–1.2× as long as wide, with or without a weak to strong and complete median groove, if median groove is missing then mesoscutellum is 1.2× as long as wide17
- G16 (15) Mesoscutellum convex (Figs 534, 535); gastral tergites with weak reticulation (Fig. 534)..... *neotropicalis* Hansson **sp.nov.** (p. 409)
 – Mesoscutellum flat (Figs 282, 283); gastral tergites with strong reticulation (Fig. 282)..... *aramis* Hansson **sp.nov.** (p. 234)
- G17 (15) Mesoscutellum with median part 3.4–3.5× as long as wide; gaster 1.8 or 2.8× as long as wide.....18
 – Mesoscutellum with median part 2.4–2.9× as long as wide; gaster 1.8–2.2× as long as wide.....19
- G18 (17) Gaster 2.8× as long as wide with weak reticulation (Fig. 388).....
 *falla* Hansson **sp.nov.** (p. 307)
 – Gaster 1.8× as long as wide with strong reticulation (Fig. 276).....
 *anyisia* Hansson **sp.nov.** (p. 230)

- G19 (17) Mesoscutellum with median part 2.9× as long as wide (Fig. 478); gonoplac yellowish-brown (Fig. 479).....*majalis* Hansson **sp.nov.** (p. 371)
 – Mesoscutellum with median part 2.4–2.5× as long as wide; gonoplac dark brown to black20
- G20 (19) Antennal clava 3.1× as long as wide with a long spicule (Fig. 859)
 *pagana* Hansson **sp.nov.** (p. 430)
 – Antennal clava 2.5× as long as wide with a short spicule (Fig. 734)
 *adobia* Hansson **sp.nov.** (p. 212)
- G21 (14) Body dark brown non-metallic (Fig. 468) ...*lumbrada* Hansson **sp.nov.** (p. 364)
 – Body with at least metallic tinges on mesoscutellum22
- G22 (21) Gaster 1.4× as long as wide (Fig. 464) *liria* Hansson **sp.nov.** (p. 361)
 – Gaster 1.6–2.2× as long as wide23
- G23 (22) Fore wing with costal setal row broken (as in Fig. 36).....
 *cecropiae* Hansson **sp.nov.** (p. 269)
 – Fore wing with costal setal row unbroken (as in Fig. 35).....24
- G24 (23) Gastral tergites with very strong reticulation with large meshes (Fig. 392).....
 *feris* Hansson **sp.nov.** (p. 310)
 – Gastral tergites with weak reticulation (e.g. Fig. 650) and/or small meshes25
- G25 (24) Median carina of propodeum ±triangular (Fig. 650); medio-basal part of Gt₁ without longitudinal carinae; gaster with dorsal part convex (Figs 650, 651).....
 *multisulcata* (Girault) (p. 200)
 – Median carina of propodeum predominantly with parallel sides, expanding in posterior one-third; medio-basal part of Gt₁ with longitudinal carinae (as in Figs 27, 28); gaster with dorsal part ±flat, or convex.....26
- G26 (25) Gaster with apex pointed and Gt₂₋₄ with weak reticulation (Fig. 442).....
 *kateperezae* Hansson **sp.nov.** (p. 346)
 – Gaster with apex blunt and Gt₂₋₄ with strong reticulation (Figs 430, 520)27
- G27 (26) Antenna longer (Fig. 804), F3 1.9× and clava 3.2× as long as wide
 *intesa* Hansson **sp.nov.** (p. 338)
 – Antenna shorter (Fig. 1083), F3 1.4× and clava 2.5× as long as wide
 *munda* Hansson **sp.nov.** (p. 399)

Subkey H

- H1 [50] Gaster 2.8–3.2× as long as wide2
 – Gaster 1.4–2.6× as long as wide4
- H2 (1) Gonoplac long, 1.0× as long as hind femur (Fig. 361)
 *cuscoensis* Hansson **sp.nov.** (p. 289)
 – Gonoplac 0.7× as long as hind femur3

- H3 (2) Body bright metallic (Fig. 600); median part of mesoscutellum 3.0× as long as wide (Fig. 600); submedian grooves on mesoscutellum curved (Fig. 600).....
 *scarpia* Hansson **sp.nov.** (p. 454)
- Body dark brown with weak metallic tinges (Fig. 396); median part of mesoscutellum 2.7× as long as wide (Fig. 396); submedian grooves on mesoscutellum ±straight (Fig. 396).....*folata* Hansson **sp.nov.** (p. 313)
- H4 (1) Dorsellum completely hidden under mesoscutellum in dorsal view (Fig. 416), and midlobe of mesoscutum predominantly metallic purplish with parts close to notauli metallic bluish-purple and mesoscutellum metallic bluish-purple (Fig. 416).....*gutierrezii* Hansson **sp.nov.** (p. 327)
- Dorsellum at least partly visible in dorsal view, or mesoscutum and mesoscutellum with same colour, metallic or black non-metallic5
- H5 (4) Dorsellum without a median carina6
- Dorsellum with a median carina13
- H6 (5) Mesoscutellum metallic bluish-purple, or bluish-green.....7
- Mesoscutellum dark brown to black, with or without weak metallic tinges8
- H7 (6) Mesoscutellum metallic bluish-purple (Fig. 492).....
*medrosa* Hansson **sp.nov.** (p. 380)
- Mesoscutellum bright metallic bluish-green (Fig. 650).....
*multisulcata* (Girault) (p. 200)
- H8 (6) Mesoscutellum 0.9× as long as wide with very elongate meshes, appearing striate (Fig. 368); medio-basal part of Gt_1 with transverse edge dorsally (as in Fig. 24).....*diriaensis* Hansson **sp.nov.** (p. 294)
- Mesoscutellum 0.8 or 1.0–1.1× as long as wide with less elongate meshes; medio-basal part of Gt_1 without transverse edge dorsally (as in Fig. 23).....9
- H9 (8) Mesoscutellum 0.8× as long as wide, ±flattened (Fig. 314)
*briannestjacquesae* Hansson **sp.nov.** (p. 256)
- Mesoscutellum 1.0–1.1× as long as wide, more convex.....10
- H10 (9) Antennal flagellum stout and short (Fig. 863), e.g. F3 1.1× and clava 2.2× as long as wide.....*preta* Hansson **sp.nov.** (p. 448)
- Antennal flagellum slender, F3 1.6–1.8× and clava 3.5–4.1× as long as wide.....
11
- H11 (10) Median part of propodeum with strong reticulation, without carinae (Fig. 242); median part of mesoscutellum with strong reticulation, dull (Fig. 242).....
*abra* Hansson **sp.nov.** (p. 208)
- Median part of propodeum with a mix of carinae and reticulation; median part of mesoscutellum with very weak reticulation, shiny12

- H12 (11) Gonoplac yellowish-brown (Fig. 483); gaster 1.4× as long as wide (Fig. 482) ...
 *manga* Hansson **sp.nov.** (p. 374)
 – Gonoplac black (Fig. 303); gaster 1.8× as long as wide (Fig. 302).....
 *bestis* Hansson **sp.nov.** (p. 247)
- H13 (5) Gt₁ with weak reticulation (e.g. Fig. 400).....14
 – Gt₁ with strong reticulation (e.g. Fig. 470)19
- H14 (13) Propodeal callus with 7–10 setae.....15
 – Propodeal callus with 2–4 setae.....16
- H15 (14) Gonoplac black to dark brown (Fig. 401).....
 *gigantensis* Hansson **sp.nov.** (p. 316)
 – Gonoplac yellowish-brown (Fig. 655)..... *cuprea* (Ashmead) (p. 194)
- H16 (14) Submedian grooves on mesoscutellum subdivided by transverse carinae (Fig.
 650)..... *multisulcata* (Girault) (p. 200)
 – Submedian grooves on mesoscutellum without transverse carinae.....17
- H17 (16) Mesoscutellum without median groove (Fig. 570); gaster 1.8× as long as wide (Fig.
 570)..... *pardis* Hansson **sp.nov.** (p. 434)
 – Mesoscutellum with a ±complete median groove; gaster 2.2–2.5× as long as
 wide18
- H18 (17) Gt₇ 1.0× as long as width at base; mesoscutellum 1.2× as long as wide (Fig. 322);
 antennal clava 3.1× as long as wide (Fig. 758).....
 *burreadis* Hansson **sp.nov.** (p. 261)
 – Gt₇ 1.3× as long as width at base; mesoscutellum 1.1× as long as wide (Fig. 512);
 antennal clava 2.6× as long as wide (Fig. 1082).....
 *moleris* Hansson **sp.nov.** (p. 393)
- H19 (13) Gonoplac with apex yellowish-brown to dark brown (Fig. 471).....
 *lunaniae* Hansson **sp.nov.** (p. 365)
 – Gonoplac completely black.....20
- H20 (19) Mesoscutum and mesoscutellum golden-green, or metallic bluish-green21
 – Mesoscutum and mesoscutellum black non-metallic, or with weak metallic ting-
 es.....25
- H21 (20) Gaster 1.6× as long as wide (Fig. 250) *agonis* Hansson **sp.nov.** (p. 213)
 – Gaster 1.9–2.5× as long as wide22
- H22 (21) Gaster 1.9× as long as wide with dorsal surface ±flat (Fig. 254).....
 *alambra* Hansson **sp.nov.** (p. 216)
 – Gaster 2.1–2.5× as long as wide with dorsal surface convex23

- H23 (22) Median part of mesoscutellum strongly reticulate and with less elongate meshes than in alternate (Fig. 564); medio-basal Gt_1 with a sharp transverse edge dorsally (as in Fig. 24) *pagana* Hansson **sp.nov.** (p. 430)
 – Median part of mesoscutellum with relatively weak reticulation and with meshes more elongate than in alternate (Fig. 354); medio-basal Gt_1 without a sharp transverse edge dorsally, but can have a sharp edge shaped like an inverted U (as in Fig. 42)24
- H24 (23) Median part of propodeum with irregular carinae (Fig. 354); gaster 2.1× as long as wide (Fig. 354)..... *crabra* Hansson **sp.nov.** (p. 285)
 – Median part of propodeum predominantly with strong reticulation (Fig. 544); gaster 2.5× as long as wide (Fig. 544)..... *noblitis* Hansson **sp.nov.** (p. 417)
- H25 (20) Antenna with F1 1.3× as long as F2, and F3 1.1× as long as wide (Fig. 863).....
 *preta* Hansson **sp.nov.** (p. 448)
 – Antenna with F1 0.9× as long as F2, and F3 1.4–1.8× as long as wide.....26
- H26 (25) Mesoscutellum black non-metallic (Fig. 494)
 *melasoma* Hansson **sp.nov.** (p. 381)
 – Mesoscutellum metallic greenish-blue (Figs 264, 322).....27
- H27 (26) Gaster 1.6× as long as wide (Fig. 264) *alloris* Hansson **sp.nov.** (p. 222)
 – Gaster 2.4× as long as wide (Fig. 322) *burreadis* Hansson **sp.nov.** (p. 261)

SPECIES TREATMENTS

Species-group *haemon*

Galeopsomyia compacta (Howard)

(Figs 652, 653)

Tetrastichodes compactus Howard 1897:175. Lectotype ♀ (primary type no. 5.3594, NHMUK 013458204) designated by LaSalle & Schauff (1992:29), examined. West Indies (Grenada).

Tetrastichus compactus (Howard), De Santis (1979:12, 291).

Galeopsomyia compacta (Howard), LaSalle & Schauff (1992:29).

Diagnosis (female). Antenna with a solid clava (Fig. 653); genal carina short, present close to mouth opening; mesoscutellum with submedian grooves indistinct and diverging towards posterior part (Fig. 652); dorsellum without median carina (Fig. 652); hind coxa without carina along posterior margin; propodeum with strong reticulation, callus with two setae; gaster 2.6× as long as wide, medio-basal Gt_1 with upper margin rounded, without transverse edge/carina or incision, tergites with strong reticulation (Fig. 652).

Redescription (female lectotype). Length of body 1.9mm.

Scape and pedicel yellowish-brown, flagellum brown. Head with frons golden-green,

clypeal area dark brown, antennal scrobes black. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole not visible on type. Gaster black with metallic tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; genal carina short, present close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric, elongate in posterior half of midlobe; midlobe without a median groove, with about six adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, diverging towards posterior part. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina, with strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation; hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open; costal setal row unbroken.

Petiole not visible on type. Gaster elongate; medio-basal Gt_1 with upper part rounded; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 42; POL 13; OOL 5; lateral ocellus diameter 5.5; head width 55; mouth width nm; malar space 16; eye length 24; scape length 18; scape width 4.5; pedicel+flagellum length 44; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 6; F1 width 5; F2 length 5.5; F2 width 5; F3 length 5.5; F3 width 5.5; clava length 13; clava width 7; C3 length 5; spicule length 1; mesosoma length 71; mesosoma width 51; midlobe of mesoscutum length 28; mesoscutellum length 27.5; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 15.5; median part of mesoscutellum, width in anterior part 13.5; median part of mesoscutellum, width in posterior part 18.5; lateral part of mesoscutellum (measured medially) 4; dorsellum length 5.5; propodeum length 10; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 10; gaster length 104; gaster width 40; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 26; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 16; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Grenada) (Howard 1897).

Material examined.

Lectotype female in NHMUK.

***Galeopsomyia epidius* (Walker)**

(Figs 23, 648, 649, 658, 659, 887, 998, 1107)

Tetrastichus epidius Walker 1847:28. Lectotype ♀ (primary type no. 5.1413, NHMUK 013458201) designated by Burks (1975:142), examined. U.S.A. (Florida).

Aprostocetus epidius (Walker), Burks (1975:142).

Galeopsomyia epidius (Walker), Graham & LaSalle (1991:91).

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 998); genal carina absent; eyes small 1.0× as long as malar space (Fig. 887); mesoscutellum (Figs 648, 658) with strong reticulation, meshes isodiametric in posterior half, elongate in anterior half, submedian grooves indistinct and partly absent, slightly curved and diverging towards posterior part, with a ±complete median groove; dorsellum without median carina; propodeum with strong reticulation (Figs 648, 658), callus with six setae; gaster 3.1× as long as wide, Gt_2 0.3× as long as Gt_4 , tergites with strong reticulation (Figs 648, 658).

Description (female nontype). Length of body 2.6mm (specimen measured) (variation in material 2.3–3.1mm).

Scape yellowish-brown with dorsal part brown, pedicel and flagellum dark brown. Head with frons bluish-green, antennal scrobes black, clypeus dark brown. Vertex bluish-green. Thoracic dorsum golden-green. Legs with fore and mid coxae black with metallic tinges, hind coxa golden-green; trochanters dark brown; femora black with apex yellowish-brown; fore tibia brown, mid and hind tibiae with basal half brown and apical half yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster golden-green; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric in posterior half, elongate in anterior half; submedian grooves indistinct and partly absent, slightly curved and diverging towards posterior part; with a ±complete median groove; frenal groove wide and subdivided by carinae; with an expanded and strongly reticulate part behind frenal groove. Dorsellum with strong reticulation. Propodeum with a strong and relatively wide median carina that expands posteriorly; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 41; POL 13; OOL 7; lateral ocellus diameter 4; head width 50; mouth width 16; malar space 18; eye length 18; scape length 21; scape width 4; pedicel+flagellum length 50; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 7; F2 width 6; F3 length 6.5; F3 width 6; clava length 17; clava width 7; C3 length 5; spicule length 1; mesosoma length 62; mesosoma width 44; midlobe of mesoscutum length 24; mesoscutellum length 22; mesoscutellum width 21; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum (measured medially) nm; dorsellum length 3.5; propodeum length 8; costal cell length 34; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 10.5; gaster length 124; gaster width 40; Gt_2 length (measured medially) 6.5; Gt_4 length (measured medially) 20; Gt_7 length (measured medially) 23; Gt_7 width (measured at base) 15; longest cercal seta length 11; shortest cercal seta length 5.

Male. Length of body 1.6–1.8mm.

Antenna (Fig. 998) with scape dark brown, elongate with dorsal and ventral edges \pm parallel; plaque dark brown and situated in apical half of scape; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 32; head width 44; mouth width 14; malar space 14; eye length 16; scape length 22; scape width 4.5; plaque length 9; pedicel length 6.5; pedicel+flagellum length 70; F1 length 6; F1 width 4; F2 length 11; F2 width 5; F3 length 12; F3 width 4.5; F4 length 11.5; F4 width 4; clava length 23; clava width 4; mesosoma length 57; mesosoma width 39; gaster length 66; gaster width 30; longest subbasal seta on F1, length 28.

Hosts. Reared from *Asphondylia* sp. (Diptera: Cecidomyiidae) on *Ambrosia psilostachya* (Asteraceae), and an unidentified Cecidomyiidae on *Xanthium* sp. (Asteraceae).

Distribution. U.S.A. (Florida (Walker 1847), Oklahoma, Texas (**new records**)).

Material examined.

Type material: lectotype ♀ (NHMUK). Additional material (14♀ 7♂, MZLU, NHMUK): 13♀ 7♂ from U.S.A., Oklahoma, Payne Co., Mehan, 36.014339°N, -96.996774°W, 10.viii.2016, ex *Asphondylia* (Diptera: Cecidomyiidae) on *Ambrosia psilostachya* (Asteraceae), M.W. Palmer (MZLU, NHMUK); 1♀ U.S.A., Texas, Navasota, v.1935, ex Cecidomyiidae on *Xanthium*, L.H. Hitchcock.

Galeopsomyia haemon (Walker)

(Figs 662, 663)

Tetrastichus haemon Walker 1847:28. Lectotype ♀ (primary type no. 5.1414, NHMUK 013458202) designated by Burks (1971:82), examined. U.S.A. (Florida).

Euderus columbiana Ashmead 1888:104. Lectotype ♀ (USNM) designated by Burks (1975:144), District of Columbia & Florida (D.C. is locality for lectotype). Synonymized by Burks (1975:144).

Cruderus columbiana (Ashmead), Howard (1892:215).

Trichaporus columbiana (Ashmead), Ashmead (1900:561).

Galeopsomyia columbiana (Ashmead), Girault (1916:348).

Horismenus haemon (Walker), Burks (1943:605).

Galeopsomyia haemon (Walker), Burks (1971:82).

Diagnosis (female). Antenna with a solid clava (Fig. 663); genal carina absent; mesoscutellum with strong reticulation, meshes elongate, submedian grooves indistinct and hardly visible (Fig. 662); dorsellum without median carina; hind coxa without carina along posterior margin; tibiae dark brown with apex yellowish-brown (Fig. 663); gaster 2.4× as long as wide, medio-basal Gt₁ with upper margin rounded, without carinae or edges, tergites with strong reticulation (Fig. 662).

Redescription (female lectotype). Length of body 2.1mm.

Scape brown, pedicel and flagellum dark brown. Head and body black with metallic tinges. Legs with coxae black with metallic tinges; trochanters dark brown; femora dark brown; tibiae

dark brown with apex yellowish-brown; T1–3 pale brown, T4 dark brown. Petiole not visible on type. Gaster with gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; genal carina absent. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, adnotaular setae not possible to see on type. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct. Dorsellum with strong sculpture, without median carina. Propodeum with a strong median carina, with strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole not visible on type. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 48; POL 15; OOL 7; lateral ocellus diameter 4; head width 55; mouth width 19; malar space 14; eye length 24; scape length 25; scape width 4.5; pedicel+flagellum length 60; pedicel length 10; pedicel width, dorsal view 4; F1 length 10; F1 width 6; F2 length 9.5; F2 width 7.5; F3 length 7; F3 width 7; clava length 20; clava width 7.5; C3 length nm; spicule length nm; mesosoma length 72; mesosoma width 51; midlobe of mesoscutum length 25.5; mesoscutellum length 28; mesoscutellum width 22; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum (measured medially) nm; dorsellum length 4; propodeum length 12; costal cell length 39; costal cell width (measured at widest part) 2; marginal vein length nm; stigmal vein length nm; gaster length 110; gaster width 45; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 15; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Reared from *Asphondylia borrichiae* Rossi & Strong (Stiling *et al.* 1992), *A. helianthiglobulus* Osten Sacken (Burks 1979), *Rhopalomyia* sp. (Burks 1979). All hosts are Cecidomyiidae (Diptera).

Distribution. U.S.A. (Florida) (Walker 1847), (District of Columbia & Florida) (Ashmead 1888).

Material examined.

Lectotype female of *T. haemon* in NHMUK.

Galeopsomyia nigrocyanea (Ashmead) (Figs 676, 677)

Gyrolasia nigrocyaneus Ashmead 1886:134. Lectotype ♀ (USNM type no. 8099) designated by LaSalle & Schauff (1992:30), examined through images. U.S.A. (Florida).

Galeopsomyia nigrocyanea (Ashmead), (Peck 1951:443).

Diagnosis (female). Antennae missing in single examined specimen; mesoscutum and mesoscutellum with strong reticulation with slightly elongate meshes (Fig. 676); propodeum with strong reticulation and with a very strong median carina that expands in posterior part (Fig. 676); hind coxa with a carina along posterior margin; petiole not visible; gaster about 3.2× as long as wide, tergites completely reticulate with very strong reticulation, medio-basal Gt₁ with a rectangular incision but without carinae or edges (Fig. 676); body black without metallic tinges (Figs 676, 677).

Male. Unknown.

Hosts. Reared from galls induced by *Belonocnema treatae* Mayr (Hymenoptera: Cynipidae) on *Quercus* sp. (Gordh 1979).

Distribution. U.S.A. (Florida) (Ashmead 1886).

Material examined.

Lectotype female in USNM, through images.

Remarks. The lectotype female is slightly damaged with most parts of antennae and left wing pair missing.

***Galeopsomyia valerus* (Walker)**

(Figs 670, 671)

Cirrospilus Valerus Walker 1839:72. Lectotype ♀ (primary type no. 5.3596, NHMUK 013458206) designated by LaSalle & Schauff (1992:30), examined. Brazil.

Tetrastichus valerus (Walker), De Santis (1980:159).

Galeopsomyia valerus (Walker), LaSalle & Schauff (1992:31).

Diagnosis (female). Antenna with a solid and strong clava (Fig. 671); genal carina strong; mesoscutellum (Fig. 670) with strong reticulation, meshes isodiametric to slightly elongate, submedian grooves indistinct, diverging towards posterior part; dorsellum without median carina; hind coxa with a strong carina along posterior margin; propodeum with strong reticulation (Fig. 670), callus with two setae; gaster 2.2× as long as wide, medio-basal Gt₁ with dorsal margin rounded, tergites with strong reticulation (Fig. 670).

Redescription (female lectotype). Length of body 1.4mm.

Scape and pedicel yellowish-brown, flagellum pale brown. Head with frons metallic bluish-green, clypeal area dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole not visible on type. Gaster metallic bluish-green; gonoplac black.

Antenna with solid and strong clava. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; genal carina present and strong. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric, elongate in posterior half of

midlobe; midlobe without a median groove, with about six adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric to slightly elongate; submedian grooves indistinct, diverging towards posterior part. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina, with strong reticulation; callus with two setae. Coxae with strong reticulation; hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open; costal setal row unbroken.

Petiole not visible on type. Gaster elongate; medio-basal Gt_1 with dorsal margin rounded; tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 47; POL 14.5; OOL 6.5; lateral ocellus diameter 5; head width 60; mouth width 19; malar space 17; eye length 26; scape length 20; scape width 4; pedicel+flagellum length 49; pedicel length 9; pedicel width, dorsal view 4.5; F1 length 7; F1 width 5.5; F2 length 6.5; F2 width 6; F3 length 6; F3 width 6.5; clava length 16.5; clava width 7.5; C3 length 6; spicule length 1.5; mesosoma length 78; mesosoma width 55; midlobe of mesoscutum length 30; mesoscutellum length 30; mesoscutellum width 28.5; median part of mesoscutellum width (measured medially) 14; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum (measured medially) 5.5; dorsellum length 2.5; propodeum length 9.5; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 11; gaster length 105; gaster width 48; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 20; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 16; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil (Walker 1839).

Material examined.

Lectotype female in NHMUK.

***Galeopsomyia viridicyanea* (Ashmead)**
(Figs 682, 683)

Trichoporus viridicyaneus Ashmead 1904:512. Lectotype ♀ (USNM type no. 8099) designated by LaSalle & Schauff (1992:30), examined through images. Brazil.

Exurus viridicyaneus (Ashmead), Costa Lima (1959:124).

Galeopsomyia viridicyanea (Ashmead), LaSalle & Schauff (1992:31).

Diagnosis (female). Mesoscutum and mesoscutellum with strong reticulation with slightly elongate meshes (Fig. 682); mesoscutellum with submedian grooves weak but discernible (Fig. 682); propodeum with very strong reticulation and with a strong median carina that expands in posterior part (Fig. 682); hind coxa with an irregular carina along posterior margin; petiole yellowish-brown, very short; gaster 3.1× as long as wide, tergites with very strong reticulation, medio-basal Gt_1 with a transverse sharp edge dorsally, median Gt_{1-5} with a longitudinal rounded edge (Fig. 682); mesosoma metallic bluish-purple (Figs 682, 683).

Redescription of female paralectotype: length of body 2.5mm.

Scape yellowish-brown, pedicel and F1–3 pale brown, clava dark brown. Head with frons metallic bluish-purple, antennal scrobes black, clypeus yellowish-brown; vertex metallic bluish-purple. Mesosoma metallic bluish-purple. Legs with fore and hind coxae metallic bluish-purple, mid coxa dark brown with metallic tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-white; tibiae and tarsi yellowish-white, T4 pale brown. Petiole yellowish-brown. Gaster dark brown to black with metallic tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with a strong genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with median groove weakly indicated, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes slightly elongate; submedian grooves weak but discernible; anterior pair of setae placed in front of the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with very strong reticulation, median carina strong and expanded in posterior one-third; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa with a strong irregular carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse sharp edge dorsally; all tergites with very strong reticulation, median $Gt_{1,5}$ with a longitudinal rounded edge.

Relative measurements: head length, dorsal view 22; head length, frontal view 39; POL 12; OOL 6; lateral ocellus diameter 4.5; head width 51.5; mouth width 16; malar space 17; eye length 20; scape length 17; scape width 4; pedicel+flagellum length 49; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4.5; F2 length 7; F2 width 4.5; F3 length 6.5; F3 width 4.5; clava length 16; clava width 5.5; C3 length 5.5; spicule length 1; mesosoma length 69; mesosoma width 46; midlobe of mesoscutum length 27; mesoscutellum length 25; mesoscutellum width 23.5; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 33; stigmal vein length 7; gaster length 113; gaster width 36; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 18; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 11; longest cercal seta length nm; shortest cercal seta length nm.

Male. Not seen.

Hosts. Unknown.

Distribution. Brazil (Ashmead 1904).

Material examined.

Lectotype female through images; paralectotype female in NHMUK labelled: “Apr11”, “Chapada”, “H.H. Smith Coll”, “Paratype No. 8099 U.S.N.M.”, “viridicyaneus A”.

New species

Galeopsomyia abatis Hansson sp.nov.

(Figs 44, 45, 999)

Diagnosis (female). Antennal clava solid, 2.2× as long as wide (Fig. 999); genal carina present; mesoscutum and mesoscutellum (Fig. 44) with a median groove, mesoscutellum with ±distinct submedian grooves and median part with ±elongate meshes (Fig. 44); propodeum with a strong and wide median carina that expands strongly backwards from median part (Fig. 44); hind coxa with a carina along posterior margin; gaster 1.9× as long as wide, medio-basal Gt_1 with a blunt transverse edge dorsally, Gt_2 0.2× as long as Gt_4 , tergites with strong reticulation (Fig. 44).

Female holotype: length of body 1.9mm (paratypes 2.0–2.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black with metallic tinges and clypeus dark brown; vertex black with metallic blue tinges. Mesosoma metallic bluish-green. Legs with fore and mid coxae black with metallic blue tinges, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; fore tarsus pale brown with T4 dark brown, mid and hind tarsi yellowish-brown with T4 pale brown. Petiole black. Gaster with Gt_1 metallic bluish-green, $Gt_{2,5}$ golden-purple, metallic bluish-green laterally, Gt_6 metallic bluish-green, Gt_7 black; gonoplac black.

Antenna with solid clava. Face below toruli and scrobes with weak reticulation, frons with strong reticulation, clypeal area smooth; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, isodiametric in anterior part of midlobe and elongate in posterior part; midlobe with six setae in one row close to notauli; with a complete but weak median groove. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves ±distinct. Dorsellum with strong reticulation. Propodeum with a strong and wide median carina that expands strongly backwards from median part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa with a strong carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row complete.

Petiole very short, just a narrow band. Gaster ovate; medio-basal Gt_1 with a blunt transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 33; POL 11.5; OOL 5; lateral ocellus diameter 4; head width 46; mouth width 14.5; malar space 12.5; eye length 20; scape length 16; scape width 3.5; pedicel+flagellum length 39; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 4; F2 length 5.5; F2 width 4.5; F3 length 5; F3 width 5; clava length 13; clava width 6; C3 length 4; spicule length 1; mesosoma length 59; mesosoma width 41; midlobe of mesoscutum length 21; mesoscutellum length 22; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 9; costal cell length 36; costal cell width (measured at widest part) 3; marginal vein length 24; stigmal vein length 12; gaster length 68; gaster width 36; Gt_2 length

(measured medially) 3; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 13; longest cercal seta length 9; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, xi.1949, F. Plaumann (NHMUK). Paratypes: 3♀ with same label data as holotype (MZLU, NHMUK).

***Galeopsomyia aciana* Hansson sp.nov.**

(Figs 46, 47, 689)

Diagnosis (female). Antennal clava solid (Fig. 689); genal carina present; mesoscutellum with relatively weak reticulation with elongate meshes (Fig. 46); propodeal callus with eight setae; hind coxa with a carina along posterior margin; gaster (Fig. 46) 2.6× as long as wide, medio-basal Gt₁ with a transverse carina dorsally, tergites with strong reticulation, Gt₁₋₄ with a smooth median line.

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head with frons black with metallic blue tinges, clypeus dark brown, antennal scrobes black; vertex black with weak metallic tinges. Thoracic dorsum black with metallic blue tinges. Legs with fore and mid coxae black, hind coxa black with metallic tinges; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster dark brown to black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe without a median groove, with nine scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a weak a median groove in anterior two-thirds, lateral parts with strong reticulation, meshes elongate; submedian grooves indistinct, running close to and parallel with lateral margin of mesoscutellum; anterior pair of setae situated in anterior part. Dorsellum with strong sculpture. Propodeum with strong reticulation; with a strong and wide median carina that expands strongly backwards from median part; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a transverse carina dorsally, Gt₁₋₄ with a smooth median line; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34.5; POL 10.5; OOL 5; lateral ocellus diameter 3; head width 45.5; mouth width 12; malar space 15; eye

length 18.5; scape length 15; scape width 3; pedicel+flagellum length 40; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 5.5; F2 width 4; F3 length 5; F3 width 4.5; clava length 14; clava width 5; C3 length 4.5; spicule length 1.5; mesosoma length 57; mesosoma width 41; midlobe of mesoscutum length 19; mesoscutellum length 21; mesoscutellum width 20.5; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 8; costal cell length 25; costal cell width (measured at widest part) 2; marginal vein length 26; stigmal vein length 11; gaster length 86; gaster width 33; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 9; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, xi.1949, F. Plaumann (NHMUK).

***Galeopsomyia alas* Hansson sp.nov.**

(Figs 19, 48, 49, 908, 1000)

Diagnosis (female). Antenna with solid clava (Fig. 1000); with genal carina; mesoscutellum 1.0× as long as wide, with elongate meshes (Fig. 908); fore coxa with a strong carina along posterior margin and with part in front of carina concave (Fig. 19), hind coxa without carina along posterior margin; propodeum with a wide median carina that splits in posterior part to form an inverted “Y” (Fig. 48); petiole transverse with strong sculpture on dorsal surface; gaster 2.3× as long as wide, Gt₂ 0.3× as long as Gt₄, Gt₁ with weak reticulation and partly smooth, more shiny than remaining tergites and medio-basal part with a ±rectangular-semicircular incision (Fig. 48).

Female holotype: length of body 2.0mm (paratypes 2.0–2.1mm).

Scape yellowish-brown, pedicel and flagellum brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex black with metallic bluish-green tinges. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown to black, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges; fore and mid tibiae yellowish-brown, hind tibia pale brown; T1–3 yellowish-white, T4 dark brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ golden-purple, Gt₅₋₆ metallic bluish-green, Gt₇ black with metallic tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus and scrobes with weak reticulation; with a strong genal carina that reaches level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and slightly

elongate on midlobe; midlobe with ten scattered adnotaular setae, without median groove. Mesoscutellum with strong reticulation, meshes elongate, submedian grooves weak, wide apart and diverging towards posterior part; anterior pair of setae placed in front of the middle of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong and wide median carina, posterior part splits into an inverted “Y”; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation; fore coxa with a strong carina along posterior margin and with part in front of carina concave; hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse, with strong sculpture on dorsal surface. Gaster elongate; Gt_1 with weak reticulation, partly smooth, and shiny, remaining tergites with strong reticulation; medio-basal Gt_1 with a \pm rectangular-semicircular incision.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 11; OOL 5.5; lateral ocellus diameter 3.5; head width 45; mouth width 15; malar space 13; eye length 21; scape length 16; scape width 3.7; pedicel+flagellum length 40; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 6; F1 width 4; F2 length 6; F2 width 4; F3 length 5; F3 width 4.5; clava length 12; clava width 6.2; C3 length 4.5; spicule length 1; mesosoma length 61; mesosoma width 45; midlobe of mesoscutum length 25; mesoscutellum length 24; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 16.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 10; gaster length 86; gaster width 37; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 10; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, 11km SE La Virgen, 10°20'N, 84°04'W, 450-550m, 23.ii-20. iv.2003, INBio, OET, ALAS (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 1♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS; 1♀ COSTA RICA, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, v.1991, P. Hanson; 2♀ from same locality as previous but collected iv.1992.

Etymology. Named after the acronym “ALAS” = Arthropods of La Selva.

Galeopsomyia aliosa Hansson sp.nov.

(Figs 21, 50, 51, 690)

Diagnosis (female). Antenna with solid clava (Fig. 690); genal carina present; mesoscutellum with weak and indistinct submedian grooves, more distinct in posterior half (Fig. 50), predominantly with isodiametric meshes; propodeum with posterior part of median carina split into a

“Y”, and with anterior part raised into a tooth (Fig. 50); hind coxa with a strong and complete carina along posterior margin (Fig. 21); petiole short, conical and smooth; gaster 2.8× as long as wide, Gt₂ 0.2× as long as Gt₄, Gt₁ with same strong reticulation as remaining tergites (Fig. 50), medio-basal part of Gt₁ without transverse carina or edge dorsally.

Female holotype: length of body 2.2mm (paratypes 2.4–2.8mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons and vertex black with metallic greenish-blue tinges, antennal scrobes and clypeus black. Thoracic dorsum metallic greenish-blue. Legs with fore and hind coxae metallic greenish-blue, mid coxa black; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges and apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic greenish-blue with posterior margin golden-purple, Gt₂₋₄ golden-purple, Gt₅ metallic greenish-blue with medio-apical part golden-purple, Gt₆ golden-purple, Gt₇ black with metallic tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Pronotum, mesoscutum and mesoscutellum with strong reticulation; midlobe of mesoscutum with six adnotaular setae in a single row. Mesoscutellum with submedian grooves hardly discernible, without median groove; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with complete but short median carina, with posterior part split into an inverted “Y” and with anterior part raised into a tooth; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong and complete carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole small, conical and smooth. Gaster elongate; all tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 11.5; OOL 6; lateral ocellus diameter 4; head width 47; mouth width 15; malar space 13; eye length 21; scape length 16.5; scape width 4; pedicel+flagellum length 45; pedicel length 7; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4.5; F2 length 6; F2 width 5; F3 length 6; F3 width 6; clava length 15.5; clava width 6.5; C3 length 4; spicule length 1; mesosoma length 61; mesosoma width 45; midlobe of mesoscutum length 27; mesoscutellum length 23; mesoscutellum width 23; median part of mesoscutellum width (measured medially); median part of mesoscutellum, width in anterior part; median part of mesoscutellum, width in posterior part; lateral part of mesoscutellum, width (measured medially); dorsellum length 3.5; propodeum length 7; costal cell length 33; costal cell width (measured at widest part) 3; marginal vein length 32; stigmal vein length 11; gaster length 100; gaster width 36; Gt₂ length (measured medially) 3; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 14; longest cercal seta length 8; shortest cercal seta length 6

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 16.ii.2013, J.S. Noyes (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): 3♀ from same locality as holotype but collected 8-29.ii.2000, iii.2002, 1-12.iv.2002; 1♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iv.2002, INBio, OET, ALAS; 1♀ **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Sendero a Casa Coca, LS 331750_574400, 1700m, 12.v.2001, D. Rubí.

***Galeopsomyia altamiraensis* Hansson sp.nov.**

(Figs 52, 53, 692)

Diagnosis (female). Antennal clava ±solid (Fig. 692); with genal carina; mesoscutum with strong reticulation with elongate meshes (Fig. 52), meshes on mesoscutellum very elongate (Fig. 52) mesoscutellum thus appearing striate, submedian grooves distinct, straight and diverging slightly towards posterior part; dorsellum with median carina; hind coxa without carina along posterior margin; propodeum with median carina shaped like an inverted V (Fig. 52); petiole dark yellowish-brown, very short narrow band; gaster 2.4× as long as wide, medio-basal Gt_1 with a strong transverse carina dorsally and with median carina in anterior half, $Gt_{2,3}$ with a very narrow shiny median stripe, tergites with very strong reticulation; mesosoma black with metallic blue tinges (Fig. 52).

Female holotype: length of body 2.1mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head black with metallic tinges, clypeus dark brown. Mesoscutum and mesoscutellum black with metallic bluish tinges, propodeum black. Legs with coxae black, hind coxa with metallic blue tinges; trochanters dark brown; femora dark brown to black; tibiae and tarsi yellowish-white, T4 dark brown. Petiole dark yellowish-brown. Gaster black, Gt_1 with metallic bluish tinges, $Gt_{2,3}$ with metallic purplish tinges; gonoplac black.

Antenna with ±solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation, meshes transverse.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median line indicated through changes in the reticulation, and with six setae in two rows close to notauli. Mesoscutellum with strong reticulation, meshes very elongate; submedian grooves distinct, straight and diverging slightly towards posterior part; anterior pair of setae placed in the anterior one-third of mesoscutellum. Dorsellum with strong sculpture, with median carina. Propodeum with a triangular median carina shaped like an inverted V, concave; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a strong transverse carina dorsally and with a median carina in anterior half; $Gt_{2,3}$ with a very narrow shiny median stripe; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; POL 9.7; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 13; malar space 14; eye length 18; scape length 15; scape width 3.5; pedicel+flagellum length 43; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 6; F2 width 4; F3 length 5.5; F3 width 4; clava length 14.5; clava width 5; C3 length 5; spicule length 1.5; mesosoma

length 55; mesosoma width 41; midlobe of mesoscutum length 20; mesoscutellum length 21.5; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 8.5; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 27; stigmal vein length 9; gaster length 90; gaster width 37; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 10; longest cercal seta length 10; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU).

Etymology. Named after type locality, Estación Altamira.

***Galeopsomyia aronia* Hansson sp.nov.**

(Figs 54, 55, 691)

Diagnosis (female). Antennal clava solid, 2.3× as long as wide (Fig. 691); genal carina present; mesoscutum (Fig. 54) with strong reticulation, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe without a median groove; mesoscutellum with strong reticulation, meshes isodiametric (Fig. 54); propodeum with median carina triangular (Fig. 54); hind coxa with a carina along posterior margin; gaster 3.1× as long as wide, medio-basal Gt₁ with transverse edge dorsally, all tergites with strong reticulation (Fig. 54).

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge and outer surface dark brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and mid coxae black with metallic tinges, hind coxa golden-green; trochanters dark brown; femora golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,5} golden-purple, Gt_{6,7} golden-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric, without median groove, submedian grooves weak but traceable in posterior half, running close to and parallel with lateral margin of mesoscutel-

lum; anterior pair of setae situated in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse edge dorsally, all tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 39; POL 11.5; OOL 6.5; lateral ocellus diameter 4; head width 49; mouth width 14.5; malar space 14; eye length 23; scape length 19; scape width 4.5; pedicel+flagellum length 47; pedicel length 8; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 4.5; F2 length 7; F2 width 5; F3 length 6; F3 width 6; clava length 15; clava width 6.5; C3 length 4; spicule length 1; mesosoma length 65; mesosoma width 48; midlobe of mesoscutum length 27.5; mesoscutellum length 25; mesoscutellum width 25; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2.5; propodeum length 8; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 36; stigmal vein length 13.5; gaster length 112; gaster width 36; Gt_2 length (measured medially) 4; Gt_4 length (measured medially) 18.5; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 18; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK).

***Galeopsomyia azofeifai* Hansson sp.nov.**

(Figs 56, 57, 693)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 693); genal carina absent; mesoscutum (Fig. 56) with strong reticulation, meshes isodiametric, midlobe without median groove; mesoscutellum (Fig. 56) with median part with rather strong reticulation and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves ±distinct, slightly curved and diverging towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 56) 2.8× as long as wide, with Gt_2 very short, 0.06× as long as Gt_4 , medio-basal Gt_1 without transverse carina or edge dorsally, $Gt_{1,2}$ with weak reticulation and shiny in posterior half, remaining tergites with strong reticulation; mesosoma bright metallic bluish-green (Figs 56, 57).

Female holotype: length of body 2.7mm.

Scape and pedicel yellowish-brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Mesoscutum and mesoscutellum metallic bluish-green, propodeum metallic blue. Legs with fore coxa black with metallic blue tinges, mid coxa black, hind coxa metallic bluish-green; trochanters pale brown; femora black with metallic blue tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum with median part with rather strong reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm distinct, slightly curved and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ without transverse edge or carina dorsally, Gt_{1,2} with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 40; POL 11.5; OOL 6; lateral ocellus diameter 5.5; head width 56; mouth width 18; malar space 14; eye length 23.5; scape length 19; scape width 5; pedicel+flagellum length 51; pedicel length 8; pedicel width, dorsal view 4; F1 length 8; F1 width 4.5; F2 length 8; F2 width 5; F3 length 7; F3 width 5; clava length 17.5; clava width 5.5; C3 length 6.5; spicule length 2; mesosoma length 69; mesosoma width 51; midlobe of mesoscutum length 27; mesoscutellum length 24; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2.5; propodeum length 9; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 32; stigmal vein length 11; gaster length 113; gaster width 41; Gt₂ length (measured medially) 2; Gt₄ length (measured medially) 32; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 13; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Cerro Mueller, LS 273200_521500, 744m, 6.xi.2001, J. Azofeifa (NHMUK).

Etymology. Named in honour of Antonio (Tonio) Azofeifa, former parataxonomist at INBio and collector of material of this and many other Costa Rican Eulophidae.

Remarks. The holotype lacks C2&3 on right antenna.

***Galeopsomyia beltearis* Hansson sp.nov.**

(Figs 58, 59, 1002)

Diagnosis (female). Antennal clava 3.5× as long as wide, with a weak constriction between C1 and C2 (Fig. 1002); genal carina present; mesoscutellum (Fig. 58) mainly with strong reticulation, but with weak reticulation and shiny close to posterior margin, meshes elongate, submedian grooves distinct in posterior one-third; dorsellum with median carina; hind coxa with a carina along posterior margin; gaster (Fig. 58) 3.9× as long as wide, medio-basal Gt₁ without transverse edge/carina dorsally, this part is smoothly rounded, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation, posterior margin of Gt_{3,4} straight.

Female holotype: length of body 3.0mm.

Antenna dark brown with base of scape dark yellowish-brown. Head with frons metallic bluish-green, clypeus dark brown; vertex metallic bluish-purple. Mesoscutum and propodeum metallic bluish-green; mesoscutellum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-white; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic blue tinges and apex yellowish-brown; tibiae and tarsi yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt_{2,5} metallic purple, Gt_{6,7} black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, antennal scrobes and parts below toruli with weak reticulation; clypeal area smooth; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with five scattered adnotaular setae. Mesoscutellum mainly with strong reticulation, but with weak reticulation and shiny close to posterior margin, meshes elongate; submedian grooves distinct in posterior one-third; median pair of setae situated just behind middle of mesoscutellum; without median groove. Dorsellum with strong reticulation, with median carina. Propodeum with median carina narrow in anterior half and expanding in posterior half; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 42; POL 11.5; OOL 7; lateral ocellus diameter 4.5; head width 52; mouth width 15; malar space 16; eye length 20; scape length 23; scape width 5; pedicel+flagellum length 56; pedicel length 9.5; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 9; F2 width 5; F3 length 8.5; F3 width 5; clava length 19.5; clava width 5.5; C3 length 7.5; spicule length 2.5; mesosoma length 74; mesosoma width 46; midlobe of mesoscutum length 29; mesoscutellum length 24.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) na;

median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 12; costal cell length 42; costal cell width (measured at widest part) 3; marginal vein length 49; stigmal vein length 9.5; gaster length 142; gaster width 36; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 22; Gt₇ width (measured at base) 13; longest cercal seta length 15; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **San José**, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iii.1995, P. Hanson (NHMUK).

***Galeopsomyia bentoni* Hansson sp.nov.**

(Figs 60, 61, 695)

Diagnosis (female). Antennal clava ±solid (Fig. 695); genal carina present; mesoscutum (Fig. 60) with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove; mesoscutellum (Fig. 60) with strong reticulation, meshes elongate, submedian grooves ±distinct, running parallel with lateral margins of mesoscutellum and diverging towards posterior part; hind coxa without carina along posterior margin; gaster (Fig. 60) 2.0× as long as wide, medio-basal Gt₁ with a strong transverse carina dorsally, Gt₂ 0.3× as long as Gt₄, all tergites with strong reticulation.

Female holotype: length of body 2.0mm.

Scape and pedicel yellowish-brown, flagellum brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae bluish-green, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with metallic tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₄ metallic purple, Gt₅₋₇ metallic bluish-green; gonoplac black.

Antenna with solid clava. Head with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves ±distinct, running parallel with lateral margins of mesoscutellum and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with triangular median carina, concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum ±open towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with a strong transverse carina dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 37; POL 11.5; OOL 4.5; lateral ocellus diameter 4.5; head width 50; mouth width nm; malar space 14; eye length 21; scape length 15; scape width 4; pedicel+flagellum length 40; pedicel length 7; pedicel width, dorsal view 3; F1 length 7; F1 width 4; F2 length 6; F2 width 5; F3 length 6; F3 width 5.5; clava length 15; clava width 6; C3 length 6; spicule length 1; mesosoma length 65; mesosoma width 48; midlobe of mesoscutum length 24.5; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 16; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 11; costal cell length 29; costal cell width (measured at widest part) 2.2; marginal vein length 31; stigmal vein length 9; gaster length 73; gaster width 37; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 25; Gt_7 length (measured medially) 4; Gt_7 width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL**, Bahia, Mucari, x.1978, F. Benton (NHMUK).

Etymology. Named in honour of collector, Fred Benton.

***Galeopsomyia bidensiae* Hansson sp.nov.**

(Figs 62, 63, 698, 951)

Diagnosis (female). Antennal clava 3.0× as long as wide, with a weak constriction between C1 and C2 (Fig. 698); genal carina present; mesoscutellum (Fig. 62) with strong reticulation, meshes elongate; propodeum with median carina very narrow, narrow part (i.e. excluding posterior expanded part) at least 6.0× as long as wide; hind coxa with a carina along posterior margin; gaster (Fig. 62) 2.7× as long as wide, medio-basal Gt_1 without transverse edge/carina dorsally, all tergites with strong reticulation. Males are distinguished from other males through the long and narrow anterior part of median carina on propodeum (as in female).

Female holotype: length of body 2.3mm (paratypes 1.9–2.6mm).

Scape yellowish-brown in basal half and dark brown in anterior half, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Mesoscutum and propodeum metallic bluish-green; mesoscutellum golden-green. Legs with fore coxa metallic bluish-purple, mid coxa black, hind coxa metallic bluish-green; trochanters brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic blue tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green with posterior

margin golden-purple, $Gt_{2,5}$ golden-purple medially and metallic bluish-green laterally, $Gt_{6,7}$ metallic bluish-green; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, \pm elongate on midlobe; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, without a median groove, submedian grooves weak and indistinct; anterior pair of setae situated just in front of middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 without incision or transverse carina dorsally, with relatively weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 10.5; OOL 6; lateral ocellus diameter 4; head width 49; mouth width 15; malar space 15; eye length 19.5; scape length 19; scape width 4; pedicel+flagellum length 53; pedicel length 8; pedicel width, dorsal view 4; F1 length 8.5; F1 width 4.5; F2 length 8; F2 width 5; F3 length 8; F3 width 6; clava length 18; clava width 6; C3 length 5; spicule length 1.5; mesosoma length 63; mesosoma width 44; midlobe of mesoscutum length 25; mesoscutellum length 22; mesoscutellum width 21; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 3.5; propodeum length 11; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 11; gaster length 100; gaster width 37.5; Gt_2 length (measured medially) 8.5; Gt_4 length (measured medially) 16.5; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 6.

Male. Length 1.4–2.0mm.

Antenna (Fig. 951) with plaque dark brown and situated in apical one-third; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 32; head width 45; mouth width 12.5; malar space 14.5; eye length 16; scape length 17; scape width 5; plaque length 6.5; pedicel length 6.5; pedicel+flagellum length 62.5; F1 length 5; F1 width 4; F2 length 7; F2 width 4; F3 length 8.5; F3 width 3.5; F4 length 10; F4 width 3.5; clava length 25; clava width 3.5; mesosoma length 57; mesosoma width 40; gaster length 70; gaster width 35; longest subbasal seta on F1, length 43.

Hosts. Reared from flowers of *Bidens* sp. (Asteraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (67♀ 7♂, CNC, MZLU, MZUCR, NHMUK): 9♀ with same label data as holotype; 2♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 2♀ 2♂ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 2♂ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 3♀ " **COSTA RICA, Puntarenas, PILA**, Estación Altamira, LS572100_331700, 1450m, 20.i-28.ii.1995, malaise trap, J.F. Quesada, M, Segura; 1♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 19-20.ii.2009, J.S. Noyes; 1♀ **COSTA RICA, Cartago**, Pejibaye, Estación Biológica Copal, Sendero Ron Ron, LN196107_563672, 1090m, 3-14.iv.2005, malaise trap, M. Moraga; 6♀ 2♂ " **COSTA RICA, Guanacaste**, Bosque Nacional Dirí, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 18.x-15.xi.2001, I. Jiménez; following from same locality as previous but collected 18.ix-18.x.2001 (10♀), 15.xi-16.xii.2001 (2♀), 16.xii.2001-16.i.2002 (13♀); 1♀ **COSTA RICA, Guanacaste**, Zona Protectorada Nosara, Fila Maravilla, LN 221350_381700, 800m, 24.xi-21.xii.2001, malaise trap, I. Jiménez; 1♀ **COSTA RICA, Guanacaste**, Reserva Forestal Monte Alto, Sendero La Ceiba, LN 221100_382950, 600m, 21.ix-22.x.2001, malaise trap, I. Jiménez; 1♀ **COSTA RICA, Guanacaste**, Estación Maritza, LN 326900_373000, 600m, 27.i-2.ii.2001, E. Negro; 1♀ " **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, iii.2002, J.S. Noyes & J.A. Azofeifa; 1♀ from same locality as previous but collected 16.ii.2008; 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson; following from same locality as previous but collected xii.1995 (1♀), i.1996 (1♀), xi.1997 ex *Bidens* flowers (1♀ 1♂). Barcoded material: 1♀ **COSTA RICA, Guanacaste**, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos, PL12-3, 10.7631°N 85.3344°W, 820m 24-31.xii.2015 D. Janzen, W. Hallwachs (BIOUG 52428-E03); 6♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-3, 10°76'N, 85°33'W, 820m, D. Janzen, W. Hallwachs, collected 22-29.xii.2016 (1♀, BIOUG 54793-H02), 9-16.ii.2017 (1♀, BIOUG 54382-D09), 12-19.vii.2019 (1♀ BIOUG 61354-F08), 2-9.i.2020 (1♀ BIOUG 59446-C11), 9-16.i.2020 (2♀ BIOUG 59449-D01, 59449-A10); 2♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-5, 10°76'N, 85°33'W, 831m, D. Janzen, W. Hallwachs, collected 1-8.xii.2016 (BIOUG 58263-H07), 12-19.i.2017 (BIOUG 57956-C05); 1♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-9, 10°76'N, 85°33'W, 809m, 16-23.ii.2017, D. Janzen, W. Hallwachs (BIOUG 55743-F08).

Etymology. Named after the host plant from which this species was reared.

***Galeopsomyia blancaensis* Hansson sp.nov.**

(Figs 64, 65, 694)

Diagnosis (female). Antenna with solid clava (Fig. 694); genal carina present; mesoscutum (Fig. 64) with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove; mesoscutellum (Fig. 64) with strong reticulation, meshes elongate, submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; hind coxa without carina along posterior margin; mid and hind tibiae predominantly dark brown (Fig. 65) ; petiole transverse and smooth and shiny; gaster (Fig. 64) 2.3× as long as wide, Gt_2 0.3× as long as Gt_4 , Gt_1 with weak reticulation and shiny, medio-basal Gt_1 with a ±rectangular incision.

Female holotype: length of body 1.8mm (paratypes 1.7–2.0mm).

Entire antenna dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters and femora dark brown to black; fore tibia yellowish-brown, mid and hind tibiae dark brown with apex yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,5-7} metallic bluish-green, Gt_{2,4} metallic purple; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with seven setae in one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed in anterior part of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse and smooth and shiny. Gaster elongate; medio-basal Gt₁ with a \pm rectangular incision, without transverse edge or carina dorsally; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 34; POL 11; OOL 5; lateral ocellus diameter 3; head width 43; mouth width 11.5; malar space 12.5; eye length 18; scape length 14; scape width 4; pedicel+flagellum length 34.5; pedicel length 6; pedicel width, dorsal view 3.7; F1 length 5; F1 width 4; F2 length 4.5; F2 width 4; F3 length 4.5; F3 width 6; clava length 12; clava width 7; C3 length 3.5; spicule length 0.5; mesosoma length 57; mesosoma width 42; midlobe of mesoscutum length 25.5; mesoscutellum length 22; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 8.5; costal cell length 32; costal cell width (measured at widest part) 2.3; marginal vein length 29; stigmal vein length 9.5; gaster length 73; gaster width 32; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 13; longest cercal seta length 7; shortest cercal seta length 3.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK). Paratypes (4♀, MZLU, MZUCR, NHMUK): 1♀ from same locality as holotype but collected 9.iv.2001; 1♀ **COSTA RICA, Heredia, Santo Domingo**, INBio Parque, 1100m, 6.x.2002, swept, J.A. Azofeifa; 1♀ **COSTA RICA, Puntarenas**, Parque Internacional La Amistad,

Estación Altamira, Casa Coca, LS 332800_574250, 1900m, 12.ix-12.x.2001, malaise trap, D. Rubi; 1♀ COSTA RICA, San José, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iv.1994, P. Hanson.

Etymology. Named after type area, Vara Blanca.

***Galeopsomyia brasiliensis* Hansson sp.nov.**

(Figs 66, 67, 696)

Diagnosis (female). Antenna with a solid clava (Fig. 696); mesoscutum and mesoscutellum (Fig. 66) with different strength of reticulation, mesoscutellum with weakest reticulation, mesoscutellum with elongate meshes; hind coxa with a carina along posterior margin in lower half; gaster (Fig. 66) 2.6× as long as wide, Gt_2 0.6× as long as Gt_4 , medio-basal Gt_1 with a strong transverse carina dorsally, all tergites with strong reticulation, Gt_{1-4} with a smooth median line.

Female holotype: length of body 1.7mm.

Scape and pedicel pale brown, flagellum dark brown. Head dark brown with metallic blue tinges, clypeus dark brown, antennal scrobes with purplish tinges. Thoracic dorsum dark brown with metallic blue tinges. Legs with coxae, trochanters and femora dark brown, femora with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole yellowish-brown. Gaster dark brown; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with weak reticulation, meshes elongate; without a median groove; submedian grooves indistinct, running close to and parallel with lateral margins of mesoscutellum; anterior pair of setae situated medially. Dorsellum with weak sculpture and shiny. Propodeum with triangular median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin in lower half. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with strong transverse carina dorsally, Gt_{1-4} with a smooth median line, all tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 31; POL 10.2; OOL 4.5; lateral ocellus diameter 3; head width 38.5; mouth width 12; malar space 13; eye length 16; scape length 14; scape width 3; pedicel+flagellum length 35.5; pedicel length 6; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 5.5; F2 width 3; F3 length 4.5; F3 width 3.5; clava length 12; clava width 4.5; C3 length 5.5; spicule length 1.5; mesosoma length 48; mesosoma width 33; midlobe of mesoscutum length 17.5; mesoscutellum length 18.5; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 8; costal cell length 27; costal cell width (measured at widest part) 2.5; marginal vein length 20; stigmal vein length 8.5; gaster length 74; gaster width 28; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 12.5;

Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 11; longest cercal seta length 7; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, xi.1949, F. Plaumann (NHMUK).

Etymology. Named after type area.

Remarks. The holotype specimen is possibly sun-bleached.

***Galeopsomyia cabroensis* Hansson sp.nov.**

(Figs 68, 69, 697, 933)

Diagnosis (female). Antenna (Fig. 697) short and stout, gradually expanding towards apex, clava solid; genal carina present only close to mouth opening; mesoscutellum (Fig. 68) with strong reticulation, meshes elongate, submedian grooves weak but traceable, wide apart, slightly curved and diverging towards posterior part; propodeum (Fig. 68) with a median carina that splits in posterior part, like an inverted Y, not raised in anterior part; hind coxa without carina along posterior margin; petiole transverse with strong sculpture; gaster (Fig. 68) 2.3× as long as wide, medio-basal Gt₁ with a short rectangular incision; Gt₂ 0.3× as long as Gt₄, Gt₁ with weak reticulation, distinctly more shiny than remaining tergites.

Female holotype: length of body 1.7mm (paratypes 1.4–2.0mm).

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and mid coxae black with metallic tinges, hind coxa golden-green; trochanters and femora dark brown to black, femora with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster golden-green; gonoplac black.

Antenna with a solid clava. Face below level of toruli with weak reticulation, frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with short genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with seven adnotaular setae, ± in one row. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves weak but traceable, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed medially. Dorsellum with strong reticulation. Propodeum with a median carina that splits in posterior part, like an inverted Y, anterior part not raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with 2–3 setae on dorsal surface of submarginal vein; speculum

closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with a short rectangular incision but without transverse edge or carina dorsally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 31; POL 9.5; OOL 5; lateral ocellus diameter 3; head width 39; mouth width 10; malar space 11.5; eye length 17.5; scape length 13; scape width 3; pedicel+flagellum length 32; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 5; F1 width 4; F2 length 4.5; F2 width 4.5; F3 length 4; F3 width 5; clava length 11; clava width 6.5; C3 length 4; spicule length 1; mesosoma length 51; mesosoma width 37.5; midlobe of mesoscutum length 20; mesoscutellum length 18; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2; propodeum length 8; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 7; gaster length 71; gaster width 31; Gt_2 length (measured medially) 5.5; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 10.5; longest cercal seta length 9; shortest cercal seta length 4.5.

Male unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos. Paratypes (12♀, CNC, MZLU, MZUCR, NHMUK): 2♀ with same label data as holotype; 1♀ COSTA RICA, **Guanacaste**, V. Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 4.vii.2003, J. D. Gutiérrez, B. Hernández, J. Azofeifa; 1♀ COSTA RICA, **San José**, Zurquí de Moravia, 10°02'58"N, 84°00'57"W, 1600m, i.1995, P. Hanson; following from same locality as previous but collected ii.1995 (3♀), iii.1995 (2♀), vi.1995 (3♀).

Etymology. Named after locality, Cabro Muco, from which one of the paratypes was collected.

***Galeopsomyia camachoi* Hansson sp.nov.**

(Figs 70, 71, 699)

Diagnosis (female). Antennal clava ±compact and distinctly wider than short funiculars (Fig. 699); genal carina present; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin; gaster (Fig. 70) 1.9× as long as wide, medio-basal Gt_1 with rectangular incision, Gt_2 0.3× as long as Gt_4 .

Female holotype: length of body 1.7mm (paratypes 1.7mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green with antennal scrobes black and clypeus dark brown, vertex less metallic than frons. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae black, hind coxa metallic bluish-green; trochanters dark brown; femora black with metallic tinges and with apex yellowish-

brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,5,6} metallic bluish-green, Gt_{2-4,7} black with metallic blue tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons above toruli with strong reticulation, antennal scrobes with weak reticulation; with genal carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with 11 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, running parallel with lateral margins of mesoscutellum and thus diverging towards posterior part; anterior pair of setae placed in anterior one-third of mesoscutellum. Dorsellum with strong reticulation. Propodeum with median carina with anterior half with parallel sides and posterior half triangular; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation; medio-basal Gt₁ with rectangular incision.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 33; POL 10; OOL 5; lateral ocellus diameter 3.5; head width 43; mouth width 13.5; malar space 12; eye length 20; scape length 14.5; scape width 3.5; pedicel+flagellum length 35; pedicel length 6; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4; F2 length 5; F2 width 4.5; F3 length 4.5; F3 width 5; clava length 12.5; clava width 6; C3 length 3.5; spicule length 1; mesosoma length 60; mesosoma width 40; midlobe of mesoscutum length 26; mesoscutellum length 21.5; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 2.5; propodeum length 10; costal cell length 28; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 8.5; gaster length 70; gaster width 37; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 3.5; Gt₇ width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, ii.1995, P. Hanson (NHMUK). Paratypes: 3♀ from same locality as holotype but collected iv.1992 (MZLU, MZUCR).

Etymology. Named in honour of Eddy Camacho, entomology laboratory assistant in the School of Biology, University of Costa Rica.

***Galeopsomyia candica* Hansson sp.nov.**

(Figs 72, 73, 700)

Diagnosis (female). Flagellum short, pedicel+flagellum 1.0× as long as width of mesoscutum, clava strong and without distinct constrictions between clavomeres (Fig. 700); genal carina present; mesoscutellum (Fig. 72) with strong reticulation, meshes ±isodiametric, submedian grooves weak, running parallel with lateral margins of mesoscutellum, slightly curved and diverging towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 72) 2.5× as long as wide, all tergites with strong reticulation; gonoplac black with tip yellowish-brown (Fig. 73).

Female holotype: length of body 2.2mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus brown; vertex black with blue tinges. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters yellowish-brown; femora black with metallic tinges, apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin golden-purple, Gt_{2,5} golden-purple, Gt_{6,7} golden-green; gonoplac black with tip yellowish-brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes ±isodiametric; submedian grooves weak, running parallel with lateral margins of mesoscutellum, slightly curved and diverging towards posterior part. Dorsellum with strong reticulation. Propodeum with triangular median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ without transverse edge or carina dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 40; POL 10; OOL 6; lateral ocellus diameter 4; head width 49; mouth width 17; malar space 14; eye length 22; scape length 17; scape width 4.5; pedicel+flagellum length 44; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 6.5; F1 width 5; F2 length 6.5; F2 width 5; F3 length 5.5; F3 width 5; clava length 14; clava width 6; C3 length 5; spicule length 1; mesosoma length 62; mesosoma width 45; midlobe of mesoscutum length 26; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2.5; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 9.5; gaster length 93; gaster width 37; Gt₂ length (measured medially) 5.5; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 14.5; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from fruit galls on *Cissus verticillata* (Vitaceae), from which an unidentified Cecidomyiidae also emerged.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Pedro de Montes de Oca, 1100m, x.1997, P. Hanson, ex fruit of *Cissus verticillata* (NHMUK).

***Galeopsomyia caribae* Hansson sp.nov.**

(Figs 74, 75, 1003)

Diagnosis (female). Antenna short, pedicel+flagellum 0.8× as long as width of mesoscutum, clava solid (Fig. 1003); genal carina present; mesoscutellum (Fig. 74) with strong reticulation, meshes very elongate, submedian grooves indistinct, running close to and parallel with lateral margins of mesoscutellum; hind coxa without carina along posterior margin; gaster (Fig. 74) 2.0× as long as wide, Gt_2 0.3× as long as Gt_4 , medio-basal Gt_1 with a transverse edge dorsally, Gt_1 with weak reticulation and more shiny than remaining tergites.

Female holotype: length of body 1.5mm (paratypes 1.4–1.8mm).

Scape yellowish-brown, pedicel and flagellum brown. Head black with golden-green tinges, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa black with metallic tinges; trochanters dark yellowish-brown; femora dark brown to black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with $Gt_{1,5,6}$ metallic bluish-green, remaining tergites black with bluish-purple tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with six scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes very elongate; submedian grooves indistinct, running close to and parallel with lateral margins of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a triangular median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with a transverse edge dorsally, Gt_1 with weak reticulation, partly smooth, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; POL 9.5; OOL 4.5; lateral ocellus diameter 3; head width 37; mouth width nm; malar space 9.5; eye length 18; scape length 12; scape width 3.5; pedicel+flagellum length 28.5; pedicel length 6; pedicel width, dorsal view 3.2; F1 length 4; F1 width 3; F2 length 3.5; F2 width 3.5; F3 length 3.5; F3 width 3.5; clava length 9.5; clava width 4; C3 length 4; spicule length 1; mesosoma

length 46; mesosoma width 34; midlobe of mesoscutum length 17; mesoscutellum length 18; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 1; propodeum length 6; costal cell length 24; costal cell width (measured at widest part) 2; marginal vein length 21; stigmal vein length 7.5; gaster length 62; gaster width 31; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 4; Gt₇ width (measured at base) 11; longest cercal seta length 8; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Trinidad & Tobago).

Material examined.

Holotype ♀ **TRINIDAD**, St. George, St. Augustine, 21.vi.1976, from wasteground, J.S. Noyes (NHMUK). Paratypes (14♀, MZLU, NHMUK): 1♀ with same label data as holotype; 2♀ **TRINIDAD**, St. George, Aripo Valley, 27.vii.1976, from rainforest, J.S. Noyes; 9♀ **TRINIDAD**, St. George, Lopinot, 10.viii.1976, from cocoa plantation and rainforest, J.S. Noyes; 2♀ **TOBAGO**: St. Paul, Parlatuvier Valley, 20.viii.1976, from edge of rainforest, J.S. Noyes.

Etymology. Named after type area, the Caribbean.

***Galeopsomyia carinata* Hansson sp.nov.**

(Figs 76, 77, 702)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 702); genal carina present; mesoscutellum (Fig. 76) with strong reticulation, meshes isodiametric, submedian grooves very weak, running parallel with and close to lateral margins of mesoscutellum; fore coxa with a sharp edge along posterior margin, and hind coxa with a carina along posterior margin; gaster (Fig. 76) elongate and laterally compressed, 4.3× as long as wide and 0.6× as wide as width of mesoscutum.

Female holotype: length of body 2.1mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons including scrobes golden-green, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum metallic golden-green with blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters and femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin metallic purplish, remaining tergites metallic purple; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on

midlobe; midlobe without a median groove, with five setae in two rows close to notauli. Mesoscutellum with strong reticulation, meshes isodiametric; submedian grooves very weak, running parallel with and close to lateral margins of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation; fore coxa with a sharp edge along posterior margin and hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate and laterally compressed; medio-basal Gt_1 without transverse edge or carina dorsally, Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 35; POL 9.5; OOL 5; lateral ocellus diameter 3.5; head width 40; mouth width nm; malar space 11; eye length 18; scape length 15; scape width 3.5; pedicel+flagellum length 43; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 6; F2 width 4; F3 length 6; F3 width 4; clava length 14.5; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 48; mesosoma width 35; midlobe of mesoscutum length 18; mesoscutellum length 19; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 1.5; marginal vein length 29; stigmal vein length 10; gaster length 96; gaster width 22.5; Gt_2 length (measured medially) 4; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Collblanco near Turrialba, 1750m, 16.iii.1990, J.S. Noyes (NHMUK).

Etymology. From the Latin *carinata* = with carina, referring to carina on fore and hind coxae.

***Galeopsomyia casacocaensis* Hansson sp.nov.**

(Figs 78, 79, 907, 1004)

Diagnosis (female). Antennal clava solid (Fig. 1004); genal carina present; mesoscutellum (Fig. 907) with strong reticulation, meshes elongate, without a median groove, submedian grooves weak but traceable in posterior half, running close to and parallel with lateral margins of mesoscutellum; fore and hind coxa with a carina along posterior margin; gaster (Fig. 78) 2.5× as long as wide, medio-basal Gt_1 with a semicircular incision, and with relatively weak reticulation and shiny, remaining tergites with strong reticulation; gonoplac yellowish-brown (Fig. 79).

Female holotype: length of body 1.9mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue and purple tinges. Mesoscutum, mesoscutellum and propodeum metallic bluish-green with purple tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters and femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,5} golden-purple, Gt_{6,7} metallic bluish-green; gonoplac yellowish-brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, without a median groove, submedian grooves weak but traceable in posterior half, running close to and parallel with lateral margins of mesoscutellum; anterior pair of setae situated just in front of middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore and hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a semicircular incision, and with relatively weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 34; POL 9.5; OOL 6.5; lateral ocellus diameter 4; head width 45; mouth width 17; malar space 12.5; eye length 18; scape length 17.5; scape width 4; pedicel+flagellum length 42; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4.5; F2 length 5.5; F2 width 5; F3 length 5.5; F3 width 5; clava length 14.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 54; mesosoma width 40; midlobe of mesoscutum length 23; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 3; propodeum length 8; costal cell length 30; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 10; gaster length 83; gaster width 33; Gt₂ length (measured medially) 5.5; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos (MZLU).

Etymology. Named after type locality, Casa Coca.

***Galeopsomyia cissusae* Hansson sp.nov.**

(Figs 80, 81, 701)

Diagnosis (female). Antennal clava solid (Fig. 701); genal carina present; mesoscutellum (Fig. 80) with strong reticulation, meshes elongate, submedian grooves indistinct, running parallel to lateral margins of mesoscutellum and thus diverging towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 80) 2.7× as long as wide, medio-basal Gt₁ with a sharp transverse edge dorsally, all tergites with strong reticulation.

Female holotype: length of body 2.2mm (paratypes 2.3–2.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa black; trochanters brown; femora dark brown to black with metallic tinges and with anterior part yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt₂₋₅ black with metallic purple tinges, Gt₆₋₇ metallic bluish-green; gonoplac black.

Antenna with solid clava. Head with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with an indistinct median groove, with eight adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, running parallel to lateral margins of mesoscutellum and thus diverging towards posterior part. Dorsellum with strong reticulation. Propodeum with triangular median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a sharp edge along posterior margin and hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; tergites with strong reticulation, Gt₁₋₄ with a smooth median line.

Relative measurements: head length, dorsal view 24; head length, frontal view 40; POL 12; OOL 6.5; lateral ocellus diameter 5; head width 54; mouth width 18.5; malar space 15; eye length 22.5; scape length 19; scape width 4.5; pedicel+flagellum length 47; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 8; F1 width 5.5; F2 length 7.5; F2 width 6; F3 length 6; F3 width 6; clava length 15; clava width 7; C3 length 5.5; spicule length 1; mesosoma length 70; mesosoma width 49; midlobe of mesoscutum length 28; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 3; propodeum length 9; costal cell length 39; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 12.5; gaster length 98; gaster width 37; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Reared from fruit galls on *Cissus verticillata* (Vitaceae), from which an unidentified Cecidomyiidae also emerged.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Pedro de Montes de Oca, 1100m, ix.2009, ex *Cissus* fruit gall, P. Hanson (NHMUK). Paratypes (3♀, MZLU, MZUCR, NHMUK): 1♀ **COSTA RICA, Cartago**, Volcan Irazú, 3000m, 21.i.1983, J.H. Martin; 1♀ **COSTA RICA, Guanacaste**, Santa Cruz, Parque Nacional Marino Las Baulas, LN 258040_332690, 0m, 17.xii.2000-17.i.2001, Y. Cárdenas; 1♀ **COSTA RICA, Puntarenas**, Parque Internacional La Amistad, Valle del Silencio, Cerro Frantzius, LS 334150_574450, 2134m, 12.ix-12.x.2001, malaise trap, F. Umaña.

Etymology. Named after the host plant from which this species was reared.

***Galeopsomyia collina* Hansson sp.nov.**

(Figs 82, 83, 1005)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1005); with genal carina; mesoscutellum (Fig. 82) with elongate meshes; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin; petiole transverse with very strong sculpture on dorsal surface; gaster (Fig. 82) 2.5× as long as wide, Gt₂ 0.2× as long as Gt₄, medio-basal Gt₁ with a rectangular incision, with weak reticulation, more shiny than remaining tergites.

Female holotype: length of body 2.6mm.

Scape yellowish-brown, pedicel dark yellowish-brown, flagellum dark brown. Head with frons metallic blue, antennal scrobes black and clypeus dark brown; vertex black with metallic blue tinges. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters dark brown; fore and mid femora black with metallic tinges, hind femur metallic bluish-green, all femora with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt_{2,5} golden-purple, Gt₇ black; gonoploc black with apex dark brown.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus and scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with 12 scattered adnotaular setae, without median groove. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves weak, especially so in anterior part, wide apart and diverging towards posterior part; without median groove. Dorsellum with strong reticulation. Propodeum with median carina expanding slightly towards posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, fore coxa with a sharp edge along posterior margin and hind coxa without carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal surface. Gaster ovate-elongate; medio-basal Gt_1 with a rectangular incision, with weak reticulation and more shiny than remaining tergites that have strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 44; POL 12; OOL 6; lateral ocellus diameter 5.5; head width 55; mouth width 18; malar space 16; eye length 25; scape length 18; scape width 4; pedicel+flagellum length 53; pedicel length 8; pedicel width, dorsal view 4; F1 length 10; F1 width 4; F2 length 8.5; F2 width 4.5; F3 length 7; F3 width 5; clava length 17; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 80; mesosoma width 55; midlobe of mesoscutum length 31; mesoscutellum length 27; mesoscutellum width 26; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 13; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 39; stigmal vein length 9; gaster length 112; gaster width 44; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 35; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 14; longest cercal seta length 11; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Antonio de Escazú, 9°54'N, 84°09'W, 1300m, iv.1996, P. Hanson (NHMUK).

Remarks. Left wing pair is missing in holotype.

***Galeopsomyia copalensis* Hansson sp.nov.**

(Figs 84, 85, 952, 1006)

Diagnosis (female). Antenna with strong constriction between C1 and C2 (Fig. 1006); genal carina present; mesoscutum and mesoscutellum (Fig. 84) with strong reticulation with elongate meshes, mesoscutellum with submedian grooves weak, indicated in the reticulation; hind coxa with a carina along posterior margin in apical part; petiole transverse with strong sculpture; gaster (Fig. 84) 3.1× as long as wide, with weak reticulation and shiny, with short Gt_2 , 0.15× as long as wide, and Gt_4 0.67× as long as wide, Gt_2 0.25× as long as Gt_4 , medio-basal Gt_1 with a semicircular incision, without transverse edge or carina dorsally.

Female holotype: length of body 2.8mm (paratypes 2.3–2.6mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown to black. Head with frons black with metallic greenish-blue tinges, antennal scrobes black and dull, clypeus dark brown; vertex black with weak metallic blue tinges. Mesosoma black with metallic purple, blue and golden tinges. Legs with coxae black with metallic green tinges; trochanters yellowish-brown; femora dark brown to black with apex yellowish-brown; tibiae

and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ golden, Gt₂₋₆ black with sides with metallic blue tinges, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six setae in two rows close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, slightly curved and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with two setae. Coxae with strong reticulation; hind coxa with a carina along posterior margin in apical part. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with a semicircular incision, without transverse edge or carina dorsally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 47; POL 10.5; OOL 6.5; lateral ocellus diameter 5.5; head width 60; mouth width 17; malar space 18; eye length 26; scape length 21.5; scape width 5; pedicel+flagellum length 61; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 10.5; F1 width 5; F2 length 9; F2 width 5; F3 length 8.5; F3 width 5.5; clava length 23; clava width 6; C3 length 9; spicule length 3; mesosoma length 83; mesosoma width 54; midlobe of mesoscutum length 32; mesoscutellum length 27; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 14.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 14; costal cell length 50; costal cell width (measured at widest part) 2.5; marginal vein length 40; stigmal vein length 13; gaster length 120; gaster width 38.5; Gt₂ length (measured medially) 5.5; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 13; longest cercal seta length 11; shortest cercal seta length 5.

Male. Length of body 1.7–1.9mm.

Antenna (Fig. 952) with plaque on scape very short, dark brown and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; head width 43.5; mouth width 14; malar space 13; eye length 18; scape length 16; scape width 5.5; plaque length 3.5; pedicel length 6.5; pedicel+flagellum length 65; F1 length 5; F1 width 4.5; F2 length 8; F2 width 4.5; F3 length 9; F3 width 4; F4 length 9; F4 width 4; clava length 26; clava width 3.5; mesosoma length 63; mesosoma width 41; gaster length 70; gaster width 29; longest subbasal seta on F1, length 40.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Humo, El Copal, 9°47'N, 83°45'W, 1050-1250m, 29.ii-6.iii.2008, C. Hansson (MZLU). Paratypes (6♀ 2♂, MZLU, NHMUK): 2♀ COSTA RICA, **Alajuela**, Parque Nacional Arenal, Sendero Ceibo, 10°27'N, 84°41'W, 620m, 22-23.ii.2016, J.S. Noyes; 1♀ COSTA RICA, Alajuela, Estación Biológica San Ramón, 10°13'N, 84°37'W, 900m, x-xii.1995, P. Hanson; 2♀ 2♂ COSTA RICA, **San José**, San Gerardo de Dota, El Manantial, 9°34'N, 83°43'W, 18-20.ii.2010, J.S. Noyes; 1♀ COSTA RICA, San José, Zurqui de Moravia, 10°03'03''N, 84°00'22''W, 1600m, vii.1992, P. Hanson.

Etymology. Named after type locality, El Copal.

***Galeopsomyia cresta* Hansson sp.nov.**

(Figs 86, 87, 953, 1007)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1007); genal carina absent; mesosoma bright metallic bluish-green; mesoscutum and mesoscutellum (Fig. 86) with strong reticulation, mesoscutellum with weak submedian grooves; dorsellum with or without median carina; propodeum (Fig. 86) with median carina triangular, anterior part distinctly elevated, callus with two setae; hind coxa with a carina along posterior margin; gaster (Fig. 86) 3.1× as long as wide, with Gt_2 0.06× as long as Gt_4 , Gt_1 with weak reticulation and shiny in posterior half. Brightly metallic species in both sexes (Figs 86, 87).

Female holotype: length of body 2.9mm (paratypes 2.3–3.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown to black. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Mesosoma bright metallic bluish-green. Legs with coxae metallic bluish-green, mid coxa with weaker metallic tinges; trochanters pale brown; femora black with metallic blue tinges and with apex yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with $Gt_{1,6}$ metallic bluish-green, $Gt_{2,5}$ metallic purple, Gt_7 black with metallic green tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, frons with strong reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes predominantly isodiametric but with elongate meshes in posterior one-third of midlobe; midlobe without median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, submedian grooves ±distinct and diverging towards posterior part. Dorsellum with strong reticulation, with median carina. Propodeum with median carina triangular, anterior part distinctly elevated; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt_1 without edge or carina dorsally, this part smoothly rounded; Gt_1 with weak reticulation and shiny in posterior half, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 12; OOL 6; lateral ocellus diameter 5.5; head width 55; mouth width 18; malar space 15; eye length 24; scape length 19.5; scape width 4.5; pedicel+flagellum length 51; pedicel length 8; pedicel width, dorsal view 4; F1 length 7.5; F1 width 5; F2 length 7.5; F2 width 5; F3 length 7; F3 width 5.5; clava length 17.5; clava width 6; C3 length 5.5; spicule length 1; mesosoma

length 72; mesosoma width 53; midlobe of mesoscutum length 30; mesoscutellum length 26; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 15.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 8.5; costal cell length 38; costal cell width (measured at widest part) 2; marginal vein length 36; stigmal vein length 12; gaster length 135; gaster width 43; Gt₂ length (measured medially) 2; Gt₄ length (measured medially) 28; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 15; longest cercal seta length 10; shortest cercal seta length 6.

Male. Length 1.7–2.3mm.

Antenna (Fig. 953) with plaque on scape situated close to apex (Fig. 953); dorso-basal whorls of long setae present on F1–F4 and on C1–C2; pedicel and flagellum pale brown. Petiole transverse and shiny. Gaster long ovate; Gt₁ smooth and shiny. Otherwise as in female.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; head width 51; mouth width 17.5; malar space 13; eye length 20; scape length 18; scape width 6.5; plaque length 6.5; pedicel length 7; pedicel+flagellum length 80; F1 length 6; F1 width 5; F2 length 10; F2 width 5; F3 length 11.5; F3 width 4.5; F4 length 12; F4 width 4.5; clava length 31; clava width 4; mesosoma length 71; mesosoma width 48; gaster length 91; gaster width 30; longest subbasal seta on F1, length 47.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450–1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU). Paratypes (8♀ 13♂, MZLU, MZUCR, NHMUK): 3♀ 10♂ with same label data as holotype; 4♀ 2♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 1♂ COSTA RICA, Puntarenas, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos.

Galeopsomyia crucensis Hansson sp.nov.

(Figs 88, 89, 1009)

Diagnosis (female). Antenna with solid clava (Fig. 1009); with a weak and short genal carina close to mouth opening; mesoscutellum (Fig. 88) with strong reticulation, meshes isodiametric to slightly elongate, submedian grooves weak and indistinct; propodeum (Fig. 88) with median carina with anterior part raised in a tooth; hind coxa with a strong carina along posterior margin; petiole very short, just a narrow band; gaster (Fig. 88) 2.0× as long as wide with dorsal part flattened in anterior half, medio-basal Gt₁ with a sharp transverse edge dorsally; Gt₂ 0.1× as long as wide, and Gt₄ 0.4× as long as wide, Gt₂ 0.14× as long as Gt₄, all tergites with strong reticulation.

Female holotype: length of body 2.4mm (paratypes 2.2–2.4mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel dark brown, flagellum dark

brown to black. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges and clypeus black with sides yellowish-brown; vertex black with metallic blue tinges. Mesosoma metallic greenish-blue. Legs with fore and hind coxae metallic greenish-blue, mid coxa dark brown; trochanters dark brown to black; femora black with metallic tinges and with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Wings hyaline. Petiole black. Gaster with Gt₁ metallic greenish-blue with posterior margin black with metallic purple tinges, Gt₂₋₅ black with metallic purple tinges medially, metallic greenish-blue laterally, Gt₆₋₇ metallic greenish-blue; gonoplac dark brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with a weak genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, isodiametric in anterior part and slightly elongate in posterior part of midlobe; midlobe with 14 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric to slightly elongate; submedian grooves weak and indistinct; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina that is distinctly raised in anterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; POL 12; OOL 6.5; lateral ocellus diameter 4; head width 53; mouth width 19; malar space 19; eye length 21; scape length 19; scape width 4; pedicel+flagellum length 48; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 7; F2 width 5; F3 length 6; F3 width 5.5; clava length 15; clava width 6; C3 length 4.5; spicule length 1; mesosoma length 69; mesosoma width 50; midlobe of mesoscutum length 30; mesoscutellum length 25; mesoscutellum width 25; median part of mesoscutellum width (measured medially); median part of mesoscutellum, width in anterior part; median part of mesoscutellum, width in posterior part; lateral part of mesoscutellum, width (measured medially); dorsellum length 3; propodeum length 8; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 12; gaster length 100; gaster width 51; Gt₂ length (measured medially) 3; Gt₄ length (measured medially) 21; Gt₇ length (measured medially) 8.5; Gt₇ width (measured at base) 11.5; longest cercal seta length 12; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 19-22.ii.2008, C. Hansson (MZLU). Paratypes: 4♀ from same locality as holotype but collected 7-19.ii.2007 (MZLU, MZUCR, NHMUK).

Etymology. Named after type locality, Las Cruces.

***Galeopsomyia domingoensis* Hansson sp.nov.**

(Figs 90, 91, 705, 954)

Diagnosis (female). Antennal clava solid and flagellum short, pedicel+flagellum $0.7\times$ as long as width of mesoscutum (Fig. 705); with a short and weak genal carina close to mouth opening; mesoscutellum (Fig. 90) with distinct submedian grooves that diverge slightly towards posterior part, median part with weak reticulation and with a weak median groove in anterior half; hind coxa without carina along posterior margin; gaster (Fig. 90) $2.2\times$ as long as wide, medio-basal Gt_1 with a very strong sharp transverse carina dorsally. Male recognizable through the very strong and sharp transverse carina on medio-basal Gt_1 as in female.

Female holotype: length of body 2.6mm (paratypes 2.3–2.4mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons and vertex black with metallic greenish-blue tinges, antennal scrobes black, clypeus dark brown. Thoracic dorsum dull golden-green. Legs with fore and hind coxae golden-green, mid coxa black; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges and apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown to yellowish-white, T4 brown. Petiole black. Gaster with Gt_1 dull golden-green in anterior half, posterior half and $Gt_{2,5}$ metallic dull purple, Gt_6 dull golden-green, Gt_7 black; gonoplac black.

Antenna with solid clava. Face below level of toruli laterally with weak transverse sculpture and medially smooth, just below toruli with long ovate pits with relatively strong reticulation, frons with strong reticulation, antennal scrobes with weak reticulation; with a short and weak genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation; midlobe with a \pm complete median groove, close to notauli with ten setae in two rows. Mesoscutellum with distinct submedian grooves that diverge slightly towards posterior part, part, median part with weak reticulation and with a weak median groove in anterior half; lateral parts with relatively strong reticulation; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina, with strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum partly open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp transverse carina dorsally; Gt_{1-6} with relatively weak reticulation and shiny, Gt_7 smooth.

Relative measurements: head length, dorsal view 26; head length, frontal view 43; POL 12.5; OOL 7.5; lateral ocellus diameter 4.5; head width 59; mouth width 19; malar space 17; eye length 25; scape length 20; scape width 4; pedicel+flagellum length 44; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 7; F1 width 5; F2 length 6.5; F2 width 5; F3 length 6; F3 width 6; clava length 15; clava width 7; C3 length 4; spicule length 0.5; mesosoma length 80; mesosoma width 59; midlobe of mesoscutum length 35; mesoscutellum length 29; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 15; median part of mesoscutellum, width in anterior part 14; median part of mesoscutellum, width in posterior part 17; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length

4; propodeum length 11; costal cell length 40; costal cell width (measured at widest part) 3.5; marginal vein length 41; stigmal vein length 7; gaster length 107; gaster width 49; Gt₂ length (measured medially) 17.5; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 8; longest cercal seta length 8; shortest cercal seta length 5.

Male. Length of body of body 1.9mm.

Antennal scape (Fig. 954) including plaque black, plaque situated in apical two-thirds of scape; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 21; head length, frontal view 36; head width 52; mouth width 20; malar space 11; eye length 21; scape length 16; scape width 6; plaque length 8; pedicel length 6.5; pedicel+flagellum length 65; F1 length 5; F1 width 5; F2 length 6; F2 width 5; F3 length 7.5; F3 width 4.5; F4 length 8; F4 width 4; clava length 21; clava width 4; mesosoma length 69; mesosoma width 49; gaster length 69; gaster width 35; longest subbasal seta on F1, length 35.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 1-12.iv.2002, J.S. Noyes & D. Rubi (NHMUK). Paratypes (4♀ 1♂, MZLU, NHMUK): 3♀ 1♂ from same locality as holotype but collected 6.xi-6.xii.2000, 1-22.v.2001, iii.2002, 11.ii.2012; 1♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero a Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii, 2002, C. Hansson & Parataxonomos.

Etymology. Named after type locality, Santo Domingo de Heredia.

***Galeopsomyia doradis* Hansson sp.nov.**

(Figs 92, 93, 1008)

Diagnosis (female). Antennal clava solid (Fig. 1008); genal carina present; mesoscutellum (Fig. 92) with ±distinct submedian grooves and a complete median groove, median part with elongate meshes; propodeal callus with three setae; hind coxa with a carina along posterior margin; gaster (Fig. 92) 2.9× as long as wide, medio-basal Gt₁ with a sharp transverse edge dorsally.

Female holotype: length of body 3.2mm (paratypes 2.9–3.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters pale brown; femora black with metallic bluish-green tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₄ metallic purple, Gt₅₋₇ metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth,

frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with median groove indicated but very weak, and with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a complete median groove; submedian grooves \pm distinct, straight and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with triangular median carina with anterior part raised; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp transverse edge, and with weaker reticulation than other tergites and more shiny; remaining tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 48; POL 14.5; OOL 6; lateral ocellus diameter 5.5; head width 63; mouth width 20; malar space 18.5; eye length 25.5; scape length 22; scape width 5; pedicel+flagellum length 56; pedicel length 9; pedicel width, dorsal view 5; F1 length 8.5; F1 width 5.5; F2 length 8.5; F2 width 6; F3 length 8; F3 width 6; clava length 19; clava width 7; C3 length 5; spicule length 1.5; mesosoma length 85; mesosoma width 62; midlobe of mesoscutum length 37; mesoscutellum length 30; mesoscutellum width 31; median part of mesoscutellum width (measured medially) 16; median part of mesoscutellum, width in anterior part 13.5; median part of mesoscutellum, width in posterior part 19; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 2.5; propodeum length 8; costal cell length 44; costal cell width (measured at widest part) 3; marginal vein length 42; stigmal vein length 14.5; gaster length 146; gaster width 50; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 24; Gt_7 width (measured at base) 17.5; longest cercal seta length 11; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iv.2002, INBio, OET, ALAS (NHMUK). Paratypes (2♀, MZLU, MZUCR): 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, x.1995, P. Hanson; 1♀ from same locality as previous but collected xii.1995.

Galeopsomyia druparum Hansson sp.nov.

(Figs 43, 94, 95, 1001)

Diagnosis (female). Antennal clava solid (Fig. 1001); genal carina absent; mesoscutellum (Fig. 94) with strong reticulation, meshes elongate, submedian grooves indistinct but traceable, slightly curved, wide apart and diverging towards posterior part; hind coxa without

carina along posterior margin; propodeum (Fig. 94) with a strong median carina that expands gradually towards posterior part; gaster (Fig. 94) 3.3× as long as wide, medio-basal Gt₁ with a rectangular incision.

Female holotype: length of body 2.1mm (paratypes 2.2–2.3mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head golden-green, antennal scrobes black, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore and mid coxae black, hind coxa golden-green; trochanters pale brown; femora black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁₋₂ golden-green, Gt₃₋₅ golden-purple, Gt₆₋₇ golden-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with eight setae ±in one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct but traceable, slightly curved, wide apart and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands gradually towards posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a rectangular incision, and with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 33; POL 10; OOL 5; lateral ocellus diameter 3.5; head width 41; mouth width 14; malar space 12.5; eye length 18; scape length 15; scape width 3.5; pedicel+flagellum length 37; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 6.5; F1 width 3.5; F2 length 5.5; F2 width 4; F3 length 5; F3 width 4; clava length 11.5; clava width 5; C3 length 4; spicule length 1; mesosoma length 54; mesosoma width 41; midlobe of mesoscutum length 22; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 3; propodeum length 7.5; costal cell length 33; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 10; gaster length 98; gaster width 30; Gt₂ length (measured medially) 4.5; Gt₄ length (measured medially) 26.5; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 13; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from galls in young fruits of avocado (*Persea americana*) (Lauraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Tarrazu, iii.1994, from young avocado fruit, R. Leon (NHMUK). Paratypes (2♀, MZUCR, NHMUK): 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iii.1995, P. Hanson; 1♀ **COSTA RICA, Cartago**, La Cangreja, 9°48'N, 83°58'W, 1950m, vii.1991, P. Hanson.

Etymology. From the Latin *drupa* = fruit, and the suffix *-arum* = from.

***Galeopsomyia duniagarciae* Hansson sp.nov.**

(Figs 96, 97, 955, 1010)

Diagnosis (female). Antenna short and stout, gradually expanding towards apex, clava solid (Fig. 1010); genal carina present; mesoscutellum (Fig. 96) with weak and indistinct submedian grooves, meshes elongate; propodeum (Fig. 96) with a median carina that splits in posterior part (inverted Y-shaped carina), not raised in anterior part; hind coxa without carina along posterior margin; petiole transverse with strong sculpture; gaster (Fig. 96) 2.4× as long as wide, medio-basal Gt₁ with a short rectangular incision; Gt₂ 0.2× as long as Gt₄, Gt₁ with weak reticulation, distinctly more shiny than remaining tergites.

Female holotype: length of body 2.2mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Face below level of toruli golden-green, frons metallic bluish-green, clypeus dark brown, antennal scrobes black. Vertex metallic bluish-green. Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and hind coxae golden-green, mid coxa black with metallic tinges; trochanters and femora dark brown to black, femora with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster golden-green; gonoplac black.

Antenna with a solid clava. Face below level of toruli with weak reticulation, frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with seven adnotaular setae, ± in one row. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves weak but traceable, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed medially. Dorsellum with strong reticulation. Propodeum with median carina strongly expanding in posterior part, anterior part not raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with a short rectangular incision, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 11; OOL 4; lateral ocellus diameter 4; head width 44; mouth width 16; malar space 12.5; eye length 22; scape length 15; scape width 4; pedicel+flagellum length 37; pedicel length 6.5; pedicel width, dorsal view 3.8; F1 length 6; F1 width 4; F2 length 5; F2 width 4; F3 length 5; F3 width 5; clava length 13.5; clava width 6; C3 length 5; spicule length 1.5; mesosoma

length 65; mesosoma width 43; midlobe of mesoscutum length 27; mesoscutellum length 22.5; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially) 13.5; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 15.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 8.5; gaster length 98; gaster width 41; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 31; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 14; longest cercal seta length 11; shortest cercal seta length 5.

Male. Length 1.2–1.4mm.

Antenna (Fig. 955) with plaque on scape dark brown and situated close to apex; dorso-basal whorls of long setae present on F1–F4, C1 with a dorso-basal and a ventro-basal whorl, C2 with a ventro-basal whorl. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 27.5; head width 37.5; mouth width 11.5; malar space 9.5; eye length 16; scape length 12; scape width 3.5; plaque length 4; pedicel length 5.5; pedicel+flagellum length 51; F1 length 3.5; F1 width 3.5; F2 length 6.5; F2 width 4; F3 length 7.5; F3 width 3; F4 length 7.5; F4 width 3; clava length 19; clava width 3; mesosoma length 47; mesosoma width 33; gaster length 49; gaster width 21; longest subbasal seta on F1, length 24.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos PL12-3 10.7631°N 85.3344°W, 820m, 26.v-2.vi.2016, D.Janzen, W.Hallwachs (barcoded specimen: BIOUG 52598-C03) (MZLU). Paratypes (3♂, barcoded specimens, MZLU): 2♂ COSTA RICA, Guanacaste, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos PL12-3 10.7631°N 85.3344°W, 820m, 30.vi-7.vii.2016 D. Janzen, W. Hallwachs (BIOUG 52907-E08, 52907-B08); 1♂ COSTA RICA, Guanacaste, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos Pailas Dos PL12-3, 10.7631°N 85.3344°W, 820m, 16-23.vi.2016, D. Janzen, W. Hallwachs (BIOUG 52669-E11).

Etymology. Named in honour of Dunia Garcia in recognition of her years of dedicated management of the Derrumbe Malaise trap on Volcan Cacao, Costa Rica, the trap that caught this and other *Galeopsomyia*.

Remarks. The males are associated through the barcode.

Galeopsomyia eberhardi Hansson sp.nov.

(Figs 98, 99, 1011)

Diagnosis (female). Antenna with solid clava (Fig. 1011); genal carina absent; mesoscutellum (Fig. 98) with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, and with a weak median groove in anterior two-thirds; hind coxa with a complete carina along posterior part; petiole black, conical and smooth; gaster (Fig.

98) 2.9× as long as wide, medio-basal Gt_1 with a sharp edge dorsally, with weak reticulation; Gt_2 0.16× as long as Gt_4 ; gonoplac black (Fig. 99).

Female holotype: length of body 2.4mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with metallic bluish-green, antennal scrobes black, clypeus dark brown, vertex metallic bluish-green. Thoracic dorsum metallic bluish-green, partly with purple tinges. Legs with coxae metallic bluish-green; trochanters dark brown; femora black with apex yellowish-brown, hind femur with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with $Gt_{1,5,7}$ metallic bluish-green, $Gt_{2,4}$ black with golden-green tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation; scrobes with weak reticulation; without genal carina. Vertex with strong reticulation; occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with ten adnotaular setae in ±two rows; without median groove. Mesoscutellum with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, with a weak median groove in anterior half. Dorsellum with strong reticulation. Propodeum short with a strong and wide median carina that expands strongly backwards from middle of carina, narrow anterior half 1.5× as long as wide; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole not visible. Gaster elongate; medio-basal Gt_1 with a sharp transverse edge dorsally; Gt_1 with relatively weak reticulation and shiny, $Gt_{2,7}$ with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 11.5; OOL 4.5; lateral ocellus diameter 5; head width 48; mouth width 18; malar space 14.5; eye length 22; scape length 17; scape width 4; pedicel+flagellum length 45; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 7; F1 width 4.5; F2 length 6; F2 width 5; F3 length 5.5; F3 width 5.5; clava length 15.5; clava width 6; C3 length 3.5; spicule length 0.5; mesosoma length 62; mesosoma width 45; midlobe of mesoscutum length 27; mesoscutellum length 22.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 6; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 32; stigmal vein length 11; gaster length 104; gaster width 36; Gt_2 length (measured medially) 3; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 15; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Cerro de la Muerte, 19km S 3km W Empalme, 9°39'N, 83°52'W, 2600m, iv-v.1993, P. Hanson (NHMUK).

Etymology. Named in honour of William Eberhard, professor emeritus in the School of Biology, University of Costa Rica, arachnologist and entomologist.

***Galeopsomyia estera* Hansson sp.nov.**

(Figs 100, 101, 703, 906, 934)

Diagnosis (female). Flagellum short, clava strong and solid (Fig. 703); clypeus dark brown; mesoscutellum (Fig. 100) with strong reticulation, submedian grooves weak, wide apart and diverging towards posterior part, with a very weak median groove; hind coxa with a carina along posterior margin; gaster (Fig. 100) 2.1× as long as wide, medio-basal Gt₁ without transverse edge or carina dorsally, and with very weak reticulation and shiny, Gt₂₋₇ with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum golden-green, mesoscutellum and propodeum metallic bluish-green. Legs with coxae golden-green; trochanters dark brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-white, T4 brown. Petiole black. Gaster with Gt_{1,5,6} metallic bluish-green, Gt_{2,4} golden-green in anterior half, metallic purple in posterior half, Gt₇ black; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, parts below eye and scrobes with weak reticulation, clypeus smooth; with a very short genal carina close to mouth opening. Vertex with strong reticulation, meshes transverse.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with nine adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; with a very weak median groove; submedian grooves weak, wide apart and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt₁ without transverse edge or carina dorsally, with very weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 11.5; OOL 5; lateral ocellus diameter 4; head width 51; mouth width 15; malar space 14.5; eye length 22; scape length 18; scape width 5; pedicel+flagellum length 45; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 6.5; F1 width 5; F2 length 6; F2 width 5; F3 length 5.5; F3 width 6; clava length 15; clava width 7; C3 length 5; spicule length 1; mesosoma length 69; mesosoma width 48.5; midlobe of mesoscutum length 28; mesoscutellum length 25; mesoscutellum width 23.5; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 9; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 10; gaster length 88; gaster width 43; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 21; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 14.5; longest cercal seta length 10; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Maritza, LN 326900_373000, 500m, 25.i-2.ii.2001, Thomas, Rio, Moraga (NHMUK).

***Galeopsomyia fernandezae* Hansson sp.nov.**

(Figs 102, 103, 1013)

Diagnosis (female). Antennal clava solid (Fig. 1013); genal carina present; mesoscutellum (Fig. 102) with strong reticulation, meshes isodiametric, submedian grooves indistinct but visible in posterior half, without median groove; propodeum (Fig. 102) with a strong median carina with anterior half with parallel sides and posterior half gradually expanding backwards; dorsellum with median carina; hind coxa with a strong carina along posterior margin; gaster (Fig. 102) 2.8× as long as wide, medio-basal Gt₁ with a semicircular incision, incision with upper part smoothly rounded, tergites with strong reticulation, gonoplac yellowish-brown (Fig. 103).

Female holotype: length of body 3.2mm (paratype 3.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus brown; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown with metallic bluish-green tinges, hind coxa metallic bluish-green; trochanters brown; femora black with metallic tinges, apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt₂₋₄ golden-purple, Gt₅ golden-purple on median part and metallic bluish-green on lateral parts, Gt₆₋₇ metallic bluish-green; gonoplac yellowish-brown.

Antenna with solid clava. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe without median groove, with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric; submedian grooves indistinct but visible in posterior half; anterior pair of setae attached in anterior one-third. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina with anterior half with parallel sides and posterior half gradually expanding backwards; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a semicircular incision, incision with upper part smoothly rounded; tergites with strong reticulation.

Relative measurements: head length, dorsal view 28; head length, frontal view 49; POL 14.5; OOL 9; lateral ocellus diameter 5; head width 67; mouth width 26; malar space 18; eye length 27; scape length 23; scape width 5; pedicel+flagellum length 57; pedicel length 9;

pedicel width, dorsal view 4.5; F1 length 8; F1 width 6; F2 length 8.5; F2 width 6; F3 length 8.5; F3 width 6; clava length 19; clava width 7; C3 length 6; spicule length 1; mesosoma length 90; mesosoma width 66; midlobe of mesoscutum length 40; mesoscutellum length 35; mesoscutellum width 33; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 4; propodeum length 12; costal cell length 47; costal cell width (measured at widest part) 4; marginal vein length 45; stigmal vein length 14; gaster length 141; gaster width 51; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 30; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 21; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, 26 km N San Isidro de El General, 2100m, iv-v.1993, P. Hanson (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

Etymology. Named in honour of Cindy Fernández, director of the School of Biology, University of Costa Rica, phycologist.

***Galeopsomyia ferula* Hansson sp.nov.**

(Figs 104, 105, 1014)

Diagnosis (female). Antenna with solid clava (Fig. 1014); with genal carina; mesoscutellum (Fig. 104) with strong reticulation, meshes slightly elongate, without median groove, submedian grooves indistinct; hind coxa with a strong and complete carina along posterior margin; petiole short, just a narrow band; gaster (Fig. 104) 2.9× as long as wide, Gt₂ 0.4× as long as Gt₄, medio-basal Gt₁ with a transverse edge dorsally, with weak reticulation and shiny; remaining tergites with strong reticulation.

Female holotype: length of body 2.5mm (paratypes 1.7–2.9mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel dark brown, flagellum brown. Head bright metallic bluish-green, clypeus dark brown. Mesosoma golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown with metallic tinges; trochanters dark brown; femora golden-green with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster Gt₁ golden-green, Gt_{2,4} golden-purple, Gt_{5,7} metallic bluish-green; gonoplac metallic bluish-green with apex dark brown; gonoplac black with metallic tinges.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with a strong genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on

midlobe; midlobe with nine scattered adnotaular setae, without a median groove. Mesoscutellum with strong reticulation, meshes slightly elongate, without median groove; submedian grooves indistinct. Dorsellum with strong reticulation. Propodeum with median carina strongly expanding towards posterior part in posterior one-third and with anterior part raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong and complete carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse edge dorsally, with weak reticulation and shiny; remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; POL 11; OOL 5; lateral ocellus diameter 3.5; head width 46; mouth width 17; malar space 12.5; eye length 22; scape length 19; scape width 4; pedicel+flagellum length 46; pedicel length 8; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4.5; F2 length 6; F2 width 5; F3 length 6; F3 width 6; clava length 16; clava width 6.5; C3 length 5; spicule length 1; mesosoma length 68; mesosoma width 50; midlobe of mesoscutum length 30; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 10; costal cell length 37; costal cell width (measured at widest part) 3.5; marginal vein length 34; stigmal vein length 10; gaster length 106; gaster width 37; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 14.5; longest cercal seta length 9; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Cartago, 4km NE Cañon, Genesis II, 9°42-43'N, 83°54-55'W, 2350m, vii.1995, P. Hanson (NHMUK). Paratypes (4♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 1♀ COSTA RICA, Cartago, Dulce Nombre, Vivero Linda Vista, 1300m, viii-x.1993, P. Hanson; 1♀ COSTA RICA, San José, 26km N San Isidro, 9°30'N, 83°43'W, 2100m, ii-v.1992, P. Hanson; 1♀ from same locality as previous but collected ix-x.1992.

Galeopsomyia fresa Hansson sp.nov.

(Figs 106, 107, 1012)

Diagnosis (female). Antennal clava 3.5× as long as wide, with a constriction between C1 and C2 (Fig. 1012); genal carina present; mesoscutellum (Fig. 106) with strong reticulation, meshes elongate in anterior two-thirds and isodiametric in posterior one-third, submedian grooves indistinct; propodeum with median carina very narrow, narrow part (i.e. excluding posterior expanded part) at least 6.0× as long as wide; hind coxa with a carina along posterior

margin; dorsellum with median carina; gaster (Fig. 106) 3.5× as long as wide, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation and dull.

Female holotype: length of body 2.7mm (paratypes 2.6–3.2mm).

Scape yellowish-brown with dorso-apical part dark brown, pedicel and flagellum dark brown. Head with frons and vertex metallic bluish-green, clypeus dark brown, antennal scrobes black. Mesosoma golden-green. Legs with fore and mid coxae dark brown to black, hind coxa black with golden-green tinges; trochanters yellowish-brown; femora black with metallic tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ golden-green, remaining tergites black with metallic tinges; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, above level of antennal toruli with strong reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate in anterior two-thirds and isodiametric in posterior one-third, submedian grooves indistinct. Dorsellum with strong reticulation and shiny, with median carina. Propodeum with median carina very narrow in anterior half, strongly expanded and triangular in posterior half; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with 3–4 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ without edge or carina dorsally, this part smoothly rounded, with weak reticulation and shiny, remaining tergites with strong reticulation and dull.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; POL 11; OOL 6; lateral ocellus diameter 5; head width 52; mouth width 15; malar space 14.5; eye length 21; scape length 20; scape width 4.5; pedicel+flagellum length 58; pedicel length 8; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 8; F2 width 5; F3 length 8; F3 width 5; clava length 21; clava width 6; C3 length 6; spicule length 2; mesosoma length 72; mesosoma width 48; midlobe of mesoscutum length 30; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 12.5; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 43; stigmal vein length 12.5; gaster length 124; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 12; longest cercal seta length 13; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Gerardo de Dota, 18-20.ii.2010, J.S. Noyes (NHMUK). Paratypes (6♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 1♀ **COSTA RICA, Cartago**, La Cangreja, 9°48'N, 83°58'W, 1950m, x.1991, P. Hanson; following from same locality as previous but collected vi-vii.1992 (1♀), ix-xii.1992 (1♀); 2♀ **COSTA RICA, San José**, 26 km N San Isidro de El General, 2100m, viii-ix.1991, P. Hanson.

***Galeopsomyia fucata* Hansson sp.nov.**

(Figs 108, 109, 885, 1015)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1015); with a short genal carina close to mouth opening; frons below toruli with two ovate, deep and strongly reticulate foveae (Fig. 885); mesoscutellum (Fig. 108) with strong reticulation, meshes slightly elongate, without median groove; propodeum (Fig. 108) with a strong median carina, sides parallel in anterior half, strongly expanding backwards from middle of propodeum; hind coxa with a carina along posterior margin; gaster (Fig. 108) 2.4× as long as wide, medio-basal Gt₁ with a rectangular incision.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Face below level of toruli with weakly reticulate parts golden-green and strongly reticulate parts metallic blue; frons metallic blue, antennal scrobes black, clypeus dark brown; vertex black with metallic purple tinges. Mesoscutum and mesoscutellum metallic bluish-green; dorsellum and propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters dark brown; femora black with metallic tinges and with apex yellowish-brown; fore and hind tibiae dark yellowish-brown, mid tibia pale brown; fore tarsus pale brown, mid and hind tarsi with T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin black, Gt_{2,5} with median part golden-purple and lateral parts metallic blue, Gt₆ golden-green, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation except two ovate, deep and strongly reticulate foveae just below toruli, clypeal area smooth, frons rugose, antennal scrobes with strong reticulation; with genal carina. Vertex with strong transverse wrinkled sculpture.

Mesoscutum with strong reticulation, meshes ±isodiametric on both mid- and sidelobes; midlobe without a median groove, with seven setae in ±one row close to notauli. Mesoscutellum with strong reticulation, meshes slightly elongate, without median groove; submedian grooves weak, curved, running parallel and close to lateral margin of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina, sides parallel in anterior half, strongly expanding backwards from middle of propodeum; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum slightly open below, with setae missing at base; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a weak rectangular incision, with weak reticulation and more shiny than remaining tergites, Gt₂₋₇ with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 39; POL 11;

OOL 7; lateral ocellus diameter 4; head width 54; mouth width 16.5; malar space 16; eye length 22; scape length 19; scape width 5; pedicel+flagellum length 49; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 8.5; F1 width 4.5; F2 length 7; F2 width 5; F3 length 7; F3 width 5; clava length 17; clava width 6; C3 length 5; spicule length 1.5; mesosoma length 68; mesosoma width 52; midlobe of mesoscutum length 27; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 10.5; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 10.5; gaster length 91; gaster width 38; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 12.5; longest cercal seta length nm; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-29.iii.2001, 11/M/NOTN, INBio-OET-ALAS intersect (NHMUK).

***Galeopsomyia gabela* Hansson sp.nov.**

(Figs 110, 111, 1016)

Diagnosis (female). Antenna with solid elongate clava, 2.7× as long as wide (Fig. 1016); scape black with metallic tinges (Fig. 1016); with a strong genal carina that almost reaches lower level of eye; mesoscutellum (Fig. 110) with strong reticulation, meshes isodiametric, without median groove, submedian grooves missing; hind coxa with a strong and complete carina along posterior margin; femora predominantly metallic bluish-green (Fig. 111); gaster (Fig. 110) 2.6× as long as wide, Gt₂ 0.3× as long as Gt₄, medio-basal Gt₁ with a blunt edge dorsally, tergites with strong reticulation.

Female holotype: length of body 2.6mm.

Scape black with metallic tinges, pedicel and flagellum dark brown. Head metallic bluish-green, antennal scrobes black, clypeus dark brown. Mesosoma metallic bluish-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora metallic bluish-green with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ and Gt_{3,7} metallic bluish-green, Gt_{2,4} metallic purple; gonoploc black.

Antenna with solid clava. Frons with strong reticulation, antennal scrobes with weak reticulation, clypeus smooth; with a strong genal carina that almost reaches lower level of eye. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; without a median groove; midlobe with nine scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric, without median groove; submedian grooves missing. Dorsellum with strong

reticulation. Propodeum median carina with anterior half narrow with with very anterior part raised and slightly expanded, posterior half strongly expanding towards posterior part and triangular; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong and complete carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below close to base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a blunt transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22.5; head length, frontal view 40; POL 13; OOL 7; lateral ocellus diameter 4; head width 51; mouth width 17.5; malar space 13; eye length 21; scape length 18; scape width 5; pedicel+flagellum length 50; pedicel length 9; pedicel width, dorsal view 4; F1 length 9; F1 width 4.5; F2 length 7; F2 width 5; F3 length 6.5; F3 width 5.5; clava length 17.5; clava width 6.5; C3 length 6.5; spicule length 1.5; mesosoma length 73; mesosoma width 53; midlobe of mesoscutum length 33; mesoscutellum length 29; mesoscutellum width 26; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3.5; propodeum length 9; costal cell length 38; costal cell width (measured at widest part) 3.5; marginal vein length 42; stigmal vein length 11; gaster length 112; gaster width 43; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 17; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 14; longest cercal seta length 8.5; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, 4km NE Cañon, Genesis II, 9°42-43'N, 83°54-55'W, 2350m, viii.1996, P. Hanson (NHMUK).

***Galeopsomyia gala* Hansson sp.nov.**

(Figs 112, 113, 1017)

Diagnosis (female). Antennal clava ±compact and distinctly wider than short funiculars, funiculars and clavomeres 1+2 yellowish-brown (Fig. 1017); genal carina present; mesoscutellum (Fig. 112) with strong reticulation, meshes elongate, submedian grooves indistinct, running parallel with lateral margins of mesoscutellum and thus diverging towards posterior part; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin; gaster (Fig. 112) 1.8× as long as wide, Gt_2 0.4× as long as Gt_4 ; medio-basal Gt_1 with a weak ±semicircular incision.

Female holotype: length of body 1.5mm (paratypes 1.4–1.6mm).

Scape dark brown with apex yellowish-brown, pedicel dark brown, flagellum with funiculars and C1 and C2 yellowish-brown, C3 dark brown. Head golden-green, clypeus dark

brown. Thoracic dorsum golden-green. Legs with coxae golden-green; fore and mid trochanters dark brown, hind trochanter yellowish-brown; fore and mid femora golden-green with apex yellowish-brown, hind femur completely golden-green; fore tibia yellowish-brown, mid and hind tibiae dark brown; T1–3 dark yellowish-brown, T4 brown. Petiole black. Gaster metallic greenish-blue; gonoplac black.

Antenna with solid clava. Frons and vertex with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with six setae in one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, running parallel with lateral margins of mesoscutellum and thus diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with weak sculpture. Propodeum with triangular median carina, concave; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin. Fore wing with 4–5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with a weak \pm semicircular incision, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 16; head length, frontal view 28; POL 9.4; OOL 5; lateral ocellus diameter 2.2; head width 33.5; mouth width nm; malar space 11.5; eye length 14; scape length 12; scape width 3.5; pedicel+flagellum length 26; pedicel length 5; pedicel width, dorsal view 3; F1 length 3.5; F1 width 3.5; F2 length 3.5; F2 width 4; F3 length 3.5; F3 width 4.5; clava length 10; clava width 5; C3 length 3.5; spicule length 1; mesosoma length 49; mesosoma width 35; midlobe of mesoscutum length 18; mesoscutellum length 18; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 9; costal cell length 25; costal cell width (measured at widest part) 2; marginal vein length 27; stigmal vein length 8; gaster length 60; gaster width 33; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 4; Gt_7 width (measured at base) 10; longest cercal seta length 7; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK). Paratypes (4♀, MZLU, MZUCR, NHMUK): 2♀ **COSTA RICA, San José**, Cerro de la Muerte, 20km S Empalme, 9°38'N, 83°51'W, 2800m, xi.1988, P. Hanson; 1♀ **COSTA RICA, San José**, Cerro de la Muerte, 19km S 3km W Empalme, 9°39'N, 83°52'W, 2600m, vi–vii.1993, P. Hanson; 1♀ **COSTA RICA, San José**, 2km W Empalme, 2300m, i.1995, P. Hanson.

***Galeopsomyia gallarum* Hansson sp.nov.**

(Figs 114, 115, 956, 1018)

Diagnosis (female). Antennal clava solid (Fig. 1018); genal carina absent; mesoscutum (Fig. 114) with strong reticulation and mesoscutellum with weak reticulation, meshes elongate; hind coxa with a carina along posterior margin; propodeum (Fig. 114) with a long and narrow median carina; gaster (Fig. 114) 2.2× as long as wide, with short Gt_2 , 0.1× as long as wide, and Gt_4 0.4× as long as wide, Gt_2 0.3× as long as Gt_4 , medio-basal Gt_1 without transverse edge or carina dorsally, with weaker reticulation and more shiny than remaining tergites.

Female holotype: length of body 2.0mm (paratypes 1.4–1.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons, including scrobes, and vertex metallic bluish-green, clypeus black. Mesoscutum and mesoscutellum metallic greenish-blue, propodeum golden-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters pale brown; fore and mid femora dark brown with apical tip yellowish-brown, hind femur black with metallic tinges with apical tip yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; genal carina absent. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with weak reticulation, meshes elongate; submedian grooves indistinct, far apart, straight and slightly diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong, long and narrow median carina; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 without transverse edge or carina dorsally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 11; OOL 5.2; lateral ocellus diameter 4; head width 46; mouth width 15; malar space 13; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 41; pedicel length 7; pedicel width, dorsal view 3.6; F1 length 6; F1 width 5; F2 length 5.5; F2 width 5; F3 length 5; F3 width 5; clava length 14.5; clava width 5.5; C3 length 4; spicule length 1; mesosoma length 58; mesosoma width 42; midlobe of mesoscutum length 23; mesoscutellum length 20.5; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 9; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 10; gaster length 82; gaster width 37; Gt_2 length (measured medially) 4; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 11; longest cercal seta length 9.5; shortest cercal seta length 5.

Male. Length of body of body 1.0–1.3mm.

Antenna (Fig. 956) with scape narrow at very apex, slightly expanding from base to plaque; plaque dark brown; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 12.5; head length, frontal view 23.5; head width 28; mouth width 8.5; malar space 8; eye length 12.5; scape length 10; scape width 3.5; plaque length 3.5; pedicel length 4.5; pedicel+flagellum length 41; F1 length 3.5; F1 width 3.5; F2 length 5; F2 width 3.5; F3 length 6; F3 width 3.5; F4 length 6; F4 width 3; clava length 15; clava width 3; mesosoma length 31; mesosoma width 22; gaster length 36; gaster width 13.5; longest subbasal seta on F1, length 23.

Hosts. Reared from fruit galls (probably induced by Cecidomyiidae) on *Ludwigia* sp. (Onagraceae). In a dissected gall, a cecidomyiid larva was found together with several hymenopteran pupae (I. Jiménez, personal communication).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 12.ii.2011, J.S. Noyes (NHMUK). Paratypes (5♀ 3♂, MZLU, MZUCR, NHMUK): 1♀ **COSTA RICA, Guanacaste**, Estación Pitilla, ACG, LN532600_380600, 30.i-4.ii.2001, R. Thomas, C. Moraga; 3♀ 3♂ **COSTA RICA, Guanacaste**, La Cruz, Rio Sapoa, ex *Ludwigia* fruit galls, I. Jiménez [no date given]; 1♀ **COSTA RICA, Limón**, Parque Nacional Cahuita, 09°43'N, 82°49'W, 24.ii.2010, J.S. Noyes.

Etymology. From the Latin *galla* = gall, and the suffix *-arum* = from.

Galeopsomyia guanacastensis Hansson sp.nov.

(Figs 116, 117, 1019)

Diagnosis (female). Antennal clava solid (Fig. 1019); genal carina present; mesoscutellum (Fig. 116) with strong reticulation, meshes elongate, without a median groove, submedian grooves weak but traceable, running close to and parallel with lateral margins of mesoscutellum; hind coxa with a carina along posterior margin; gaster (Fig. 116) 2.6× as long as wide, medio-basal Gt₁ without transverse edge or carina dorsally, with relatively weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.0mm (paratypes 1.6–2.4mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue tinges. Mesoscutum and mesoscutellum metallic blue; propodeum golden-green. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic blue, Gt_{2,5} golden-purplish, Gt₆ golden-green, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, \pm elongate on midlobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, without median groove; submedian grooves weak but traceable, running close to and parallel with lateral margins of mesoscutellum; anterior pair of setae situated just behind middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 without transverse edge or carina dorsally, with relatively weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 9.5; OOL 5; lateral ocellus diameter 4; head width 45; mouth width 13.5; malar space 13.5; eye length 19.5; scape length 17; scape width 4; pedicel+flagellum length 42; pedicel length 7; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4.5; F2 length 6; F2 width 4.5; F3 length 5.5; F3 width 5; clava length 15; clava width 5.5; C3 length 5; spicule length 1.2; mesosoma length 55; mesosoma width 40; midlobe of mesoscutum length 21.5; mesoscutellum length 19.5; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2.5; propodeum length 7.5; costal cell length 28; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 9; gaster length 83; gaster width 32; Gt_2 length (measured medially) 5.5; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 10.5; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Parque Nacional Santa Rosa, Bosque Humedo, 10°51'N, 87°37'W, 300m, 21.ii.2003, J.S. Noyes (NHMUK). Paratypes (8♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 1♀ COSTA RICA, Guanacaste, Parque Nacional Santa Rosa, 300m, H-3-O, 6-27.ix.1986, D.H. Janzen & I.D. Gauld; 1♀ COSTA RICA, Guanacaste, Estación Maritza, 10°58'N, 85°29'W, 700m, 23.ii.2003, J.S. Noyes; 1♀ COSTA RICA, Guanacaste, Bagaces, Parque Nacional Palo Verde, Sector Catalina, Fila Catalina, LN 257400_400000, 250m, 8.i-8.ii.2000, malaise trap, I. Jiménez; 1♀ COSTA RICA, Guanacaste, Bagaces, Parque Nacional Palo Verde, 0.3 km Radio Estación Palo Verde, LN 259050_388400, 10m, 13-20.xi.2000, I. Jiménez; 1♀ COSTA RICA, Guanacaste, Bagaces, Parque Nacional Palo Verde, Sector Palo Verde, LN 260952_385020, 50m, 5-18.i.2000, swept, I. Jiménez; 1♀ COSTA RICA, Guanacaste, Las Pailas, LN 309550_388850, 1250m, 27.i-11.ii.2001, C. Moraga, P. Rios, P.N. Thomas; 1♀ COSTA RICA, Guanacaste, Bosque Nacional Diríá, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 15.xi-16.xii.2001, I. Jiménez.

Etymology. Named after type area, Guanacaste Province.

Galeopsomyia guillermopereirai Hansson sp.nov.

(Figs 118, 119, 1020)

Diagnosis (female). Flagellum short, clava solid and short, 1.7× as long as wide (Fig. 1020); genal carina present close to mouth opening only; mesoscutum (Fig. 118) with strong reticulation, meshes isodiametric, median part of midlobe with slightly elongate meshes, midlobe with a weak median groove in posterior two-thirds; mesoscutellum (Fig. 118) with strong reticulation, submedian grooves distinct, slightly curved, situated far apart and diverging towards posterior part, without median groove; propodeum (Fig. 118) with median carina triangular with anterior part raised; hind coxa with a carina along posterior margin; petiole transverse with strong sculpture; gaster (Fig. 118) 2.1× as long as wide.

Female holotype: length of body 2.1mm (paratype 2.2mm).

Scape yellowish-brown with dorsal edge brown, pedicel and F1–F3 brown, clava dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes mainly black; vertex metallic bluish-green. Thoracic dorsum golden-green, mesoscutellum with median part metallic greenish-blue. Legs with coxae golden-green; trochanters and femora black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,5} metallic bluish-green, Gt_{6,7} golden-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong small-meshed reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; genal carina weak and present only close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric, median part of midlobe with slightly elongate meshes; midlobe with a weak median groove in posterior two-thirds, with 14 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric on median part and slightly elongate on lateral parts; submedian grooves distinct, slightly curved, situated far apart and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with triangular median carina, concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ without transverse carina or edge dorsally, with weak reticulation and shiny, Gt_{2,7} with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 36; POL 13.5; OOL 5; lateral ocellus diameter 4.5; head width 51; mouth width 14; malar space 14.5; eye length 21; scape length 17; scape width 4.5; pedicel+flagellum length 38; pedicel length 8; pedicel width, dorsal view 4; F1 length 6; F1 width 4.5; F2 length 5; F2 width 5; F3 length 4.5; F3 width 6; clava length 12; clava width 7; C3 length 3.5; spicule length 1; mesosoma length 68; mesosoma width 50; midlobe of mesoscutum length 28.5; mesoscutellum length 25; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 13.5; median part of mesoscutellum, width in anterior part 13; median part of mesoscutellum, width in posterior part 16; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 9; gaster length 89; gaster width 43; Gt₂

length (measured medially) 8; Gt_4 length (measured medially) 18; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 11; longest cercal seta length; shortest cercal seta length.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Upala, Bijagua, Alb. Heliconias, Sendero Lago Danto, LN 423760_298100, 1100m, 17.iii-17.iv.2000, J.D. Gutiérrez (NHMUK). Paratype: 1♀ **COSTA RICA, Guanacaste**, ACG, Sector Cacao, 10.9292° N 85.4643° W, 1220m, 30.x-6.xi.2014, D.H. Janzen & W. Hallwachs (barcoded specimen, BIOUG31518-C05) (MZLU).

Etymology. Named in honour of Guillermo Pereira in recognition of his years of dedicated management of the ICE Malaise traps at the geothermal site PL12 at the base of Volcan Rincon de la Vieja, Costa Rica, the traps that caught this and other *Galeopsomyia*.

***Galeopsomyia hallwachsae* Hansson sp.nov.**

(Figs 120, 121, 704)

Diagnosis (female). Antennal clava solid and short (Fig. 704); genal carina present; mesoscutum and mesoscutellum (Fig. 120) with strong reticulation and with \pm distinct median groove; mesoscutellum (Fig. 120) with \pm distinct submedian grooves that diverge towards posterior part, with elongate meshes; propodeum (Fig. 120) with median carina predominantly with parallel sides; hind coxa with a carina along posterior margin; gaster (Fig. 120) elongate, 2.4 \times as long as wide, medio-basal Gt_1 with a blunt transverse edge dorsally.

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue tinges. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa metallic bluish-green; trochanters pale brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic bluish-green tinges and apex yellowish-brown; tibiae yellowish-brown; fore tarsus brown, mid and hind tarsi with T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-4} golden-purple dorsally and metallic bluish-green laterally, Gt_{5-7} metallic bluish-green; gonoplac dark brown with apex yellowish-brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeal area smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, and with 13 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a complete median groove; submedian grooves \pm distinct, slightly curved and diverging towards posterior part.

Dorsellum with strong sculpture. Propodeum with median carina predominantly with parallel sides, strongly expanding backwards in very posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a blunt transverse edge dorsally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 11; OOL 4.5; lateral ocellus diameter 4; head width 47; mouth width 15.5; malar space 12.5; eye length 22; scape length 15.5; scape width 4; pedicel+flagellum length 38; pedicel length 7; pedicel width, dorsal view 4; F1 length 6; F1 width 4.5; F2 length 5.5; F2 width 5; F3 length 5; F3 width 5.5; clava length 13; clava width 7; C3 length 3.5; spicule length 1; mesosoma length 57; mesosoma width 45; midlobe of mesoscutum length 26; mesoscutellum length 23; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 7; costal cell length 29; costal cell width (measured at widest part) 2.5; marginal vein length 25; stigmal vein length 9; gaster length 82; gaster width 34; Gt_2 length (measured medially) 3.5; Gt_4 length (measured medially) 18.5; Gt_7 length (measured medially) 10.5; Gt_7 width (measured at base) 16; longest cercal seta length 10; shortest cercal seta length 4.5.

Male Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, SE-6-C, 23.iii-13. iv.1986, D.H. Janzen & I.D. Gauld (NHMUK).

Etymology. This species is named in honour of Winnie Hallwachs for her efforts to understand and preserve natural tropical ecosystems, in particular within Costa Rica.

***Galeopsomyia harryramirezi* Hansson sp.nov.**

(Figs 122, 123, 707)

Diagnosis (female). Antennal clava solid (Fig. 707); genal carina present; mesoscutellum (Fig. 122) with elongate meshes; hind coxa without carina along posterior margin; petiole transverse with strong sculpture; gaster (Fig. 122) 3.1× as long as wide, with Gt_2 0.3× as long as Gt_4 , Gt_1 with weak reticulation, more shiny than remaining tergites, medio-basal Gt_1 with a ±rectangular incision but without transverse carina dorsally, Gt_{2-4} with a smooth median line.

Female holotype: length of body 2.7mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head

with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with coxae golden-green; trochanters and femora dark brown to black, femora with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, remaining tergites black with blue and purple tinges; gonoplac black.

Antenna with ±solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with five setae in one row close to notauli. Mesoscutellum with rather strong reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate; with a very weak median groove; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; setae not visible, broken off. Dorsellum with rather strong reticulation and shiny. Propodeum with a strong median carina that expands in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation, Gt₂₋₄ with a smooth median line.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 12; OOL 5.5; lateral ocellus diameter 4; head width 51; mouth width 15; malar space 15; eye length 22; scape length 17; scape width 4; pedicel+flagellum length 42; pedicel length 8; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 6; F2 width 4.5; F3 length 5; F3 width 5; clava length 14; clava width 6; C3 length 5; spicule length 1; mesosoma length 73; mesosoma width 51; midlobe of mesoscutum length 29; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 16; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 10; costal cell length 42; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 11; gaster length 120; gaster width 39; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 34; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11.5; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, ACG, Sector Cacao, Derrumbe, 10.9292° N, 85.4643° W, 1220m, 14-21.v.2015, D.H. Janzen & W. Hallwachs (barcoded specimen: BIOUG 36316-D11) (MZLU).

Etymology. Named in honour of Harry Ramirez in recognition of his years of dedicated management of the Derrumbe Malaise trap on Volcan Cacao, Costa Rica, the trap that caught this and other *Galeopsomyia*.

***Galeopsomyia herediensis* Hansson sp.nov.**

(Figs 124, 125, 706)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 706); genal carina absent; mesoscutum and mesoscutellum (Fig. 124) with strong reticulation with elongate meshes, mesoscutellum with submedian grooves weak, indicated in the reticulation; hind coxa with a carina along posterior margin; gaster (Fig. 124) 2.3× as long as wide, with short Gt_2 , 0.13× as long as wide, and Gt_4 0.45× as long as wide, Gt_2 0.36× as long as Gt_4 , medio-basal Gt_1 with a transverse edge dorsally, with weaker reticulation and more shiny than remaining tergites.

Female holotype: length of body 2.2mm (paratypes 1.9–2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic greenish blue with scrobes black with metallic tinges and clypeus dark brown; vertex black with metallic blue tinges. Mesosoma golden-green. Legs with fore and mid coxae metallic greenish-blue, hind coxa golden-green; fore and mid trochanters dark brown, hind trochanter black; femora golden-green with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-7} metallic greenish-blue; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with five setae in one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, slightly curved and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a triangular median carina, concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse edge dorsally, more shiny than remaining tergites which have rather strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 11.2; OOL 5; lateral ocellus diameter 4; head width 49; mouth width 14; malar space 13; eye length 20.5; scape length 17; scape width 4.5; pedicel+flagellum length 43; pedicel length 7; pedicel width, dorsal view 4; F1 length 6; F1 width 4; F2 length 6; F2 width 5; F3 length 5; F3 width 5; clava length 15; clava width 6; C3 length 5; spicule length 1; mesosoma length 63; mesosoma width 44.5; midlobe of mesoscutum length 26; mesoscutellum length 23.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 27; stigmal vein length 10; gaster length 93; gaster width 41; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 7.5; Gt_7 width (measured at base) 13; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 1-12.iv.2002, J.S. Noyes & D.Rubí (NHMUK). Paratypes (3♀, MZLU, NHMUK): 1♀ with same label data as holotype; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes.

Etymology. Named after type area, Heredia, Province in Costa Rica.

***Galeopsomyia iangauldi* Hansson sp.nov.**

(Figs 126, 127, 708)

Diagnosis (female). Antennal clava \pm solid (Fig. 708); genal carina present; mesoscutellum (Fig. 126) with strong reticulation, meshes elongate, submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; hind coxa without carina along posterior margin; gaster (Fig. 126) 2.7 \times as long as wide, medio-basal Gt_1 with sharp transverse edge dorsally, Gt_2 0.2 \times as long as Gt_4 .

Female holotype: length of body 2.3mm (paratypes 2.0–2.5mm).

Scape and pedicel yellowish-brown, flagellum dark brown. Face below level of toruli metallic bluish-green, clypeus dark brown, frons metallic bluish-purple; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters dark yellowish-brown; femora dark brown to black with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green, remaining tergites black with metallic purple tinges; gonoplac black.

Antenna with \pm solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed in anterior part of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina that expands in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with sharp transverse edge dorsally, tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 40; POL

11; OOL 4.5; lateral ocellus diameter 4.2; head width 52; mouth width 13.5; malar space 13; eye length 24.5; scape length 17; scape width 4; pedicel+flagellum length 48; pedicel length 7; pedicel width, dorsal view 4; F1 length 8; F1 width 4; F2 length 7.5; F2 width 4.5; F3 length 6.5; F3 width 5; clava length 16.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 72; mesosoma width 47; midlobe of mesoscutum length 25; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4.5; propodeum length 10.5; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 7; gaster length 94; gaster width 35; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 28; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, H-3-O, 6-27.ix.1986, D.H. Janzen & I.D. Gauld (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): all from same locality as holotype but collected 26.x-16.xi.1985 (1♀), 16.xi-7.xii.1985 (2♀), 27.ix-18.x.1986 (1♀), 18.x-8.xi.1986 (1♀).

Etymology. Named in honour of the collector, Ian D. Gauld.

***Galeopsomyia ibis* Hansson sp.nov.**

(Figs 128, 129, 1021)

Diagnosis (female). Antennal clava with weak constrictions between clavomeres (Fig. 1021); with a short genal carina close to mouth opening; mesoscutellum (Fig. 128) with isodiametric meshes; hind coxa with a short carina along posterior margin close to base; petiole transverse and shiny on dorsal surface; gaster (Fig. 128) 3.1× as long as wide, Gt₂ 0.24× as long as Gt₄, medio-basal Gt₁ with rectangular incision, shiny with weak reticulation and with upper margin smoothly rounded, remaining tergites with strong reticulation.

Female holotype: length of body 3.0mm.

Scape dark yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head metallic bluish-green, antennal scrobes black, clypeus dark brown. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with fore and hind coxae golden-green, mid coxa dark brown with metallic tinges; trochanters dark brown; fore and hind femora golden-green, mid femur dark brown with metallic tinges, apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,2,6} metallic bluish-green, Gt_{3,5} and apex of Gt₇ black; gonoplac black.

Antennal clava with weak constrictions between clavomeres. Frons with strong reticulation, clypeus smooth; with a short genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with seven setae in one row close to notauli. Mesoscutellum with strong reticulation, meshes isodiametric; without median groove; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part. Dorsellum with strong reticulation. Propodeum with a strong triangular median carina with concave upper surface; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a short carina along posterior margin close to base. Fore wing with three setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole transverse and shiny on dorsal part. Gaster elongate; medio-basal Gt_1 with rectangular incision, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 45; POL 13; OOL 7; lateral ocellus diameter 4; head width 57; mouth width 17; malar space 18; eye length 24; scape length 20; scape width 4.5; pedicel+flagellum length 56; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 8.5; F2 width 5.5; F3 length 8; F3 width 6; clava length 18.5; clava width 7; C3 length 7; spicule length 2; mesosoma length 85; mesosoma width 58; midlobe of mesoscutum length 36; mesoscutellum length 32; mesoscutellum width 30; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 13; costal cell length 46; costal cell width (measured at widest part) 3.5; marginal vein length 43; stigmal vein length 12.5; gaster length 148; gaster width 48; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 41; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 16; longest cercal seta length 11; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, ii.1995, P. Hanson (NHMUK).

Galeopsomyia incisa Hansson sp.nov.

(Figs 130, 131, 1022)

Diagnosis (female). Antenna with solid clava (Fig. 1022); genal carina present; mesoscutellum (Fig. 130) with strong reticulation, meshes slightly elongate, submedian grooves very weak, strongly diverging towards posterior part; hind coxa with a short carina close to apex at posterior margin; propodeum (Fig. 130) with a triangular, short and concave median carina,

with two foveae in anterior part, callus with eight setae; petiole transverse with very strong sculpture; gaster (Fig. 130) $2.9\times$ as long as wide, medio-basal Gt_1 with a deep rectangular incision, Gt_{1-5} with a smooth rounded edge medially along entire length.

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons and vertex golden-green, antennal scrobes black with metallic tinges, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa black; trochanters pale brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-5} black with metallic purple tinges, Gt_{6-7} black with metallic tinges; gonoplac black with apex yellowish-brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with genal carina. Vertex with strong reticulation, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, with isodiametric meshes; midlobe of mesoscutum with seven adnotaular setae in a single row. Mesoscutellum with strong reticulation, meshes slightly elongate; submedian grooves very weak, strongly diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a wide short median carina, concave with two foveae in anterior part; callus with eight setae. Fore coxa with relatively weak reticulation, mid coxa with weak, and hind coxa with strong reticulation; hind coxa with a short carina close to apex at posterior margin. Fore wing with 4–6 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with very strong sculpture. Gaster elongate; medio-basal Gt_1 with deep rectangular incision, to fit petiole; tergites with strong reticulation; Gt_{1-5} medially along entire length with a smooth longitudinal rounded edge.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 10; OOL 5.5; lateral ocellus diameter 4; head width 44; mouth width 13.5; malar space 12.5; eye length 19.5; scape length 14; scape width 4; pedicel+flagellum length 36.5; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 3.5; F2 length 5; F2 width 4; F3 length 4.5; F3 width 4.5; clava length 13; clava width 5; C3 length 4.5; spicule length 2; mesosoma length 58; mesosoma width 41; midlobe of mesoscutum length 23; mesoscutellum length 22; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 14.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2.5; propodeum length 8.5; costal cell length 30; costal cell width (measured at widest part) 3; marginal vein length 26; stigmal vein length 9; gaster length 90; gaster width 31; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 8.5; Gt_7 width (measured at base) 12; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 12.ii.2011, J.S. Noyes (NHMUK).

Etymology. From the Latin *incisus* = cut into, referring to rectangular incision of Gt₁.

***Galeopsomyia itabunaensis* Hansson sp.nov.**

(Figs 132, 133, 709)

Diagnosis (female). Antennal clava solid (Fig. 709); genal carina present; mesoscutellum (Fig. 132) 0.8× as long as wide with strong reticulation, meshes elongate, with a weak median groove; hind coxa with a carina along posterior margin; gaster (Fig. 132) 1.9× as long as wide, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Mesoscutum and mesoscutellum metallic bluish-purple, propodeum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,2} metallic blue, Gt_{3,5} golden-purple; Gt₆ metallic bluish-purple, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe without a median groove, with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; with a weak median groove in anterior two-thirds; submedian grooves weak, ±straight and diverging towards posterior part; anterior pair of setae situated in front of the middle. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with sculpture on dorsal part. Gaster ovate-elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 11; OOL 5; lateral ocellus diameter 5; head width 54.5; mouth width 13.5; malar space 13.5; eye length 26; scape length 17; scape width 4.5; pedicel+flagellum length 42.5; pedicel length 7; pedicel width, dorsal view 4.5; F1 length 6.5; F1 width 5; F2 length 6; F2 width 5.5; F3 length 5.5; F3 width 5.5; clava length 15; clava width 6; C3 length 5.5; spicule length 2; mesosoma length 68; mesosoma width 51; midlobe of mesoscutum length 25; mesoscutellum length 23; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 14.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum

length 3.5; propodeum length 11; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 9; gaster length 88; gaster width 46; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 15; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Bahia**, Itabuna, ii.1983, F. Benton (NHMUK).

Etymology. Named after type locality.

***Galeopsomyia janzeni* Hansson sp.nov.**

(Figs 134, 135, 710)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 710); genal carina present; mesoscutellum (Fig. 134) with elongate meshes, without a median groove; dorsellum with median carina; hind coxa without carina along posterior margin; gaster (Fig. 134) 3.9× as long as wide, Gt₂ 0.28× as long as Gt₄, medio-basal Gt₁ with a rectangular incision and with weak reticulation.

Female holotype: length of body 2.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum brown. Face below level of toruli metallic bluish-green, clypeus dark brown, frons metallic bluish-purple, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae dark brown with metallic tinges, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,6,7} metallic bluish-green, Gt₂₋₅ golden-purplish; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe without a median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, without a median groove; submedian grooves weak, running close to and parallel with lateral margins of mesoscutellum; anterior pair of setae situated just in front of the middle. Dorsellum with weak sculpture, with median carina. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster very elongate; medio-basal Gt_1 with a rectangular incision; Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; POL 11; OOL 5.5; lateral ocellus diameter 4; head width 48; mouth width 14.5; malar space 14.5; eye length 21; scape length 16; scape width 4; pedicel+flagellum length 43; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 6; F2 width 4.5; F3 length 5.5; F3 width 5; clava length 15; clava width 5.5; C3 length 4.5; spicule length 1.5; mesosoma length 61; mesosoma width 42; midlobe of mesoscutum length 26; mesoscutellum length 21.5; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 12.4; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 10; costal cell length 33; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 8; gaster length 121; gaster width 31; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 27; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, Guanacaste, Parque Nacional Santa Rosa, 300m, H-1-O, 26.vii-14.viii.1986, D.H. Janzen & I.D. Gauld (NHMUK).

Etymology. This species is named in honour of Prof. Daniel H. Janzen for his heroic efforts to understand and preserve natural tropical ecosystems, in particular within Costa Rica.

***Galeopsomyia jimenezi* Hansson sp.nov.**

(Figs 136, 137, 712)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 712); with genal carina; mesoscutum and mesoscutellum (Fig. 136) with strong reticulation, mesoscutellum with very weak submedian grooves that run close to and parallel with lateral margins of mesoscutellum; hind coxa with a carina along posterior margin; gaster (Fig. 136) 2.5× as long as wide, medio-basal Gt_1 with a transverse edge dorsally.

Female holotype: length of body 1.7mm (paratype 2.0mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head metallic bluish-purple, clypeus dark brown, antennal scrobes black. Thoracic dorsum black with bluish-purple tinges. Legs with fore and hind coxae dark brown to black with metallic tinges, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black.

Gaster with Gt₁ metallic blue, Gt_{2,5} golden-purple, Gt_{6,7} black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with five adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves very weak, running close to and parallel with lateral margins of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands posteriorly; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row sparse but \pm unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a transverse edge dorsally; tergites with strong reticulation, Gt₁ with slightly weaker reticulation and more shiny.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; POL 9; OOL 5; lateral ocellus diameter 3.5; head width 41; mouth width 11; malar space 12.5; eye length 17; scape length 15; scape width 3.2; pedicel+flagellum length 42; pedicel length 6.5; pedicel width, dorsal view 3.2; F1 length 7; F1 width 4; F2 length 5.5; F2 width 4; F3 length 5.5; F3 width 4.5; clava length 14.5; clava width 5; C3 length 5.5; spicule length 1.5; mesosoma length 45; mesosoma width 33; midlobe of mesoscutum length 16; mesoscutellum length 16.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2.5; propodeum length 7.5; costal cell length 24; costal cell width (measured at widest part) 1.5; marginal vein length 25; stigmal vein length 7.5; gaster length 75; gaster width 30; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 10; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Dirriá, Retallano Alrededores Torre control de incendios, LN 238550_358650, 600-700m, 1.xii-i.2002, I. Jiménez (NHMUK). Paratype: 1♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, SE-7-O, 28.xii.1985-18.i.1986, D.H. Janzen & I.D. Gauld (NHMUK).

Etymology. Named in honour of Iván Jiménez, former parataxonomist at INBio and collector of material of this and many other Costa Rican Eulophidae.

***Galeopsomyia labilis* Hansson sp.nov.**

(Figs 138, 139, 713)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2, 2.6× as long as wide (Fig. 713); genal carina present; mesoscutellum (Fig. 138) with strong reticulation, meshes isodiametric; propodeum (Fig. 138) with median carina triangular; hind coxa with a very strong carina along posterior margin; gaster (Fig. 138) 3.7× as long as wide, medio-basal Gt₁ with transverse rounded edge dorsally, all tergites with strong reticulation.

Female holotype: length of body 3.0mm (paratypes 2.9–3.1mm).

Scape yellowish-brown with dorso-apical part dark brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue tinges. Mesosoma golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters dark brown; femora black with metallic blue tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green in anterior half and metallic purple in posterior half, Gt_{2,5} metallic purple, Gt₆ metallic purple in anterior half and black with metallic blue tinges in posterior half, Gt₇ black with metallic blue tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, above level of antennal toruli with strong reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes ±isodiametric; submedian grooves indistinct. Dorsellum with strong reticulation. Propodeum with median carina triangular; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ with a transverse rounded edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 44; POL 12; OOL 6.5; lateral ocellus diameter 5; head width 58; mouth width 19; malar space 16; eye length 25; scape length 20.5; scape width 4.5; pedicel+flagellum length 54; pedicel length 9; pedicel width, dorsal view 4; F1 length 8.5; F1 width 6; F2 length 7.5; F2 width 6; F3 length 7.5; F3 width 6.5; clava length 18.5; clava width 7; C3 length 5; spicule length 1; mesosoma length 75; mesosoma width 55; midlobe of mesoscutum length 34.5; mesoscutellum length 25; mesoscutellum width 26; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 4; propodeum length 8.5; costal cell length 39; costal cell width (measured at widest part) 3.5; marginal vein length 42; stigmal vein length 12; gaster length 148; gaster width 40; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 23.5; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 16; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 11.ii.2012, J.S. Noyes (NHMUK). Paratypes: 2♀ **COSTA RICA, Guanacaste**, Zona Protectorada Nosara, Fila Maravilla, LN 221350_381700, 800m, 24.xi-21.xii.2001, malaise trap, I. Jiménez (MZLU, MZUCR).

***Galeopsomyia lapra* Hansson sp.nov.**

(Figs 140, 141, 1023)

Diagnosis (female). Antennal clava solid (Fig. 1023); genal carina present; mesoscutellum (Fig. 140) with a mix of isodiametric and slightly elongate meshes in median part; fore and hind coxa with a carina along posterior margin; gaster (Fig. 140) elongate and laterally compressed, 2.8× as long as wide, and 0.7× as wide as width of mesoscutum.

Female holotype: length of body 1.9mm (paratype 2.1mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with bluish-green tinges. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown, hind coxa golden-green; trochanters dark brown; femora dark brown to black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin dark brown, Gt_{2,5} metallic purple, Gt_{6,7} metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, inside triangle with weak reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric to elongate; submedian grooves weak, running parallel and close to lateral margins of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore and hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate and laterally flattened; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 32; POL 9; OOL 6; lateral ocellus diameter 3.5; head width 47; mouth width 14; malar space 12; eye length 17; scape length 15; scape width 3.5; pedicel+flagellum length 40; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4.5; F2 length 5.5; F2 width 4.5; F3 length 5.5; F3 width 5; clava length 13.5; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length 53; mesosoma width 38.5; midlobe of mesoscutum length 21; mesoscutellum length 20; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 9;

median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2; propodeum length 7.5; costal cell length 30; costal cell width (measured at widest part) 2.5; marginal vein length 22.5; stigmal vein length 10.5; gaster length 79; gaster width 28; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 6.5; Gt_7 width (measured at base) 13; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK). Paratype: 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

Galeopsomyia larshuggerti Hansson sp.nov.

(Figs 142, 143, 1024)

Diagnosis (female). Antennal clava solid (Fig. 1024); genal carina absent; mouth opening very wide, 1.5× malar space (Fig. 1024); mesoscutellum (Fig. 142) with strong reticulation, meshes elongate, submedian grooves indistinct, straight and diverging towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 142) 2.4× as long as wide, Gt_2 0.21× as long as Gt_4 .

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel and flagellum pale brown. Head with frons dark brown with metallic bluish-purple tinges, clypeus yellowish-brown, antennal scrobes dark brown; vertex dark brown. Thoracic dorsum dark brown with metallic tinges. Legs with coxae dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole dark brown. Gaster dark brown; gonoplac dark brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, inside ocellar triangle with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, straight and diverging towards posterior part; with median groove in anterior two-thirds; anterior pair of setae in median part of mesoscutellum. Dorsellum with strong sculpture. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row broken.

Petiole transverse. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 16; head length, frontal view 30; POL 9.5; OOL 4.5; lateral ocellus diameter 3.5; head width 38.5; mouth width 15.5; malar space 10.5; eye length 17.5; scape length 13.5; scape width 3.3; pedicel+flagellum length 33; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 5; F1 width 3.5; F2 length 4; F2 width 4; F3 length 4; F3 width 4.2; clava length 12; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 46; mesosoma width 36; midlobe of mesoscutum length 17; mesoscutellum length 18.5; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2; propodeum length 5; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 18; stigmal vein length 7; gaster length 68; gaster width 28; Gt₂ length (measured medially) 3; Gt₄ length (measured medially) 14.5; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Peru.

Material examined.

Holotype ♀ **PERU**, Madre de Dios, Puerto Maldonado, 2.i.1984, Lars Huggert (MZLU).

Etymology. Named in honour of Lars Huggert, collector of material from Ecuador and Peru..

Remarks. The holotype specimen is bleached by light.

***Galeopsomyia liosa* Hansson sp.nov.**

(Figs 144, 145, 1026)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1026); genal carina present; mesoscutellum (Fig. 144) with strong reticulation, meshes elongate, submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; hind coxa without carina along posterior margin; gaster (Fig. 144) 2.3× as long as wide, Gt₂ 0.4× as long as Gt₄, medio-basal Gt₁ with a ±rectangular incision, with very weak reticulation, distinctly more shiny than remaining tergites.

Female holotype: length of body 2.2mm (paratypes 1.7–2.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with coxae black with blue-green tinges; trochanters and femora dark brown to black, femora with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, remaining tergites black with purple tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation,

clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with seven setae in one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina that expands in posterior part, expanded part concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with a \pm rectangular incision, with weak reticulation and shiny, remaining tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 11.5; OOL 6; lateral ocellus diameter 3.5; head width 47; mouth width 14; malar space 13; eye length 19; scape length 16; scape width 4; pedicel+flagellum length 42; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4.5; F2 length 6; F2 width 5; F3 length 5.5; F3 width 5; clava length 15.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 64; mesosoma width 45; midlobe of mesoscutum length 26; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 9; costal cell length 33; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 11.5; gaster length 87; gaster width 38; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 23.5; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 13; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Camino a Río Humo, LN 188100_560500, 1400-1500m, 22.xii.1999-16.i.2000, malaise trap, M. Alfaro (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): 3♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, La Península, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes; 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 10°26'N, 84°01'W, 75m, 27-28.ii.2003, J.S. Noyes; 1♀ **COSTA RICA, Puntarenas**, Golfito, Parque Nacional Corcovado, Cerro Rincón, La Tigrilla, LS 523600_274500, 600m, ix.2000, malaise trap, J. Azofeifa.

Galeopsomyia lobo Hansson sp.nov.

(Figs 146, 147, 811, 886)

Diagnosis (female). Antenna with solid clava (Fig. 811); genal carina present; mesoscutellum (Fig. 146) with strong reticulation, with elongate meshes in median part and a weak median groove; hind coxa with a weak carina along posterior margin; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 146) $2.1\times$ as long as wide, medio-basal Gt_1 with a short rectangular incision.

Female holotype: length of body 1.8mm (paratype 1.5mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head golden-green with blue tinges. scrobes black, clypeus dark brown. Thoracic dorsum golden-green with blue tinges. Legs with fore and mid coxae black, hind coxa metallic bluish-green; trochanters pale brown; femora black with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-4} black with metallic purple tinges, Gt_{5-7} metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with seven setae in \pm one row close to notauli. Mesoscutellum with strong reticulation, meshes elongate, with a weak median groove; submedian grooves weak, running parallel with and close to lateral margins of mesoscutellum. Dorsellum with strong sculpture. Propodeum with triangular median carina, concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a weak carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with a short rectangular incision, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 11; OOL 5; lateral ocellus diameter 3; head width 44; mouth width 14; malar space 12.5; eye length 19; scape length 14; scape width 4; pedicel+flagellum length 34; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 4.5; F1 width 3.5; F2 length 4.5; F2 width 4; F3 length 4.5; F3 width 4; clava length 12; clava width 5.2; C3 length 5; spicule length 2; mesosoma length 55; mesosoma width 38; midlobe of mesoscutum length 21; mesoscutellum length 21; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 8; costal cell length 30; costal cell width (measured at widest part) 2; marginal vein length 22; stigmal vein length 8; gaster length 73; gaster width 35; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 11; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from fruit galls on *Cissus verticillata* (Vitaceae), from which Cecidomyiidae also emerged.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, San Pedro de Montes de Oca, 1100m, x.1997, ex fruit of *Cissus verticillatus*, P. Hanson (NHMUK). Paratype: 1♀ COSTA RICA, Guanacaste, Parque Nacional Santa Rosa, 300m, SE-6-C, 7-28.xii.1985, D.H. Janzen & I.D. Gauld (NHMUK).

Etymology. Named in honour of Jorge Lobo, professor in the School of Biology, University of Costa Rica, specialist in population genetics of plants and bees.

***Galeopsomyia malia* Hansson sp.nov.**

(Figs 148, 149, 1027)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 1027); genal carina present; mesoscutellum (Fig. 148) with complete submedian grooves, reticulate with slightly elongate meshes; hind coxa with a carina along posterior margin; gaster (Fig. 148) 2.8× as long as wide, medio-basal Gt₁ with a ±rectangular incision, with weak reticulation and more shiny than remaining tergites.

Female holotype: length of body 2.7mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesosoma golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic purple tinges; trochanters yellowish-brown; femora black with metallic tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,6} golden-green, Gt_{2,5} metallic blue with posterior margin metallic purple, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation, below eyes with weak reticulation and more shiny, clypeal area smooth; with a weak genal carina. Vertex outside ocellar triangle with strong reticulation, inside triangle with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes predominantly isodiametric but with elongate meshes in posterior one-third of midlobe; midlobe without median groove, with nine scattered adnotaular setae. Mesoscutellum with strong reticulation, median part with weaker reticulation and more shiny than lateral parts, meshes elongate, submedian grooves ±distinct and diverging towards posterior part. Dorsellum with strong reticulation. Propodeum with median carina triangular, narrow anterior part very short; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with 3–4 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse and smooth. Gaster elongate; medio-basal Gt₁ with a ±rectangular incision, with very weak reticulation and shiny, remaining tergites with strong reticulation and dull.

Relative measurements: head length, dorsal view 27; head length, frontal view 44; POL

12,5; OOL 7; lateral ocellus diameter 5; head width 57; mouth width 18; malar space 15,5; eye length 24; scape length 22; scape width 5; pedicel+flagellum length 57; pedicel length 7,5; pedicel width, dorsal view 4; F1 length 9,5; F1 width 5; F2 length 9,5; F2 width 5; F3 length 8,5; F3 width 6; clava length 21; clava width 6; C3 length 7,5; spicule length 2; mesosoma length 79; mesosoma width 54; midlobe of mesoscutum length 32,5; mesoscutellum length 27,5; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 8,5; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 12; costal cell length 38; costal cell width (measured at widest part) 3; marginal vein length 41; stigmal vein length 11; gaster length 110; gaster width 40; Gt₂ length (measured medially) 3,5; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 15; longest cercal seta length 14; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia mandria* Hansson sp.nov.**

(Figs 150, 151, 1028)

Diagnosis (female). Antennal clava solid (Fig. 1028); genal carina absent; mesoscutellum (Fig. 150) with weak reticulation (compared to mesoscutum), submedian grooves very weak, wide apart and diverging towards posterior part, without a median groove; propodeum (Fig. 150) with a strong median carina, with ±parallel sides; hind coxa with a weak carina in apical one-third of posterior margin; gaster (Fig. 150) 2.1× as long as wide, Gt₁ with weak reticulation, remaining tergites with rather strong reticulation.

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel and F1–3 dark brown dorsally and yellowish-brown ventrally, F4–6 dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown with metallic tinges, hind femur metallic bluish-green, all femora with apex yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole black. Gaster with Gt_{1,5-7} metallic bluish-green, Gt₂₋₄ golden-purple; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeal area smooth, frons with strong reticulation, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation lateral to ocellar triangle, inside triangle with transverse carinae.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, \pm elongate on midlobe; midlobe without median groove, with seven adnotaular setae. Mesoscutellum with weak reticulation; submedian grooves very weak, wide apart and diverging towards posterior part; without a median groove. Dorsellum with strong sculpture. Propodeum with a strong median carina, with \pm parallel sides; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa with a weak carina in apical one-third along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; Gt_1 with weak reticulation, remaining tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; POL 9.5; OOL 4; lateral ocellus diameter 4; head width 40; mouth width 9.5; malar space 11; eye length 18.5; scape length 14.5; scape width 4; pedicel+flagellum length 34; pedicel length 33; pedicel width, dorsal view 3.5; F1 length 4.5; F1 width 3; F2 length 4.5; F2 width 3.5; F3 length 4.5; F3 width 4; clava length 13; clava width 5.5; C3 length 4; spicule length 1; mesosoma length 54; mesosoma width 40; midlobe of mesoscutum length 24; mesoscutellum length 21; mesoscutellum width 21; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 2.5; propodeum length 8; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 9; gaster length 77; gaster width 37; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 6.5; Gt_7 width (measured at base) 12; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, 2km W Empalme, 2300m, vii.1995, P. Hanson (NHMUK).

Galeopsomyia maniata Hansson sp.nov.

(Figs 152, 153, 1029)

Diagnosis (female). Flagellum short, clava solid (Fig. 1029); genal carina absent; mesoscutellum (Fig. 152) reticulate with elongate meshes, submedian grooves \pm distinct and diverging towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 152) 2.7 \times as long as wide.

Female holotype: length of body 2.3mm (paratype 2.5mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, below level of toruli golden-green, antennal scrobes golden, clypeus dark brown; vertex metallic bluish-purple with green tinges. Mesoscutum metallic blue with green tinges; mesoscutellum golden-green with sublateral grooves metallic blue. Legs with fore and mid

coxae dark brown with metallic tinges, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown with metallic tinges, hind femur metallic bluish-green, all femora with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₅ golden-purple, Gt₆ black with metallic bluish-purple tinges, Gt₇ black with metallic purple and green tinges; gonoplac black.

Antennal clava solid. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe without median groove, with nine scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, submedian grooves ±distinct and diverging towards posterior part. Dorsellum with strong reticulation. Propodeum with median carina wide and strongly expanded and triangular in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with 4–5 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ without edge or carina dorsally, this part smoothly rounded, with very weak reticulation and shiny, remaining tergites with strong reticulation and dull.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; POL 11,5; OOL 6; lateral ocellus diameter 4,5; head width 50; mouth width 13; malar space 14; eye length 21,5; scape length 17,5; scape width 4; pedicel+flagellum length 45,5; pedicel length 7,5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 6,5; F2 width 5; F3 length 6; F3 width 5,5; clava length 16; clava width 6; C3 length 5; spicule length 1,5; mesosoma length 66; mesosoma width 46; midlobe of mesoscutum length 27; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 8,5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2; propodeum length 10; costal cell length 36; costal cell width (measured at widest part) 2,5; marginal vein length 33; stigmal vein length 10,5; gaster length 100; gaster width 36,5; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 12; longest cercal seta length 9; shortest cercal seta length 4,5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson (MZLU). Paratype: 1 ♀ with same label data as holotype (NHMUK).

***Galeopsomyia manuelepereirai* Hansson sp.nov.**

(Figs 154, 155, 714, 905, 957)

Diagnosis (female). Flagellum short, clava solid (Fig. 714); genal carina absent; mesoscutellum

(Fig. 154) with strong reticulation, meshes elongate, with complete median groove, submedian grooves weak, straight and diverging slightly towards posterior part; hind coxa with a carina along posterior margin; gaster (Fig. 154) 1.7× as long as wide.

Female holotype: length of body 2.0mm (paratypes 1.4–2.3mm)

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum black with metallic blue and purple tinges; mesoscutellum and propodeum golden-green. Legs with fore and hind coxae metallic blue, mid coxa dark brown; trochanters brown; femora dark brown to black with metallic tinges; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; genal carina absent. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with six adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; with complete median groove; submedian grooves weak, straight and diverging slightly towards posterior part; anterior pair of setae situated in anterior part of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina that expands posteriorly; callus with two setae. Fore and hind coxae with strong reticulation, hind coxa with a carina along posterior margin, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 30; POL 9; OOL 5.5; lateral ocellus diameter 3.2; head width 38; mouth width 10.5; malar space 10.5; eye length 17.5; scape length 12; scape width 3; pedicel+flagellum length 33; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 4.5; F1 width 4; F2 length 4.5; F2 width 5; F3 length 4; F3 width 5; clava length 11; clava width 5.5; C3 length 4; spicule length 1; mesosoma length 45; mesosoma width 31; midlobe of mesoscutum length 17; mesoscutellum length 16.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2.5; propodeum length 6; costal cell length 24; costal cell width (measured at widest part) 2; marginal vein length 21; stigmal vein length 7; gaster length 62; gaster width 30; Gt₂ length (measured medially) 3.5; Gt₄ length (measured medially) 11.5; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 10; longest cercal seta length 8; shortest cercal seta length 4.5.

Male. Length of body of body 2.0mm.

Antenna (Fig. 957) with scape widest medially; plaque dark brown and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and ventro-basal whorl on C1–C2. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 19; head length, frontal view 36; head width 47; mouth width 14; malar space 14; eye length 20; scape length 15.5; scape width 5; plaque length 6; pedicel length 6.5; pedicel+flagellum length 63; F1 length 5; F1 width 5; F2 length 7.5; F2 width 5; F3 length 9.5; F3 width 5; F4 length 9.5; F4 width 5; clava length 23;

clava width 5; mesosoma length 63; mesosoma width 44; gaster length 78; gaster width 33; longest subbasal seta on F1, length 27.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos PL12-3, 10.7631°N 85.3344°W, 820m, 1-8.i.2015 D. Janzen, W. Hallwachs (barcoded specimen: BIOUG 44687-C04) (MZLU). Paratypes (73♀ 12♂, MZLU, MZUCR, NHMUK): 50♀ 7♂ **COSTA RICA, Guanacaste, Bagaces**, Sector Palo Verde, LN 260952_385020, 50m, 8-19.ii.2000, yellow pan trap, I. Jiménez; following from same locality as previous but collected 5-18.i.2000 (5♀ 2♂), 6.i-18.ii.2000 (1♂), 8-18.iii.2000 (1♀); 1♀ **COSTA RICA, Guanacaste, Bagaces**, Parque Nacional Palo Verde, Sector Catalina, Fila Catalina, LN 257400_400000, 250m, 8.i-8.ii.2000, malaise trap, I. Jiménez; 1♀ **COSTA RICA, Guanacaste, Zona Protectorada Nosara**, Sendero La Ceiba, LN 221100_382950, 600m, 20.iii.2002, swept, I. Jiménez; 2♀ **COSTA RICA, Guanacaste, Cañas**, Río Chiquito, LN 292500_417000, 410m, 25.vii.2003, J. Azofeifa; 1♂ **COSTA RICA, Guanacaste, Parque Nacional Bosque Diría**, 14-15.ii.2011, J.S. Noyes; 1♀ **COSTA RICA, Guanacaste, Bosque Nacional Diría, Retallano**, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 18.x-15.xi.2001, I. Jiménez; 1♀ from same locality as previous but collected 16.xii.2001-16.i.2002; 1♀ **COSTA RICA, Guanacaste, Refugio Nacional de Vida Silvestre Bosque Diría (now Parque Nacional), Torre Vigilancia, Cerro Retallano**, LN 239083_358610, 700m, 12.vi-9.vii.2001, I. Jiménez; 1♀ **COSTA RICA, Guanacaste, Parque Nacional Santa Rosa**, 300m, H-2-C, 7-28xii.1985, D.H. Janzen & I.D. Gauld; following from same locality as previous but collected 28.xii.1985-18.i.1986 (1♀), 13.iv-4.v.1986 (1♀), 21.ii-14.iii.1987 (1♂), 4-25.iv.1987 (2♀), 25.iv-16.v.1987 (4♀). Barcoded specimens: 1♀ **COSTA RICA, Guanacaste, Area de Conservacion Guanacaste, Sector Pailas, Pailas Dos PL12-3**, 10.7631°N 85.3344°W, 820m, D. Janzen, W. Hallwachs, collected 9-16.i.2014 (1♀, BIOUG 29635-A06), 18-25.xii.2014 (1♀, BIOUG 44678-F06), 24-31.xii.2015 (1♀, BIOUG 52426-H11).

Etymology. Named in honour of Manuel Pereira in recognition of his years of dedicated management of the Derrumbe Malaise trap on Volcan Cacao, Costa Rica, the trap that caught this and other *Galeopsomyia*.

***Galeopsomyia marea* Hansson sp.nov.**

(Figs 156, 157, 1030)

Diagnosis (female). Antennal clava solid (Fig. 1030); genal carina absent; mesoscutellum (Fig. 156) with submedian grooves indistinct, wide apart and diverging towards posterior part; propodeum (Fig. 156) with a strong and narrow median carina that expands strongly towards posterior part; hind coxa without carina along posterior margin; gaster (Fig. 156) 2.7× as long as wide, medio-basal Gt₁ with a ±rectangular short incision, with weak reticulation and shiny, Gt₂₋₇ with strong reticulation.

Female holotype: length of body 1.4mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, antennal scrobes black, clypeus dark brown. Thoracic dorsum black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters

pale brown; femora black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic blue, Gt_{2-5} golden-purple, Gt_{6-7} black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeal area smooth, frons with strong reticulation, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with six setae \pm in one row close to notauli. Mesoscutellum with rather strong reticulation, stronger on lateral parts, meshes elongate; submedian grooves indistinct but traceable, slightly curved, wide apart and diverging towards posterior part. Dorsellum with strong sculpture. Propodeum with a strong and narrow median carina that expands strongly towards posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with a \pm rectangular short incision, with weak reticulation, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 16; head length, frontal view 26; POL 8; OOL 4; lateral ocellus diameter 3; head width 33; mouth width 11; malar space 9; eye length 15.5; scape length 10.5; scape width 3; pedicel+flagellum length 28; pedicel length 5; pedicel width, dorsal view 3; F1 length 4; F1 width 3; F2 length 3.5; F2 width 3.5; F3 length 3.5; F3 width 3.5; clava length 9.5; clava width 4.2; C3 length 4; spicule length 0.8; mesosoma length 38; mesosoma width 28; midlobe of mesoscutum length 14.5; mesoscutellum length 14; mesoscutellum width 15; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 1; propodeum length 6; costal cell length 21; costal cell width (measured at widest part) 1.5; marginal vein length 19; stigmal vein length 6; gaster length 63; gaster width 23; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 18; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 8; longest cercal seta length 8; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Sector Murcielago, Playa Blanca, 10°56'N, 86°51'W, 10m, 21.ii.2007, J.S. Noyes (NHMUK).

***Galeopsomyia mimosa* Hansson sp.nov.**

(Figs 158, 159, 715)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 715); genal carina present; mesoscutum and mesoscutellum (Fig. 158) with strong reticulation with

elongate meshes, mesoscutellum with a weak median groove, with submedian grooves distinct, straight and diverging slightly towards posterior part, almost parallel; dorsellum with median carina; propodeum (Fig. 158) with median carina shaped like an inverted V, callus with 7–8 setae; hind coxa without carina along posterior margin; petiole yellowish-brown, very short; gaster (Fig. 158) 2.4× as long as wide, tergites with strong reticulation, medio-basal Gt_1 with a strong transverse carina dorsally, and with a median carina in anterior half, Gt_{1-3} with smooth and shiny posterior margin and Gt_{2-3} with a narrow shiny median stripe, Gt_7 0.6× as long as width at base; black non-metallic species (Figs 158, 159).

Female holotype: length of body 3.0mm (paratype 2.5mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel dark brown, flagellum dark brown to black. Head black with metallic tinges, clypeus dark brown. Mesoscutum and mesoscutellum black with metallic tinges, propodeum black. Legs with coxae black; trochanters pale brown; femora black; tibiae and tarsi yellowish-brown, T4 dark brown. Petiole yellowish-brown. Gaster black, Gt_{1-3} with posterior margin dark brown; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging slightly towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with weak sculpture, with median carina. Propodeum with triangular median carina (shaped like an inverted V), concave; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without carina along posterior margin. Fore wing with 6-7 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a strong transverse carina dorsally and with a median carina in anterior half; tergites with strong reticulation, Gt_{2-3} with a very narrow shiny median stripe.

Relative measurements: head length, dorsal view 24; head length, frontal view 45; POL 13.67; OOL 7; lateral ocellus diameter 5; head width 61; mouth width 16.5; malar space 20; eye length 23; scape length 20; scape width 4.5; pedicel+flagellum length 54; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 9; F1 width 4.5; F2 length 8.5; F2 width 5; F3 length 6.5; F3 width 5; clava length 18; clava width 6; C3 length 7; spicule length 2; mesosoma length 80; mesosoma width 56; midlobe of mesoscutum length 29; mesoscutellum length 29; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 14.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4.5; propodeum length 12.5; costal cell length 43; costal cell width (measured at widest part) 3; marginal vein length 36; stigmal vein length 11; gaster length 134; gaster width 56; Gt_2 length (measured medially) 17; Gt_4 length (measured medially) 30; Gt_7 length (measured medially) 8; Gt_7 width (measured at base) 14; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos (MZLU). Paratype: 1 ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes (NHMUK).

***Galeopsomyia miopis* Hansson sp.nov.**

(Figs 160, 161, 1031)

Diagnosis (female). Antenna with solid clava (Fig. 1031); genal carina present; mesoscutellum (Fig. 160) with weak and indistinct submedian grooves, predominantly with isodiametric meshes; propodeum (Fig. 160) with median carina split into an inverted “Y”, and with anterior part raised into a tooth; hind coxa with a strong and complete carina along posterior margin; petiole short, conical and smooth; gaster (Fig. 160) 3.1× as long as wide, Gt₂ 0.22× as long as Gt₄, Gt₁ with same strong reticulation as remaining tergites, medio-basal Gt₁ with a rounded edge dorsally.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons and vertex metallic greenish-blue, scrobes blackish and clypeus dark brown. Thoracic dorsum metallic greenish-blue. Legs with fore and mid coxae dark brown with metallic greenish-blue tinges, hind coxa metallic greenish-blue; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges and apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic blue with posterior margin golden-purple, Gt₂₋₄ golden-purple, Gt₅ metallic greenish-blue with medio-apical part golden-purple, Gt₆₋₇ metallic greenish-blue; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum and mesoscutellum with strong reticulation; midlobe of mesoscutum with ten adnotaular setae in a ±double row. Mesoscutellum with submedian grooves hardly discernible, without median groove; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a complete but short median carina, posterior part split into an inverted “Y” and with anterior part raised into a tooth; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong and complete carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole small, conical and smooth. Gaster elongate; all tergites with strong reticulation; medio-basal Gt₁ with a rounded edge dorsally.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 11; OOL 6; lateral ocellus diameter 4; head width 47; mouth width 14; malar space 12; eye length 21; scape length 17; scape width 4; pedicel+flagellum length 45; pedicel length 8,5;

pedicel width, dorsal view 3,5; F1 length 7; F1 width 4; F2 length 7; F2 width 4,5; F3 length 6,5; F3 width 5; clava length 15; clava width 6; C3 length 4,5; spicule length 1; mesosoma length 62; mesosoma width 47; midlobe of mesoscutum length 27; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 1,5; propodeum length 8; costal cell length 34; costal cell width (measured at widest part) 2; marginal vein length 34; stigmal vein length 12; gaster length 113; gaster width 36; Gt₂ length (measured medially) 4; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 14; longest cercal seta length 12; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, La Cangreja, 1950m, iii-v.1992, P. Hanson (NHMUK).

***Galeopsomyia mogensenae* Hansson sp.nov.**

(Figs 162, 163, 716)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 716); genal carina present; mesoscutellum (Fig. 162) with elongate meshes, with a weak median groove in anterior one-quarter; propodeum (Fig. 162) with median carina ±triangular; hind coxa with a carina along posterior margin; gaster (Fig. 162) 2.3× as long as wide, tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Mesoscutum, mesoscutellum and propodeum metallic bluish-green. Legs with fore and hind coxae black with metallic blue tinges, mid coxa black; trochanters brown; femora dark brown, hind femur with metallic tinges, with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ golden-purple medially and metallic bluish-green laterally, Gt₅₋₇ metallic bluish-green; gonoplac black.

Antenna with weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a weak median groove in anterior one-quarter, submedian grooves weak but traceable, running close to and parallel with lateral margins of

mesoscutellum; anterior pair of setae situated in front of middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; all tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 10.5; OOL 6.5; lateral ocellus diameter 4.5; head width 52.5; mouth width 15; malar space 13; eye length 22; scape length 19; scape width 4; pedicel+flagellum length 49; pedicel length 8; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 7; F2 width 5.5; F3 length 6.5; F3 width 6; clava length 16; clava width 6; C3 length 5; spicule length 1.5; mesosoma length 68; mesosoma width 48.5; midlobe of mesoscutum length 29; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 4; propodeum length 11; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 10.5; gaster length 96; gaster width 42; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 12; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 23-24.ii.2007, J.S. Noyes (NHMUK).

Etymology. Named after Karen Mogensen who established the private reserve “Karen Mogensen”.

***Galeopsomyia monteverdensis* Hansson sp.nov.**

(Figs 164, 165, 711)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 711); with genal carina; mesoscutellum (Fig. 164) with elongate meshes; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin; petiole transverse with very strong sculpture on dorsal surface; gaster (Fig. 164) 2.2× as long as wide, Gt₂ 0.17× as long as Gt₄, medio-basal Gt₁ with a rectangular incision, with very weak reticulation, more shiny than remaining tergites.

Female holotype: length of body 2.1mm (paratypes 1.6–2.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with metallic

tinges. Thoracic dorsum black with metallic tinges. Legs with coxae black with metallic tinges; trochanters dark brown; femora black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₆ black with metallic, mainly purple, tinges, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with genal carina. Vertex with strong reticulation, meshes transverse.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with four adnotaular setae in a single row, without median groove. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves weak, wide apart and diverging towards posterior part; without median groove. Dorsellum with strong reticulation. Propodeum with triangular median carina; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal surface. Gaster ovate-elongate; medio-basal Gt₁ with a rectangular incision, with very weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; POL 11.5; OOL 6; lateral ocellus diameter 4.5; head width 49; mouth width 14; malar space 15; eye length 20; scape length 15; scape width 4; pedicel+flagellum length 42.5; pedicel length 7; pedicel width, dorsal view 4; F1 length 6; F1 width 5; F2 length 6; F2 width 5.5; F3 length 6; F3 width 5.5; clava length 16; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 66; mesosoma width 46.5; midlobe of mesoscutum length 27; mesoscutellum length 25.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 10; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 10; gaster length 80; gaster width 37; Gt₂ length (measured medially) 4; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 4; Gt₇ width (measured at base) 10; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N 84°49'W, 1540m, 18-25.ii.2004, C. Hansson (MZLU). Paratypes (5♀, MZUCR, NHMUK): 1♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes; 1♀ **COSTA RICA, Heredia**, Santo Domingo, Santa Rosa, INBio Parque, Bosque Seco, LN 526200_217300, 1100m, 8-29.ii.2000, R. Zúñiga; 1♀ from same locality as previous but collected 1-22.v.2001; 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, vii.1992, P. Hanson; 1♀ **COSTA RICA, San José**, Zona Protectorada El Rodeo, Fila Diamante, Reserva U. Paz, LN 209300_507000, 900-1000m, 21.i.2006, swept, M. Solís.

Etymology. Named after the type locality, Monteverde.

***Galeopsomyia mucuriensis* Hansson sp.nov.**

(Figs 166, 167, 1037)

Diagnosis (female). Antennal clava solid (Fig. 1037); genal carina present; mesoscutum and mesoscutellum (Fig. 166) with very strong reticulation, with different colours; propodeal callus with ten setae; hind coxa with a carina along posterior margin; gaster (Fig. 166) ovate-elongate, 2.3× as long as wide, with dorsal surface flat, medio-basal Gt₁ with a transverse edge dorsally, tergites with strong reticulation.

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-purple, clypeus dark brown, antennal scrobes black; vertex metallic purple. Mesoscutum and propodeum metallic blue with purple tinges, mesoscutellum black with purple tinges. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters dark brown; femora dark brown; tibiae yellowish-brown to yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, remaining tergites golden-purple; gonoplac dark brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with very strong reticulation, meshes ±isodiametric; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with very strong reticulation, meshes isodiametric to slightly elongate, submedian grooves very weak and hardly traceable, with a weak median groove; anterior pair of setae situated in front of the middle. Dorsellum with strong sculpture. Propodeal callus with ten setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse. Gaster elongate and ±flattened dorsally; medio-basal Gt₁ with a transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 9.5; OOL 6; lateral ocellus diameter 4; head width 45; mouth width 14.5; malar space 11.5; eye length 19.5; scape length 17; scape width 3.2; pedicel+flagellum length 42; pedicel length 7; pedicel width, dorsal view 3.2; F1 length 7.5; F1 width 4; F2 length 6; F2 width 5; F3 length 5.5; F3 width 5; clava length 13.5; clava width 5; C3 length 4.5; spicule length 1.5; mesosoma length 52; mesosoma width 40; midlobe of mesoscutum length 20; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2; propodeum length 8; costal cell length 26; costal cell width (measured at widest part) 2.2; marginal vein length 27; stigmal vein length 9; gaster length 78; gaster width 34; Gt₂ length (measured medially) 5.5; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 9.5; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Bahia**, Mucuri, xi.1978, F. Benton (NHMUK).

Etymology. Named after type locality.

***Galeopsomyia noyesi* Hansson sp.nov.**

(Figs 16, 20, 37, 168, 169, 720)

Diagnosis (female). Antenna with solid clava (Figs 37, 720); with genal carina; mesoscutellum (Fig. 168) 0.9× as long as wide, with elongate meshes; fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin; propodeum (Fig. 168) with median carina that splits in posterior part to form an inverted “Y”; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 168) 2.2× as long as wide, Gt₂ 0.26× as long as Gt₄, medio-basal Gt₁ with a ±rectangular incision, with weak reticulation, more shiny than remaining tergites.

Female holotype: length of body 2.1mm (paratypes 1.2–2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons and vertex metallic greenish-blue, antennal scrobes black with metallic tinges, clypeus dark brown. Thoracic dorsum golden-green, mesoscutum also with metallic blue tinges. Legs with coxae golden-green; trochanters pale brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ golden-green, Gt_{2,4} golden-purple, Gt₅ golden-purple with posterior margin metallic greenish-blue, Gt₆ metallic greenish-blue tinges, Gt₇ black with metallic tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on midlobe; midlobe with six adnotaular setae in a single row, without median groove. Mesoscutellum with strong reticulation, meshes elongate, submedian grooves weak, wide apart and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with complete but short median carina, posterior part splits into an inverted “Y”; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a sharp edge along posterior margin; hind coxa without carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum ±open towards base of wing; costal setal row unbroken.

Petiole transverse, with strong sculpture on dorsal surface. Gaster elongate; medio-basal Gt₁ with a ±rectangular incision, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 12; OOL 5; lateral ocellus diameter 4; head width 49; mouth width 17; malar space 14; eye

length 20; scape length 15; scape width 4; pedicel+flagellum length 37; pedicel length 7; pedicel width, dorsal view 4; F1 length 6; F1 width 4; F2 length 5.5; F2 width 4; F3 length 5; F3 width 5; clava length 12.5; clava width 6; C3 length 3.5; spicule length 1; mesosoma length 61; mesosoma width 45; midlobe of mesoscutum length 25; mesoscutellum length 22.5; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 14; median part of mesoscutellum, width in anterior part 12.5; median part of mesoscutellum, width in posterior part 16.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 8.5; costal cell length 33; costal cell width (measured at widest part) 2.5; marginal vein length 25; stigmal vein length 9; gaster length 85; gaster width 38; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica, Trinidad & Tobago.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 16.ii.2013, J.S. Noyes (NHMUK). Paratypes (68♀, CNC, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; following from same locality as holotype but collected 8-29.ii.2000 (7♀), iii.2000 (1♀), iii.2002 (1♀), 1-12.iv.2002 (2♀), 6.x.2002 (1♀), 11-25.ii.2006 (4♀), 16.ii.2008 (1♀), 13.ii.2010 (1♀), 12.ii.2011 (2♀), 13.ii.2016 (1♀); 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 75m, 10°26'N, 84°01'W, ii-iv.2005, ALAS, 15_M_NOTN; 25♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, La Península, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ **COSTA RICA, Alajuela**, 7 km N Boca Tapada, Laguna Lagerta Lodge, 10°41'N, 84°11'W, 55m, 18-19.ii.2018, J.S. Noyes; 1♀ **COSTA RICA, Alajuela**, San Carlos, Reserva Forestal Arenal, Sector La Península, LN 271500_453800, 600m, 6-10.ii.2000, yellow pan trap, G. Carballo; 1♀ **COSTA RICA, Guanacaste**, Macizo Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 18.iii.2003, J. Azofeifa, B. Hernández, J.D. Gutiérrez; 1♀ **COSTA RICA, Guanacaste**, Bosque Nacional Diríá, Cerro Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 18.ix-18.x.2001, malaise trap, I. Jimenez; 2♀ **COSTA RICA, Guanacaste**, Reserva Forestal Monte Alto, Cerro Romo, LN 220700_382545, 883m, 27-29.x.2001, swept, I. Jiménez; 1♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 23-24.ii.2013, J.S. Noyes; 3♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero a Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii, 2002, swept, C. Hansson & Parataxonomos; 1♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii, 2002, yellow pan trap, C. Hansson & Parataxonomos; 1♀ " **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Sendero Los Gigantes, LS 572200_331700, 1450m, 15.vii-16.viii.2000, malaise trap, D. Rubí; 1♀ from same locality as previous but collected 14.i-13.ii.2001; 1♀ **COSTA RICA, Puntarenas**, Reserva Forestal Golfo Dulce, Estación Agujas, Sendero Trocha, LS 276750_526550, 310m, 17.ix-18.x.2001, malaise trap, J. Azofeifa; 1♀ **COSTA RICA, Puntarenas**, Golfito, Parque Nacional Corcovado, Cerro Rincón, La Tigrilla, LS 523600_274500, 600m, 20.ii-15.iii.2001, malaise trap, J. Azofeifa; 1♀ **COSTA RICA, Puntarenas**, Golfito, Estación Agujas, LS 526550_276750, 300m, 15.iii.2000, Solis; 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson; 1♀ from same locality as previous but collected xii.1995; 1♀ **TRINIDAD**, St. Augustine, 15.vii-15.viii.1976, J.S. Noyes.

Etymology. Named in honour of John S. Noyes (NHMUK), major collector of material for this revision.

***Galeopsomyia pelora* Hansson sp.nov.**

(Figs 170, 171, 1032)

Diagnosis (female). Antenna with solid and elongate clava (Fig. 1032); with a short genal carina close to mouth opening; mesoscutellum (Fig. 170) with strong reticulation, meshes isodiametric, without median groove, submedian grooves indistinct; hind coxa with a strong and complete carina along posterior margin; petiole short, just a narrow band; gaster (Fig. 170) 2.6× as long as wide, Gt_2 0.11× as long as Gt_4 , medio-basal Gt_1 with a sharp transverse edge dorsally, tergites with strong reticulation.

Female holotype: length of body 2.3mm (paratypes 2.0–2.5mm).

Scape yellowish-brown with dorsal edge darker, pedicel and flagellum dark brown. Head with frons metallic bluish-green, vertex black with metallic bluish-green tinges, antennal scrobes black, clypeus dark brown. Mesosoma metallic bluish-green. Legs with fore coxa black, mid coxa dark brown, hind coxae metallic bluish-green; trochanters dark brown; femora black with apical one-third yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with anterior half of Gt_1 and entire $Gt_{6,7}$ metallic bluish-green, posterior half of Gt_1 and $Gt_{2,5}$ metallic purple.

Antenna with solid clava. Frons with strong reticulation, clypeus and scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with nine scattered adnotaular setae, without a median groove. Mesoscutellum with strong reticulation, meshes isodiametric, without median groove; submedian grooves indistinct. Dorsellum with strong reticulation. Propodeum with median carina strongly expanding in posterior one-third and with anterior part raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong and complete carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 11; OOL 6; lateral ocellus diameter 4; head width 50; mouth width 15; malar space 13.5; eye length 21; scape length 17; scape width 4; pedicel+flagellum length 43; pedicel length 7; pedicel width, dorsal view 4; F1 length 6; F1 width 5; F2 length 6; F2 width 5; F3 length 6; F3 width 5.5; clava length 14.5; clava width 6; C3 length 4.5; spicule length 1; mesosoma length 62; mesosoma width 46; midlobe of mesoscutum length 27; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3.5; propodeum length 7; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 32; stigmal vein length 10.5; gaster length 100; gaster width 38; Gt_2 length (measured medially) 2; Gt_4 length (measured medially) 18; Gt_7 length (measured medially) 10.5; Gt_7 width (measured at base) 13; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Zona Protectorada Miravalles, Las Hornillas, Tajo ICE, LN 299400_409200, 900m, 21.viii.2004, swept, J. A. Azofeifa (NHMUK). Paratypes (9♀, MZLU, MZUCR, NHMUK): 2♀ **COSTA RICA, Guanacaste**, Bosque Nacional Diríá, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 16.xii.2001-16.i.2002, I. Jiménez; 2♀ **COSTA RICA, Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 9°40'N, 83°02'W, 100m, 14-18.i.1991, J.S. Noyes; 1♀ **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Sendero a Casa Coca, LS 331750_574400, 1700m, 13.i.2001, malaise trap, D. Rubí (NHMUK). Barcoded material: 1♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-5, 10°75'N, 85°33'W, 809m, 5-12.i.2017, D. Janzen, W. Hallwachs (BIOUG 57913-A02); following from same locality but collected 19-26.i.2017 (1♀, BIOUG 57368-E02), 26.i-2.ii.2017 (1♀, BIOUG 57396-A03), 18-25.i.2018 (1♀, BIOUG 57574-G04).

***Galeopsomyia perseae* Hansson sp.nov.**

(Figs 172, 173, 717, 1108)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 717); genal carina absent; mesoscutellum (Fig. 172) with elongate meshes; hind coxa with a carina along posterior margin; gaster (Fig. 172) laterally flattened, 4.4× as long as wide, with very short Gt₂, 0.06× as long as Gt₄, Gt₁ with weak reticulation and shiny, Gt₁₋₄ with a smooth median line, Gt₇ with apical half dark yellowish-brown.

Female holotype: length of body 3.5mm (paratype 3.6mm).

Scape with basal half yellowish-brown and apical half brown, pedicel and flagellum dark brown. Face below level of toruli golden-green but with median part metallic bluish-green, clypeus brown, frons metallic bluish-green, antennal scrobes black; vertex black with blue and green tinges. Mesoscutum golden-green with purple tinges in posterior part; mesoscutellum metallic bluish-green; propodeum golden-green. Legs with fore coxa golden-green, mid coxa dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green with some parts golden-green, Gt₇ with apical half dark yellowish-brown; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli and scrobes with weak reticulation, clypeus smooth, frons with strong reticulation; genal carina absent. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with an indistinct median groove in posterior two-thirds, with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves ±distinct, straight and diverging towards posterior part. Dorsellum with strong reticulation.

Propodeum with a wide median carina that expands in posterior part, posterior part concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very long and laterally flattened; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation, Gt₁₋₄ with a smooth median line.

Relative measurements: head length, dorsal view 28; head length, frontal view 48; POL 11; OOL 7; lateral ocellus diameter 6; head width 61; mouth width 22; malar space 17.5; eye length 28; scape length 21; scape width 5; pedicel+flagellum length 63; pedicel length 9.5; pedicel width, dorsal view 5; F1 length 10; F1 width 5.5; F2 length 9; F2 width 5.5; F3 length 8.5; F3 width 5.5; clava length 21; clava width 6.5; C3 length 7.5; spicule length 1.5; mesosoma length 83; mesosoma width 62; midlobe of mesoscutum length 33.5; mesoscutellum length 28; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 13.5; median part of mesoscutellum, width in anterior part 13; median part of mesoscutellum, width in posterior part 17; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9.5; costal cell length 45; costal cell width (measured at widest part) 3; marginal vein length 43; stigmal vein length 13; gaster length 182; gaster width 41; Gt₂ length (measured medially) 3; Gt₄ length (measured medially) 49; Gt₇ length (measured medially) 22; Gt₇ width (measured at base) 17; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Reared from galls in young fruits of avocado (*Persea americana*) (Lauraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Carrizal, 11.iv.2002, from avocado fruit gall (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

Etymology. Named after the host plant from which this species was reared.

***Galeopsomyia peruviansis* Hansson sp.nov.**

(Figs 174, 175, 1033)

Diagnosis (female). Antennal clava solid (Fig. 1033); genal carina present; mesoscutellum (Fig. 174) with elongate meshes, median part appearing striate; hind coxa without carina along posterior margin; gaster (Fig. 174) 1.9× as long as wide, medio-basal Gt₁ with a strong transverse carina dorsally, with strong reticulation in anterior half and with weak reticulation and shiny in posterior half, remaining tergites with strong reticulation; Gt₂ 0.3× as long as Gt₄.

Female holotype: length of body 1.8mm (paratypes 1.9mm).

Scape and pedicel yellowish-brown, flagellum brown. Head metallic bluish-purple, clypeus

dark brown, antennal scrobes black. Mesoscutum, mesoscutellum and propodeum metallic bluish-green with purple tinges. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters pale brown; femora dark brown to black with metallic tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂–Gt₄ golden-purple, Gt₅–Gt₇ black with metallic blue tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation, inside ocellar triangle with transverse carinae.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with seven adnotaular setae ± in one row. Mesoscutellum with strong reticulation, meshes distinctly elongate; submedian grooves weak but traceable, wide apart, straight and diverging towards posterior part; anterior pair of setae placed in anterior one-third. Dorsellum with strong reticulation. Propodeum with median carina wide and strongly expanding in posterior part, anterior part not raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster ovate-elongate; medio-basal Gt₁ with a strong transverse carina dorsally, with strong reticulation in anterior half, with weak reticulation and shiny in posterior half, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 11; OOL 4; lateral ocellus diameter 4; head width 45; mouth width 12; malar space 13; eye length 19.5; scape length 14; scape width 3.5; pedicel+flagellum length 34; pedicel length 6.5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3.5; F2 length 5; F2 width 4; F3 length 4.5; F3 width 4; clava length 11.5; clava width 5; C3 length 4; spicule length 1; mesosoma length 57; mesosoma width 43; midlobe of mesoscutum length 22.5; mesoscutellum length 23; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 7.5; costal cell length 29; costal cell width (measured at widest part) 2.5; marginal vein length 22; stigmal vein length 8; gaster length 71; gaster width 37; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 20.5; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 10; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Ecuador, Peru.

Material examined.

Holotype ♀ **PERU**, Madre de Dios, Puerto Maldonado, 2.i.1984, Lars Huggert (MZLU). Paratypes (2♀, MZLU): 1♀ with same data as holotype; 1♀ **ECUADOR**, Napo, Tena, 18.ii.1983, Lars Huggert.

Etymology. Named after type area.

Galeopsomyia philyra Hansson sp.nov.

(Figs 176, 177, 1038)

Diagnosis (female). Antenna with solid clava (Fig. 1038); with genal carina; mesoscutellum (Fig. 176) with strong reticulation, meshes elongate, submedian grooves indistinct but traceable; propodeum (Fig. 176) with median carina that splits in posterior part (Y-shaped carina); fore coxa with a sharp edge along posterior margin and hind coxa without carina along posterior margin; gaster (Fig. 176) 2.0× as long as wide, Gt₂ 0.3× as long as Gt₄, medio-basal Gt₁ with a ±rectangular incision, Gt₁ with strong reticulation with posterior margin smooth.

Female holotype: length of body 2.1mm (paratypes 1.9–2.3mm).

Antenna dark brown. Frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum golden-green with blue tinges. Legs with coxae golden-green; trochanters dark brown; femora dark brown to black, with metallic tinges; fore tibia yellowish-brown, mid and hind tibiae pale brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,5,6} golden-green; Gt_{2,4} metallic purple, Gt₇ black; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct but traceable, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae in median part of mesoscutellum. Dorsellum with strong sculpture, hidden under mesoscutellum and not visible in dorsal view. Propodeum with a strong median carina that splits in posterior part, forming an inverted “Y”; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin. Fore wing with 3–5 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with a ±rectangular incision and with strong reticulation in anterior two-thirds, smooth in posterior one-third, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; POL 11; OOL 5.5; lateral ocellus diameter 3.5; head width 45; mouth width 13; malar space 13; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 40.5; pedicel length 7; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4; F2 length 5.5; F2 width 4.5; F3 length 5; F3 width 5; clava length 13.5; clava width 6.5; C3 length 3; spicule length 1; mesosoma length 63; mesosoma width 47; midlobe of mesoscutum length 26; mesoscutellum length 26; mesoscutellum width 24; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 2; propodeum length 10; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 34; stigmal vein length 12; gaster length 89; gaster width 37; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 13.5; longest cercal seta length 10; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica, Peru.

Material examined.

Holotype ♀ **PERU**, Cusco, Machu Picchu, 21.xii.1983, Lars Huggert (MZLU). Paratypes (6♀, MZLU, NHMUK): 2♀ with same label data as holotype; 1♀ **PERU**, Cusco, Aqua Caliente [=Aguas Calientes], 28.vii.1983, Lars Huggert; 2♀ from same locality as previous but collected 20.xii.1983; 1♀ **COSTA RICA**, **San José**, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, i.1996, P. Hanson.

***Galeopsomyia plaumanni* Hansson sp.nov.**

(Figs 178, 179, 721)

Diagnosis (female). Antennal clava with a constriction between C1 and C2 (Fig. 721); genal carina short, present close to mouth opening; mesoscutellum (Fig. 178) with \pm isodiametric meshes; antero-median part of median carina on propodeum raised as a tooth (Fig. 178); hind coxa with a carina along posterior margin; gaster (Fig. 178), 3.6 \times as long as wide, and high in lateral view, Gt₂ 0.13 \times as long as Gt₄, medio-basal Gt₁ with a sharp transverse edge dorsally, and with same strong reticulation as remaining tergites.

Female holotype: length of body 3.2mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, antennal scrobes and clypeus black; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa golden-green; trochanters dark yellowish-brown; fore and mid femora dark brown with metallic tinges and with apical part yellowish-brown, hind femur golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, remaining tergites black with metallic blue and purple tinges; gonoplac black.

Antenna with a constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; genal carina short, present close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with a very weak median groove in posterior two-thirds, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes \pm isodiametric; submedian grooves very weak, straight and diverging slightly towards posterior part. Dorsellum with strong reticulation. Propodeum with triangular median carina with anterior part raised in a tooth; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally, and with same strong reticulation as remaining tergites.

Relative measurements: head length, dorsal view 26; head length, frontal view 47; POL 16; OOL 7; lateral ocellus diameter 5.5; head width 62; mouth width 21; malar space 17; eye length 25.5; scape length 21; scape width 5.5; pedicel+flagellum length 53; pedicel length 9.5;

pedicel width, dorsal view 4.5; F1 length 7.5; F1 width 6; F2 length 8; F2 width 6; F3 length 6.5; F3 width 6; clava length 18; clava width 6.5; C3 length 6.5; spicule length 2; mesosoma length 66; mesosoma width 62; midlobe of mesoscutum length 34; mesoscutellum length 32; mesoscutellum width 33; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 4.5; propodeum length 9.5; costal cell length 43; costal cell width (measured at widest part) 3.5; marginal vein length 48; stigmal vein length 13; gaster length 150; gaster width 42; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 45; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 19; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL**, Santa Catarina, Nova Teutonia, 27°11'N, 52°23'W, 17.xi.1938, F. Plaumann (NHMUK).

Etymology. Named in honour of Fritz Plaumann, collector of material from Brazil.

Galeopsomyia ramyamanjunathae Hansson sp.nov.

(Figs 180, 181, 718)

Diagnosis (female). Antenna with solid clava (Fig. 718); genal carina absent; mesoscutellum (Fig. 180) with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, and with a weak median groove in anterior two-thirds; hind coxa with a carina along posterior part in lower one-third; petiole black, conical and smooth; gaster (Fig. 180) 2.9× as long as wide, medio-basal Gt₁ with a sharp edge dorsally, with weak reticulation; Gt₂ 0.12× as long as Gt₄; gonoplac black with apex pale brown (Fig. 181).

Female holotype: length of body 2.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus dark brown, vertex metallic bluish-purple. Thoracic dorsum golden-green. Legs with fore and mid coxae black with metallic green tinges, hind coxa metallic greenish-blue; trochanters pale brown; femora black with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster black with metallic tinges; gonoplac black with apex pale brown.

Antenna with solid clava. Frons with strong reticulation; scrobes with weak reticulation; without genal carina.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with seven adnotaular setae in one row. Mesoscutellum with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, and with a weak median groove in

anterior two-thirds; setae on mesoscutellum broken off. Dorsellum with strong reticulation. Propodeum with a strong and narrow median carina that gradually widens towards posterior part; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin in apical one-third. Fore wing with three setae on dorsal surface of submarginal vein; setae on membrane in basal part mainly broken off.

Petiole conical and smooth. Gaster elongate; medio-basal Gt_1 with a sharp edge dorsally; Gt_{1-2} with weak reticulation and shiny, Gt_{3-7} with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 41; POL 11; OOL 6.5; lateral ocellus diameter 4.5; head width 52; mouth width 20; malar space 15; eye length 22; scape length 18; scape width 4.5; pedicel+flagellum length 50; pedicel length 9; pedicel width, dorsal view 4; F1 length 8; F1 width 4.5; F2 length 7; F2 width 5; F3 length 7; F3 width 5; clava length 16; clava width 6; C3 length 5; spicule length 1; mesosoma length 75; mesosoma width 48; midlobe of mesoscutum length 27; mesoscutellum length 28; mesoscutellum width 27; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 4; propodeum length 11; costal cell length 34; costal cell width (measured at widest part) 2.5; marginal vein length 34; stigmal vein length 8; gaster length 116; gaster width 40; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 43; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 15; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-9, 10°75'N, 85°33'W, 809m, 27.ix-4.x.2018, D. Janzen, W. Hallwachs (Barcoded specimen, BIOUG59322-F05) (MZLU).

Etymology. Named in honour of Ramya Manjunath in recognition of her years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

Galeopsomyia rubii Hansson sp.nov.

(Figs 182, 183, 722, 888)

Diagnosis (female). Antenna with a solid clava (Fig. 722); genal carina absent; mesoscutellum (Fig. 182) with strong reticulation, meshes slightly elongate, with very weak submedian grooves or grooves absent; dorsellum with an indistinct median carina; propodeum (Fig. 182) with median carina that splits in posterior part (Y-shaped carina) and with anterior part raised in a tooth; hind coxa with a strong carina along posterior margin; gaster (Fig. 182) 3.2× as long as wide, Gt_2 0.2× as long as Gt_4 , Gt_1 with weak reticulation, more shiny than remaining tergites, above petiole with pale brown to dark brown plate; mesosoma bright metallic blue or greenish-blue (Figs 182, 183).

Female holotype: length of body 2.7mm (paratypes 2.7–3.2mm).

Scape and pedicel yellowish-brown, flagellum dark brown. Head with frons metallic greenish-blue with scrobes black with metallic tinges and clypeus dark brown; vertex metallic blue. Mesosoma metallic greenish-blue, mesoscutellum with purple tinges. Legs with fore and hind coxae metallic greenish-blue, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown, hind femur with metallic tinges; tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ metallic blue, Gt₂₋₅ metallic purple with sides metallic blue, Gt₆ metallic blue, Gt₇ black; gonoplac black with very apex brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six setae in two rows close to notauli. Mesoscutellum with strong reticulation, meshes slightly elongate; submedian grooves indistinct, slightly curved and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation, with an indistinct median carina. Propodeum with a strong triangular median carina, concave; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin. Fore wing with 5-6 setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row broken or unbroken.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with weak reticulation and shiny, smooth along posterior margin; remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 40; POL 11.5; OOL 5.5; lateral ocellus diameter 4.5; head width 51; mouth width 19; malar space 14; eye length 22; scape length 18; scape width 4.5; pedicel+flagellum length 50; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 7; F2 width 5; F3 length 7; F3 width 6; clava length 17; clava width 6.5; C3 length 5.5; spicule length 1; mesosoma length 72; mesosoma width 50; midlobe of mesoscutum length 33.5; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 13; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 15.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3.5; propodeum length 8; costal cell length 41; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 11.5; gaster length 133; gaster width 42; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii, 2002, yellow pan trap, C. Hansson & Parataxonomos (MZLU). Paratypes (8♀, MZLU, MZUCR, NHMUK): 2♀ from same locality and same collecting dates as holotype; 5♀ **COSTA RICA, Puntarenas**,

Estación Altamira, Sendero a Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept&malaise traps, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii, 2002, swept&malaise traps, C. Hansson & Parataxonomos.

Etymology. Named in honour of Didier Rubí, former parataxonomist at INBio and collector of material of this and many other Costa Rican Eulophidae.

***Galeopsomyia saga* Hansson sp.nov.**

(Figs 41, 184, 185, 719)

Diagnosis (female). Antenna with solid clava (Fig. 719); with a short and weak genal carina close to mouth opening; mesoscutellum (Fig. 184) with submedian grooves with inner margin distinct, outer margin \pm indistinct, subdivided by transverse carinae, straight and diverging towards posterior part; hind coxa without carina along posterior margin; fore wing with a bare patch below marginal vein (Fig. 185); petiole very short, just a narrow band; gaster (Fig. 184) 2.0 \times as long as wide, medio-basal Gt₁ with a strong transverse carina dorsally (Fig. 41), tergites with weak reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, vertex black with metallic bluish-green tinges, antennal scrobes black, clypeus dark brown. Mesosoma metallic bluish-green with propodeum dull golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur metallic bluish-green with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with anterior half of Gt₁ and entire Gt₆ metallic bluish-green, posterior half of Gt₁ and remaining tergites black with metallic tinges.

Antenna with solid clava. Frons with strong reticulation, clypeus and scrobes with weak reticulation; with a short and weak genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on midlobe; midlobe with ten scattered adnotaular setae, with a weak median groove in posterior half. Mesoscutellum with weak reticulation on median part and with a \pm complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with inner margin distinct, outer margin \pm indistinct, subdivided by transverse carinae, straight and diverging towards posterior part; with two pairs of setae. Dorsellum with strong reticulation, without median carina. Propodeum with strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a strong transverse carina dorsally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 12.5; OOL 7.5; lateral ocellus diameter 4.5; head width 57; mouth width 17; malar space 15; eye length 25; scape length 18.5; scape width 4; pedicel+flagellum length 45; pedicel length 8; pedicel width, dorsal view 4; F1 length 6.5; F1 width 5.5; F2 length 7; F2 width 5.5; F3 length

6; F3 width 5.5; clava length 14; clava width 6.5; C3 length 4; spicule length 1; mesosoma length 75; mesosoma width 57; midlobe of mesoscutum length 32; mesoscutellum length 27; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 15; median part of mesoscutellum, width in anterior part 14; median part of mesoscutellum, width in posterior part 15.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3.5; propodeum length 11; costal cell length 42; costal cell width (measured at widest part) 3; marginal vein length 40; stigmal vein length 8; gaster length 93; gaster width 47; Gt₂ length (measured medially) 15; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 13.5; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Zona Protectorada Miravalles, Las Hornillas, Tajo ICE, LN 299400_409200, 900m, 21.viii.2004, swept, J. A. Azofeifa (NHMUK).

***Galeopsomyia santarosensis* Hansson sp.nov.**

(Figs 186, 187, 1034)

Diagnosis (female). Antenna with a solid clava (Fig. 1034); genal carina absent; mesoscutellum (Fig. 186) with isodiametric meshes in median part; propodeal callus with three setae; hind coxa with a weak carina along posterior margin; gaster (Fig. 186) 2.9× as long as wide, medio-basal Gt₁ with sharp transverse edge dorsally, all tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge brown, pedicel brown, flagellum dark brown. Head metallic bluish-purple, clypeus dark brown, antennal scrobes black. Thoracic dorsum weakly metallic bluish-green, mesoscutum with a narrow median purplish stripe. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster dark brown to black, Gt₁ with green tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without a median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric to slightly elongate; submedian grooves very weak, diverging towards posterior part. Dorsellum with strong reticulation. Propodeum short, with a narrow median carina; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a weak carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with sharp transverse edge dorsally; all tergites with strong reticulation.

Relative measurements: head length, dorsal view 23.5; head length, frontal view 36.5; POL 11.5; OOL 6.5; lateral ocellus diameter 4; head width 51; mouth width 16; malar space 12; eye length 20.5; scape length 17; scape width 4; pedicel+flagellum length 47; pedicel length 8; pedicel width, dorsal view 3.5; F1 length 9; F1 width 4; F2 length 6.5; F2 width 4.5; F3 length 6.5; F3 width 5; clava length 14.5; clava width 5.5; C3 length 5.5; spicule length 1.5; mesosoma length 54; mesosoma width 40; midlobe of mesoscutum length 23.5; mesoscutellum length 20; mesoscutellum width 19.5; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 1.5; propodeum length 6; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 32; stigmal vein length 9.5; gaster length 104; gaster width 35.5; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 16.5; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 10; longest cercal seta length 7; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Guanacaste**, Parque Nacional Santa Rosa, 300m, H-1-O, 18.i-18.ii.1986, D.H. Janzen & I.D. Gauld (NHMUK).

Etymology. Named after type area, Parque Nacional Santa Rosa.

***Galeopsomyia seminarum* Hansson sp.nov.**

(Figs 15, 188, 189, 723, 958)

Diagnosis (female). Antenna with solid clava (Fig. 723); genal carina absent; mesoscutellum (Fig. 188) with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, and with a \pm complete median groove; hind coxa with a carina along posterior part in apical one-third; petiole yellowish-brown, conical and smooth; gaster (Fig. 188) 2.8 \times as long as wide, medio-basal Gt_1 with a sharp transverse edge dorsally, with weak reticulation; Gt_2 0.12 \times as long as Gt_4 ; gonoplac yellowish-brown (Fig. 189).

Female holotype: length of body 2.7mm (paratypes 2.0–2.6mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus dark brown, vertex metallic greenish-blue. Pronotum metallic greenish-blue. Mesoscutum golden-green. Mesoscutellum metallic greenish-blue with median part golden. Dorsellum metallic greenish-blue. Propodeum golden-green in anterior half, metallic greenish-blue in posterior half. Legs with coxae metallic greenish-blue; trochanters yellowish-brown; fore and mid femora with basal half dark brown, apical half yellowish-brown,

hind femur metallic greenish-blue with apical one-quarter yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown to yellowish-white, T4 dark brown. Petiole yellowish-brown. Gaster with Gt₁ metallic greenish-blue with posterior margin dark brown with metallic tinges, Gt_{2–4} dark brown with metallic tinges, Gt_{5–7} metallic greenish-blue; gonoplac yellowish-brown.

Antenna with solid clava. Frons with strong reticulation; scrobes with weak reticulation; without genal carina.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with ten adnotaular setae in 2–3 rows. Mesoscutellum with strong reticulation, meshes elongate, with indistinct submedian grooves that diverge towards posterior part, and with a ±complete median groove; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong and narrow median carina; callus with 2–3 setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin in lower one-third. Fore wing with four setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole conical and smooth. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; Gt_{1,2} with weak reticulation and shiny, Gt_{3–7} with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 12; OOL 5.5; lateral ocellus diameter 4.5; head width 51; mouth width 19; malar space 15; eye length 21; scape length 18; scape width 4.5; pedicel+flagellum length 48; pedicel length 9; pedicel width, dorsal view 4; F1 length 7.5; F1 width 5; F2 length 7; F2 width 5.5; F3 length 6; F3 width 6; clava length 15.5; clava width 6.5; C3 length 4.5; spicule length 1; mesosoma length 71; mesosoma width 47; midlobe of mesoscutum length 26; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 13; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 16; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 11; costal cell length 34; costal cell width (measured at widest part) 2.5; marginal vein length 35; stigmal vein length 7.5; gaster length 111; gaster width 39; Gt₂ length (measured medially) 4.5; Gt₄ length (measured medially) 39; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 14; longest cercal seta length 9; shortest cercal seta length 5.

Male. Length of body 1.6mm.

Antenna (Fig. 958) with scape widest at apex; plaque white, surrounded by a black ring and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate; all tergites with strong reticulation. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 34; head width 42; mouth width 17; malar space 13; eye length 17; scape length 15; scape width 5; plaque length 2.5; pedicel length 7; pedicel+flagellum length 60; F1 length 5.5; F1 width 5; F2 length 8.5; F2 width 5; F3 length 9; F3 width 4.5; F4 length 8; F4 width 4.5; clava length 22; clava width 4.5; mesosoma length 55; mesosoma width 37.5; gaster length 70; gaster width 29; longest subbasal seta on F1, length 37.

Hosts. Reared from seeds of *Portulacea oleracea* (Portulacaceae).

Distribution. Colombia, Costa Rica, Trinidad & Tobago.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 11-25.ii.2006, J.S. Noyes (NHMUK). Paratypes (10♀ 1♂, MZLU, MZUCR, NHMUK): 1♀ from same locality as holotype but collected iii.2002; 1♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes; 1♀ **TRINIDAD**, St. George, Lopinot, 10.viii.1976, J.S. Noyes; 1♀ **TRINIDAD**, St. George, St. Augustine, viii.1976, F.D. Bennett; 6♀ 1♂ **COLOMBIA**, from *Portulacaceae* seeds [no precise location or collection date given].

Etymology. From the Latin *semen* = seed, and the suffix *-arum* = from.

***Galeopsomyia springerae* Hansson sp.nov.**

(Figs 190, 191, 724)

Diagnosis (female). Antennal clava with weak constriction between C1 and C2 (Fig. 724); genal carina strong and reaching above level of lower eye margin; mesoscutellum (Fig. 190) with strong reticulation, meshes elongate, submedian grooves weak but traceable, wide apart, slightly curved and diverging towards posterior part; propodeum (Fig. 190) with median carina that splits in posterior part, like an inverted Y, raised in anterior part; hind coxa without carina along posterior margin; petiole transverse with strong sculpture; gaster (Fig. 190) 2.5× as long as wide, medio-basal Gt₁ with a short rectangular incision; Gt₂ 0.2× as long as Gt₄, Gt₁ with relatively weak reticulation, distinctly more shiny than remaining tergites.

Female holotype: length of body 2.4mm (paratypes 1.9–2.1mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Frons metallic bluish-green, clypeus and antennal scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum metallic bluish-purple with green tinges, propodeum golden-green. Legs with fore coxa metallic bluish, mid and hind coxae golden-green; trochanters dark brown, femora black with metallic tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green; remaining tergites black with metallic purple tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons below eyes, clypeal area and toruli with weak reticulation, remaining parts with strong reticulation; with a long and strong genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with 18 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves weak but traceable, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed slightly in front of middle. Dorsellum with strong reticulation and median carina, not visible in dorsal view due to overhanging mesoscutellum. Propodeum with median carina splits in posterior part, like an inverted Y, anterior part raised; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation, hind coxa without carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with a short rectangular incision but without transverse edge or carina dorsally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 42; POL

11.5; OOL 4.5; lateral ocellus diameter 5; head width 53; mouth width 17; malar space 15; eye length 24; scape length 17; scape width 4; pedicel+flagellum length 52; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 9; F1 width 4; F2 length 8; F2 width 4.5; F3 length 7.5; F3 width 5; clava length 17.5; clava width 6; C3 length 5; spicule length 1.5; mesosoma length 74; mesosoma width 48; midlobe of mesoscutum length 27; mesoscutellum length 27; mesoscutellum width 26; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 3; propodeum length 12; costal cell length 33; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 8; gaster length 107; gaster width 42; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 33; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 6.

Male unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Desamparaditos, 9.8832, 84.3326, 700m, v-vii.2019, P. Hanson (NHMUK). Paratypes (MZLU, MZUCR): 2 ♀ with same label data as holotype.

Etymology. Named in honour of Monika Springer, professor in the School of Biology, University of Costa Rica, aquatic entomologist.

***Galeopsomyia sureshnaiki* Hansson sp.nov.**

(Figs 192, 193, 1040)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 1040); genal carina present; mesoscutellum (Fig. 192) with complete submedian grooves, reticulate with slightly elongate meshes; hind coxa with a carina along posterior margin; gaster (Fig. 192) 2.2× as long as wide, medio-basal Gt₁ without transverse edge or carina dorsally, Gt₁ with weak reticulation and more shiny than remaining tergites.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge brown, pedicel brown, flagellum dark brown. Face below level of toruli greenish-blue, clypeus dark brown, frons black with golden-purplish tinges, antennal scrobes black; vertex black with purple tinges. Mesoscutum black with golden-purple tinges; mesoscutellum with median part metallic bluish-purple and lateral parts black with golden-purple tinges; propodeum golden-green. Legs with coxae black; trochanters and femora dark brown to black; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster dark brown to black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with rather strong reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes mainly isodiametric but elongate in posterior half of midlobe; midlobe without a median groove, with seven scattered adnotaular setae. Mesoscutellum with strong reticulation, weaker on median part, meshes slightly elongate; submedian grooves weak but traceable, slightly curved and diverging towards posterior part; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with a strong median carina that expands strongly in posterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse. Gaster ovate-elongate; tergites with strong reticulation, medio-basal Gt₁ without transverse edge or carina dorsally, with weaker reticulation and more shiny than remaining tergites.

Relative measurements: head length, dorsal view 25; head length, frontal view 39; POL 11.5; OOL 8; lateral ocellus diameter 3.5; head width 51.5; mouth width 15; malar space 16.5; eye length 20; scape length 18.5; scape width 4.5; pedicel+flagellum length 49; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 4.5; F2 length 7; F2 width 5; F3 length 6.5; F3 width 5.5; clava length 16; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 72; mesosoma width 50; midlobe of mesoscutum length 29; mesoscutellum length 25; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 10; gaster length 100; gaster width 46; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 21; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 10; longest cercal seta length nm; shortest cercal seta length nm.

Male.Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, ACG, Sector Cacao, Derrumbe, 10.9292°N, 85.4643°W, 1220m, 25.xii.2014-1.i.2015, D.H. Janzen & W. Hallwachs (barcoded specimen, BIOUG 31681-D08) (MZLU).

Etymology. This species is named in honour of Suresh Naik in recognition of his years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia talamancaensis* Hansson sp.nov.**

(Figs 194, 195, 1035)

Diagnosis (female). Antennal clava 3.0× as long as wide, with a weak constriction between C1 and C2 (Fig. 1035); genal carina present; mesoscutellum (Fig. 194) with strong reticulation, meshes isodiametric, submedian grooves weak but visible in posterior half, without a median groove; fore coxa with a sharp edge along posterior margin and hind coxa with a carina along posterior margin; gaster (Fig. 194) 2.4× as long as wide, Gt₁ with posterior margin with weak reticulation and shiny, anterior part and remaining tergites with strong reticulation.

Female holotype: length of body 2.5mm (paratypes 2.0–3.1mm).

Scape yellowish-brown with apical half of dorsal edge dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue-green tinges. Mesoscutum metallic bluish-green, mesoscutellum and propodeum golden-green. Legs with fore coxa black with metallic blue tinges, mid coxa black with golden-green tinges, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown, hind femur metallic bluish-green; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,3} golden-purplish, Gt₆ metallic bluish-green, Gt₇ black; gonoplac black with tip yellowish-brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes isodiametric, without a median groove, submedian grooves weak but visible in posterior half; anterior pair of setae situated just in front of middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a sharp edge along posterior margin and hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with weak reticulation and shiny along posterior margin, anterior part of Gt₁ and remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 44; POL 12.5; OOL 7; lateral ocellus diameter 5; head width 56; mouth width 20; malar space 16; eye length 23; scape length 21; scape width 5; pedicel+flagellum length 53; pedicel length 8; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 8; F2 width 5; F3 length 8; F3 width 5.5; clava length 17; clava width 7; C3 length 6.5; spicule length 1.5; mesosoma length 75; mesosoma width 51.5; midlobe of mesoscutum length 22; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 4; propodeum length 10; costal cell length 39; costal cell width (measured at widest part) 3; marginal vein length 36; stigmal vein length 12; gaster length 113; gaster width 47; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 23.5; Gt₇ length

(measured medially) 7.5; Gt_7 width (measured at base) 11.5; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos (MZLU). Paratypes (29♀, CNC, MZLU, MZUCR, NHMUK): 16♀ with same label data as holotype; 2♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos; 4♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos; 1♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 19-22.ii.2008, C. Hansson; 2♀ **COSTA RICA, Alajuela**, Cabro Muco, 10°43'N, 85°09'W, 1100m, 13.ii.2004, C. Hansson & J.A. Azofeifa; 4♀ **COSTA RICA, Guanacaste**, Bosque Nacional Diríá, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 15.xi-16.xii.2001, I. Jiménez.

Etymology. Named after type area, Cordillera Talamanca.

***Galeopsomyia tandayapaensis* Hansson sp.nov.**

(Figs 196, 197, 1036)

Diagnosis (female). Antennal clava solid (Fig. 1036); genal carina present; mesoscutum (Fig. 196) with a weak median groove in posterior half; mesoscutellum (Fig. 196) with strong reticulation, meshes elongate, with distinct submedian grooves (i.e. distinct for this group) and with a distinct median groove in anterior two-thirds; hind coxa with a carina along posterior margin; gaster (Fig. 196) 2.5× as long as wide, Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.8mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex golden-green. Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters brown; fore and mid femora dark brown with apex yellowish-brown, hind femur golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole not visible. Gaster with Gt_1 pale golden-green, Gt_{2-5} with a mix of metallic purple and blue, Gt_{6-7} metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove in posterior half, with nine scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a median groove in anterior

two-thirds; submedian grooves with outer margin indistinct, \pm straight and diverging towards posterior part; anterior pair of setae situated just behind middle of mesoscutellum. Dorsellum with strong reticulation. Propodeal callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with 5–7 setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole not visible. Gaster elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 44; POL 13; OOL 6.5; lateral ocellus diameter 4.5; head width 56; mouth width 19; malar space 16; eye length 23; scape length 20; scape width 5; pedicel+flagellum length 50; pedicel length 8.5; pedicel width, dorsal view 5; F1 length 8.5; F1 width 6; F2 length 7; F2 width 6; F3 length 7; F3 width 6; clava length 16; clava width 7.5; C3 length 6; spicule length 1; mesosoma length 80; mesosoma width 54; midlobe of mesoscutum length 36; mesoscutellum length 28; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 13; median part of mesoscutellum, width in anterior part 16; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3; propodeum length nm; costal cell length 42; costal cell width (measured at widest part) 4; marginal vein length 39; stigmal vein length 14; gaster length 117; gaster width 46; Gt₂ length (measured medially) 5; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 15; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Ecuador.

Material examined.

Holotype ♀ **ECUADOR**, Pichinicha, Quito, Santo Domingo, Tandayapa, 8.ii.1983, Lars Huggert (MZLU).

Etymology. Named after type area, Tandayapa.

***Galeopsomyia trinidadensis* Hansson sp.nov.**

(Figs 198, 199, 935, 1041)

Diagnosis (female). Antennal clava solid (Fig. 1041); genal carina present; mesoscutellum (Fig. 198) with strong reticulation, median part with \pm isodiametric meshes; fore coxa with a sharp edge along posterior margin and hind coxae with a carina along posterior margin; petiole very short, just a narrow band; gaster (Fig. 198) 2.3 \times as long as wide, Gt₁ with strong reticulation; gonoplac yellowish-brown (Fig. 199).

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex black with metallic blue tinges.

Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa metallic bluish-green; trochanters pale brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole brown. Gaster with Gt₁ with anterior half metallic bluish-green and posterior half golden-purple, Gt₂₋₅ golden-purple, Gt₆ metallic bluish-green, Gt₇ black; gonoplac yellowish-brown.

Antenna with solid clava. Frons with strong reticulation, antennal scrobes with weak reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, \pm elongate on midlobe; midlobe without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes on median part \pm isodiametric, elongate on lateral parts, without a median groove, submedian grooves weak and visible only in posterior half, curved and running close to and parallel with lateral margins of mesoscutellum; anterior pair of setae situated in anterior one-third of mesoscutellum. Dorsellum with strong reticulation. Propodeum with median carina triangular with anterior part raised; callus with two setae. Fore and hind coxae with strong reticulation mid coxa with weak reticulation; fore coxa with a sharp edge and hind coxa with a carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21.5; head length, frontal view 45; POL 10.5; OOL 5.5; lateral ocellus diameter 4; head width 49; mouth width 14.5; malar space 13.5; eye length 20; scape length 17.5; scape width 4; pedicel+flagellum length 43; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 6.5; F1 width 5; F2 length 6; F2 width 5; F3 length 6; F3 width 5.5; clava length 14; clava width 6; C3 length 4.5; spicule length 1; mesosoma length 61; mesosoma width 43; midlobe of mesoscutum length 23; mesoscutellum length 24; mesoscutellum width 23; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 4; propodeum length 8; costal cell length 29; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 9.5; gaster length 84; gaster width 36; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 13; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Trinidad & Tobago).

Material examined.

Holotype ♀ **TRINIDAD**, Mayaro, Trinity Hills Reserve, 5.viii.1976, from rain forest, J.S. Noyes (NHMUK).

Etymology. Named after type area.

Galeopsomyia valmiri Hansson sp.nov.

(Figs 200, 201, 1042)

Diagnosis (female). Antennal clava solid (Fig. 1042); mesoscutellum (Fig. 200) with weak reticulation, meshes elongate, with median groove and with median part 1.7× as long as wide; propodeum (Fig. 200) with median carina triangular and concave in posterior half, callus with eight setae; hind coxa with a strong carina in apical half of posterior margin; gaster (Fig. 200) 2.3× as long as wide, medio-basal Gt_1 with a strong transverse carina and with median carina in anterior half, tergites with very strong reticulation, Gt_{1-4} with a narrow shiny median stripe; mesosoma black with metallic tinges (Figs 200, 201).

Female holotype: length of body 2.1mm.

Antenna dark brown. Head black with metallic blue tinges, antennal scrobes black, clypeus dark brown. Thoracic dorsum black with metallic blue tinges. Legs with coxae black with metallic tinges; trochanters dark brown; femora dark brown to black, hind femur with metallic tinges; tibiae and tarsi yellowish-brown, T4 dark brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with solid clava. Frons with weak reticulation except parts between scrobes and eyes with strong reticulation, clypeal area smooth; with genal carina. Vertex with strong reticulation, meshes transverse.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median line, with nine setae in two rows close to notauli. Mesoscutellum with strong reticulation on lateral parts, with very weak reticulation on median part, meshes elongate; submedian grooves distinct, straight and diverging slightly towards posterior part. Dorsellum with strong sculpture, with postero-median part drawn out in a sharp point. Propodeum with triangular median carina with posterior part concave; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a strong carina along posterior margin in apical half. Fore wing with 2–3 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a strong sharp transverse carina dorsally, and with a median carina in anterior half; Gt_{2-4} with a narrow shiny median stripe; Gt_{1-4} with very strong reticulation, Gt_{5-7} with slightly weaker reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 11; OOL 5.5; lateral ocellus diameter 4; head width 48; mouth width 14; malar space 16; eye length 20; scape length 15; scape width 3; pedicel+flagellum length 42; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 6; F2 width 4; F3 length 5.5; F3 width 4; clava length 15; clava width 5; C3 length 5; spicule length 1.2; mesosoma length 60; mesosoma width 45; midlobe of mesoscutum length 22; mesoscutellum length 21; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 8; costal cell length 28.5; costal cell width (measured at widest part) 2; marginal vein length 28; stigmal vein length 9; gaster length 90; gaster width 39; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 4; Gt_7 width (measured at base) 7.5; longest cercal seta length 8; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Sao Paulo**, Campinas, Estación Biológico, 16.iii.2011, C. Hansson (MZSP).

Etymology. Named in honour of Valmir Antonio Costa, Instituto Biologico Campinas, Brazil, for his work with Brazilian Hymenoptera, and helping others in the same field.

Galeopsomyia verdensis **Hansson sp.nov.**

(Figs 202, 203, 1043)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1043); with genal carina; mesoscutum and mesoscutellum (Fig. 202) with strong reticulation with \pm isodiametric meshes; propodeum (Fig. 202) with median carina strong and raised in a tooth in anterior part; hind coxa with a strong carina along posterior margin; gaster (Fig. 202) elongate, $3.1\times$ as long as wide, Gt_2 $0.2\times$ as long as wide, and Gt_4 $0.67\times$ as long as wide, medio-basal Gt_1 with a transverse edge dorsally, with same strong reticulation as remaining tergites, but smooth above attachment point of petiole; gonoplac yellowish-brown (Fig. 203).

Female holotype: length of body 2.6mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges and clypeus brown; vertex black with metallic greenish-blue tinges. Mesosoma golden-green with blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters pale brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-white to yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 metallic greenish-blue with posterior margin dark brown, Gt_{2-5} black with metallic purple tinges, Gt_6 metallic greenish-blue, Gt_7 black with metallic blue tinges; gonoplac yellowish-brown.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with very strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with median groove indicated, with seven setae in two rows close to notauli. Mesoscutellum with very strong reticulation, meshes isodiametric; submedian grooves absent; anterior pair of setae placed in the middle of mesoscutellum. Dorsellum with strong reticulation. Propodeum with median carina strong and raised in a tooth in anterior part; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa with a strong carina along posterior margin. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse edge dorsally, with same strong reticulation as remaining tergites, but smooth above attachment point of petiole.

Relative measurements: head length, dorsal view 22; head length, frontal view 41; POL 11.5; OOL 7; lateral ocellus diameter 4.5; head width 53; mouth width 20; malar space 14; eye length 21; scape length 17.5; scape width 4.5; pedicel+flagellum length 52; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 7.5; F2 width 5; F3 length 7; F3 width 5.5; clava length 17.5; clava width 6; C3 length 5.5; spicule length 1; mesosoma length 70; mesosoma width 50; midlobe of mesoscutum length 31; mesoscutellum length 26.5; mesoscutellum width 26; median part of mesoscutellum width (measured medially); median part of mesoscutellum, width in anterior part; median part of mesoscutellum, width in posterior part; lateral part of mesoscutellum, width (measured medially); dorsellum length 4; propodeum length 8; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 39; stigmal vein length 11; gaster length 120; gaster width 38; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 14; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK).

Etymology. Named after type locality, Monteverde.

***Galeopsomyia volcanensis* Hansson sp.nov.**

(Figs 204, 205, 936, 1045)

Diagnosis (female). Antenna short, e.g. F3 0.6× as long as wide, and stout, flagellum gradually expanding towards apex, clava solid (Fig. 1045); genal carina short, present close to mouth opening; mesoscutellum (Fig. 204) with distinct submedian grooves and elongate meshes; propodeum (Fig. 204) with median carina that splits in posterior part (Y-shaped carina) with anterior part strongly raised; hind coxa without carina along posterior margin; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 204) 1.8× as long as wide, Gt₂ 0.4× as long as Gt₄, Gt₁ with weak reticulation, distinctly more shiny than remaining tergites.

Female holotype: length of body 2.3mm (paratype 2.1mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Face below level of toruli medially golden-red, laterally golden-green, frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum, mesoscutellum and propodeum golden-green. Legs with fore and mid coxae black with metallic tinges, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora black with apex yellowish-brown, hind femur black with golden tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green with purple and golden tinges; gonoplac black.

Antenna with a solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with 14 scattered adnotaular setae. Mesoscutellum with median part with weaker reticulation and more shiny than lateral parts and with meshes slightly elongate, lateral parts with strong reticulation, meshes distinctly elongate; submedian grooves with outer margin indistinct, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae situated medially. Dorsellum with strong reticulation. Propodeum with median carina that splits in posterior part (Y-shaped carina), with anterior part strongly raised; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, hind coxa without carina along posterior margin. Fore wing with 5–3 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 38; POL 13.5; OOL 5.5; lateral ocellus diameter 4.5; head width 53.5; mouth width 14.5; malar space 15.5; eye length 21.5; scape length 17; scape width 5; pedicel+flagellum length 42; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 6; F1 width 5; F2 length 5; F2 width 5.5; F3 length 4.5; F3 width 7; clava length 14; clava width 7.5; C3 length 4; spicule length 1; mesosoma length 73; mesosoma width 54; midlobe of mesoscutum length 29; mesoscutellum length 27.5; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 15.5; median part of mesoscutellum, width in anterior part 15; median part of mesoscutellum, width in posterior part 18; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 10; costal cell length 38; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 7.5; gaster length 83; gaster width 45; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 15.5; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 18; longest cercal seta length 7; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Parque Nacional Guanacaste, below Volcan Cacao, 400–600m, 3.iii.1990, J.S. Noyes (NHMUK). Paratype: 1♀ COSTA RICA, Puntarenas, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK).

Galeopsomyia zunigai Hansson sp.nov.

(Figs 206, 207, 1046)

Diagnosis (female). Antenna with a solid clava (Fig. 1046); genal carina present; mesoscutellum (Fig. 206) with elongate meshes; propodeum (Fig. 206) with median carina that splits in posterior part (Y-shaped carina); fore coxa with a sharp edge along posterior margin, hind

coxa without carina along posterior margin; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 206) $2.0\times$ as long as wide, Gt_2 $0.3\times$ as long as Gt_4 , medio-basal Gt_1 with a \pm rectangular incision, with strong reticulation with posterior margin smooth.

Female holotype: length of body 2.1mm (paratypes 1.8–2.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum golden-green with blue tinges. Legs with coxae golden-green; trochanters and femora dark brown to black, femora with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with 14 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves indistinct, wide apart, slightly curved and diverging towards posterior part; anterior pair of setae placed in anterior part of mesoscutellum. Dorsellum with strong sculpture. Propodeum with a strong median carina that splits in posterior part, forming an inverted “Y”; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation, fore coxa with a sharp edge along posterior margin, hind coxa without carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with a \pm rectangular incision, with strong reticulation in anterior two-thirds, smooth in posterior one-third, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 37; POL 12; OOL 5; lateral ocellus diameter 4; head width 51; mouth width 13.5; malar space 14; eye length 22; scape length 16; scape width 4; pedicel+flagellum length 38; pedicel length 7; pedicel width, dorsal view 4; F1 length 5.5; F1 width 4.5; F2 length 5; F2 width 4.5; F3 length 5; F3 width 6; clava length 13; clava width 7.2; C3 length 4.5; spicule length 1; mesosoma length 69; mesosoma width 51; midlobe of mesoscutum length 29; mesoscutellum length 24; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 15; median part of mesoscutellum, width in anterior part 13; median part of mesoscutellum, width in posterior part 17; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2.5; propodeum length 11; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 10; gaster length 85; gaster width 42; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 23.5; Gt_7 length (measured medially) 6.5; Gt_7 width (measured at base) 10; longest cercal seta length 9; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, Santo Domingo, Santa Rosa, INBio Parque, Bosque Seco, LN

526200_217300, 1100m, 6.xii.2000-10.i.2001, R. Zúñiga (NHMUK). Paratypes (2♀, MZLU, MZUCR) 1♀ COSTA RICA, **San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, xii.1995, P. Hansson. Barcoded specimen: 1♀ COSTA RICA, Guanacaste, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-2, 10°76'N, 85°33'W, 824m, 16-23.i.2020, D. Janzen, W. Hallwachs (BIOUG 64718-F09).

Etymology. Named in honour of Ronald Zúñiga, collector of holotype.

Species-group *lasallei*

Galeopsomyia amadea Hansson sp.nov.

(Figs 208, 209, 728, 937)

Diagnosis (female). Antenna with F1 3.3×, F2 3.3×, F3 2.6× as long as wide (Fig. 728); mesoscutellum (Fig. 208) with median part with very weak reticulation and shiny, meshes elongate, submedian grooves distinct, ±straight and diverging slightly towards posterior part; coxae dark brown to black with metallic tinges, tibiae yellowish-brown (Fig. 209); hind femur 3.2× as long as wide; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 208) 3.4× as long as wide; gonoplac 1.0× as long as length of hind femur (Fig. 209).

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-green inside ocellar triangle, metallic purple outside triangle. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole yellowish-brown. Gaster with Gt₁ with anterior half golden and posterior half golden-purple, Gt₂₋₆ golden-purple, Gt₇ black; gonoplac black.

Face below level of toruli including clypeus with weak reticulation, frons with strong reticulation, antennal scrobes with weak reticulation. Vertex with weak reticulation and shiny. Occipital margin rounded,

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with four adnotaular setae in a single row. Mesoscutellum with submedian grooves distinct, ±straight and diverging slightly towards posterior part; median part with very weak reticulation and shiny, meshes elongate, lateral parts with strong reticulation. Dorsellum with weak sculpture and shiny. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum open below and towards base of wing.

Petiole transverse with strong sculpture on dorsal surface. Gaster elongate; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 32.5; POL 7; OOL 4.5; lateral ocellus diameter 4; head width 38.5; mouth width 14; malar space 12; eye length 20; scape length 17.5; scape width 5; pedicel+flagellum length 58; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 10; F1 width 3; F2 length 10; F2 width 3; F3 length 9; F3 width 3.5; clava length 18.5; clava width 4; C3 length 6; spicule length 1.5; mesosoma length 70; mesosoma width 37; midlobe of mesoscutum length 18; mesoscutellum length 21;

mesoscutellum width 18; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 10; costal cell length 30; costal cell width (measured at widest part) 2; marginal vein length 35; stigmal vein length 9; gaster length 102; gaster width 30; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 11-21.ii.2005, C. Hansson (MZLU).

***Galeopsomyia coralis* Hansson sp.nov.**

(Figs 210, 211, 1039)

Diagnosis (female). Antenna with F1 4.7×, F2 4.5×, F3 3.0× as long as wide (Fig. 1039); mesoscutellum (Fig. 210) with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct and parallel; coxae yellowish-brown, tibiae yellowish-brown (Fig. 211); hind femur 4.6× as long as wide; petiole a narrow band; gaster (Fig. 210) 3.7× as long as wide; gonoplac 1.1× as long as length of hind femur (Fig. 211).

Female holotype: length of body 2.6mm (paratype 2.6mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head black with metallic blue tinges. Thoracic dorsum black with metallic tinges. Legs predominantly yellowish-brown, femora pale brown on outer surface, T4 dark brown. Wings hyaline, veins yellowish-brown. Petiole dark yellowish-brown. Gaster black with metallic tinges; gonoplac black.

Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation. Vertex with weak reticulation. Occipital margin with a sharp edge.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with four adnotaular setae. Mesoscutellum with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate; submedian grooves parallel. Axillae with weak reticulation. Dorsellum with weak sculpture, almost smooth. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three very weak setae on dorsal surface of submarginal vein; speculum closed.

Petiole very short, just a narrow band. Gaster very elongate; Gt₁ with very weak reticulation and shiny, Gt_{2,7} with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 8; OOL 6.5; lateral ocellus diameter 3.5; head width 43; mouth width 11; malar space 12; eye

length 21; scape length 21; scape width 4.2; pedicel+flagellum length 77; pedicel length 9; pedicel width, dorsal view 3.5; F1 length 14; F1 width 3; F2 length 13.5; F2 width 3; F3 length 12; F3 width 4; clava length 24; clava width 5; C3 length 9; spicule length 1.5; mesosoma length 66; mesosoma width 36; midlobe of mesoscutum length 22; mesoscutellum length 23; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2.5; propodeum length 12; costal cell length 34; costal cell width (measured at widest part) 1.5; marginal vein length 48; stigmal vein length 8.5; gaster length 115; gaster width 31; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 13; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Cartago, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Torre ICE #32, LN 561600_187400, 1700m, 11.viii-15.ix.2000, malaise trap, D. Rubí (NHMUK). Paratype: 1♀ COSTA RICA, Puntarenas, Buenos Aires, Estación Altamira, Sendero a Casa Coca, LS 332800_574250, 1800m, 10.iii-10.iv.2001, malaise trap, D. Rubí (MZLU).

Galeopsomyia corista Hansson sp.nov.

(Figs 212, 213, 725, 910)

Diagnosis (female). Antenna with F1 5.5×, F2 4.0×, F3 3.0× as long as wide (Fig. 725); mesoscutellum (Fig. 212) with weak reticulation on median part, slightly stronger on lateral parts, meshes elongate, submedian grooves distinct in posterior two-thirds and slightly diverging towards posterior part, indistinct in anterior one-third; fore and mid coxae yellowish-brown, hind coxa dark brown with anterior part paler, tibiae yellowish-brown (Fig. 213); hind femur 3.6× as long as wide; petiole a narrow band; gaster (Fig. 212) very elongate, 4.2× as long as wide; gonoplac 1.1× as long as length of hind femur (Fig. 213).

Female holotype: length of body 2.5mm.

Scape yellowish-brown with dorsal edge brown, pedicel brown, and flagellum dark brown. Head with frons metallic blue, clypeus dark brown; vertex metallic bluish-purple. Mesoscutum and propodeum metallic blue; mesoscutellum less metallic than mesoscutum and propodeum. Legs with fore and mid coxae yellowish-brown, hind coxa dark brown with anterior part paler; trochanters and tibiae yellowish-brown; femora dark brown; T1–3 yellowish-brown, T4 dark brown. Petiole yellowish-brown. Gaster with Gt₁ with anterior half metallic pale bluish and posterior half golden-purple, Gt₂₋₅ golden-purple, Gt₆₋₇ black; gonoplac black.

Face below level of toruli, including clypeus, with weak reticulation, frons with strong reticulation, antennal scrobes with weak reticulation. Vertex with wrinkled sculpture inside

ocellar triangle, outside with weak reticulation. Occipital margin rounded,

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with three adnotaular setae in a single row. Mesoscutellum with weak reticulation on median part, slightly stronger on lateral parts, meshes elongate; submedian grooves distinct in posterior two-thirds and slightly diverging towards posterior part, indistinct in anterior one-third. Dorsellum with strong reticulation. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row broken.

Petiole very short, just a narrow band. Gaster very elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 31; POL 6.5; OOL 4.5; lateral ocellus diameter 3.5; head width 36; mouth width 11; malar space 10.5; eye length 19.5; scape length 16; scape width 4; pedicel+flagellum length 61; pedicel length 8; pedicel width, dorsal view 3.5; F1 length 11; F1 width 2; F2 length 10; F2 width 2.5; F3 length 9; F3 width 3; clava length 20; clava width 4; C3 length 7; spicule length 1.5; mesosoma length 61; mesosoma width 32; midlobe of mesoscutum length 20; mesoscutellum length 20; mesoscutellum width 14.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 10; costal cell length 35; costal cell width (measured at widest part) 2; marginal vein length 34; stigmal vein length 9; gaster length 110; gaster width 26.5; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 13.5; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 23-24.ii.2013, J.S. Noyes (NHMUK).

***Galeopsomyia elegans* Hansson sp.nov.**

(Figs 214, 215, 1047, 1109)

Diagnosis (female). Antenna with F1 4.3×, F2 4.0×, F3 3.8× as long as wide (Fig. 1047); mesoscutellum (Fig. 214) with very weak reticulation and shiny, meshes elongate, submedian grooves distinct and parallel; coxae and tibiae yellowish-brown (Fig. 215); hind femur 4.9× as long as wide; petiole transverse with longitudinal carinae; gaster (Fig. 214) 3.7× as long as wide; gonoplac very long, 1.0× as long as length of hind femur (Fig. 215).

Female holotype: length of body 3.0mm (paratypes 2.7–2.9mm).

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown.

Head with frons and vertex black with golden-green tinges, antennal scrobes and median part below level of toruli black, clypeus dark brown. Mesoscutum and mesoscutellum golden-green, propodeum black. Legs yellowish-brown with T4 brown. Wings hyaline, veins yellowish-white. Petiole yellowish-brown. Gaster black with metallic tinges; gonoplac black.

Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation. Vertex with weak reticulation and shiny. Occipital margin with a carina.

Mesoscutum with strong reticulation, meshes on sidelobes isodiametric, elongate on mid-lobe; midlobe without median groove, with four adnotaular setae in a single row. Mesoscutellum with very weak reticulation and shiny, meshes elongate; submedian grooves distinct, \pm straight and parallel. Axillae with strong reticulation. Dorsellum with weak sculpture. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed.

Petiole transverse with longitudinal carinae. Gaster elongate; Gt_1 with weak reticulation and shiny, remaining tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 42; POL 9; OOL 7.5; lateral ocellus diameter 4; head width 51; mouth width 16; malar space 14; eye length 25; scape length 24; scape width 5.5; pedicel+flagellum length 89; pedicel length 9; pedicel width, dorsal view 4; F1 length 17; F1 width 4; F2 length 16; F2 width 4; F3 length 15; F3 width 4; clava length 29; clava width 5; C3 length 9.5; spicule length 1.5; mesosoma length 80; mesosoma width 45; midlobe of mesoscutum length 25; mesoscutellum length 27; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 4; propodeum length 15; costal cell length 41; costal cell width (measured at widest part) 2.5; marginal vein length 50; stigmal vein length 11; gaster length 129; gaster width 35; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 13; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 10; longest cercal seta length 15; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°05'W, 1050-1150m, 9-29.iii.2001, 11_M_NOTN, INBio-OET-ALAS intersect" (NHMUK). Paratypes (2♀, MZLU, NHMUK): 1♀ **COSTA RICA, Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Torre ICE #32, LN 561600_187400, 1700m, 7.vii-11.viii.2000, malaise trap, D. Rubí; 1♀ **COSTA RICA, Cartago**, Tapantí, 1100-1200m, iv.2011-ii.2012, R. Zuffiga.

***Galeopsomyia eroica* Hansson sp.nov.**

(Figs 216, 217, 1048)

Diagnosis (female). Antenna with F1 3.0×, F2 2.8×, F3 2.3× as long as wide (Fig. 1048); mesoscutellum (Fig. 216) with weak reticulation and elongate meshes, submedian grooves distinct and slightly curved; coxae dark brown, fore and mid tibiae dark brown with apex yellowish-white, hind tibia yellowish-white with median one-third dark brown (Fig. 217); hind femur 4.6× as long as wide; petiole a narrow band; gaster (Fig. 216) 2.3× as long as wide; gonoplac 0.6× as long as length of hind femur (Fig. 217).

Female holotype: length of body 2.0mm (paratypes 2.0–2.5mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli including clypeus dark brown, frons and vertex dark brown with metallic blue and purple tinges, antennal scrobes dark brown. Thoracic dorsum dark brown with metallic tinges. Legs with coxae and femora dark brown; trochanters pale brown; fore and mid tibiae dark brown with apex yellowish-white, hind tibia yellowish-white with median one-third dark brown; T1–3 yellowish-white to yellowish-brown, T4 dark brown. Wings hyaline, veins yellowish-brown. Petiole yellowish-brown. Gaster dark brown; gonoplac black.

Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation. Vertex with weak reticulation inside ocellar triangle, with strong reticulation outside triangle; occipital margin with an edge behind ocellar triangle.

Mesoscutum with strong reticulation, sidelobes with isodiametric meshes and midlobe with elongate meshes; midlobe with three adnotaular setae in a single row, and with a weak median groove in posterior half. Mesoscutellum with weak reticulation and elongate meshes; with submedian grooves distinct and slightly curved. Axillae with weak reticulation, shiny. Dorsellum with strong reticulation. Medio-posterior propodeum with longitudinal carinae reaching half-way up on propodeum. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 35; POL 7.5; OOL 6.5; lateral ocellus diameter 3.5; head width 41; mouth width 12.5; malar space 12; eye length 19; scape length 17; scape width 3.5; pedicel+flagellum length 50; pedicel length 7; pedicel width, dorsal view 3; F1 length 9; F1 width 3; F2 length 8.5; F2 width 3; F3 length 7; F3 width 3; clava length 16; clava width 4; C3 length 6; spicule length 1.5; mesosoma length 56; mesosoma width 35; midlobe of mesoscutum length 19; mesoscutellum length 19.5; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2; propodeum length 10; costal cell length 26; costal cell width (measured at widest part) 2; marginal vein length 34; stigmal vein length 9; gaster length 81; gaster width 35; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 12; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, 5km W San Ramón on Route 1, 1200m, viii–ix.1995, P. Hanson (NHMUK). Paratypes: 2♀ with same label data as holotype (MZLU, MZUCR).

***Galeopsomyia fabia* Hansson sp.nov.**

(Figs 218, 219, 1049)

Diagnosis (female). Antenna with F1 3.9×, F2 3.2×, F3 2.3× as long as wide (Fig. 1049); mesoscutellum (Fig. 218) with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct and parallel; fore and mid coxae pale brown, hind coxa dark brown to black with metallic tinges, tibiae yellowish-white (Fig. 219); hind femur 3.2× as long as wide; petiole very short just a narrow band; gaster (Fig. 218) 3.3× as long as wide; gonoplac 0.9× as long as length of hind femur (Fig. 219).

Female holotype: length of body 1.9mm.

Scape, pedicel and F1–3 yellowish-brown, F4–6 brown. Head black, frons with metallic blue tinges, clypeus dark brown, vertex with metallic purple tinges. Thoracic dorsum black with metallic blue tinges. Legs with fore and mid coxae pale brown, hind coxa dark brown to black with metallic tinges; trochanters yellowish-brown; femora brown with apical tip yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 dark brown. Wings hyaline, veins yellowish-brown. Petiole dark yellowish-brown. Gaster black with metallic tinges; gonoplac black.

Frons and vertex with strong reticulation. Occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with two adnotaular setae. Mesoscutellum with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate; submedian grooves parallel. Axillae with rather weak reticulation. Dorsellum with strong reticulation. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two very weak setae on dorsal surface of submarginal vein; speculum open towards base of wing.

Petiole very short, just a narrow band. Gaster very elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 36; POL 6; OOL 4; lateral ocellus diameter 3; head width 32.5; mouth width 11; malar space 8; eye length 17; scape length 14.5; scape width 4; pedicel+flagellum length 50; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 2.2; F2 length 8; F2 width 2.5; F3 length 7; F3 width 3; clava length 17.5; clava width 3.5; C3 length 6; spicule length 1; mesosoma length 48; mesosoma width 28.5; midlobe of mesoscutum length 12.5; mesoscutellum length 17; mesoscutellum width 12.5; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 5.5; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2; propodeum length 9; costal cell length 25; costal cell width (measured at widest part)

1; marginal vein length 29; stigmal vein length 7.5; gaster length 77; gaster width 23; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 10.5; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Golfito, Reserva Forestal Golfo Dulce, Estación Agujas, LS 276750_526550, 250-350m, 11.ii.2002, J.A. Azofoifa (NHMUK).

***Galeopsomyia fuga* Hansson sp.nov.**

(Figs 220, 221, 726)

Diagnosis (female). Antenna with F1 3.6×, F2 2.6×, F3 2.4× as long as wide (Fig. 726); mesoscutellum (Fig. 220) with very weak reticulation and shiny, meshes elongate, submedian grooves as pit rows, parallel and distinct; fore and mid coxae yellowish-brown, hind coxa brown in basal half and yellowish-brown in apical half, tibiae yellowish-brown (Fig. 221); hind femur 4.6× as long as wide; petiole a narrow band; gaster (Fig. 220) 3.4× as long as wide; gonoplac 0.8× as long as length of hind femur (Fig. 221).

Female holotype: length of body 3.2mm (paratype 2.6mm).

Scape yellowish-brown with apico-dorsal part dark brown, pedicel and flagellum dark brown to black. Head with frons black with metallic tinges, clypeus dark brown; vertex black with metallic pale blue tinges. Mesosoma golden-green. Legs with fore and mid coxae yellowish-white, hind coxa yellowish-brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 dark brown. Wings hyaline, veins yellowish-brown. Petiole yellowish-brown. Gaster with Gt₁₋₆ black with pale golden green tinges, Gt₇ black; gonoplac black.

Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation. Vertex with very weak reticulation. Occipital margin with a carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated in posterior half, with four adnotaular setae in one row. Mesoscutellum with pit rows instead of submedian grooves; with very weak reticulation and shiny, meshes elongate. Axillae with very weak reticulation. Dorsellum with weak sculpture. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum open below and towards base of wing.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with anterior half smooth and posterior half with weak reticulation, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 44; POL 10.5; OOL 8; lateral ocellus diameter 5; head width 56; mouth width 20; malar space 16; eye length 23; scape length 23.5; scape width 5; pedicel+flagellum length 79; pedicel length 8;

pedicel width, dorsal view 4; F1 length 16; F1 width 4.5; F2 length 13; F2 width 5; F3 length 12; F3 width 5; clava length 25; clava width 5.5; C3 length 9.5; spicule length 2; mesosoma length 84; mesosoma width 51; midlobe of mesoscutum length 31; mesoscutellum length 29; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 14; costal cell length 43; costal cell width (measured at widest part) 2.5; marginal vein length 50; stigmal vein length 13; gaster length 134; gaster width 40; Gt₂ length (measured medially) 15; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 22; Gt₇ width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK). Paratype 1 ♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iii.1991, P. Hanson (MZLU)

***Galeopsomyia lama* Hansson sp.nov.**

(Figs 222, 223, 727)

Diagnosis (female). Antenna with F1 4.0×, F2 3.8×, F3 3.7× as long as wide (Fig. 727); mesoscutellum (Fig. 222) with weak reticulation, meshes elongate, submedian grooves distinct and parallel; fore and mid coxae brown, hind coxa dark brown to black with metallic tinges, tibiae yellowish-brown to yellowish-white (Fig. 223); hind femur 3.4× as long as wide; petiole very short, just a narrow band; gaster (Fig. 222) 3.9× as long as wide; gonoplac 1.0× as long as length of hind femur (Fig. 223).

Female holotype: length of body 2.9mm (paratype 2.4mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, black with metallic blue tinges, clypeus dark brown; vertex black with metallic purple tinges. Thoracic dorsum golden-green with metallic blue tinges. Legs with fore and mid coxae brown, hind coxa dark brown to black with metallic tinges; trochanters yellowish-brown; femora brown with apical tip yellowish-brown; tibiae yellowish-brown to yellowish-white; T1–3 yellowish-white, T4 dark brown. Wings hyaline, veins yellowish-brown to yellowish-white. Petiole yellowish-brown. Gaster with Gt₁ golden-green in anterior two-thirds and black with purple tinges in posterior one-third, Gt₂₋₆ black with metallic purple tinges, Gt₇ black; gonoplac black.

Face below level of toruli including clypeus with rather strong reticulation, frons with very strong reticulation, antennal scrobes with weak reticulation. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; with three adnotaular setae. Mesoscutellum with weak reticulation, meshes elongate; submedian grooves parallel. Axillae with strong reticulation. Dorsellum with strong sculpture. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum open towards base of wing.

Petiole very short, just a narrow band. Gaster very elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 39; POL 8.5; OOL 5.5; lateral ocellus diameter 5; head width 46; mouth width 17; malar space 13; eye length 23.5; scape length 19; scape width 4.5; pedicel+flagellum length 69; pedicel length 8.5; pedicel width, dorsal view 3.8; F1 length 12; F1 width 3; F2 length 11.5; F2 width 3; F3 length 11; F3 width 3; clava length 23; clava width 4; C3 length 7.5; spicule length 2; mesosoma length 73; mesosoma width 42; midlobe of mesoscutum length 22; mesoscutellum length 25; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 11; costal cell length 40; costal cell width (measured at widest part) 2; marginal vein length 38; stigmal vein length 11; gaster length 127; gaster width 33; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 16; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 23-24.ii.2013, J.S. Noyes (NHMUK). Paratype: 1 ♀ from same locality as holotype but collected 17-18.ii.2011 (NHMUK).

Galeopsomyia lasallei Hansson sp.nov.

(Figs 224, 225, 889, 1044)

Diagnosis (female). Antenna with F1 3.3×, F2 2.5×, F3 2.1× as long as wide (Fig. 1044); mesoscutellum (Fig. 224) with weak reticulation and elongate meshes, submedian grooves distinct and slightly curved; fore coxa golden-green, mid coxa black, hind coxa black with apex yellowish-brown, fore tibia with basal half infuscate and apical half yellowish-brown, mid tibia dark brown to black with apical one-third yellowish-white, hind tibia yellowish-white with median one-third dark brown (Fig. 225); hind femur 3.7× as long as wide; petiole very short just a narrow band; gaster (Fig. 224) 2.5× as long as wide; gonoplac 0.6× as long as length of hind femur (Fig. 225).

Female holotype: length of body 2.6mm (paratypes 2.3–2.6mm).

Scape yellowish-brown with dorsal part brownish, pedicel and flagellum dark brown. Face below level of toruli black with golden tinges, clypeus dark brown, frons and vertex metallic

blue, antennal scrobes black with golden tinges. Thoracic dorsum golden-greenish, propodeum less bright than mesoscutum and mesoscutellum. Legs with fore coxa golden-green, mid coxa black, hind coxa black with apex yellowish-brown; trochanters yellowish-white; femora black; fore tibia with basal half infuscate and apical half yellowish-brown, mid tibia dark brown to black with apical one-third yellowish-white, hind tibia yellowish-white with median one-third dark brown; T1–3 yellowish-white to yellowish-brown, T4 dark brown. Wings hyaline, veins yellowish-white. Petiole yellowish-brown. Gaster metallic purple to black with golden tinges; gonoplac black.

Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation. Vertex with weak reticulation. Occipital margin rounded.

Mesoscutum with strong reticulation, sidelobes with isodiametric meshes and midlobe with elongate meshes; midlobe with five adnotaular setae in a single row, and with a weak median groove in posterior half. Mesoscutellum with weak reticulation and elongate meshes; with submedian grooves distinct and slightly curved. Axillae with weak reticulation. Dorsellum with weak reticulation, smooth medially. Medio-posterior propodeum with carinae reaching half-way up on propodeum. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum open towards base of wing.

Petiole very short, just a narrow band. Gaster elongate; Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 41.5; POL 10; OOL 7; lateral ocellus diameter 5; head width 54.5; mouth width 18; malar space 15.5; eye length 24.5; scape length 21; scape width 5; pedicel+flagellum length 62; pedicel length 7; pedicel width, dorsal view 4; F1 length 13; F1 width 4; F2 length 10; F2 width 4; F3 length 8.5; F3 width 4; clava length 19; clava width 5; C3 length 5.5; spicule length 1; mesosoma length 73; mesosoma width 45; midlobe of mesoscutum length 24.5; mesoscutellum length 24.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3.5; propodeum length 12.5; costal cell length 38; costal cell width (measured at widest part) 2; marginal vein length 39; stigmal vein length 10.5; gaster length 105; gaster width 42; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 15.5; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 13; longest cercal seta length 9; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 12.ii.2011, J.S. Noyes (NHMUK). Paratypes (9♀, MZLU, MZUCR, NHMUK): 1♀ from same locality as holotype but collected 11.ii.2012; 2♀ **COSTA RICA, Alajuela**, Estación Biológica San Ramón, 10°13'N, 84°37'W, 900m, x-xii.1995, P. Hanson; 1♀ **COSTA RICA, Alajuela**, San Carlos, Reserva Forestal Arenal, Sendero Pilón,

LN 269100_457900, 600m, 9.iii-7.iv.2000, malaise trap, G. Carballo; following from same locality as previous but collected 22.xii.1999–15.i.2000 (1♀), 6-14.xi.2000 (2♀); 1♀ COSTA RICA, **Puntarenas**, ACOSA, Cerro de Oro, LN 280000_518500, 200m, 7.v.1995, malaise trap, R. Villalobos, M. Moraga, R. Zuñiga; 1♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes.

Etymology. Named in honour of John LaSalle, who has contributed substantially to the knowledge of *Galeopsomyia* and to Tetrastichinae in general.

***Galeopsomyia mynta* Hansson sp.nov.**

(Figs 226, 227, 909, 938, 1050)

Diagnosis (female). Antenna with F1 2.8×, F2 2.5×, F3 2.5× as long as wide (Fig. 1050); mesoscutellum (Fig. 909) with median part with weak reticulation with large meshes that are elongate in anterior half and ±isodiametric in posterior half, submedian grooves distinct and diverging slightly towards posterior part; coxae dark brown to black, tibiae yellowish-brown (Fig. 227); hind femur 3.8× as long as wide; petiole very short just a narrow band; gaster (Fig. 226) 3.0× as long as wide; gonoplac 0.8× as long as length of hind femur (Fig. 227).

Female holotype: length of body 2.6mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Face below level of toruli with median part black with golden tinges, lateral parts and frons metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with coxae dark brown to black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Wings hyaline, veins yellowish-white. Petiole yellowish-brown. Gaster with Gt₁ golden-green in anterior half, golden-purple in posterior half, Gt₂₋₆ golden-purple, Gt₇ black; gonoplac black.

Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation. Vertex with weak reticulation inside ocellar triangle, with strong reticulation outside triangle, with a carina between hind part of posterior ocelli. Occipital margin rounded.

Mesoscutum with strong reticulation, sidelobes with isodiametric meshes and midlobe with elongate meshes, especially so in median part; midlobe with five adnotaular setae in a single row, without median groove. Mesoscutellum with median part with weak reticulation with large meshes that are elongate in anterior half and ±isodiametric in posterior half, lateral parts with strong reticulation and elongate meshes; with submedian grooves distinct and diverging slightly towards posterior part. Axillae with weak reticulation. Dorsellum with weak reticulation. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum open towards base of wing.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 36; POL 8; OOL 5; lateral ocellus diameter 4.5; head width 44; mouth width 15.5; malar space 13; eye length 22; scape length 18; scape width 5; pedicel+flagellum length 56; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 11; F1 width 4; F2 length 10; F2 width 4; F3 length 10; F3 width 4; clava length 23; clava width 5; C3 length 7; spicule length 1.5; mesosoma length 73; mesosoma width 41; midlobe of mesoscutum length 19; mesoscutellum length 24;

mesoscutellum width 19; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 12; costal cell length 37; costal cell width (measured at widest part) 2; marginal vein length 37; stigmal vein length 10; gaster length 105; gaster width 35; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 14; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 11-21.ii.2005, C. Hansson (MZLU).

***Galeopsomyia rosea* Hansson sp.nov.**

(Figs 228, 229, 729, 890)

Diagnosis (female). Antenna with F1 2.3×, F2 2.5×, F3 2.5× as long as wide (Fig. 729); mesoscutellum (Fig. 228) with very weak reticulation and shiny, meshes elongate, submedian grooves distinct, ±straight and parallel; coxae dark brown, tibiae yellowish-brown (Fig. 229); hind femur 3.7× as long as wide; petiole a narrow band; gaster (Fig. 228) 3.4× as long as wide; gonoplac 0.9× as long as length of hind femur (Fig. 229).

Female holotype: length of body 2.9mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons black with metallic blue tinges, antennal scrobes and clypeus black. Mesoscutum with sidelobes black with metallic tinges, midlobe metallic pale bluish; mesoscutellum metallic pale bluish; propodeum black with metallic tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; fore and mid trochanters dark brown, hind trochanter yellowish-brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole yellowish-brown. Gaster with Gt₁ with anterior half metallic pale bluish and posterior half golden-purple, Gt₂₋₆ golden-purple, Gt₇ black; gonoplac black.

Face below level of toruli, including clypeus, with weak reticulation, frons rugose, antennal scrobes with weak reticulation. Vertex with wrinkled sculpture inside ocellar triangle, outside with weak reticulation. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with three adnotaular setae in a single row. Mesoscutellum with very weak reticulation and shiny, meshes elongate; submedian grooves distinct, ±straight and parallel. Dorsellum with weak sculpture. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 40; POL 7.5; OOL 6.5; lateral ocellus diameter 5; head width 48.5; mouth width 16; malar space 14; eye length 23; scape length 20; scape width 4.2; pedicel+flagellum length 63.5; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 9; F1 width 4; F2 length 10; F2 width 4; F3 length 10; F3 width 4; clava length 22; clava width 5; C3 length 8; spicule length 1.5; mesosoma length 78; mesosoma width 46; midlobe of mesoscutum length 23; mesoscutellum length 27; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 12; costal cell length 37; costal cell width (measured at widest part) 2; marginal vein length 43; stigmal vein length 11; gaster length 124; gaster width 36; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 19; Gt₇ width (measured at base) 17; longest cercal seta length 14; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes (NHMUK).

Species-group *admirabilis*

***Galeopsomyia admirabilis* Hansson sp.nov.**
(Figs 232, 233, 731, 891, 926, 939, 960, 1110)

Diagnosis (female). A very distinct and odd species. Face yellowish-brown, non-metallic (Fig. 891); with short genal carina; midlobe of mesoscutum (Fig. 232) with a strong and complete median groove; notauli (Fig. 232) very strong and smooth; mesoscutellum (Fig. 926) with submedian grooves distinct, straight and parallel, frenal groove very wide, subdivided by carinae with median carina especially strong; dorsellum with median carina; fore and hind coxae white, mid coxa dark brown (Fig. 233); gaster (Fig. 232) elongate, Gt₁ with very weak reticulation, almost smooth, remaining tergites with weak reticulation. Male flagellum with dorso-basal whorls of long setae present on F1–F4 and C1 (Fig. 960).

Female holotype: length of body 3.0mm (paratypes 2.0–2.9mm).

Scape yellowish-brown with dorsal edge brown, pedicel dark brown, F1–F3 dark brown, C1 pale brown, C2–C3 yellowish-white. Face below level of toruli yellowish-brown with parts below eye dark brown, frons black with metallic green and purple tinges and with scrobes yellowish-brown; vertex black with metallic tinges. Mesoscutum and mesoscutellum metallic bluish-green; propodeum black with metallic tinges. Legs with fore and hind coxae white, mid coxa dark brown; fore and mid trochanters brown, hind trochanter white; femora dark brown;

fore tibia yellowish-brown, mid and hind tibiae dark brown; tarsi yellowish-brown. Wings hyaline, fore wing with a large infuscate spot medially. Petiole dark brown. Gaster black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons with transverse carinae and with very fine small-meshed reticulation between carinae, antennal scrobes with weak reticulation and shiny; frons with a few scattered setae except scrobes that are bare; with a short genal carina close to mouth opening. Vertex with fine small-meshed reticulation outside ocellar triangle, with wrinkled sculpture inside triangle; ocellar triangle very small because ocelli are close; with a carina between posterior ocelli in posterior part, with a strong carina from eye margin to posterior ocelli. Occipital margin with a strong carina.

Pronotum very large with sides parallel, with strong reticulation, meshes isodiametric, with posterior margin smooth. Mesoscutum with strong reticulation on sidelobes, meshes isodiametric; midlobe with a mix of strong reticulation with elongate meshes and with longitudinal carinae, with a strong and complete median groove, and with four adnotaular setae in a single row; notauli very strong, distinct and smooth. Mesoscutellum with weak reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with two pairs of setae on lateral parts, one pair at posterior margin and one pair situated slightly behind middle of mesoscutellum close to axillular groove; frenal groove very wide and subdivided by carinae with median carina especially strong. Dorsellum with strong reticulation, with median carina. Propodeum with a strong narrow median carina; with strong reticulation; callus with two setae. All coxae with weak reticulation and shiny. Fore wing with seven setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong longitudinal carinae. Gaster elongate; Gt₁ with very weak reticulation, almost smooth, remaining tergites with weak reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 50; POL 11; OOL 10.5; lateral ocellus diameter 5; head width 63; mouth width 24; malar space 19; eye length 25.5; scape length 28; scape width 7; pedicel+flagellum length 90; pedicel length 8.5; pedicel width, dorsal view 5; F1 length 14; F1 width 5.5; F2 length 17; F2 width 5; F3 length 15; F3 width 5; clava length 31; clava width 5.5; C3 length 9.5; spicule length 1.7; mesosoma length 88; mesosoma width 55; midlobe of mesoscutum length 26; mesoscutellum length 31; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 4.5; propodeum length 17.5; costal cell length 51; costal cell width (measured at widest part) 2.5; marginal vein length 52; stigmal vein length 11.5; gaster length 113; gaster width 48; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 15; longest cercal seta length 15; shortest cercal seta length 8.

Male. Length of body 1.6–2.3mm.

Antenna (Fig. 960) with scape narrow in basal half, expanded in apical half; plaque translucent-infuscate surrounded by a dark brown ring and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 21; head length, frontal view 39; head width 49; mouth width 17; malar space 14; eye length 20; scape length 22; scape width 7;

plaque length 7.5; pedicel length 7; pedicel+flagellum length 93; F1 length 7; F1 width 5; F2 length 13.5; F2 width 5; F3 length 14; F3 width 4.5; F4 length 14; F4 width 4.5; clava length 39; clava width 4; mesosoma length 68; mesosoma width 44; gaster length 70; gaster width 33; longest subbasal seta on F1, length 60.

Hosts. Reared from galls (swellings) on leaf veins, petioles and young stems induced by *Zalepidota* sp. (Cecidomyiidae) on *Piper crassinervium* (Piperaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (31♀ 16♂, CNC, MZLU, MZUCR, NHMUK): 3♀ with same label data as holotype; 2♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 2♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; following from same locality as previous but collected 15-16.ii.2006 (2♀), 7-19.ii.2007 (3♀), 19-22.ii.2008 (2♀), 15-16.ii.2012 (5♀); 1♂ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 11-21.ii.2005, C. Hansson; 1♀ from same locality as previous but collected 19-20.ii.2009; 1♀ COSTA RICA, Puntarenas, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes; 1♀ COSTA RICA, Puntarenas, Monteverde, "Ecological Farm", 1300m, 10°18'N, 84°49'W, 16-17.ii.2003, J.S. Noyes; 5♀ 10♂ COSTA RICA, **Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ COSTA RICA, Alajuela, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes; 1♀ COSTA RICA, Alajuela, Parque Nacional Arenal, Sendero Pilón, 10°27'N, 84°43'W, 26.ii.2003, J.S. Noyes; 2♂ COSTA RICA, Alajuela, Parque Nacional Arenal, La Peninsula, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes; following from same locality as previous but collected 6-10.ii.2000 (1♂), 17.vi.2000 (1♂); 1♀ COSTA RICA, Alajuela, Parque Nacional Arenal, Sendero Mena, LN 454170_271800, 600m, 17.iv-19.v.2001, G. Carballo; 1♂ COSTA RICA, Alajuela, San Carlos, Reserva Forestal Arenal, Sector Cerro Chato, LN 269500_460900, 1100m, 22.x-22.xi.1999, malaise trap, G. Carballo; 1♀ COSTA RICA, **San José**, Ciudad Colón, Hacienda Rodeo, 800m, 21.x.1990, from Piper vein gall, P. Hanson.

***Galeopsomyia insignis* Hansson sp.nov.**

(Figs 234, 235, 730, 961)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2, C2 and C3 yellowish-brown (Fig. 730); lower frons yellowish-brown to pale brown, non-metallic; frons with transverse carinae; with a short genal carina; midlobe of mesoscutum (Fig. 234) with strong longitudinal carinae; mesoscutellum (Fig. 234) with very weak reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with a weak median carina; fore wing with a large fuscous spot medially (Fig. 235); propodeum (Fig. 234) with a very strong but narrow median carina, and with strong reticulation, callus with two setae; petiole transverse with longitudinal carinae; gaster (Fig. 234) elongate; Gt₁ smooth and shiny, remaining tergites with weak reticulation. Similar to *G. admirabilis*, differs in having antennal flagellum shorter, head not so long (frontal view), and in having frenal groove on mesoscutellum narrower. Male flagellum with dorso-basal whorls of long setae present on F1–F4 and with ventro-basal whorls of long setae on C1–C2 (Fig. 961).

Female holotype: length of body 2.4mm (paratypes 2.1–2.2mm).

Scape yellowish-white with dorsal edge dark brown, pedicel, funiculars and C1 dark brown, C2–3 yellowish-brown. Face below level of toruli yellowish-brown to pale brown, above level metallic bluish-green, antennal scrobes yellowish-brown; vertex metallic purple. Mesoscutum with sidelobes black with metallic tinges, midlobe metallic bluish-green; mesoscutellum metallic bluish-green with anterior two-thirds of median part golden-purple; propodeum dark brown. Legs with fore and hind coxae white (fore coxa predominantly dark brown in one paratype), mid coxa dark brown; trochanters, femora and tibiae dark brown with apex of tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark yellowish-brown. Fore wing with a large fuscous spot medially, wings otherwise hyaline. Petiole yellowish-brown. Gastral tergites metallic purple; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation and shiny, clypeus smooth, frons with transverse carinae, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with very weak reticulation. Occipital margin carinate.

Pronotum very large with sides parallel, with strong reticulation, meshes isodiametric, with posterior margin smooth. Mesoscutum with strong reticulation on sidelobes, meshes isodiametric, midlobe with elongate carinae, with four adnotaular setae in a single row. Mesoscutellum with very weak reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with two pairs of setae on lateral parts, one pair close to posterior margin of mesoscutellum and one pair placed medially; frenal groove narrow and subdivided by longitudinal carinae. Dorsellum with weak reticulation and shiny, with a weak median carina. Propodeum with a narrow strong median carina; with strong reticulation; callus with two setae. Coxae with weak reticulation and shiny. Fore wing with 3&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong longitudinal carinae, otherwise smooth. Gaster elongate; Gt₁ smooth and shiny, remaining tergites with weak reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 41; POL 8.5; OOL 8; lateral ocellus diameter 4.5; head width 54; mouth width 17; malar space 14.5; eye length 22; scape length 21; scape width 5; pedicel+flagellum length 68; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 13; F1 width 5; F2 length 11; F2 width 5; F3 length 10; F3 width 4.5; clava length 23; clava width 6; C3 length 8; spicule length 1.5; mesosoma length 63; mesosoma width 44; midlobe of mesoscutum length 17.5; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3.5; propodeum length 11; costal cell length 40; costal cell width (measured at widest part) 1.5; marginal vein length 33; stigmal vein length 9; gaster length 114; gaster width 40; Gt₂ length (measured medially) 11.5; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 10; longest cercal seta length 15; shortest cercal seta length 6.

Male. Length of body 2.0mm.

Antenna (Fig. 961) with scape gradually expanding slightly from base towards plaque but narrowed at apex; plaque white; dorso-basal whorls of long setae present on F1–F4 and, ventro-basal whorls of long setae on C1–C2. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 21; head length, frontal view 36; head width 48; mouth width 15; malar space 13; eye length 20; scape length 20; scape width 6.5; plaque length 5; pedicel length 7; pedicel+flagellum length 89; F1 length 5; F1 width 5; F2 length 12.5; F2 width 5; F3 length 14; F3 width 4; F4 length 15; F4 width 4; clava length 35; clava width 4; mesosoma length 63; mesosoma width 43; gaster length 70; gaster width 32.5; longest subbasal seta on F1, length 54.

Hosts. Reared from galls induced by *Zalepidota* (Diptera: Cecidomyiidae) on *Piper crassinervium* (Piperaceae). The galls consist of swellings of the leaf veins, petioles and stems.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Golfito, Estación Agujas, LS 526550_276750, 300m, 1-14.x.2000, swept, J. Azofeifa (NHMUK). Paratypes (2♀ 2♂, MZLU, NHMUK): 1♀ **COSTA RICA**, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; 1♀ 2♂ **COSTA RICA, San José**, Ciudad Colón, 800m, iv.1997, from *Piper crass.* leaf gall.

The five species listed below have two pairs of setae on mesoscutellum, same as the three groups above, but they do not match other features of these species-groups. They are therefore listed as unplaced to species-group.

Galeopsomyia persimilis (Ashmead)

(Figs 678, 679)

Trichoporus persimilis Ashmead, 1904:512. Lectotype ♀ (USNM type no. 60566) designated by LaSalle&Schauff (1992:30), examined via images (Figs 678, 679). Brazil.

Trichoporus persimilis Ashmead, 1904, (Schmiedeknecht 1909:468).

Exurus persimilis (Ashmead, 1904), (Costa Lima 1959:124).

Galeopsomyia persimilis (Ashmead, 1904) (LaSalle & Schauff 1992:30).

Diagnosis (female). Antennal clava with constriction between C1 and C2 (Fig. 679); flagellomeres very elongate (Fig. 679), F1 about 8×, F2 4.5×, F3 4×, clava 6.2× as long as wide; genal carina absent; mesoscutellum (Fig. 678) with strong reticulation, meshes slightly elongate to isodiametric, median groove indicated but weak, submedian grooves indistinct, slightly curved and converging towards posterior part, with two pairs of setae on lateral parts, one pair close to posterior margin of mesoscutellum and one pair placed medially; dorsellum without median carina; propodeum (Fig. 678) with strong reticulation, callus with eight setae; petiole very short, just a narrow band; gaster (Fig. 678) about 3× as long as wide, tergites with strong reticulation; dark brown non-metallic species (Figs 678, 679).

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil (Ashmead 1904).

Material examined.

Lectotype female, through images.

***Galeopsomyia anomala* Hansson sp.nov.**

(Figs 230, 231, 924, 1051)

Diagnosis (female). Antenna with clava with a distinct constriction between C1 and C2, and one anellus large (Fig. 1051); genal carina present; mesoscutellum (Fig. 924) with submedian grooves distinct with inner and outer margin distinct, grooves subdivided by several transverse carinae, with two pairs of setae, one pair just above the middle of mesoscutellum and one pair close to posterior margin; dorsellum concave with raised posterior margin and a median carina (Fig. 230); propodeum (Fig. 230) with median carina triangular, with strong reticulation, callus with 11 setae; fore coxa with a carina along anterior margin; petiole yellowish-brown (Fig. 230); gaster (Fig. 230) 2.5× as long as wide, tergites with weak reticulation; dark brown to black non-metallic species (Figs 230, 231).

Female holotype: length of body 2.4mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head, mesoscutum, and mesoscutellum dark brown; propodeum black. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole yellowish-brown. Gaster with Gt₁₋₅ dark brown, Gt₆₋₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2, with one anellus large. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with transverse carinae inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a wide indistinct median groove, with 15 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part, subdivided by transverse carinae; lateral parts with two pair of setae, one pair just above the middle and one pair close to posterior margin. Dorsellum concave with raised posterior margin and a median carina. Propodeum with triangular median carina that is concave; with strong reticulation; callus with 11 setae. Fore coxa with weak reticulation and with a carina along anterior margin, mid coxa with weak reticulation, hind coxa with strong reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum small and closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 11; OOL 5.5; lateral ocellus diameter 5.2; head width 56; mouth width 16.5; malar space 12; eye length 26; scape length 21; scape width 5; pedicel+flagellum length 62; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 12; F1 width 5; F2 length 10; F2 width 5; F3 length 9; F3 width 5.5; clava length 18; clava width 6; C3 length 7; spicule length 2; mesosoma length 65; mesosoma width 50; midlobe of mesoscutum length 23; mesoscutellum length 22; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 7; me-

dian part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 5; propodeum length 8.5; costal cell length 36; costal cell width (measured at widest part) 3; marginal vein length 46; stigmal vein length 12; gaster length 100; gaster width 40; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Ecuador.

Material examined.

Holotype ♀ **ECUADOR**, Napo, Lumbaqui, 10-11.iii.1983, Lars Huggert (MZLU).

Etymology. From the Greek *anomalos* = unusual, different, referring to the slightly odd appearance of species.

***Galeopsomyia blendis* Hansson sp.nov.**

(Figs 236, 237, 1054)

Diagnosis (female). Antennal clava solid (Fig. 1054); genal carina short and weak, present close to mouth opening; mesoscutellum (Fig. 236) with weak reticulation on median part, lateral parts with stronger reticulation, meshes elongate, with a weak median groove in anterior two-thirds, submedian grooves distinct, straight and diverging slightly towards posterior part, lateral parts with two pairs of setae, one pair close to posterior margin and one pair medially; dorsellum without median carina; propodeum (Fig. 236) with a short and narrow median carina that expands strongly in posterior part, with strong reticulation, callus with five setae; petiole very short, just a transverse band; gaster (Fig. 236) elongate, 2.0× as long as wide, medio-basal Gt₁ with a strong and sharp transverse carina dorsally, tergites with strong reticulation, Gt₁ with weak reticulation along posterior margin.

Female holotype: length of body 2.0mm (paratype 2.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with metallic blue tinges, clypeus dark brown. Mesoscutum metallic bluish-green, mesoscutellum and propodeum golden-green. Legs with coxae black with metallic blue tinges; trochanters dark brown; femora black with metallic tinges with apex yellowish-brown; fore and mid tibiae pale brown, hind tibia dark brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁₋₄ black with metallic tinges, Gt₅₋₇ metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, scrobes with weak reticulation; with a weak genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated but very weak, with seven adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with stronger reticula-

tion, meshes elongate; with a weak median groove in anterior two-thirds; submedian grooves distinct, straight and diverging slightly towards posterior part. Dorsellum with strong reticulation, without median carina. Propodeum with a short and narrow median carina that expands strongly in posterior part, with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open at base; costal setal row unbroken.

Petiole very short, just a transverse band. Gaster elongate; medio-basal Gt_1 with a strong and sharp transverse carina dorsally; tergites with strong reticulation, Gt_1 with weak reticulation along posterior margin.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 12; OOL 7; lateral ocellus diameter 3.5; head width 48; mouth width nm; malar space 13; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 38; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 5.5; F1 width 4.5; F2 length 6; F2 width 4.5; F3 length 5; F3 width 5; clava length 12.5; clava width 6; C3 length 3; spicule length 1; mesosoma length 64; mesosoma width 49; midlobe of mesoscutum length 25; mesoscutellum length 24; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 3; propodeum length 8; costal cell length 33; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 7; gaster length 79; gaster width 39; Gt_2 length (measured medially) 14; Gt_4 length (measured medially) 10; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 15; longest cercal seta length 8; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, v.1991, P. Hanson (NHMUK). Paratype: 1♀ COSTA RICA, San José, Cerro de la Muerte, 19km S 3km W Empalme, 9°39'N, 83°52'W, 2600m, x-xii.1993, P. Hanson (MZLU).

Galeopsomyia maura Hansson sp.nov.

(Figs 238, 239, 962, 1055)

Diagnosis (female). Antennal clava solid (Fig. 1055); scape slightly expanded in lower half (Fig. 1055); genal carina absent; mesoscutellum (Fig. 238) with strong reticulation, meshes elongate, without median groove, submedian grooves distinct, straight and converging towards posterior part, with two pairs of setae on lateral parts, one pair close to posterior margin of mesoscutellum and one pair placed medially; dorsellum without median carina; propodeum (Fig. 238) with very strong reticulation, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 238) 1.9× as long as wide, tergites with strong reticulation; dark brown to black non-metallic species (Figs 238, 239).

Female holotype: length of body 1.7mm (paratypes 1.4–1.8mm).

Scape and pedicel yellowish-brown, funiculars pale brown and clava dark brown. Head, mesosoma and mesosoma dark brown to black. Legs with coxae dark brown to black; trochanters yellowish-brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown.

Antenna with solid clava. Frons with strong reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves distinct, straight and converging towards posterior part; with two pairs of setae on lateral parts, one pair close to posterior margin of mesoscutellum and one pair placed medially. Dorsellum with strong reticulation, without median carina. Propodeum with a wide median carina that expands both anteriorly and posteriorly; with very strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 34; POL 9.5; OOL 5; lateral ocellus diameter 3.5; head width 42; mouth width 15; malar space 11; eye length 20; scape length 14; scape width 4; pedicel+flagellum length 38; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 5; F1 width 3; F2 length 6; F2 width 3; F3 length 5; F3 width 3; clava length 12.5; clava width 4; C3 length 5.5; spicule length 1; mesosoma length 51; mesosoma width 38; midlobe of mesoscutum length 17; mesoscutellum length 18; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4; propodeum length 6.5; costal cell length 30; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 9; gaster length 66; gaster width 35; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 7; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 18; longest cercal seta length; shortest cercal seta length.

Male. Length of body of body 1.3–1.4mm.

Antenna (Fig. 962) with scape widest in the middle and narrow at apex; plaque brown, extending along major part of scape and situated medially; dorso-basal whorls of long setae present on F1–F4. Gaster short ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17.5; head length, frontal view 33; head width 40.5; mouth width 12; malar space 14; eye length 17.5; scape length 15; scape width 6; plaque length 9; pedicel length 6; pedicel+flagellum length 61; F1 length 5.5; F1 width 4; F2 length 7.5; F2 width 4; F3 length 9.5; F3 width 3; F4 length 9.5; F4 width 3; clava length 21; clava width 3; mesosoma length 48; mesosoma width 35; gaster length 45; gaster width 29; longest subbasal seta on F1, length 42.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, 15.x.1949, F. Plaumann (NHMUK). Paratypes: 24♀ 2♂ from same locality as holotype and collected 15–20 October 1949 (MZLU, NHMUK).

Etymology. From the Greek *mauros* = dark, referring to colour of body.

***Galeopsomyia morula* Hansson sp.nov.**

(Figs 240, 241, 1057)

Diagnosis (female). Antennal flagellum relatively long and slender, F1–F3 each 2.0–2.2× as long as wide, clava with a weak constriction between C1 and C2 (Fig. 1057); genal carina present; mesoscutellum (Fig. 240) with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part, with two pairs of setae on lateral parts, one pair medially and one pair close to posterior margin; dorsellum without median carina; propodeum (Fig. 240) with strong reticulation, callus with six setae; gaster (Fig. 240) 1.8× as long as wide, medio-basal Gt₁ with a protruding and sharp transverse carina shaped like an inverted U embracing the heavily sculptured and transverse petiole, and with short longitudinal carinae from carina and pointing backwards, tergites with weak reticulation; body black non-metallic (Figs 240, 241).

Female holotype: length of body 1.6mm.

Scape, pedicel and F1 yellowish-brown, F2 pale brown, remaining parts of flagellum dark brown. Head black with weak blue tinges, clypeus black. Mesosoma black. Legs with coxae black; trochanters brown; femora black; fore and mid tibiae yellowish-brown, hind tibia dark brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ black with weak blue tinges, remaining tergites metallic purple; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, antennal scrobes with weak reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a sharp edge behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove, with four adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with two pairs of setae on lateral parts, one pair medially and one pair close to posterior margin. Dorsellum with strong sculpture, without median carina. Propodeum with strong median carina; with strong reticulation; callus with six setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with a protruding and sharp transverse carina shaped like an inverted U embracing the heavily sculptured and transverse petiole, and with short longitudinal carinae from carina and pointing backwards; tergites with weak reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 30; POL 9; OOL 4.2; lateral ocellus diameter 4; head width 42.5; mouth width 11.5; malar space 12; eye length 17.5; scape length 16; scape width 3.2; pedicel+flagellum length 43; pedicel length 6; pedicel width, dorsal view 3; F1 length 7; F1 width 3.5; F2 length 6.5; F2 width 3; F3 length

6.5; F3 width 3; clava length 16; clava width 4; C3 length 6; spicule length 1; mesosoma length 50; mesosoma width 36; midlobe of mesoscutum length 19; mesoscutellum length 18; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 8.5; costal cell length 29; costal cell width (measured at widest part) 1.7; marginal vein length 25; stigmal vein length 8; gaster length 60; gaster width 34; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 7; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 13; longest cercal seta length; shortest cercal seta length.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Golfito, Parque Nacional Corcovado, Estación Agujas, Cerro Quebraditas, LS 521400_274300, 782m, 15.vii-15.viii.2000, J. Azofeifa (NHMUK).

Etymology. From the Latin *morulus* = black (like a mulberry), referring to colour of body.

Species-group *cuprea*

***Galeopsomyia cuprea* (Ashmead)**

(Figs 654, 655)

Tetrastichus cupreus Ashmead 1894:184-185 (in Riley *et al.* 1894). Lectotype ♀ (primary type no. 5.3595, NHMUK 013458205) designated by LaSalle & Schauff (1992:30), examined. West Indies (St Vincent).

Galeopsomyia cuprea (Ashmead), LaSalle & Schauff (1992:30).

Diagnosis (female). Antenna with solid clava (Fig. 655); genal carina short and weak, present just close to mouth opening; mesoscutellum (Fig. 654) with very weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate, with a weak median groove in anterior half, submedian grooves with outer margin indistinct, almost straight and diverging slightly towards posterior part; dorsellum with a very weak median carina; femora yellowish-brown (Fig. 655); propodeum (Fig. 654) with strong irregular carinae and strong reticulation, callus with seven setae; petiole very short, just a narrow band; gaster (Fig. 654) 2.2× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, Gt₁ with weak reticulation, remaining tergites with strong reticulation, gonoplac dark brown (Fig. 655).

Description (female lectotype). Length 1.8mm.

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head with frons golden-green, scrobes black, clypeus brown; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa golden-green; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole dark brown. Gaster golden-green;

gonoplac yellowish-brown.

Antenna with solid clava. Face below level of toruli with strong reticulation, frons rugose, clypeal area smooth, scrobes with weak reticulation; genal carina short and weak, present just close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with weak reticulation and shiny, especially so on midlobe, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior one-third, and with 12 scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and shiny, lateral parts with stronger reticulation and with ten scattered setae, meshes elongate, with a weak median groove in anterior half; submedian grooves with outer margin indistinct, almost straight and diverging slightly towards posterior part. Dorsellum with weak sculpture and shiny, with a very weak median carina. Propodeum with median carina expanding towards posterior part; with irregular carinae and strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; Gt_1 with weak reticulation, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 47; POL 11; OOL 6.5; lateral ocellus diameter 5; head width 58.5; mouth width 16.5; malar space 15; eye length 28; scape length 20; scape width 4; pedicel+flagellum length 51; pedicel length 9; pedicel width, dorsal view 4.5; F1 length 8; F1 width 5; F2 length 6.5; F2 width 5; F3 length 7.5; F3 width 5; clava length 16; clava width 6; C3 length 5; spicule length 1; mesosoma length 68; mesosoma width 51; midlobe of mesoscutum length 25.5; mesoscutellum length 28; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum (measured medially) 5; dorsellum length 4; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 11; gaster length 84; gaster width 39; Gt_2 length (measured medially) 8.5; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 15; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (St. Vincent) (Ashmead 1894).

Material examined.

Lectotype female in NHMUK.

***Galeopsomyia deilochus* (Walker)**

(Figs 656, 657)

Cirrospilus Deilochus Walker 1839:74. Lectotype ♀ (primary type no. 5.1425, NHMUK 010838709) designated by LaSalle & Schauff (1992:30), examined. Brazil.

Tetrastichus deilochus (Walker), Walker (1846:81).

Galeopsomyia deilochus (Walker), LaSalle & Schauff (1992:30).

Diagnosis (female). Antenna with a solid clava (Fig. 657); genal carina absent; submedian grooves on mesoscutellum \pm distinct (indistinct in very anterior part) and diverging towards posterior part, median part with weak reticulation (Fig. 656); dorsellum with median carina; propodeum (Fig. 656) with median carina narrow with parallel sides, with strong irregular carinae and strong reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 656) 2.0 \times as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with weak reticulation.

Reescription (female lectotype). Length 1.5mm.

Scape yellowish-brown, pedicel yellowish-brown with dorsal part brown, flagellum brown. Head with frons metallic bluish-green, clypeus yellowish-brown, scrobes black; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green with golden tinges. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters pale brown; femora dark brown, hind femur with apical part yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₄ dark brown with metallic tinges, Gt₅₋₇ black with metallic tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, frons with strong reticulation, clypeal area smooth, scrobes with weak reticulation; genal carina absent. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric, elongate in posterior half of midlobe; midlobe with a weak median groove in posterior half, with 11 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and a weak \pm complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm distinct (indistinct in very anterior part) and diverging towards posterior part; with about ten setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and narrow median carina, with parallel sides, expanding in posterior part; with strong irregular carinae and strong reticulation; callus with six setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; POL 9; OOL 6; lateral ocellus diameter 4; head width 50.5; mouth width 21; malar space 12; eye length 24; scape length 17.5; scape width 4; pedicel+flagellum length 49; pedicel length 7; pedicel width, dorsal view 4; F1 length 7.5; F1 width 5.5; F2 length 7.5; F2 width 5.5; F3 length 7; F3 width 6; clava length 15; clava width 6.5; C3 length 5; spicule length 1; mesosoma length 60; mesosoma width 46; midlobe of mesoscutum length 24.5; mesoscutellum length 23; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum (measured medially) 5; dorsellum length 4.5; propodeum length 9; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 10.5; gaster length 76; gaster width 39; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 9.5; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 15.5; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil (Walker 1839).

Material examined.

Lectotype female in NHMUK.

***Galeopsomyia fausta* LaSalle**

(Figs 25, 660, 661, 1111)

Galeopsomyia fausta LaSalle in LaSalle & Peña 1997:464–468. Holotype ♀ (primary type no. 5.3961, NHMUK 013458207), examined. Mexico.

Diagnosis (female). Antenna with constriction between C1 and C2, flagellomeres about as long as wide (Fig. 661); with genal carina; mesoscutellum (Fig. 660) golden-purple, median part with weak reticulation, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, wide and parallel; dorsellum with median carina; propodeum (Fig. 660) with strong reticulation and irregular carinae, callus with five setae; fore coxa with a sharp carina along base and along posterior margin; petiole transverse and heavily sculptured on dorsal surface; medio-basal Gt₁ with a very strong transverse carina dorsally and with short longitudinal carinae from transverse carina pointing backwards (Figs 25, 1111). The male has scattered setae on flagellomeres (see fig 9 in LaSalle & Peña (1997), i.e. without subbasal whorls of setae.

Description. See LaSalle & Peña (1997).

Distribution. Argentina, Brazil, Colombia, Honduras, Mexico, Nicaragua, Puerto Rico (LaSalle & Peña, 1997), Costa Rica (provinces Alajuela, Cartago, Guanacaste, Heredia, San José) (**new records**).

Hosts. Reported as an important parasitoid of the citrus leafminer (*Phyllocnistis citrella* Stainton) (Lepidoptera: Gracillariidae) (Cobo Nuñez 1996, as *Galeopsomyia* sp.; LaSalle & Peña 1997). The citrus leafminer is a micromoth introduced to the Americas from Asia, and is a serious pest on citrus trees in the Americas (Heppner 1993). Prior to this publication no indigenous host for *G. fausta* was known, but here it is recorded from *Phyllocnistis* sp. on *Trichilia havanensis* (Meliaceae) and an unidentified microlepidopteran leaf mineer on avocado (*Persea americana*), both records from Costa Rica.

Cobo Nuñez (1996) and Llácer *et al.* (2005) studied the life cycle of *G. fausta* in detail and found that it attacked the larva, prepupa and pupa of its host. It attaches its egg to the inner surface of the leaf mine. The first instar larva kills the host and feeds as a solitary ectoparasitoid

Material examined.

Type material: Holotype ♀ of *G. fausta* (NHMUK). Non type material (61 ♀, CNC, MZLU, MZUCR, NHMUK): 2 ♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1 ♀ COSTA RICA, Cartago, Paraíso, P.N. Tapantí-Macizo de la Muerte, Torre cerca de Estación, 1200m, LN560050_193800, 9.vii-12.viii.2000, D. Rubí; 1 ♀ COSTA RICA, Guanacaste, Macizo Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 18.iii.2003, J. Azofeifa; 1 ♀ COSTA RICA, Guanacaste, Estación Maritza, 10°58'N, 85°29'W, 600m, 27.i-2.ii.2001, E. Negro; 7 ♀

COSTA RICA, Heredia, Santo Domingo, INBio-Parque, 8-29.ii.2000, R. Zuñiga; following from same locality as previous but collected iii.2002 (3♀), 1-12.iv.2002 (6♀), 6.x.2002 (2♀), 11-25.ii.2006 (9♀), 16.ii.2008 (5♀), 14.ii.2009 (2♀), 12.ii.2011 (4♀), 11.ii.2012 (2♀), 16.ii.2013 (2♀), 13.ii.2016 (1♀); 2♀ COSTA RICA, Heredia, Birrí, 1300m, vi.1996 A. Gonzalez, leaf mine on limón; 1♀ from same locality as previous but collected 28.viii.1999 from an unidentified microlep. leaf mine on avocado; 5♀ COSTA RICA, San José, UCR Campus, ii-iii.1999, K. Nishida, *Phyllocnistis* sp. on *Trichilia havanensis*; 2♀ with same label data as previous but collected vi.2013; 1♀ from same locality as previous but collected 27.ii.1990; 1♀ COSTA RICA, San José, San Antonio de Escazú, 9°54'N, 84°09'W, 1700m, ix.1996, Eberhard&Hanson; 1♀ COSTA RICA, San José, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iv.1994, P. Hanson.

***Galeopsomyia flavipes* (Howard)**

(Figs 672, 673)

Tetrastichodes flavipes Howard 1897:176. Holotype ♀ (USNM type no. 10116), examined via images (Figs 672, 673). West Indies (Grenada).

Tetrastichus georgensis De Santis 1979:292. Unnecessary replacement name for *T. flavipes* Howard (LaSalle & Schauff 1992:30).

Galeopsomyia flavipes (Howard), LaSalle & Schauff (1992:30).

Diagnosis (female). Antenna yellowish-brown with solid clava (Fig. 673); genal carina present and strong, reaching to level of lower margin of eye; mesoscutellum (Fig. 672) with submedian grooves slightly diverging towards posterior part, median part with strong reticulation with very elongate meshes, appearing striate, and with median groove indicated but weak; propodeum (Fig. 672) with strong reticulation, callus with three setae; gaster (Fig. 672) 1.6× as long as wide, medio-basal part of Gt_1 with lateral carinae, tergites with strong reticulation.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Grenada) (Howard 1897).

Material examined.

Holotype female, through images.

***Galeopsomyia itauna* Perioto & Costa**

No illustrations

Galeopsomyia itauna Perioto & Costa, *in* Perioto, Lara & Costa 2009:86. Holotype ♀ (MZSP); not examined. Brazil.

Diagnosis (female). Antennal clava solid; genal carina absent; mesoscutellum with median part with weak reticulation and shiny, lateral parts with strong reticulation, submedian grooves with outer margin missing and diverging towards posterior part; dorsellum with median carina; propodeum with a mix of irregular carinae and reticulation, callus with four setae; hind coxa with a strong carina along posterior margin; medio-basal Gt_1 with a transverse carina dorsally.

Description. See Perioto & Costa (2009).

Hosts. Reared from seeds of *Ilex affinis* (Aquifoliaceae), and is presumably a parasitoid of the seed infesting *Prodecatoma juliae* Perioto & Lara (Hymenoptera: Eurytomidae) (Perioto & Costa 2009).

Distribution. Brazil (Perioto & Costa 2009).

Material examined.

No material has been examined. The interpretation of this species is based on the detailed and well illustrated original description.

***Galeopsomyia macaxeira* Perioto, Costa & Lara**

(Figs 684-688)

Galeopsomyia macaxeira Perioto, Costa & Lara 2011:163-165. Holotype ♀ (MZSP), examined through images; Brazil.

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 684); genal carina present; mesoscutellum (Fig. 685) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with a indistinct median groove in anterior two-thirds, submedian grooves with outer margin indistinct, diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 686) with strong reticulation, callus with four setae; fore wing with four setae on dorsal surface of submarginal vein; petiole very short, just a narrow band; gaster (Fig. 688) 3.3× as long as wide, tergites with strong reticulation, medio-basal Gt₁ with short longitudinal carinae pointing backwards from transverse sharp edge.

Description. See Perioto *et al.* (2011).

Hosts. Reared from leaf galls on cassava (*Manihot esculenta*, Euphorbiaceae), possibly parasitizing *Iatrophobia brasiliensis* (Rübsaamen) (Diptera: Cecidomyiidae; cited as *Jatrophobia brasiliensis*) (Perioto *et al.* 2011).

Distribution. Brazil (Perioto *et al.* 2011).

Material examined.

No material has been examined, but images of female holotype and one female paratype of *G. macaxeira* have been examined.

Comments. The images in the original description of *G. macaxeira* (figs 1–8 in Perioto *et al.* 2011) are not of this species. Instead the images are possibly of *G. glypta*, described in the same paper as *G. macaxeira*. However, *G. glypta* does not belong in *Galeopsomyia*. See comment under *G. glypta*. Thus *G. macaxeira* has never been imaged.

***Galeopsomyia multisulcata* (Girault)**
(Figs 29-34, 650, 651, 674, 675, 898, 1112)

Galeopsomopsis multisulcata Girault 1917a:1. Lectotype ♀ (USNM type no. 20660), designated here, examined through images. Mexico.

Galeopsomyia multisulcata (Girault), LaSalle & Schauff (1992:29).

Diagnosis (female). Antenna with solid clava (Fig. 651); genal carina present; mesoscutellum (Figs 650, 674) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin indistinct, curved and diverging towards posterior part and subdivided by transverse carinae; dorsellum with median carina; propodeum (Figs 650, 674) with strong irregular carinae and strong reticulation, callus with ten setae; gaster (Figs 650, 674) ovate, 1.9× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, reticulation on tergites rather weak.

Female non-type: length of body 2.1mm (variation in material 1.5–2.8mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, and vertex golden-green, clypeus dark brown. Thoracic dorsum metallic greenish-blue, propodeum with medio-anterior half golden. Legs with fore and hind coxae metallic greenish-blue, mid coxa black; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₄ black with metallic blue tinges, Gt₅₋₆ golden, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, and with 14 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves with indistinct outer margin, curved and diverging towards posterior part, subdivided by transverse carinae; with 12 setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a concave triangular median carina, with strong irregular carinae and strong reticulation; callus with ten setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse, with some sculpture on dorsal surface. Gaster ovate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with rather weak reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 41; POL 10.5; OOL 5; lateral ocellus diameter 5.5; head width 54; mouth width 20; malar space 13; eye length 25; scape length 18; scape width 4.5; pedicel+flagellum length 54; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 4.5; F2 length 9; F2 width 4.5; F3 length 8; F3 width 5; clava length 16.5; clava width 6; C3 length 4.5; spicule length 2; mesosoma length 67; mesosoma width 48; midlobe of mesoscutum length 27; mesoscutellum length 25.5; mesoscutellum width 24.5; median part of mesoscutellum width (measured medially) 7;

median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 10; costal cell length 33; costal cell width (measured at widest part) 3; marginal vein length 27; stigmal vein length 11; gaster length 84; gaster width 45; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 5.5.

Male. Length of body of body 1.2–1.8mm.

Antenna with scape widest medially; plaque dark brown, long and placed in apical part; dorso-basal whorls of long setae present on F1–F4 and C1–C2. Gaster ovate; all tergites with strong reticulation. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 36; head width 47; mouth width 16; malar space 10; eye length 22; scape length 17; scape width 5.2; plaque length 11; pedicel length 6.5; pedicel+flagellum length 70; F1 length 5.5; F1 width 4.5; F2 length 9.5; F2 width 4; F3 length 10.5; F3 width 4; F4 length 10; F4 width 4; clava length 25; clava width 4; mesosoma length 59; mesosoma width 39; gaster length 56; gaster width 35; longest subbasal seta on F1, length 31.

Hosts. Unknown.

Distribution. Mexico (Girault 1917a); **new records:** Belize, Brazil, Costa Rica, Ecuador, Peru, St. Vincent, Trinidad & Tobago.

Material examined.

Type material: Lectotype ♀ of *G. multisulcata* (USNM). Non type material (406♀ 43♂, CNC, MZLU, MZSP, MZUCR, NHMUK): 25♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 11-25.ii.2006, J.S. Noyes (NHMUK); following from same locality as holotype but collected 8-29.ii.2000(4♀), 10.i-30.iii.2001 (1♀), 1-22.v.2001 (1♀), 27.vi-6.viii.2001 (1♀), 11.ii-18.iii.2002 (1♀), iii.2002 (11♀), 1-12.iv.2002 (2♀), 11-25.ii.2006 (1♀), ii.2007 (2♀), 16.ii.2008 (2♀), 13.ii.2010 (4♀), 12.ii.2011 (9♀), 13.ii.2016 (7♀); 2♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 3♀ 8♂ **COSTA RICA, Alajuela**, Parque Nacional Arenal, La Peninsula, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes; 2♀ **COSTA RICA, Alajuela**, Cabro Muco, 10°43'N, 85°09'W, 1100m, 13.ii.2004, C. Hansson & J.A. Azofeifa; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, Sendero Mena, LN 454170_271800, 600m, 17.iv.-19.v.2001, G. Carballo; 1♀ **COSTA RICA, Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Camino a Río Humo, LN 188100_560500, 1400-1500m, 22.xii.1999-16.i.2000, malaise trap, M. Alfaro; 19♀ 11♂ **COSTA RICA, Guanacaste**, Bagaces, Sector Palo Verde, LN260952_385020, 50m, 8-19.ii.2000, yellow pan trap, I. Jiménez; following from same locality as previous but collected 5-18.i.2000 (10♀ 4♂), 6.i-18.ii.2000 (1♂), 8-18.iii.2000 (28♀ 14♂); 6♀ **COSTA RICA, Guanacaste**, Reserva Forestal Monte Alto, Cerro Romo, LN 220700_382545, 883m, 27-29.x.2001, swept, I. Jiménez; 4♀ 1♂ **COSTA RICA, Guanacaste**, Cañas, Río Chiquito, LN 292500_417000, 410m, 25.vii.2003, J. Azofeifa; 1♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, H-4-C, 7-28.xii.1985, D.H. Janzen & I.D. Gauld; following from same locality as previous but collected 18.i-8.ii.1986 (1♀), 25.iv-16.v.1987 (3♀); 1♀ **COSTA RICA, Guanacaste**, Santa Cruz, Parque Nacional Marino Las Baulas, LN 258040_332690, 0m, 20.ix-16.x.2000, Y. Cárdenas; 3♀ 1♂ **COSTA RICA, Guanacaste**, Refugio Nacional de Vida Silvestre Bosque Diríá, LN 239083_358610, 700m, 14-15.ii.2011, J.S. Noyes; 3♀ **COSTA RICA, Guanacaste**, Bosque Nacional Diríá, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 15.xi-16.xii.2001, I. Jiménez; 5♀ from same locality as previous but collected 16.xii.2001-16.i.2002; 2♀ **COSTA RICA, Heredia**, 6km ENE

Vara Blanca, 10°11'N, 84°07'W, 2000m, iv.2002, INBio, OET, ALAS; 1♀ COSTA RICA, **Limón**, Valle de la Estrella, Reserva Biológica Hitoy Cerere, Sendero Toma de Agua, LN 184300_643500, 140m, 8.v.1999, malaise trap, F. Umaña; 1♀ COSTA RICA, Limón, Reserva Biológica Hitoy-Cerere, 9°40'N, 83°02'W, 100m, 24-25.ii.2004, J.S. Noyes; 1♀ from same locality as previous but collected 14-18.i.1991; 3♀ COSTA RICA, **Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 301m, 11-21.ii.2005, C. Hansson; following from same locality as previous but collected 14.iii.2002 (1♀), 14-15.ii.2005 (3♀), 23.24.ii.2007 (2♀), 19-20.ii.2009 (1♀), 17-18.ii.2011 (2♀); 19-20.ii.2016 (6♀); 6♀ 2♂ COSTA RICA, Puntarenas, Refugio Nacional de Vida Silvestre Río Piro, Golfito, Estación Tuva, LS 262284_535746, 40m, 18.ix.2004, swept, M. Moraga; 53♀ COSTA RICA, Puntarenas, Parque Nacional Corcovado, Estación Los Patos, 08°33'N, 83°30'W, 200m, 1-9.iii.2000, J.S. Noyes & J. A. Azofeifa; 30♀ COSTA RICA, Puntarenas, Parque Nacional Corcovado, Estación Sirena, LS 270000_507750, 10m, 19.ii.2002, J. Azofeifa; 1♀ from same locality as previous but collected 19-20.ii.2004; 29♀ COSTA RICA, Puntarenas, Parque Nacional Corcovado, Estación el Tigre, LS 277800_529600, 34m, 19.i.2003, J. Azofeifa; 2♀ COSTA RICA, Puntarenas, Reserva Absoluta Cabo Blanco, 9°35'N, 85°06'W, 30m, 16-17.ii.2009, J.S. Noyes; 3♀ COSTA RICA, Puntarenas, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, Parque Internacional La Amistad. Buenos Aires, Sendero Los Gigantes, LS 331800_572100, 1460m, 9.vii-9.viii.2001, malaise trap, D. Rubí; 1♀ COSTA RICA, Puntarenas, Buenos Aires, Estación Altamira, Send a Casa Coca, LS 331750_574400, 1700m, 12.v.2001, swept, D. Rubí; 2♀ from same locality as previous but collected 7.ii-5.iii.2007; 1♀ COSTA RICA, Puntarenas, La Gamba, 8°42'N, 83°12'W, 150m, 13-14.ii.2006, J.S. Noyes; 1♀ **BELIZE**, Toledo, Punta Gorda, 27.iv-7.v.1982, P. Kelly & R.S. George; 1♀ **BRAZIL**, Santa Catarina, Nova Teutonia, 18.xi.1949, F. Plaumann; 1♀ from same locality as previous but collected 20.xi.1949; 2♀ **BRAZIL**, Sao Paulo, Campinas, Estación Biológico, 16.iii.2011, C. Hansson; 6♀ **ECUADOR**, Napo, Misahualli, 20.ii.1983, Lars Huggert; 4♀ **PERU**, Madre de Dios, Puerto Maldonado, 2-3.i.1984, Lars Huggert; 1♀ **PERU**, Napo, Tena, 18.ii.1983, Lars Huggert; 1♀ **PERU**, Junin, Satipo, 18.i.1984, Lars Huggert; 1♀ **ST VINCENT**, St. George, Belmont, 6.vii.1976, J.S. Noyes; 1♀ **TRINIDAD**, Caroni, Brasso, 17.vii.1976, J.S. Noyes; 1♀ 1♂ **TRINIDAD**, Mayaro, Trinity Hills Reserve, 5.viii.1976, J.S. Noyes; 1♀ **TRINIDAD**, St. George, Arima Valley, 4th mile, 13.viii.1976, J.S. Noyes; 67♀ **TRINIDAD**, St. George, Lopinot, 10.viii.1976, J.S. Noyes, BM 1976-46; 1♀ **TRINIDAD**, St. George, St. Augustine, 19.vi.1976, J.S. Noyes; 2♀ from same locality as previous but collected ix.1976; 1♀ **TRINIDAD**, St. George, Tumpuna Reserve, 9.viii.1976, J.S. Noyes; 1♀ **TRINIDAD**, Victoria, Hardbargain, 18.vii.1976, J.S. Noyes.

Remarks. The lectotype is damaged (Figs 674, 675) with following parts missing: head including antennae, wings except right hind wing.

***Galeopsomyia nicaraguaensis* (Cameron)**

(Figs 664, 665)

Tetrastichus nicaraguaensis Cameron 1904:64. Lectotype ♀ (primary type no. 5.1433, NHMUK 010838711) designated by LaSalle & Schauff (1992:30), examined. Nicaragua. *Galeopsomyia nicaraguaensis* (Cameron), LaSalle & Schauff (1992:30).

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 665); genal carina absent; mesoscutellum (Fig. 664) elongate, 1.3× as long as wide, submedian grooves with outer margin indistinct, slightly curved and diverging towards posterior part, median part with weak reticulation; dorsellum with a weak median carina; propodeum with narrow median carina, with strong irregular carinae and strong reticulation, callus with three (remaining) setae.

Redescription (female lectotype). Length 1.8mm.

Scape yellowish-brown, pedicel and flagellum brown. Head with frons golden-green, clypeus brown, scrobes black; vertex golden-green. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeal area smooth, scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notaulus rugose; midlobe with a median groove in posterior half, and with 12 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, slightly curved and diverging towards posterior part; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, with a weak median carina. Propodeum with a narrow median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with three (remaining) setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole and gaster missing.

Relative measurements: head length, dorsal view 30; head length, frontal view 58; POL 14; OOL 6.5; lateral ocellus diameter 7; head width 66; mouth width 19; malar space 17; eye length 32; scape length 24; scape width 5.5; pedicel+flagellum length 67; pedicel length 10; pedicel width, dorsal view 6; F1 length 12; F1 width 6.5; F2 length 11.5; F2 width 6.5; F3 length 10.5; F3 width 7; clava length 21; clava width 7.5; C3 length 6; spicule length 1.5; mesosoma length 86; mesosoma width 61; midlobe of mesoscutum length 29; mesoscutellum length 36; mesoscutellum width 28.5; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum (measured medially) 6.5; dorsellum length 6; propodeum length 15; costal cell length 39; costal cell width (measured at widest part) 4; marginal vein length 37; stigmal vein length 14.5; measurements on gaster not possible as gaster is missing.

Male. Unknown.

Hosts. Unknown.

Distribution. Nicaragua.

Material examined.

Lectotype female in NHMUK.

Remarks. The type specimen lacks petiole and gaster, and possibly with some setae on propodeal callus broken off.

Galeopsomyia scadius (Walker)

(Figs 666, 667)

Tetrastichus Scadius Walker 1843:116-117. Lectotype ♀ (primary type no. 5.1428, NHMUK 010838710) designated by LaSalle & Schauff (1992:30), examined. Chile.

Galeopsomyia scadius (Walker), LaSalle & Schauff (1992:30).

Diagnosis (female). Antennal clava (Fig. 667) strong and solid, flagellum short (flagellum+pedicel 0.9× as long as width of mesoscutum), scape dark brown (Fig. 667); genal carina present and strong; mesoscutellum (Fig. 666) with median part with weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves ±distinct, slightly curved and diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 666) with strong reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 666) 2.1× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Redescription (female lectotype). Length 1.6mm.

Antenna dark brown. Head with frons golden-green, clypeus dark brown; vertex golden-green. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster black with golden tinges; gonoplac black.

Antennal clava strong and solid. Frons with strong reticulation, clypeal area smooth; scrobes with weak reticulation; with a strong genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric, elongate in posterior half of midlobe; midlobe with a complete median groove, with 12 scattered adnotaular setae. Mesoscutellum with median part with weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves ±distinct, slightly curved and diverging slightly towards posterior part; with five (visible) setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands towards both posterior and anterior parts; with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with very weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 46; POL 15; OOL 7.5; lateral ocellus diameter 3.5; head width 57; mouth width 17; malar space 18; eye length 23.5; scape length 20; scape width 4; pedicel+flagellum length 51; pedicel length 8; pedicel width, dorsal view 5; F1 length 7.5; F1 width 5.5; F2 length 7.5; F2 width 5.5; F3 length 7.5; F3 width 6.5; clava length 16.5; clava width 8.5; C3 length 5; spicule length 1; mesosoma length 74; mesosoma width 56; midlobe of mesoscutum length 29; mesoscutellum length 31; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum (measured medially) 6.5; dorsellum length 3; propodeum length 12.5; costal cell length 39; costal cell width (measured at widest part) 3.2; marginal vein length 34; stigmal vein length 13; gaster length 105; gaster width 51;

Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 18; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Chile (Walker 1842).

Material examined.

Lectotype female in NHMUK.

***Galeopsomyia sulcata* (Howard)**

(Figs 668, 669)

Tetrastichus sulcatus Howard 1897:172-173. Holotype ♀ (primary type no. 5.1415, NHMUK 013458203), examined. West Indies (Grenada).

Galeopsomyia sulcata (Howard), LaSalle & Schauff (1992:31).

Diagnosis (female). Antennal clava solid (Fig. 669); genal carina present and strong; mesoscutellum (Fig. 668) with strong reticulation and elongate meshes, submedian grooves strong and diverging slightly towards posterior part, with a complete median groove; dorsellum with median carina; propodeum (Fig. 668) with strong carinae and strong reticulation, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 668) 2.1× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Redescription. Female holotype: length of body 1.7mm.

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head with frons metallic bluish-green with scrobes black, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with coxae dark yellowish-brown to pale brown, with metallic tinges; trochanters yellowish-brown; femora pale brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-white, T4 brown. Petiole dark brown. Gaster with Gt₁ metallic bluish-green, Gt₂₋₇ dark brown with metallic tinges; gonoplac black.

Antenna with a solid clava. Face below level of toruli with weak reticulation, clypeal area smooth, frons rugose, antennal scrobes with weak reticulation; with a strong genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with a weak median groove in posterior half; with six scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes; submedian grooves strong and diverging slightly towards posterior part; with a complete median groove; with about six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two (visible) setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 44; POL 10; OOL 6; lateral ocellus diameter 5.5; head width 53; mouth width 15; malar space 12; eye length 26; scape length 18; scape width 4.2; pedicel+flagellum length 46; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 8; F1 width 5; F2 length 7.5; F2 width 5; F3 length 8; F3 width 5.5; clava length 16; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length 61; mesosoma width 47; midlobe of mesoscutum length 23; mesoscutellum length 26; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum (measured medially) 4.5; dorsellum length 4.5; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 2.2; marginal vein length 31; stigmal vein length 10; gaster length 87; gaster width 41; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 11; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 12; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Grenada) (Howard 1897).

Material examined.

Holotype female in NHMUK.

Remarks. The type specimen appears slightly bleached by light.

Galeopsomyia transcarinata (Gahan)

(Figs 680, 681)

Galeopsomopsis transcarinatus Gahan 1919:168. Holotype ♀ (USNM type no. 22303), examined through images. U.S.A. (Arizona).

Galeopsomyia transcarinata (Gahan), (LaSalle 1994:176).

Diagnosis (female). Antennal clava solid (Fig. 681); lateral ocelli close to eyes, POL 1.7× OOL; mesoscutellum (Fig. 680) with median part with very weak reticulation and shiny, lateral parts with strong reticulation and with white setae scattered all over parts, submedian grooves indistinct; dorsellum with median carina; propodeal callus with ten setae; medio-basal Gt_1 with carinae laterally, absent dorsally (Fig. 680).

Female paratype: length of body 1.9mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters pale brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with $Gt_{1,6,7}$ metallic bluish-green, $Gt_{2,5}$ golden-purple; gonoplac yellowish-brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a short and weak genal carina close to mouth opening. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove, and with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part, outer margin indistinct in anterior half; with ten setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that is gradually expanding towards posterior part; with strong irregular carinae; callus with ten setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with dorsal part rounded, with carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 35; POL 9.5; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 14; malar space 10.5; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 46; pedicel length 6; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4; F2 length 7.5; F2 width 4.5; F3 length 7; F3 width 4.5; clava length 16; clava width 5.5; C3 length 5.5; spicule length 1; mesosoma length 56; mesosoma width 41; midlobe of mesoscutum length 24; mesoscutellum length 21.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 6; costal cell length 30; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 11; gaster length 81; gaster width 38; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from galls induced by the alfalfa gall midge, *Asphondylia websteri* Felt (Diptera: Cecidomyiidae) (Gahan 1919). The host plant in Arizona was undoubtedly alfalfa (Fabaceae: *Medicago sativa*), although the flower-fruit galls produced by *A. websteri* have subsequently been reported from other Fabaceae and even a species of Simmondsiaceae (Gagné & Wood 1988). The latter authors report *Galeopsomyia* sp. from *A. websteri* galls on *Parkinsonia aculeata* (Fabaceae).

Distribution. U.S.A. (Arizona) (Gahan 1919).

Material examined.

Holotype female examined through images; paratype female in NHMUK.

New species

Galeopsomyia abra Hansson sp.nov.

(Figs 242, 243, 732)

Diagnosis (female). Antenna (Fig. 732) with scape yellowish-white, pedicel and flagellum yellowish-brown, clava solid; genal carina present; mesoscutellum (Fig. 242) with submedian grooves slightly diverging towards posterior part, median part with weak reticulation, with median groove indicated; propodeum (Fig. 242) with strong reticulation; gaster (Fig. 242) ovate, 1.5× as long as wide, tergites with strong reticulation; body black with metallic purple tinges (Figs 242, 243).

Female holotype: length of body 1.3mm (paratype 1.6mm).

Scape yellowish-white, pedicel and flagellum yellowish-brown. Head with frons black with metallic bluish tinges, clypeus dark brown; vertex black with metallic bluish tinges. Mesosoma black with metallic purplish tinges. Legs with coxae dark brown, hind coxa with posterior part black; trochanters and femora yellowish-brown; tibiae and tarsi yellowish-white, T4 yellowish-brown. Petiole black. Gaster black, Gt₁ with weak metallic blue tinges.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, rugose inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with five adnotaular setae in one row. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging slightly towards posterior part, with a weak but complete median groove; with three setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a narrow median carina; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 28; POL 7.5; OOL 4.5; lateral ocellus diameter 3; head width 38; mouth width 11; malar space 9.5; eye length 17; scape length 15; scape width 3; pedicel+flagellum length 38; pedicel length 5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 6; F2 width 3.2; F3 length 5.5; F3 width 3.5; clava length 14; clava width 4; C3 length 4.5; spicule length 1; mesosoma length 42; mesosoma width 32; midlobe of mesoscutum length 14; mesoscutellum length 16; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 7; costal cell length 23; costal cell width (measured at widest part) 1.5; marginal vein length 20; stigmal vein length 7; gaster length 45; gaster width 30; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 8; Gt₇ length (measured medially) 3; Gt₇ width (measured at base) 9; longest cercal seta length 11; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

***Galeopsomyia abraxas* Hansson sp.nov.**

(Figs 244, 245, 1053)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 1053); mesoscutum (Fig. 244) with strong reticulation with elongate meshes and a median groove in posterior half; mesoscutellum (Fig. 244) with submedian grooves distinct only in posterior one-quarter to distinct throughout; dorsellum without median carina; propodeum (Fig. 244) with strong reticulation and irregular carinae, callus with five setae; gaster (Fig. 244) 2.2× as long as wide, medio-basal Gt₁ with a sharp transverse edge dorsally, tergites with strong small-meshed reticulation.

Female holotype: length of body 2.7mm (paratypes 2.4–2.7mm).

Scape yellowish-brown, pedicel dark brown, flagellum dark brown to black. Head with frons metallic bluish-green, clypeus dark brown; vertex metallic blue. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters yellowish-brown; fore and mid femora yellowish-brown, hind femur with basal half dark brown and apical half yellowish-brown; tibiae and tarsi yellowish-white, T4 pale brown. Petiole black. Gaster metallic bluish-green, Gt₂₋₅ metallic purple dorsally, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex rugose outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin \pm carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, and with 14 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, and with seven scattered setae; submedian grooves distinct, slightly curved and \pm parallel; median groove indicated but weak. Dorsellum with strong wrinkled sculpture, without median carina. Propodeum with a strong median carina that is expanding in posterior part; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with eight setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 43; POL 11; OOL 6; lateral ocellus diameter 6; head width 57; mouth width 15; malar space 15; eye length 25; scape length 21; scape width 5; pedicel+flagellum length 68; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 10; F1 width 6; F2 length 12; F2 width 5.5; F3 length 11; F3 width 5.5; clava length 25; clava width 6; C3 length 8.5; spicule length 2.5; mesosoma length 77; mesosoma width 54; midlobe of mesoscutum length 28; mesoscutellum length 29; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 5; propodeum length 11; costal cell length 42; costal cell width (measured at widest part) 3.5; marginal vein length 44; stigmal vein length 12; gaster length 115; gaster width 53; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 15; longest cercal seta length broken; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes 9♀ with same label data as holotype (CNC, MZLU, MZUCR, NHMUK).

***Galeopsomyia actis* Hansson sp.nov.**

(Figs 246, 247, 733)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 733); genal carina present and strong; mesoscutellum (Fig. 246) with strong reticulation with elongate meshes, submedian grooves \pm distinct but with outer margin weak, slightly curved and diverging towards posterior part, with a complete and strong median groove; dorsellum without median carina; propodeum (Fig. 246) with strong reticulation, callus with four setae; gaster (Fig. 246) 2.5 \times as long as wide with apex pointed, medio-basal Gt₁ with a sharp transverse edge dorsally and with longitudinal carinae behind transverse edge in lateral parts, tergites with weak reticulation.

Female holotype: length of body 2.3mm (paratype 2.4mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons golden-green with scrobes black with metallic tinges and clypeus dark brown; vertex golden-green. Mesoscutum with sidelobes and parts of midlobe close to notauli golden-green, median part of midlobe black with metallic tinges. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa golden-green; trochanters yellowish-brown; femora dark brown with apical part yellowish-white; tibiae and tarsi yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green with hind margin metallic purple, Gt₂₋₄ metallic purple, Gt₅₋₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, scrobes with weak reticulation; with a strong genal carina that reaches almost to level of lower margin of eyes. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated but indistinct in posterior half, with about 10 adnotaular setae (difficult to see as they are dark) \pm in two rows. Mesoscutellum with strong reticulation with elongate meshes; submedian grooves \pm distinct but with outer margin weak, grooves slightly curved and diverging towards posterior part; with a complete and strong median groove; with six setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with four setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally and with longitudinal carinae behind transverse edge in lateral parts; tergites with weak reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 39; POL 10; OOL 6; lateral ocellus diameter 4; head width 52; mouth width 14.5; malar space 15; eye length 22.5; scape length 17.5; scape width 4; pedicel+flagellum length 55; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 9; F2 width 5; F3 length 8.5; F3 width 5; clava length 20.5; clava width 5.5; C3 length 5.5; spicule length 1.5; mesosoma length 67; mesosoma width 46; midlobe of mesoscutum length 29; mesoscutellum length 25; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width

in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 10; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 10; gaster length 103; gaster width 41; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 11; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratype: 1♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (NHMUK).

***Galeopsomyia adobia* Hansson sp.nov.**

(Figs 248, 249, 734)

Diagnosis (female). Antenna with a solid clava (Fig. 734); mesoscutellum (Fig. 248) with submedian grooves diverging towards posterior part, median part with strong reticulation, and with a complete median groove; dorsellum with median carina; propodeum (Fig. 248) with strong carinae and strong reticulation, callus with five setae; petiole very short, just a narrow band; gaster (Fig. 248) 1.9× as long as wide.

Female holotype: length of body 2.0mm (paratype 2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green with scrobes black with golden tinges, clypeus black; vertex golden-green with blue tinges. Thoracic dorsum metallic greenish-blue with golden tinges. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa metallic greenish-blue; trochanters dark brown; femora dark brown with apex yellowish-brown, hind femur with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-white, T4 brown. Petiole black. Gaster with Gt₁ metallic greenish-blue with posterior margin black, Gt₂₋₅ black with metallic blue and purple tinges, Gt₆ metallic greenish-blue, Gt₇ black; gonoplac black.

Antenna with a solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; with a very weak median groove; with 13 scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes; submedian grooves strong and diverging towards posterior part; with a complete median groove; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak

reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 34; POL 9.5; OOL 4.5; lateral ocellus diameter 4; head width 45; mouth width 15; malar space 12; eye length 21.5; scape length 14; scape width 4; pedicel+flagellum length 42; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 6.5; F2 width 5; F3 length 6; F3 width 5; clava length 15; clava width 6; C3 length 4.5; spicule length 1; mesosoma length 55; mesosoma width 42; midlobe of mesoscutum length 22; mesoscutellum length 22.5; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2.5; propodeum length 7; costal cell length 29; costal cell width (measured at widest part) 2.5; marginal vein length 20; stigmal vein length 9.5; gaster length 85; gaster width 44; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 15; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 11-21.ii.2005, C. Hansson (MZLU). Paratypes (14♀, CNC, MZLU, MZUCR, MZUCR): 1♀ **COSTA RICA, Puntarenas**, Parque Internacional La Amistad, Estación Altamira, Sendero a Casa Coca, LS 332800_574250, 1900m, 12.xii.2001-12.i.2002, malaise trap, D. Rubí; 1♀ **COSTA RICA, Guanacaste**, V. Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 4.vii.2003, J.D. Gutiérrez, B. Hernández, J. Azofeifa; 1♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, H-4-C, 18.i-8.ii.1986, D.H. Janzen & I.D. Gauld; 1♀ from same locality as previous but collected 26.vii-14.viii.1986; 2♀ **COSTA RICA, Guanacaste**, Refugio Nacional de Vida Silvestre (RVS) Bosque Diría, LN 239083_358610, 700m, 14-15.ii.2011, J.S. Noyes; 1♀ **COSTA RICA, Guanacaste**, Cañas, Río Chiquito, LN 292500_417000, 410m, 25.vii.2003, J. Azofeifa; 2♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, iii.2002, J.S. Noyes & J.A. Azofeifa; following from same locality as previous but collected 16.ii.2008 (2♀); 13.ii.2010 (1♀); 2♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 10°26'N, 84°01'W, 75m, 27-28.ii.2003, J.S. Noyes.

***Galeopsomyia agonis* Hansson sp.nov.**

(Figs 250, 251, 735)

Diagnosis (female). Antenna short, flagellum+pedicel 1.1× as long as width of mesoscutum, with a solid clava (Fig. 735); genal carina present; mesoscutellum (Fig. 250) with strong reticulation, meshes elongate, with a ±complete median groove that is indicated but weak, submedian grooves distinct and slightly curved; dorsellum with median carina; propodeum (Fig. 250) with strong irregular carinae and strong reticulation, callus with five setae; gaster

(Fig. 250) short, 1.6× as long as wide, tergites with strong reticulation, gonoplac short with pointed tip (Fig. 251).

Female holotype: length of body 1.3mm.

Scape yellowish-brown, pedicel and flagellum brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Mesosoma metallic bluish-green. Legs with fore coxa black with metallic tinges, mid coxa dark brown, hind coxa metallic bluish-green; trochanters dark brown; fore and mid femora dark brown, hind femur black with metallic tinges; fore and mid tibiae yellowish-brown, hind tibia pale brown; tarsi yellowish-brown, T4 pale brown. Gaster with Gt₁ metallic bluish-green with posterior margin metallic purple, Gt_{2,5} metallic purple with lateral parts metallic bluish-green, Gt₆ metallic bluish-green, Gt₇ black.

Antenna with solid clava. Face below level of antennal toruli and on scrobes with weak reticulation, clypeus smooth, frons with strong reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe with a weak median groove in posterior half, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a ±complete median groove that is indicated but weak; submedian grooves distinct and slightly curved; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a narrow median carina; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole not visible. Gaster short ovate; tergites with strong reticulation; gonoplac short with pointed tip.

Relative measurements: head length, dorsal view 16; head length, frontal view 26; POL 7; OOL 4; lateral ocellus diameter 3; head width 34; mouth width 11; malar space 8; eye length 16; scape length 11; scape width 3; pedicel+flagellum length 31; pedicel length 4.5; pedicel width, dorsal view 2.5; F1 length 4; F1 width 3; F2 length 4; F2 width 3; F3 length 4; F3 width 3; clava length 11; clava width 4; C3 length 4.5; spicule length 1.5; mesosoma length 42; mesosoma width 29; midlobe of mesoscutum length 18; mesoscutellum length 16; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2; propodeum length 5; costal cell length 18; costal cell width (measured at widest part) 1.5; marginal vein length 17; stigmal vein length 5.5; gaster length 51; gaster width 33; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 9.5; Gt₇ length (measured medially) 3; Gt₇ width (measured at base) 7.5; longest cercal seta length 11; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Estación Los Patos, 08°33'N 83°30'W, 200m, ii.2000, J.S. Noyes & J. A. Azofeifa (NHMUK).

***Galeopsomyia ajax* Hansson sp.nov.**

(Figs 252, 253, 918, 1056)

Diagnosis (female). Antennal clava solid and asymmetric (Fig. 1056), scape dark brown, flagellum relatively slender, flagellum+pedicel 1.7× as long as width of mesoscutum; midlobe of mesoscutum with weak reticulation (Fig. 252); mesoscutellum (Fig. 918) with median part 3.6× as long as wide, without median groove, submedian grooves with outer margin absent, curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 252) with strong irregular carinae and strong reticulation; fore and mid coxae dark brown, hind coxa weak metallic blue (Fig. 253); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 252) 2.2× as long as wide, tergites with weak reticulation; mesosoma metallic blue (Figs 252, 253).

Female holotype: length of body 1.6mm.

Antenna dark brown. Head black with metallic blue tinges, clypeus dark brown. Mesoscutum black with metallic bluish-green tinges; mesoscutellum metallic bluish-green; propodeum black with weak metallic blue tinges. Legs with coxae dark brown with metallic tinges; trochanters yellowish-brown; femora brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ with weak purplish tinges, Gt_{2,5} dark brown with metallic tinges, Gt₆ black with metallic bluish tinges, Gt₇ black; gonoplac black.

Antenna with solid clava, asymmetric. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with weak reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, and with six scattered adnotaular setae. Mesoscutellum with submedian grooves with outer margin absent, median part with very weak reticulation, lateral parts with strong reticulation, with six scattered setae. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; tergites with weak reticulation.

Relative measurements: head length, dorsal view 17; head length, frontal view 30; POL 8; OOL 5.5; lateral ocellus diameter 3; head width 39; mouth width 10; malar space 11; eye length 16; scape length 14.5; scape width 3; pedicel+flagellum length 51; pedicel length 5; pedicel width, dorsal view 3.2; F1 length 6; F1 width 3.3; F2 length 8; F2 width 3.8; F3 length 8.5; F3 width 4; clava length 16; clava width 4; C3 length 5.5; spicule length 2; mesosoma length 44; mesosoma width 31; midlobe of mesoscutum length 17; mesoscutellum length 18; mesoscutellum width 15; median part of mesoscutellum width (measured medially) 5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length

2.5; propodeum length 8.5; costal cell length 23; costal cell width (measured at widest part) 2; marginal vein length 28; stigmal vein length 8; gaster length 62; gaster width 28; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 10.5; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 8; longest cercal seta length 10; shortest cercal seta length 3.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & parataxonomos (MZLU).

***Galeopsomyia alambra* Hansson sp.nov.**

(Figs 254, 255, 742)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 742); mesoscutum and mesoscutellum with strong reticulation (Fig. 254); dorsellum with median carina; propodeum (Fig. 254) with strong reticulation; gaster (Fig. 254) 1.9× as long as wide, tergites with very strong reticulation, dorsal part ±flattened.

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Mesoscutum with sidelobes black, midlobe golden-green; mesoscutellum golden-green; propodeum black. Legs with fore and mid coxae dark brown, hind coxa black; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin black, remaining tergites black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with strong reticulation and some wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, and with ten scattered adnotaular setae. Mesoscutellum with strong reticulation on median part, lateral parts with strong reticulation and with eight scattered setae, meshes elongate; submedian grooves ±distinct, straight and ±parallel. Dorsellum with strong sculpture, with median carina. Propodeum with a narrow and strong median carina; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate-elongate; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 40; POL 10; OOL 6.5; lateral ocellus diameter 4.2; head width 48; mouth width 19; malar space 13; eye length 21; scape length 18; scape width 4.5; pedicel+flagellum length 49; pedicel length 7; pedicel width, dorsal view 4; F1 length 8; F1 width 4; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4.5; clava length 16; clava width 5; C3 length 5; spicule length 1; mesosoma length 66; mesosoma width 47; midlobe of mesoscutum length 24; mesoscutellum length 26; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9.5; costal cell length 42; costal cell width (measured at widest part) 3; marginal vein length 36; stigmal vein length 11; gaster length 86; gaster width 45; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 10; longest cercal seta length 13; shortest cercal seta length 6.

Male.Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia alanis* Hansson sp.nov.**

(Figs 256, 257, 736)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 736); genal carina present; mesoscutellum (Fig. 256) with weak reticulation on median part and strong reticulation on lateral parts, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part, with a strong and complete median groove; dorsellum without median carina; propodeum (Fig. 256) medially with strong longitudinal carinae, laterally with strong reticulation, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 256) 2.8× as long as wide with apex pointed, medio-basal Gt₁ with longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 3.2mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green with scrobes black and clypeus dark brown; vertex metallic bluish-green. Mesoscutum with sidelobes golden-green, midlobe black with golden-green tinges; mesoscutellum with median part metallic bluish-green, lateral parts golden-green; propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters brown; femora with basal two-thirds dark brown, apical one-third yellowish-brown; tibiae and tarsi yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,5} golden-purple, Gt₆₋₇ black with metallic tinges; gonoplac black.

Antenna with constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeal area smooth, frons rugose and with strong reticulation in upper part, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part; with a sulcus from eye to lateral ocellus and from there to median ocellus.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, parts close to notauli \pm rugose; midlobe with a weak median groove in posterior one-third, with 15 adnotaular setae in two rows on rugose parts. Mesoscutellum with weak reticulation on median part and strong reticulation on lateral parts, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with a strong and complete median groove; with six setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina that expands in posterior part; median part with strong irregular carinae, lateral parts with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with four longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26.5; head length, frontal view 51; POL 12.5; OOL 7.5; lateral ocellus diameter 6; head width 62.5; mouth width 20; malar space 19; eye length 27; scape length 22; scape width 5; pedicel+flagellum length 72; pedicel length 8; pedicel width, dorsal view 5; F1 length 11; F1 width 6; F2 length 12; F2 width 6; F3 length 12; F3 width 6.5; clava length 27; clava width 7; C3 length 8.5; spicule length 2.5; mesosoma length 89; mesosoma width 63; midlobe of mesoscutum length 38; mesoscutellum length 36; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4; propodeum length 14; costal cell length 46; costal cell width (measured at widest part) 3.5; marginal vein length 49; stigmal vein length 15; gaster length 148; gaster width 52; Gt₂ length (measured medially) 14; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 24; Gt₇ width (measured at base) 16.5; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, San José, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, vi.1995, P. Hanson (NHMUK).

***Galeopsomyia alegra* Hansson sp.nov.**

(Figs 258, 259, 737)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 737); mesoscutellum (Fig. 258) with outer margin of submedian grooves \pm indistinct, grooves slightly

curved and diverging towards posterior part, median part with weak reticulation; propodeum (Fig. 258) with strong reticulation and irregular carinae; petiole transverse, dorsal part with strong sculpture; gaster (Fig. 258) $2.1\times$ as long as wide, tergites with strong reticulation, medio-basal Gt_1 with weak longitudinal carinae laterally but missing dorsally.

Female holotype: length of body 2.3mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with bluish-purple tinges. Thoracic dorsum golden-green. Legs with fore and hind coxae black with metallic bluish-green tinges, mid coxa dark brown; trochanters pale brown; femora with basal two-thirds dark brown and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-6} black with metallic blue and purple tinges, Gt_7 black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak but complete median groove, with 11 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin \pm indistinct, slightly curved and diverging towards posterior part; with 11 setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands posteriorly and anteriorly; medially with strong irregular carinae and laterally with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 10; OOL 6; lateral ocellus diameter 5; head width 51; mouth width 12; malar space 12; eye length 22; scape length 17; scape width 4.2; pedicel+flagellum length 55; pedicel length 7; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 8.5; F2 width 5; F3 length 9; F3 width 5; clava length 20; clava width 5.5; C3 length 7; spicule length 2; mesosoma length 65; mesosoma width 49; midlobe of mesoscutum length 26; mesoscutellum length 24.5; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3.5; propodeum length 9; costal cell length 46; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 12; gaster length 95; gaster width 46; Gt_2 length (measured medially) 12; Gt_4 length (measured medially) 17; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 15; longest cercal seta length 12; shortest cercal seta length 5.

Male.Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Las Pailas, LN 306004_389145, 930m, 27.i-11.ii.2001, C. Moraga, P.N. Thomas (NHMUK).

***Galeopsomyia aliante* Hansson sp.nov.**

(Figs 260, 261, 738)

Diagnosis (female). Antenna with a solid clava (Fig. 738); genal carina present; mesoscutellum (Fig. 260) with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with a weak median carina; propodeum (Fig. 260) with a mix of strong irregular carinae and strong reticulation, callus with four setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 260) 2.1× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons black with metallic greenish tinges, clypeus dark brown, scrobes black; vertex black with metallic tinges. Mesoscutum metallic purple, mesoscutellum black with metallic tinges, propodeum black with metallic green tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a solid clava. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, with genal carina, frons with strong reticulation. Vertex with transverse carinae.

Mesoscutum with strong reticulation, meshes elongate on midlobe, isodiametric on side-lobes; midlobe with a median groove in posterior two-thirds, with five scattered adnotaular setae. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with five scattered setae on lateral parts. Dorsellum with weak sculpture, with a weak median carina. Propodeum with a strong median carina that expands in posterior part; with a mix of strong irregular carinae and reticulation; callus with four setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed below and towards base of wing; costal setal row unbroken.

Petiole transverse, dorsal surface with strong sculpture. Gaster short ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 29; POL 9.5; OOL 5.5; lateral ocellus diameter 3.5; head width 41.5; mouth width 14; malar space 9; eye length 17; scape length 14.5; scape width 3.5; pedicel+flagellum length 43; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 6; F2 width 4; F3 length 6.5; F3 width 4; clava length 18; clava width 4.5; C3 length 5; spicule length 2; mesosoma length 51; mesosoma width 36; midlobe of mesoscutum length 18; mesoscutellum length 19;

mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2.5; propodeum length 8; costal cell length 27.5; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 9; gaster length 66; gaster width 31; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 8.5; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK).

Galeopsomyia allisonbrownae Hansson sp.nov.

(Figs 262, 263, 1058)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 1058); genal carina present; mesoscutellum (Fig. 262) with submedian grooves straight and ±parallel, median part with very weak reticulation; dorsellum without median carina; propodeum (Fig. 262) with strong carinae and strong reticulation, callus with two setae; fore and mid coxae pale brown, hind coxa dark brown to black (Fig. 263); petiole transverse with strong sculpture on dorsal part, with anterolateral corners as sharp points (Fig. 262); gaster (Fig. 262) ovate, 1.4× as long as wide, tergites with strong reticulation, gonoplac short with tip blunt. Small (1.6mm), predominantly dark brown to black species (Figs 262, 263).

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head dark brown to black. Mesoscutum, mesoscutellum and propodeum dark brown to black. Legs with fore and mid coxae pale brown, hind coxa dark brown to black; trochanters pale brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown with T4 pale brown. Petiole black. Gaster dark brown.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a sharp carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with ten scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and strong reticulation on lateral parts, meshes elongate; with an indistinct median groove in anterior two-thirds; submedian grooves distinct in posterior two-thirds, straight and ±parallel; with five setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a narrow median

carina that expands in very posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part, with anterolateral corners as sharp points. Gaster ovate; tergites with strong reticulation; gonoplac short with tip blunt.

Relative measurements: head length, dorsal view 19; head length, frontal view 34; POL 8.5; OOL 6; lateral ocellus diameter 4; head width 45; mouth width nm; malar space 11.5; eye length 19; scape length 17; scape width 4; pedicel+flagellum length 50; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 8; F1 width 4; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4; clava length 18; clava width 4.5; C3 length 7; spicule length 2.5; mesosoma length 57; mesosoma width 39; midlobe of mesoscutum length 18; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 3; costal cell length 25; costal cell width (measured at widest part) 2.5; marginal vein length 25; stigmal vein length 10; gaster length 55; gaster width 38; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 13.5; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-6, 10°76'N, 85°33'W, 853m, 18-25.i.2018, D. Janzen, W. Hallwachs (barcoded specimen: BIOUG58476-A04) (MZLU).

Etymology. Named in honour of Allison Brown in recognition of her years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia alloris* Hansson sp.nov.**

(Figs 264, 265, 1059)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1059); genal carina present; mesoscutellum (Fig. 264) with submedian grooves distinct, diverging slightly towards posterior part, median part with weak reticulation and with a weak ±complete median groove, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 264) with strong reticulation and strong carinae, callus with four setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 264) short ovate, 1.6× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation, apex of gonoplac ±blunt (Fig. 265).

Female holotype: length of body 1.4mm (paratype 1.4mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with metallic blue tinges, clypeus dark brown. Mesosoma black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters yellowish-brown; fore femur pale brown with apex yellowish-brown, mid and hind femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt_1 black with metallic blue tinges, G_{2-5} metallic purple, G_{6-7} black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli and scrobes with weak reticulation, clypeus smooth, frons with strong reticulation; with genal carina. Vertex with strong reticulation, inside ocellar triangle also with transverse carinae.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with an indistinct median groove in posterior half, with five scattered adnotaular setae. Mesoscutellum with submedian grooves distinct, diverging slightly towards posterior part, median part with weak reticulation and with a weak \pm complete median groove, lateral parts with strong reticulation and with nine scattered setae, meshes elongate. Dorsellum with weak sculpture, with median carina. Propodeum with a narrow median carina that expands in posterior part; with strong carinae and strong reticulation; callus with four setae. Fore and mid coxae with weak reticulation and shiny, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster short ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation; apex of gonoplac \pm blunt.

Relative measurements: head length, dorsal view 17; head length, frontal view 28; POL 7.5; OOL 6; lateral ocellus diameter 3.5; head width 40; mouth width 13; malar space 9; eye length 18; scape length 14; scape width 3.2; pedicel+flagellum length 44; pedicel length 5; pedicel width, dorsal view 3.5; F1 length 6.5; F1 width 4; F2 length 7; F2 width 4; F3 length 7; F3 width 4; clava length 16; clava width 4.5; C3 length 5.5; spicule length 1.5; mesosoma length 45; mesosoma width 33; midlobe of mesoscutum length 15.5; mesoscutellum length 17; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 9; costal cell length 21; costal cell width (measured at widest part) 2; marginal vein length 20; stigmal vein length 7; gaster length 53; gaster width 33; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 12; Gt_7 length (measured medially) 4; Gt_7 width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, Estación Biológica La Selva, 10°26'N, 84°01'W, 100-200m, 30-31.iii.2002, swept, J.A. Azofeifa (MZLU). Paratype 1♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N 85°03'W, 305m, 23-24.ii.2013, J.S. Noyes (NHMUK).

***Galeopsomyia altura* Hansson sp.nov.**

(Figs 266, 267, 739)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 739); with genal carina; mesoscutellum (Fig. 266) with submedian grooves distinct and parallel, median part with weak reticulation hence shiny, lateral parts with strong reticulation; mid coxa yellowish-brown (Fig. 267); propodeum (Fig. 266) with strong reticulation and a few irregular carinae, callus with five setae; gaster (Fig. 266) 2.2× as long as wide, tergites with strong reticulation.

Female holotype: length of body 2.1mm (paratype 2.4mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black with metallic tinges. Mesoscutum with sidelobes black and midlobe metallic bluish-green, mesoscutellum and propodeum golden-green with blue tinges. Legs with fore coxa black with posterior part dark brown, mid coxa yellowish-brown, hind coxa yellowish-brown with posterior-basal half black with metallic tinges; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁₋₆ metallic bluish-green, Gt₂₋₅ also with dorsal part with metallic purple tinges, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin ±carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated in posterior half, with eight adnotaular setae in two rows. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with five setae scattered over lateral parts. Dorsellum with weak sculpture, with an indistinct median carina. Propodeum with a strong and wide median carina that expands posteriorly; with a few strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with two short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 9.5; OOL 7; lateral ocellus diameter 4.2; head width 51; mouth width 13; malar space 12; eye length 21; scape length 20; scape width 4.5; pedicel+flagellum length 58; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 9; F2 width 5; F3 length 9.5; F3 width 5; clava length 21; clava width 5.5; C3 length 7.5; spicule length 3; mesosoma length 63; mesosoma width 45; midlobe of mesoscutum length 24; mesoscutellum length 24.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 11; costal cell length 36; costal cell width (measured at widest part) 2; marginal vein length 39; stigmal vein length 9; gaster length 89; gaster width 40; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 14.5; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 12; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratype: 1♀ with same label data as holotype (NHMUK).

Etymology. Name referring to collecting locality, Las Alturas.

***Galeopsomyia ambigua* Hansson sp.nov.**

(Figs 268, 269, 747)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 747); mesoscutum (Fig. 268) with strong reticulation, meshes elongate, and with a weak median groove in posterior one-third; mesoscutellum (Fig. 268) with submedian grooves distinct, curved and diverging towards posterior part, with a \pm complete median groove; dorsellum with median carina; propodeum (Fig. 268) with strong irregular carinae medially, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 268) 2.6 \times as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.3mm.

Scape dark brown with base yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex black with metallic green tinges. Mesoscutum dark brown with metallic blue and green tinges, mesoscutellum and propodeum golden-green. Legs with fore and mid coxae dark brown, hind coxa dark brown with metallic tinges; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₄ golden-purple, Gt₅₋₆ golden-green, Gt₇ dark brown with golden-green tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a weak genal carina. Vertex with strong reticulation outside ocellar triangle, rugose inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior one-third, with nine scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and with a weak but \pm complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, curved and diverging towards posterior part; with four setae scattered over lateral parts. Dorsellum with weak reticulation, with median carina. Propodeum with a few strong irregular carinae on median part, laterally with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; POL 10; OOL 6; lateral ocellus diameter 3.5; head width 43; mouth width 16; malar space 12; eye length 19; scape length 16.5; scape width 4.5; pedicel+flagellum length 53; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 6.5; F1 width 4.5; F2 length 8; F2 width 4.5; F3 length 8; F3 width 4.5; clava length 19.5; clava width 5; C3 length 6.5; spicule length 1.5; mesosoma length 59; mesosoma width 42; midlobe of mesoscutum length 25; mesoscutellum length 22; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 10; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 32; stigmal vein length 10; gaster length 88; gaster width 34; Gt_2 length (measured medially) 12.5; Gt_4 length (measured medially) 12.5; Gt_7 length (measured medially) 15; Gt_7 width (measured at base) 12; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from a stem gall (stem swelling) induced by *Procecidochares* sp. (Diptera: Tephritidae) on *Ageratina* sp. (Asteraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Gerardo de Dota, 9°34'N, 83°43'W, 6.viii.1995, A. Norrbom, ex *Procecidochares* on *Ageratina* (NHMUK).

***Galeopsomyia amphis* Hansson sp.nov.**

(Figs 270, 271, 913)

Diagnosis (female). Antennal clava solid (Fig. 271); genal carina present and strong; mesoscutellum (Fig. 270) with strong rugosity, submedian grooves with outer margin indistinct; dorsellum with median carina; propodeum (Fig. 270) with strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 270) 2.4× as long as wide, medio-basal Gt_1 with a transverse sharp edge dorsally, tergites with strong reticulation.

Female holotype: length of body 2.1mm (paratype 1.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex black with metallic bluish-green tinges. Mesoscutum and mesoscutellum metallic bluish-purple, propodeum golden-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora black with metallic bluish-green tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_2 metallic bluish-purple in anterior half and golden-purple in posterior half, Gt_{3-5} golden-purple, Gt_6 black with metallic tinges, Gt_7 black; gonoplac black.

Antennal clava solid. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric, midlobe with elongate meshes postero-medially and with a median groove in posterior half, with eight scattered adnotaular setae. Mesoscutellum rugose and with a median groove in anterior two-thirds; submedian grooves with outer margin indistinct, slightly curved, almost parallel; with five setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a transverse sharp edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 9; OOL 5; lateral ocellus diameter 4.5; head width 50; mouth width nm; malar space 12.5; eye length 22; scape length 16; scape width 4; pedicel+flagellum length 51; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7.5; F1 width 4.5; F2 length 7.5; F2 width 4.5; F3 length 7.5; F3 width 4.5; clava length 16; clava width 5; C3 length 7; spicule length 1.5; mesosoma length 60; mesosoma width 44; midlobe of mesoscutum length 21; mesoscutellum length 23; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3.5; propodeum length 8; costal cell length 33; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 10; gaster length 90; gaster width 37; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 10; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 15; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Guanacaste, below Pitilla, 500m, 7-8. iii.1990, J.S. Noyes (NHMUK). Paratype 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°02'58"N, 84°00'27"W, 1600m, iii.1995, P. Hanson (MZLU).

***Galeopsomyia amyra* Hansson sp.nov.**

(Figs 272, 273, 740, 1113)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 740), F1 long, 3.1× as long as wide; genal carina present; mesoscutellum (Fig. 272) with median part with weak reticulation, shiny, submedian grooves with outer margin missing, grooves

curved and diverging towards posterior part, lateral parts rugose with 25 setae; dorsellum with median carina; propodeum (Fig. 272) with strong irregular carinae, median carina wide, callus with six setae; all coxae metallic (Fig. 273); petiole 0.5× as long as wide with a strong carina along posterior margin and with weak reticulation on dorsal part; gaster (Fig. 272) 1.8× as long as wide, medio-basal Gt₁ with several short longitudinal carinae, Gt_{1,3} with weak reticulation, Gt₄₋₇ with strong reticulation.

Female holotype: length of body 2.9mm (paratype 3.1mm).

Scape yellowish-brown with dorsal edge and apical one-fifth dark brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic blue. Mesoscutum golden, mesoscutellum and propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster black with golden and golden-purple tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with strong small-meshed reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe with parts close to notauli rugose; midlobe with a ±complete but weak median groove, with 20 scattered adnotaular setae. Mesoscutellum with median part with weak reticulation and shiny, lateral parts strongly rugose with 25 setae; submedian grooves with outer margin missing. Dorsellum with very weak reticulation, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole 0.5× as long as wide with a strong carina along posterior margin and with weak reticulation on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with several short longitudinal carinae; Gt_{1,3} with weak reticulation, Gt₄₋₇ with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 50; POL 12.5; OOL 7.5; lateral ocellus diameter 5.5; head width 62; mouth width 18.5; malar space 19; eye length 23.5; scape length 31; scape width 6; pedicel+flagellum length 88; pedicel length 10.5; pedicel width, dorsal view 5; F1 length 17; F1 width 5.5; F2 length 16.5; F2 width 6; F3 length 13.5; F3 width 6; clava length 25; clava width 7; C3 length 8; spicule length 1.5; mesosoma length 99; mesosoma width 63; midlobe of mesoscutum length 36; mesoscutellum length 35; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 7; dorsellum length 5; propodeum length 17.5; costal cell length 49; costal cell width (measured at widest part) 3; marginal vein length 50; stigmal vein length 13; gaster length 100; gaster width 55; Gt₂ length (measured medially) 13; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 17.5; longest cercal seta length 13; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 21.iv.2002, INBio, OET, ALAS (NHMUK). Paratype: 1♀ from same locality as holotype but collected ii.2002 (MZUCR).

***Galeopsomyia anis* Hansson sp.nov.**

(Figs 274, 275, 741)

Diagnosis (female). Antennal clava short with a weak constriction between C1 and C2, with apex blunt (Fig. 741), flagellum short, pedicel+flagellum 1.1× as long as width of mesoscutum; genal carina present; mesoscutellum (Fig. 274) with median part with weak reticulation and shiny, lateral parts rugose, outer margin of submedian grooves predominantly absent; dorsellum with median carina; propodeum (Fig. 274) with some strong irregular carinae close to median carina, otherwise with strong reticulation, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 274) long-ovate, 2.5× as long as wide, medio-basal Gt₁ with longitudinal sharp carinae laterally, tergites with very strong reticulation with large meshes, meshes becoming gradually smaller from Gt₅ and backwards.

Female holotype: length of body 2.6mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons, including scrobes, and vertex metallic bluish-green, clypeus dark brown. Thoracic dorsum metallic bluish-green. Legs with fore coxa dark brown with metallic tinges, mid coxa dark brown, hind coxa metallic bluish-green; remaining parts of legs yellowish-brown. Petiole black. Gaster with Gt₁ metallic blue with medio-posterior part dark brown, Gt_{2,5} dark brown dorsally and metallic bluish-green laterally, Gt_{6,7} metallic bluish-green; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, scrobes with strong reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum predominantly with strong reticulation, midlobe close to notauli rugose, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with an indistinct median groove, with 20 scattered setae on rugose parts. Mesoscutellum with median part with weak reticulation and shiny, lateral parts rugose, with 18 scattered setae; outer margin of submedian grooves predominantly absent, present only in posterior one-third. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a median carina that expands gradually towards posterior part; with some strong irregular carinae close to median carina, otherwise with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open at apex; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster long-ovate; medio-basal Gt₁ with longitu-

dinal sharp carinae laterally; tergites with very strong reticulation with large meshes, meshes becoming gradually smaller from Gt₅ and backwards.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 10.5; OOL 7; lateral ocellus diameter 5; head width 52; mouth width 21; malar space 14.5; eye length 23; scape length 19; scape width 4; pedicel+flagellum length 54; pedicel length 7; pedicel width, dorsal view 4; F1 length 10; F1 width 5.5; F2 length 9.5; F2 width 6; F3 length 8.5; F3 width 6; clava length 16.5; clava width 7; C3 length 5; spicule length 1; mesosoma length 74; mesosoma width 51; midlobe of mesoscutum length 32; mesoscutellum length 28.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 11; costal cell length 42; costal cell width (measured at widest part) 2.5; marginal vein length 39; stigmal vein length 12.5; gaster length 113; gaster width 45; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 21; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 20; longest cercal seta length 13; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, xii.1995, P. Hanson (NHMUK).

***Galeopsomyia anysia* Hansson sp.nov.**

(Figs 276, 277, 743)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 743); genal carina present; mesoscutellum (Fig. 276) with rather strong reticulation on median part, lateral parts with strong reticulation with 11 scattered setae, meshes elongate; submedian grooves straight and parallel with outer margin absent; propodeum (Fig. 276) with strong irregular carinae and strong reticulation, callus with two setae; petiole transverse, dorsal part with strong sculpture; gaster (Fig. 276) 1.8× as long as wide, medio-basal Gt₁ with longitudinal sharp edges laterally, tergites with strong reticulation.

Female holotype: length of body 1.9mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green; propodeum golden. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-brown; femora yellowish-brown with base darkened; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,5,7} metallic bluish-green, Gt_{2,4} dark brown with metallic tinges dorsally and metallic bluish-green laterally; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with

weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove in posterior half, and with 13 scattered adnotaular setae. Mesoscutellum with rather strong reticulation on median part, lateral parts with strong reticulation and with 11 scattered setae, meshes elongate; submedian grooves with outer margin absent, grooves straight and parallel. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster ovate-elongate; medio-basal Gt_1 with longitudinal sharp edges laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 10.5; OOL 6; lateral ocellus diameter 4.5; head width 48; mouth width 13; malar space 15.5; eye length 21; scape length 17; scape width 4; pedicel+flagellum length 52; pedicel length 7; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 8.5; F2 width 4; F3 length 8; F3 width 4.5; clava length 18; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 60; mesosoma width 43; midlobe of mesoscutum length 24; mesoscutellum length 22; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 12; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 10; gaster length 70; gaster width 39; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, V. Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 4.vii.2003, J. D. Gutiérrez, B. Hernández, J. Azofeifa (NHMUK).

***Galeopsomyia apicis* Hansson sp.nov.**

(Figs 278, 279, 1060)

Diagnosis (female). Antennal clava solid (Fig. 1060); genal carina present and reaching to level of lower margin of eye; mesoscutellum (Fig. 278) with strong reticulation throughout, submedian grooves distinct in posterior two-thirds, ±straight and parallel, with a very weak and ±complete median groove; dorsellum without median carina; propodeum (Fig. 278) with

strong reticulation, callus with five setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 278) 2.2× as long as wide, medio-basal Gt_1 with longitudinal sharp edges laterally, tergites with strong reticulation.

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, scrobes black. Thoracic dorsum with mesoscutum, lateral parts of mesoscutellum and propodeum golden-green, median part of mesoscutellum metallic bluish-green. Legs with fore and hind coxae golden-green, mid coxa black with metallic tinges; trochanters dark brown; fore and mid femora dark brown with metallic tinges and apex yellowish-brown, hind femur golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 golden-green with posterior margin golden-purple, Gt_{2-4} golden-purple, Gt_{5-6} metallic bluish-green, Gt_7 black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a weak median groove in posterior half, with 13 scattered setae on rugose parts. Mesoscutellum with strong reticulation on median part and with a very weak \pm complete median groove, lateral parts with strong reticulation and seven setae scattered, meshes elongate; submedian grooves distinct in posterior two-thirds, \pm straight and parallel. Dorsellum with strong reticulation, without median carina. Propodeum short with a strong median carina that expands towards anterior and posterior parts, with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal surface. Gaster elongate; medio-basal Gt_1 with longitudinal sharp edges laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22.5; head length, frontal view 37.5; POL 9.5; OOL 5; lateral ocellus diameter 4; head width 46.5; mouth width 15; malar space 13; eye length 22; scape length 16; scape width 4; pedicel+flagellum length 45; pedicel length 7; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 7; F2 width 4; F3 length 6.5; F3 width 4; clava length 16; clava width 5.2; C3 length 4.5; spicule length 1.5; mesosoma length 56; mesosoma width 42; midlobe of mesoscutum length 21; mesoscutellum length 22; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 7.5; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 9; gaster length 83; gaster width 38; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 13; Gt_7 width (measured at base) 13; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Peninsula de Osa, Puerto Jiménez, 10m, xi.1991, P. Hanson (NHMUK).

***Galeopsomyia arada* Hansson sp.nov.**

(Figs 280, 281, 744)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 744); with genal carina; mesoscutellum (Fig. 280) with submedian grooves with outer margin indistinct, grooves curved and diverging towards both anterior and posterior parts, median part with strong reticulation; dorsellum with median carina; propodeum (Fig. 280) with strong reticulation but without irregular carinae, median carina wide, callus with five setae; all coxae metallic bluish-green (Fig. 281); petiole very short, just a narrow band; gaster (Fig. 280) 2.7× as long as wide, medio-basal Gt₁ with a transverse sharp edge dorsally, Gt₇ 1.6× as long as width at base, tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown; fore and mid femora with basal half dark brown and apical half yellowish-brown, hind femur with basal two-thirds golden-green and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic blue with medio-posterior part gulden-purple, Gt_{2,6} golden-purple, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe papillate close to notauli; midlobe with a weak median groove in posterior half, with 13 scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and with a weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, slightly curved and diverging towards both anterior and posterior parts; with nine setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein, speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with transverse sharp edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 8.5; OOL 5; lateral ocellus diameter 4.3; head width 45; mouth width 14.5; malar space 11; eye length 20; scape length 16.5; scape width 4; pedicel+flagellum length 55; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 9; F1 width 4; F2 length 9; F2 width 4; F3 length

9; F3 width 4; clava length 19; clava width 4.5; C3 length 6; spicule length 1.5; mesosoma length 53; mesosoma width 40; midlobe of mesoscutum length 21; mesoscutellum length 20.5; mesoscutellum width 20.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2; propodeum length 6; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 33; stigmal vein length 9; gaster length 110; gaster width 41; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 21; Gt₇ width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Golfito, Jiménez, Parque Nacional Corcovado, Cerro Mueller, LS 273200_521500, 744m, 21.ix-6.xi.2001, malaise trap, J. Azofeifa (NHMUK).

***Galeopsomyia aramis* Hansson sp.nov.**

(Figs 282, 283, 921, 1066)

Diagnosis (female). Antenna with a solid clava (Fig. 1066); genal carina very short, present close to mouth opening; mesoscutellum (Fig. 921) completely flat, 0.9× as long as wide with strong reticulation throughout, submedian grooves indistinct and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 282) with strong irregular carinae medially, with strong reticulation laterally, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 282) 1.8× as long as wide, medio-basal Gt₁ with longitudinal sharp edges laterally, tergites with strong reticulation, gonoplac dark brown (Fig. 283).

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore and hind coxae black, mid coxa dark brown; trochanters brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole dark brown. Gaster black; gonoplac dark brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum flat with strong reticulation, meshes isodiametric; midlobe with a complete median groove, and with seven scattered adnotaular setae. Mesoscutellum flat with strong reticulation, meshes elongate, without median groove; submedian grooves indistinct, curved and diverging towards posterior part; with ten setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina; with strong

reticulation, medially with some irregular carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate; medio-basal Gt_1 with longitudinal sharp edges laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 33; POL 9; OOL 5.5; lateral ocellus diameter 4; head width 44; mouth width 16.5; malar space 12.5; eye length 19.5; scape length 16; scape width 4.5; pedicel+flagellum length 42; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7; F1 width 3.5; F2 length 7; F2 width 3.5; F3 length 6.5; F3 width 4; clava length 14; clava width 4.5; C3 length 5; spicule length 1; mesosoma length 56; mesosoma width 42.5; midlobe of mesoscutum length 17; mesoscutellum length 20; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3.5; propodeum length 8.5; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 27; stigmal vein length 10; gaster length 79; gaster width 43; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 12.5; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 17.5; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes (NHMUK).

Galeopsomyia arenalicola Hansson sp.nov.

(Figs 284, 285, 1061)

Diagnosis (female). Antennal clava solid (Fig. 1061); genal carina present; mesoscutellum (Fig. 284) 1.0× as long as wide with submedian grooves parallel, median part with strong reticulation with elongate meshes, with complete median groove; dorsellum without median carina; propodeum (Fig. 284) with strong reticulation, callus with three setae; petiole transverse; gaster (Fig. 284) 1.4× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.3mm (paratype 1.4mm).

Scape yellowish-brown, pedicel and flagellum pale brown. Head with frons golden-green, vertex black with metallic green and purple tinges. Mesoscutum with sidelobes black, midlobe with weak metallic green tinges; mesoscutellum and propodeum with weak metallic green tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic green tinges; fore and mid trochanters brown, hind trochanter yellowish-brown; femora dark brown; tibiae yellowish-white to yellowish-brown; T1–3 yellowish-white, T4 yellowish-brown. Petiole

black. Gaster with Gt_{1,6} black with metallic green tinges, Gt₇ black; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeal area smooth, antennal scrobes with weak reticulation; with scattered setae except scrobes that are bare; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part, with a strong sulcus from eye margin to posterior ocelli and continuing from there to median ocellus. Occipital margin with an edge behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe. Mesoscutellum with strong reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel, with a complete median groove; with five setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with narrow median carina; with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 17; head length, frontal view 29; POL 8; OOL 5; lateral ocellus diameter 3; head width 39; mouth width 11; malar space 10; eye length 15.5; scape length 14; scape width 3; pedicel+flagellum length 38; pedicel length 5; pedicel width, dorsal view 3; F1 length 6; F1 width 3; F2 length 5.5; F2 width 3; F3 length 6; F3 width 3; clava length 15; clava width 3.5; C3 length 6; spicule length 2; mesosoma length 46; mesosoma width 35; midlobe of mesoscutum length 16; mesoscutellum length 17.5; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 8; costal cell length 23; costal cell width (measured at widest part) 1.5; marginal vein length 23; stigmal vein length 6; gaster length 47; gaster width 34; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 10; Gt₇ length (measured medially) 4; Gt₇ width (measured at base) 8; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson (MZLU). Paratype; 1♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes (NHMUK).

***Galeopsomyia artis* Hansson sp.nov.**

(Figs 286, 287, 745)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 745); with genal carina; mesoscutellum (Fig. 286) with submedian grooves with outer margin indistinct,

median part 2.3× as long as wide with weak reticulation and 2.9× as wide as width of lateral parts, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 286) with median carina strongly expanding in posterior half, median part with strong irregular carinae, lateral part with strong reticulation, callus with four setae; coxae metallic bluish-green (Fig. 287); petiole as long as wide with a strong carina along lateral margins; gaster (Fig. 286) 1.7× as long as wide, medio-basal Gt₁ with longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge and apical one-third dark brown, pedicel and flagellum dark brown. Frons and vertex golden-green with clypeus dark brown and scrobes black. Thoracic dorsum golden-green. Legs with coxae metallic bluish-green; trochanters pale brown; tibiae and T1–3 yellowish-brown, T4 dark brown; femora black with metallic tinges in basal two-thirds, yellowish-brown in apical one-third. Petiole black. Gaster with Gt₁ golden-green, Gt_{2,4} metallic bluish-green with posterior margin golden-purple, Gt_{5,7} metallic bluish-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli and antennal scrobes with weak reticulation, clypeus smooth, frons rugose; with a genal carina. Vertex with weak reticulation lateral to ocellar triangle, with transverse carinae inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a weak median groove in posterior half, and with 14 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part, meshes elongate, lateral parts with strong reticulation and 12 setae; submedian grooves ±straight and parallel, outer margin indistinct, with transverse carinae. Dorsellum with weak irregular sculpture, with median carina. Propodeum with median carina strongly expanding in posterior half; median part with strong irregular carinae, lateral part with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole as long as wide with a strong carina along lateral margins. Gaster ovate; medio-basal Gt₁ with two longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 44; POL 12; OOL 7; lateral ocellus diameter 5.5; head width 59; mouth width 20; malar space 16; eye length 25; scape length 21.5; scape width 5; pedicel+flagellum length 65; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 11; F1 width 5.5; F2 length 11; F2 width 5.5; F3 length 11; F3 width 5.5; clava length 22; clava width 6.5; C3 length 7; spicule length 2; mesosoma length 81; mesosoma width 59; midlobe of mesoscutum length 33; mesoscutellum length 30; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 13; median part of mesoscutellum, width in anterior part 13; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 14; costal cell length 41; costal cell width (measured at widest part) 3; marginal vein length 40; stigmal vein length 15; gaster length 87; gaster width 51; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 16.5; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **San José**, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iii.1995, P. Hanson (NHMUK).

***Galeopsomyia assai* Hansson sp.nov.**

(Figs 288, 289, 1063)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1063); genal carina present; mesoscutellum (Fig. 288) with median part with very weak reticulation, without median groove, outer margin of submedian grooves absent, grooves with transverse and strong carinae, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 288) with strong irregular carinae, median carina ±triangular expanding backwards from very anterior part, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 288) 2.0× as long as wide, medio-basal Gt₁ with longitudinal carinae, Gt₁ with weak reticulation, Gt_{2,7} with strong reticulation.

Female holotype: length of body 2.6mm (paratype 2.2mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons golden-green, scrobes black, clypeus dark brown; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green with red tinges, propodeum golden-red. Legs with fore and mid coxae dark brown, hind coxa black with apical one-third yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt_{2,5} metallic purple, Gt_{6,7} black with golden-green tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of antennal toruli with strong reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with weak reticulation and shiny outside ocellar triangle, with transverse carinae inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose on parts close to notauli; midlobe with a very weak median groove in posterior half, with 12 scattered setae on rugose parts. Mesoscutellum with median part with very weak reticulation, without median groove; outer margin of submedian grooves absent, grooves with transverse and strong carinae; lateral parts with strong reticulation and with six scattered setae. Dorsellum with rather weak reticulation, with median carina. Propodeum with a strong median carina that expands backwards from very anterior part; with strong irregular carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae; Gt₁ with weak reticulation, Gt_{2,7} with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 46; POL 11.5; OOL 7; lateral ocellus diameter 6; head width 60; mouth width 17; malar space 15; eye length 26; scape length 21; scape width 5.3; pedicel+flagellum length 72; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 12.5; F1 width 5.5; F2 length 12; F2 width 6; F3 length 10.5; F3 width 6; clava length 23.5; clava width 6; C3 length 8; spicule length 2; mesosoma length 81; mesosoma width 56; midlobe of mesoscutum length 34; mesoscutellum length 30; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 5; propodeum length 14; costal cell length 38; costal cell width (measured at widest part) 3.5; marginal vein length 43; stigmal vein length 14; gaster length 100; gaster width 50; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 29; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 16; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°46'N, 82°57'W, 1300m, 15-16.ii.2012, J.S. Noyes (NHMUK). Paratype: 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia atrata* Hansson sp.nov.**

(Figs 290, 291, 751)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 751), flagellum slender; genal carina present; mesoscutellum (Fig. 290) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with a weak but complete median groove, submedian grooves distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 290) with strong reticulation, callus with four setae; coxae dark brown (Fig. 291); petiole very short, just a narrow band; gaster (Fig. 290) 2.4× as long as wide, medio-basal Gt₁ with a sharp transverse edge dorsally, tergites with strong reticulation. Small species (1.8mm), head and mesosoma black (Figs 290, 291).

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head black with weak metallic tinges. Mesosoma black. Legs with coxae dark brown, hind coxa with posterior part almost black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ black with metallic bluish tinges, Gt₂₋₅ dark brown, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, and with six adnotaular setae in one row. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; with a weak but complete median groove; submedian grooves distinct, straight and parallel; with six setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands and is concave in posterior part; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a transverse sharp edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 31; POL 7.5; OOL 5; lateral ocellus diameter 3.5; head width 36; mouth width 11.5; malar space 9.5; eye length 17.5; scape length 14.5; scape width 3.5; pedicel+flagellum length 45; pedicel length 5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 3.5; F2 length 6.5; F2 width 3; F3 length 7; F3 width 3; clava length 18; clava width 4; C3 length 7; spicule length 2; mesosoma length 46; mesosoma width 32; midlobe of mesoscutum length 17.5; mesoscutellum length 16.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 3; propodeum length 7; costal cell length 24; costal cell width (measured at widest part) 1.5; marginal vein length 24; stigmal vein length 7; gaster length 78; gaster width 33; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 10; longest cercal seta length 15; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes (NHMUK).

Etymology. From the Latin *atra* = black, referring to colour on head and mesosoma.

***Galeopsomyia aureoviridis* Hansson sp.nov.**

(Figs 292, 293, 746)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 746); genal carina present; mesoscutellum (Fig. 292) with median part with very weak reticulation, shiny, outer margin of submedian grooves absent, grooves curved and diverging towards posterior part, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 292) with strong irregular carinae and strong reticulation, callus with two setae; fore and hind coxae metallic, mid coxa dark brown (Fig. 293); petiole transverse with strong sculpture on dorsal part; gaster

(Fig. 292) 2.2× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with weak reticulation, hence shiny; body bright golden-green (Figs 292, 293).

Female holotype: length of body 2.8mm (paratypes 2.8–3.0mm).

Scape dark brown with ventro-basal one-quarter yellowish-brown, pedicel and flagellum black. Head with frons golden-green with scrobes black with metallic tinges, clypeus dark brown; vertex metallic bluish-green. Mesosoma golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₅ medially metallic purple and laterally metallic bluish-green, Gt₆ metallic bluish-green, Gt₇ with basal half golden-green and apical half black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons strongly rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, strongly rugose inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation in anterior part, with weak reticulation in posterior part, meshes elongate, strongly rugose on parts close to notauli, without a median groove; midlobe with 24 scattered setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, grooves slightly curved and diverging towards posterior part; median part with very weak reticulation; lateral parts strongly rugose with 18 scattered setae. Dorsellum with weak sculpture, with median carina. Propodeum with a strong and wide median carina, expanding posteriorly, this part with a fovea; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open (one seta missing at apex); costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 49; POL 12; OOL 7; lateral ocellus diameter 6.2; head width 64; mouth width 16.5; malar space 18.5; eye length 27; scape length 24; scape width 6; pedicel+flagellum length 76; pedicel length 7.5; pedicel width, dorsal view 5; F1 length 14; F1 width 6; F2 length 14; F2 width 6; F3 length 13; F3 width 6.5; clava length 23.5; clava width 7; C3 length 7; spicule length 2; mesosoma length 87; mesosoma width 59; midlobe of mesoscutum length 35; mesoscutellum length 32; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 5.5; propodeum length 16; costal cell length 45; costal cell width (measured at widest part) 3.5; marginal vein length 46; stigmal vein length 13; gaster length 110; gaster width 50; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 14; longest cercal seta length 18; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (3♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 1♀ **COSTA RICA, Puntarenas, Buenos Aires**, Estación Altamira, Sendero Los Gigantes, LS 572200 _331700, 1460m, 8.vi-10.vii.2000, malaise trap, D. Rubí; 1♀ **COSTA RICA, Puntarenas, San Vito**, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, v.1992, P. Hanson.

Etymology. From the Latin *aurum* = gold, and *viridis* = green, referring to bright golden-green body.

***Galeopsomyia avis* Hansson sp.nov.**

(Figs 294, 295, 748)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 748); with genal carina; mesoscutellum (Fig. 294) elongate, 1.2× as long as wide, with weak reticulation on median part, meshes elongate, lateral part with strong rugose sculpture, submedian grooves curved and diverging towards posterior part, with several transverse carinae, outer margin indistinct, median part 2.7× as long as wide; dorsellum with median carina; propodeum (Fig. 294) with strong irregular carinae and strong reticulation, callus with eight setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 294) 2.1× as long as wide, medio-basal Gt₁ with longitudinal carinae, tergites with weak reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge and apex dark brown, pedicel and flagellum dark brown. Head metallic bluish-green with clypeus dark brown and scrobes blackish. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters yellowish-brown, fore and mid femora yellowish-brown with base dark brown, hind femur with basal half metallic bluish-green and apical half yellowish-brown, tibiae and T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ metallic purple, Gt₅₋₆ metallic bluish-green with anterior margin metallic purple, Gt₇ black with anterior margin metallic bluish-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons and vertex with rugose sculpture, clypeus smooth, scrobes with weak reticulation; with a strong genal carina.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notauli rugose; midlobe with a very weak median groove in posterior half, and with about 20 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, meshes elongate, lateral parts with strong rugose sculpture and with about 20 setae; submedian grooves curved and diverging towards posterior part, with several transverse carinae, outer margin indistinct. Dorsellum with strong irregular sculpture, with median carina. Propodeum with a narrow median carina that expands and is concave in posterior part; predominantly with strong irregular carinae, laterally with reticulation; callus

with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 44; POL 11.5; OOL 6; lateral ocellus diameter 6; head width 58; mouth width 17; malar space 15.5; eye length 26; scape length 20; scape width 5; pedicel+flagellum length 59; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 8.5; F2 width 5.5; F3 length 8; F3 width 5.5; clava length 21; clava width 6; C3 length 6.5; spicule length 1.5; mesosoma length 77; mesosoma width 57; midlobe of mesoscutum length 32; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 5; propodeum length 13; costal cell length 39; costal cell width (measured at widest part) 4; marginal vein length 35; stigmal vein length 14; gaster length 98; gaster width 47; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 8; Gt_7 width (measured at base) 12; longest cercal seta length 11; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU).

Galeopsomyia baldosa Hansson sp.nov.

(Figs 296, 297, 752, 914)

Diagnosis (female). Antenna with constriction between C1 and C2 (Fig. 752); genal carina present; mesoscutellum (Fig. 914) with median part with strong reticulation and a ±complete median groove, submedian grooves straight and parallel, with outer margin indistinct, with transverse and strong carinae, lateral parts rugose with 18 scattered setae; petiole transverse, dorsal part with sculpture; gaster (Fig. 296) ovate, 1.7× as long as wide, medio-basal Gt_1 with short longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.3mm (paratypes 2.1–2.3mm).

Scape yellowish-brown with apico-dorsal part dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, above this level metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters brown; fore and mid femora dark brown to black with apex yellowish-brown,

hind femur metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt_{1-2,5-7} metallic bluish-green, Gt₃₋₄ golden-purple; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe and rugose close to notauli; midlobe with a median groove in posterior two-thirds, with 12 scattered adnotaular setae. Mesoscutellum with median part with strong reticulation and a ±complete median groove; submedian grooves straight and parallel, with outer margin indistinct, with transverse and strong carinae; lateral parts with 18 scattered setae. Dorsellum with strong reticulation, with median carina. Propodeum with triangular and strong carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal part with sculpture. Gaster ovate; medio-basal Gt₁ with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 44; POL 12; OOL 6.5; lateral ocellus diameter 5; head width 57; mouth width 19; malar space 18; eye length 24; scape length 19; scape width 4.5; pedicel+flagellum length 57; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 10.5; F1 width 5; F2 length 10; F2 width 5; F3 length 8.5; F3 width 5.5; clava length 19; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 75; mesosoma width 56; midlobe of mesoscutum length 30; mesoscutellum length 29.5; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 3.5; propodeum length 12.5; costal cell length 38; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 13; gaster length 80; gaster width 46; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-29.iii.2001, INBio, OET, ALAS (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): 1♀ from same locality as holotype but collected 10-21.iii.2001; 1♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Estación Agujas, La Tigrilla, LS 523600_274500, 600m, 15.iii-28.iv.2001, malaise trap, J. Azofeifa; 2♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson; 1♀ from same locality as previous but collected 15-16.ii.2012.

***Galeopsomyia bariolis* Hansson sp.nov.**

(Figs 298, 299, 749)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 749); genal carina present and strong; mesoscutellum (Fig. 298) with median part with strong reticulation, lateral parts with very strong reticulation/rugosity, submedian grooves with outer margin indistinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 298) with a mix of strong carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 298) 2.1× as long as wide, tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape dark yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, clypeus and scrobes black. Mesosoma golden-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂ metallic bluish-green with posterior margin black with metallic tinges, Gt₃₋₆ black with metallic tinges and with sides metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of antennal toruli with strong reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with median groove indicated in posterior half, with 12 scattered adnotaular setae. Mesoscutellum with median part with strong reticulation, lateral parts with very strong reticulation/rugosity, meshes slightly elongate; submedian grooves with outer margin indistinct, slightly curved and diverging towards posterior part; with eight pairs of setae on lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with a mix of strong irregular carinae and reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum closed below and towards base of wing; costal setal row broken.

Petiole transverse, dorsal part with strong sculpture. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 11; OOL 6; lateral ocellus diameter 4; head width 54; mouth width 15; malar space 16; eye length 21; scape length 18; scape width 4.5; pedicel+flagellum length 57; pedicel length 7; pedicel width, dorsal view 4; F1 length 9.5; F1 width 4; F2 length 9.5; F2 width 4.5; F3 length 8.5; F3 width 5; clava length 18.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 69; mesosoma width 47; midlobe of mesoscutum length 27; mesoscutellum length 24; mesoscutellum width 23.5; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 2.5; propodeum length 10; costal cell length 32; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 10; gaster length 85; gaster width 41; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 16; Gt₇ length (measured

medially) 8.5; Gt₇ width (measured at base) 13.5; longest cercal seta length 13; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

Galeopsomyia beltanis Hansson sp.nov.

(Figs 300, 301, 750)

Diagnosis (female). Antenna with solid clava (Fig. 750); genal carina present and strong, reaching to level of lower margin of eye; mesoscutellum (Fig. 300) with submedian grooves slightly diverging towards posterior part, median part with strong reticulation with very elongate meshes, appearing striate, and with median groove indicated but weak; dorsellum with median carina; propodeum (Fig. 300) with strong carinae and strong reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 300) 2.2× as long as wide; medio-basal Gt₁ with a transverse sharp edge dorsally; gastral tergites with strong reticulation.

Female holotype: length of body 2.5mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green with scrobes black with metallic tinges, clypeus dark brown; vertex golden-green with blue tinges. Mesoscutum and mesoscutellum metallic greenish-blue, propodeum golden-green. Legs with fore and hind coxae metallic greenish-blue, mid coxa black with greenish-blue tinges; trochanters yellowish-brown; femora with basal two-thirds black with metallic tinges and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black with metallic tinges. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₄ black with sides metallic greenish-blue, Gt_{5,6} golden-green, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina reaching level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a very weak median groove in posterior half, and with 14 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes very elongate and surface appearing striate; with median groove indicated but weak; submedian grooves slightly diverging towards posterior part; lateral parts with eight scattered setae. Dorsellum with strong sculpture, with median carina. Propodeum with strong and wide median carina; part between median and paraspiracular carinae with strong irregular carinae and strong reticulation; callus with six setae. Coxae with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 42; POL 10.5; OOL 7; lateral ocellus diameter 5; head width 58; mouth width 18; malar space 15; eye length 23; scape length 20; scape width 4.5; pedicel+flagellum length 58; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 8.5; F1 width 6; F2 length 9.5; F2 width 5.5; F3 length 8.5; F3 width 5.5; clava length 20; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 80; mesosoma width 52; midlobe of mesoscutum length 33; mesoscutellum length 29; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 13; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 40; stigmal vein length 11; gaster length 102; gaster width 47; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 12.ii.2011, J.S. Noyes (NHMUK).

***Galeopsomyia bestis* Hansson sp.nov.**

(Figs 302, 303, 754)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 754); genal carina present; mesoscutellum (Fig. 302) with very weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging slightly towards posterior part, with a weak median groove in anterior three-quarters; dorsellum without median carina; propodeum (Fig. 302) with strong reticulation and a few strong carinae, callus with four setae; gaster (Fig. 302) short ovate, 1.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation; body black with metallic blue tinges (Figs 302, 303).

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head black with metallic blue tinges, clypeus dark brown. Mesoscutum black with metallic purple tinges, midlobe, mesoscutellum and propodeum black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black; femora dark brown; trochanters, tibiae and tarsi yellowish-brown, T4 pale brown. Gaster with Gt₁₋₅ dark brown, Gt₆₋₇ black.

Antennal clava with a weak constriction between C1 and C2. Face below level of toruli

with weak reticulation, clypeus smooth, frons with strong reticulation, scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, inside ocellar triangle rugose.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with 12 scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging slightly towards posterior part, with a weak median groove in anterior three-quarters; with six setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a narrow median carina; with a few irregular carinae and strong reticulation; callus with four setae. Fore and mid coxae with weak reticulation and shiny, hind coxa with strong reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole not visible. Gaster short ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 28; POL 8; OOL 5.5; lateral ocellus diameter 4; head width 42; mouth width 14; malar space 11; eye length 18; scape length 15; scape width 3.5; pedicel+flagellum length 45; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 6.5; F1 width 4; F2 length 7.5; F2 width 4; F3 length 7; F3 width 4; clava length 16.5; clava width 4; C3 length 5.5; spicule length 2; mesosoma length 52; mesosoma width 36; midlobe of mesoscutum length 19; mesoscutellum length 18.5; mesoscutellum width 16.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 8.5; costal cell length 23; costal cell width (measured at widest part) 1.6; marginal vein length 26; stigmal vein length 8; gaster length 63; gaster width 36; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 4; Gt_7 width (measured at base) 10; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia bicolor* Hansson sp.nov.**

(Figs 304, 305, 753, 963)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 753); with a short genal carina close to mouth opening; mesoscutum and mesoscutellum (Fig. 304) with distinctly different colours; mesoscutellum (Fig. 304) 0.9× as long as wide and flattened, sub-

median grooves distinct, straight and diverging towards posterior part, with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; median propodeum (Fig. 304) with strong irregular carinae and anterolaterally with strong reticulation without carinae, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 304) ovate, 1.6× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.9mm (paratypes 1.5mm).

Scape and pedicel yellowish-brown, flagellum brown. Head with frons and vertex metallic bluish-green, clypeus dark brown, antennal scrobes black. Mesoscutum golden-purple; mesoscutellum and propodeum golden-green. Legs with fore coxa dark brown with metallic tinges, mid coxa brown, hind coxa black with metallic tinges and with apex yellowish-brown; trochanters yellowish-brown; femora yellowish-brown with base brownish; tibiae yellowish-white; T1–3 yellowish-white, T4 yellowish-brown. Petiole black. Gaster with Gt₁₋₂ metallic blue, remaining tergites golden-purple; gonoplac brown with ventral margin black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a complete median groove, with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with 14 setae scattered over lateral parts. Dorsellum with weak reticulation, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; medially with strong irregular carinae and anterolaterally with strong reticulation without carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 37; POL 9; OOL 6.5; lateral ocellus diameter 4.5; head width 51; mouth width 16.5; malar space 11; eye length 22.5; scape length 18; scape width 4; pedicel+flagellum length 54; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4; F2 length 10; F2 width 4.5; F3 length 8; F3 width 4.5; clava length 18; clava width 6; C3 length 5; spicule length 2; mesosoma length 63; mesosoma width 47; midlobe of mesoscutum length 22.5; mesoscutellum length 24.5; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3.5; propodeum length 10.5; costal cell length 32; costal cell width (measured at widest part) 2.2; marginal vein length 24; stigmal vein length 11; gaster length 64; gaster width 41; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 6.

Male. Length of body of body 1.5mm.

Antennal scape (Fig. 963) with plaque dark brown and situated close to, just below, apex; dorso-basal whorls of long setae present on F1–F4 and on C1, and with a ventro-basal whorl of long setae on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 30; head width 41; mouth width 12; malar space 8.5; eye length 18; scape length 14; scape width 3.5; plaque length 3.5; pedicel length 5; pedicel+flagellum length 65; F1 length 4.5; F1 width 4; F2 length 6.5; F2 width 4; F3 length 9.5; F3 width 4; F4 length 9.5; F4 width 3.5; clava length 29; clava width 3.2; mesosoma length 51; mesosoma width 39; gaster length 45; gaster width 31; longest subbasal seta on F1, length 36.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Volcán Cacao, Cerro Pedregal, 1000m, ii-iv.1989, I.D. Gauld (NHMUK). Paratypes (3♀ 1♂, MZLU, NHMUK): 1♀ 1♂ **COSTA RICA, Guanacaste**, Estación Maritza, 10°58'N, 85°29'W, 700m, 21.ii.2005, J.S. Noyes; 1♀ **COSTA RICA, Guanacaste**, Area de Conservacion Guanacaste (ACG), "no date"; 1♀ **COSTA RICA, San José**, Ciudad Colón, Hacienda El Rodeo, 16.ii.1991, J.S. Noyes.

Etymology. Name referring to different colours of mesoscutum and mesoscutellum.

***Galeopsomyia bimaculata* Hansson sp.nov.**

(Figs 306, 307, 763, 964)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 763); with a weak genal carina; mesoscutellum (Fig. 306) with submedian grooves strong and diverging towards posterior part, median part with strong reticulation, and with median groove indicated; dorsellum with a weak but complete median carina; propodeum (Fig. 306) with strong irregular carinae and strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 306) 2.1× as long as wide; fore wing (Fig. 307) with two infusate spots, one spot around and below stigmal vein and one weaker spot at upper-apical margin of fore wing; body dark brown to black with weak metallic tinges (Figs 306, 307). Male with C2 enlarged (Fig. 964), and with same infusate spots in fore wing as female.

Female holotype: length of body 1.7mm (paratypes 1.4–1.7mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head dark brown to black. Mesosoma black. Legs with fore and hind coxae black, mid coxa dark brown; trochanters pale brown; femora dark brown; tibiae yellowish-brown, hind tibia with basal one-third brown; T1–3 yellowish-brown to yellowish-white, T4 brown. Wings hyaline with one infusate spot below stigmal vein and one spot on apicodorsal margin. Petiole black. Gaster dark brown to black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with a weak genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, with eight adnotaular setae in two rows. Mesoscutellum with strong reticulation, meshes elongate; with median groove indicated; submedian grooves distinct, straight and diverging slightly towards posterior part; with three setae on lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands in posterior part, this part concave; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 30; POL 7.8; OOL 5.5; lateral ocellus diameter 3; head width 40; mouth width 14; malar space 10; eye length 18; scape length 15.5; scape width 3; pedicel+flagellum length 39; pedicel length 7; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 5; F2 width 3; F3 length 5.5; F3 width 3; clava length 15; clava width 4; C3 length 5; spicule length 1.5; mesosoma length 50; mesosoma width 35; midlobe of mesoscutum length 19; mesoscutellum length 19; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 7; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 28; stigmal vein length 9; gaster length 73; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 5.

Male. Length of body of body 1.4mm.

Antenna (Fig. 964) with scape gradually expanding towards apex; plaque dark brown and situated in apical three-quarters; dorso-basal whorls of short setae present on F1–F4, and one ventro-basal whorl on C1; antenna with C2 enlarged. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 16; head length, frontal view 28; head width 36; mouth width 12; malar space 9; eye length 17; scape length 16; scape width 6; plaque length 11; pedicel length 6.5; pedicel+flagellum length 43; F1 length 4.5; F1 width 3; F2 length 4.5; F2 width 3; F3 length 5; F3 width 3; F4 length 5; F4 width 3; clava length 17; clava width 3; mesosoma length 46; mesosoma width 30; gaster length 52; gaster width 26; longest subbasal seta on F1, length 7.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU). Paratypes (4♀ 3♂, MZLU, MZUCR, NHMUK): 1♀ 1♂ with same label data as holotype; 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii, 2002, C. Hansson & parataxonomos; 1♀ COSTA RICA, Alajuela, 5km W San Ramón, 1200m, x.1996, O. Castro & P. Hanson; 2♀ 1♂ COSTA RICA, Alajuela, 5km W San Ramón on Route 1, 1200m, xii.1996, P. Hanson.

Etymology. From the Latin *bi* = two, and *macula* = spot, referring to infusate spots in the fore wing.

***Galeopsomyia blakeae* Hansson sp.nov.**

(Figs 26, 308, 309, 965, 1068)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1068); with a weak genal carina close to mouth opening; mesoscutellum (Fig. 308) with submedian grooves parallel, median part with weak reticulation; dorsellum with median carina; propodeum (Fig. 308) with strong reticulation, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 308) 2.2× as long as wide, medio-basal Gt₁ with a carina shaped like an inverted U (Fig. 26), gonoplac yellowish-brown (Fig. 309).

Female holotype: length of body 1.9mm (paratypes 1.8–2.1mm).

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head dark brown with bluish-green tinges, clypeus yellowish-brown. Mesosoma dark brown. Legs with fore and mid coxae yellowish-brown, hind coxa brown; trochanters, femora and tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole dark brown. Gaster dark brown; gonoplac yellowish-brown.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a weak genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a complete median groove, with 22 scattered adnotaular setae. Mesoscutellum with median part with weak reticulation and shiny; submedian grooves ±distinct, straight and parallel; lateral parts with strong reticulation and with 16 scattered setae. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands slightly in posterior part; with strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a carina shaped like an inverted U, tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 33; POL 9; OOL 5.5; lateral ocellus diameter 3.5; head width 42; mouth width 15.5; malar space 11; eye length 18; scape length 16.5; scape width 4; pedicel+flagellum length 44; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 6.5; F2 width 4; F3 length 6.5; F3 width 5; clava length 15; clava width 5.2; C3 length 5; spicule length 1.5; mesosoma length 55; mesosoma width 40; midlobe of mesoscutum length 19; mesoscutellum length 21; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4; propodeum length 9; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 10; gaster length 75; gaster width 34; Gt₂ length

(measured medially) 8; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 12; longest cercal seta length 10; shortest cercal seta length 5.

Male. Length of body of body 1.3–1.8mm.

Antenna (Fig. 965) with scape widest in median part; plaque dark brown and extending along entire scape; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; head width 43.5; mouth width 17; malar space 11; eye length 19.5; scape length 19; scape width 7; plaque length 17; pedicel length 6; pedicel+flagellum length 59; F1 length 5; F1 width 4; F2 length 8; F2 width 4; F3 length 9; F3 width 4; F4 length 9; F4 width 4; clava length 23; clava width 4.5; mesosoma length 57; mesosoma width 42; gaster length 60; gaster width 30; longest subbasal seta on F1, length 32.

Hosts. Reared from stem gall on *Blakea grandiflora* (Melastomataceae). The gall is multilocular and consists of an elongate swelling, about 2.5 cm in length.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Monteverde, v.2002, ex *Blakea grandiflora* stem gall (NHMUK). Paratypes: 3♀ 4♂ with same label data as holotype (MZUCR, NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

Remarks. The specimens in the type series are bleached by (sun)light.

***Galeopsomyia boria* Hansson sp.nov.**

(Figs 310, 311, 755)

Diagnosis (female). Antennal clava short with a weak constriction between C1 and C2 and with apex pointed (Fig. 755), flagellum short, pedicel+flagellum 1.0× as long as width of mesosoma; genal carina present; mesoscutellum (Fig. 310) with very strong reticulation throughout, meshes isodiametric, submedian grooves indistinct; dorsellum with median carina; propodeum (Fig. 310) with strong irregular carinae and reticulation, callus with two setae; fore wing with a weak infusate spot distad of stigmal vein (Fig. 311); petiole short, just a narrow band; gaster (Fig. 310) ovate, 2.2× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with very strong and large-meshed reticulation.

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, and vertex bright golden-green, vertex also with golden-red tinges, clypeus dark brown. Mesoscutum dull golden-green with posterior part metallic purplish; mesoscutellum golden; propodeum dull golden-green. Legs with coxae dark brown to black with metallic tinges; trochanters pale brown; femora dark brown with apex paler; tibiae yellowish-brown; tarsi with T1–3 yellowish-brown, T4 brown. Fore wing hyaline with a weak infusate spot

distad of stigmal vein. Petiole black. Gaster with $Gt_{1,7}$ metallic bluish-green, remaining tergites black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli and scrobes with weak reticulation, clypeus smooth, frons with strong reticulation; with genal carina, reaching to level of lower margin of eye. Vertex with strong reticulation.

Mesoscutum with very strong reticulation, meshes isodiametric; midlobe with a weak median groove, with 15 scattered adnotaular setae. Mesoscutellum with very strong reticulation, meshes isodiametric; submedian grooves indistinct, lateral parts with ten scattered setae. Dorsellum with very weak reticulation and shiny, with median carina. Propodeum with median carina that expands posteriorly; with a mix of strong irregular carinae and reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole short, just a narrow band. Gaster elongate-ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with very strong reticulation with large meshes.

Relative measurements: head length, dorsal view 18; head length, frontal view 27; POL 7,5; OOL 5; lateral ocellus diameter 2,5; head width 34,5; mouth width 11,5; malar space 10; eye length 12; scape length 16,5; scape width 3; pedicel+flagellum length 31; pedicel length 6; pedicel width, dorsal view 3; F1 length 3,5; F1 width 3; F2 length 3,5; F2 width 3,5; F3 length 3,5; F3 width 4; clava length 12; clava width 5; C3 length 4,5; spicule length 1,8; mesosoma length 47; mesosoma width 31; midlobe of mesoscutum length 18; mesoscutellum length 17,5; mesoscutellum width 15,5; median part of mesoscutellum width (measured medially) 6,5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 6,5; lateral part of mesoscutellum, width (measured medially) 3,5; dorsellum length 2,2; propodeum length 6,5; costal cell length 26; costal cell width (measured at widest part) 1,5; marginal vein length 31; stigmal vein length 9; gaster length 60; gaster width 27; Gt_2 length (measured medially) 5; Gt_4 length (measured medially) 10; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 9,5; longest cercal seta length 8,5; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia bravis* Hansson sp.nov.**

(Figs 312, 313, 756)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 756); with genal carina; mesoscutellum (Fig. 312) 1.0× as long as wide, with strong reticulation throughout, submedian grooves distinct, slightly curved and converging towards posterior part, with

a weak and incomplete median groove; dorsellum with median carina; propodeum (Fig. 312) with strong reticulation, callus with four setae; gaster (Fig. 312) 1.7× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.4mm (paratype 1.6mm).

Scape yellowish-brown, pedicel and F1 pale brown, F2–6 dark brown. Head with frons metallic blue with scrobes black and clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum with sidelobes black, midlobe metallic blue; mesoscutellum and propodeum metallic blue. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters pale brown; femora with basal two-thirds dark brown and apical one-third yellowish-brown; tibiae and tarsi yellowish-white, T4 pale brown. Petiole not visible. Gaster with Gt₁₋₃ metallic blue with posterior margin dark brown, Gt_{4,5} black with metallic tinges, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeal area smooth, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, lateral parts with four scattered setae; submedian grooves distinct, slightly curved and converging towards posterior part; with a weak and incomplete median groove. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands slightly anteriorly and posteriorly; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole not visible. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 16; head length, frontal view 26; POL 6.5; OOL 4; lateral ocellus diameter 3; head width 33.5; mouth width 10; malar space 9; eye length 16; scape length 12; scape width 3; pedicel+flagellum length 38; pedicel length 5; pedicel width, dorsal view 3; F1 length 5; F1 width 3; F2 length 6; F2 width 3; F3 length 6; F3 width 3; clava length 15; clava width 3; C3 length 5; spicule length 1.5; mesosoma length 37.5; mesosoma width 28; midlobe of mesoscutum length 12.5; mesoscutellum length 15; mesoscutellum width 14.5; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 5.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 1.5; propodeum length 5.5; costal cell length 21; costal cell width (measured at widest part) 1.5; marginal vein length 20; stigmal vein length 5.5; gaster length 60; gaster width 36; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 9; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Sirena, 8°29'N, 83°35'W, 5m, 19-20.ii.2004, J.S. Noyes (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

***Galeopsomyia briannestjacesae* Hansson sp.nov.**

(Figs 314, 315, 1062)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1062); genal carina present close to mouth opening; mesoscutellum (Fig. 314) flattened and 0.8× as long as wide, with weak reticulation on median part and with an indistinct ±complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct in posterior half, with outer margin indistinct in anterior half, slightly curved and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 314) with strong reticulation, callus with two setae; gaster (Fig. 314) 1.8× as long as wide, tergites with strong reticulation, gonoplac short, with apex pointed (Fig. 315); body black, head, mesoscutellum, propodeum and Gt₁ with metallic tinges (Fig. 314).

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head black with metallic tinges, clypeus dark brown. Mesosoma black, median part of mesoscutellum and propodeum with metallic tinges. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ black with metallic tinges, remaining tergites black with purplish tinges; gonoplac black with apex yellowish-brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with strong wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with an indistinct but ±complete median groove, adnotaular setae mainly broken off. Mesoscutellum flattened, with weak reticulation on median part and an indistinct ±complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct in posterior half, with outer margin indistinct in anterior half, slightly curved and diverging towards posterior part; setae on lateral parts mainly broken off. Dorsellum with strong reticulation, without median carina. Propodeum with a strong and narrow median carina that expands in posterior one-third; propodeum with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; POL 9; OOL 6; lateral ocellus diameter 4; head width 51; mouth width 15; malar space 13.5; eye length 21; scape length 19; scape width 4; pedicel+flagellum length 57; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 10; F1 width 4.5; F2 length 10; F2 width 4.5; F3 length 9; F3 width 5; clava length 18.5; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length

64; mesosoma width 45; midlobe of mesoscutum length 22; mesoscutellum length 21; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3.5; propodeum length 10; costal cell length nm; costal cell width (measured at widest part) 2.5; marginal vein length 32; stigmal vein length 9.5; gaster length 76; gaster width 42; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 15; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-9, 10°76'N, 85°33'W, 809m, 14-21.xii.2017, D. Janzen, W. Hallwachs (barcoded specimen: BIOUG58920-B07) (MZLU).

Etymology. Named in honour of Brienne St. Jacques in recognition of her years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia bricenoi* Hansson sp.nov.**

(Figs 316, 317, 757)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 757); genal carina present; mesoscutellum (Fig. 316) with median part with weak reticulation and a ±complete weak median groove, meshes elongate, submedian grooves distinct and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 316) short with strong reticulation, callus with three setae; petiole very short, transverse; gaster (Fig. 316) elongate, 2.3× as long as wide with strong reticulation, medio-basal Gt₁ with a sharp edge shaped like an inverted U.

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, scrobes black; vertex metallic bluish-purple. Mesoscutum black with median part of midlobe and lateral parts of sidelobes metallic blue; mesoscutellum metallic bluish-green; propodeum metallic green. Legs with coxae black with metallic blue tinges; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₅ metallic purple, Gt₆ metallic blue, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle and with a sharp edge between posterior part of posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on

midlobe; with an indistinct median groove in posterior half; with six adnotaular setae in two rows. Mesoscutellum with median part with weak reticulation and a \pm complete weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct and diverging towards posterior part; with four setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and wide median carina that expands strongly in very posterior part; with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 35; POL 8.5; OOL 5.5; lateral ocellus diameter 5; head width 50; mouth width 16; malar space 12; eye length 22; scape length 17.5; scape width 4; pedicel+flagellum length 52; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 9; F1 width 5; F2 length 9.5; F2 width 4.5; F3 length 9; F3 width 5; clava length 19; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 60; mesosoma width 43; midlobe of mesoscutum length 24; mesoscutellum length 23; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2.5; propodeum length 8.5; costal cell length 30; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 8.5; gaster length 93; gaster width 41; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 17; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 12; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Los Charcos de Osa, 8°40'N, 83°30'W, 50m, 18-19.ii.2008, J.S. Noyes (NHMUK).

Etymology. Named in honour of Daniel Briceño, former director of the School of Biology, University of Costa Rica, entomologist.

***Galeopsomyia brinaris* Hansson sp.nov.**

(Figs 318, 319, 1065)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1065); genal carina present but weak; mesoscutellum (Fig. 318) with median part with strong reticulation, lateral parts with very strong reticulation, meshes elongate, submedian grooves predominantly indistinct, \pm straight and slightly diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 318) with a mix of strong carinae and strong reticulation, callus with two setae; gaster (Fig. 318) 2.1 \times as long as wide, medio-basal Gt_1 with a carina shaped like an inverted U (as in Fig. 26), tergites with strong reticulation.

Female holotype: length of body 2.1mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown in upper half and yellowish-brown in lower half, scrobes black; vertex metallic bluish-green. Mesoscutum black with golden-green tinges, mesoscutellum golden-green, propodeum black. Legs with coxae, trochanters and femora dark brown, tibiae dark yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin black with metallic tinges, remaining tergites black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of antennal toruli and antennal scrobes with weak reticulation, clypeal area smooth, frons above antennal toruli with strong reticulation; with a weak genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe without median groove, with 12 scattered adnotaular setae. Mesoscutellum with median part with strong reticulation, lateral parts with very strong reticulation, meshes elongate; submedian grooves indistinct in anterior three-quarters and \pm distinct in posterior one-quarter, \pm straight and slightly diverging towards posterior part; lateral parts with seven scattered setae. Dorsellum with strong sculpture, without median carina. Propodeum with a strong median carina that expands in posterior part; with a mix of strong irregular carinae and reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt₁ with a carina shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 36.5; POL 10; OOL 5; lateral ocellus diameter 3.5; head width 76; mouth width 18; malar space 13; eye length 19; scape length 16.5; scape width 4.5; pedicel+flagellum length 51; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 8; F1 width 3.5; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4; clava length 17.5; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 67; mesosoma width 47; midlobe of mesoscutum length 25; mesoscutellum length 25; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3.5; propodeum length 11; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 36; stigmal vein length 9.5; gaster length 90; gaster width 42; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 18.5; Gt₇ length (measured medially) 9.5; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia burra* Hansson sp.nov.**

(Figs 320, 321, 1070)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1070); genal carina absent; mesoscutellum (Fig. 320) with submedian grooves parallel, median part with very weak reticulation; dorsellum with median carina; petiole very short, just a narrow band; gaster (Fig. 320) 3.2× as long as wide, medio-basal Gt₁ with a transverse carina dorsally; gonoplac yellowish-brown (Fig. 321).

Female holotype: length of body 2.8mm (paratypes 2.8–3.0mm).

Colour (specimen is light-bleached). Scape yellowish-white, pedicel and flagellum brown. Face below level of toruli golden-green with lower part brown, clypeus yellowish-brown, frons metallic bluish-green, antennal scrobes black; vertex dark brown with blue tinges. Thoracic dorsum golden-green, median part of mesoscutellum also with blue tinges. Legs with fore and hind coxae dark brown with metallic tinges, mid coxa pale brown; trochanters yellowish-brown; femora dark brown with apex yellowish-white; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole dark brown. Gaster with Gt₁ metallic bluish-green, remaining tergites dark brown with metallic tinges; gonoplac yellowish-brown.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notauli rugose; midlobe with a ±complete median groove, with 12 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves ±distinct, straight and parallel; with 11 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a transverse carina dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 43; POL 10.5; OOL 7; lateral ocellus diameter 4.5; head width 51; mouth width 25; malar space 15; eye length 22.5; scape length 18; scape width 4.5; pedicel+flagellum length 57; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 4; F2 length 10; F2 width 4.5; F3 length 9; F3 width 5; clava length 18; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 68; mesosoma width 49; midlobe of mesoscutum length 28.5; mesoscutellum length 26; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum

length 3.5; propodeum length 8; costal cell length 39; costal cell width (measured at widest part) 3; marginal vein length 36; stigmal vein length 13; gaster length 130; gaster width 41; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 21; Gt₇ width (measured at base) 15; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from a large fruit on *Eugenia monteverdensis* (Myrtaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Porrosatí de Barva, 2000m, ii.1997, P. Hanson, ex large Myrtaceae fruit (NHMUK). Paratypes: 2♀ with same label data as holotype (MZLU, NHMUK).

Remarks. Specimens are bleached by (sun)light.

Galeopsomyia burreadis **Hansson sp.nov.**

(Figs 322, 323, 758)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 758); genal carina present; mesoscutellum (Fig. 322) with submedian grooves slightly diverging towards posterior part, median part with strong reticulation, and with a strong and complete median groove; dorsellum with median carina; propodeum (Fig. 322) with strong carinae and strong reticulation, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 322) 2.4× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.4mm (paratypes 1.9–2.9mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges, and clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum black with metallic blue tinges; mesoscutellum metallic greenish-blue; propodeum golden-green. Legs with fore and mid coxae black with metallic greenish-blue tinges, hind coxa metallic greenish-blue; trochanters pale brown; femora with basal two-thirds dark brown to black and apical one-third yellowish-brown; tibiae and tarsi yellowish-brown to yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic greenish-blue with posterior margin metallic purple, Gt₂₋₆ golden-purple, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with rather strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with a median groove indicated in posterior part; with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes, median part with slightly weaker

reticulation and more elongate meshes than on lateral parts; submedian grooves strong and slightly diverging towards posterior part; with a complete and strong median groove; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and wide median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole short, just a narrow band. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 9; OOL 5.5; lateral ocellus diameter 5; head width 49; mouth width 15; malar space 12; eye length 22; scape length 16; scape width 4.5; pedicel+flagellum length 50; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 6.5; F1 width 5; F2 length 7.5; F2 width 5; F3 length 8; F3 width 5.5; clava length 18.5; clava width 6; C3 length 5.5; spicule length 1.5; mesosoma length 66; mesosoma width 45; midlobe of mesoscutum length 28; mesoscutellum length 27; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3; propodeum length 10; costal cell length 33; costal cell width (measured at widest part) 2; marginal vein length 31; stigmal vein length 9; gaster length 102; gaster width 42; Gt_2 length (measured medially) 12; Gt_4 length (measured medially) 16.5; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 14; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica, Ecuador, Peru, the West Indies (Trinidad & Tobago).

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 17-18.ii.2011, J.S. Noyes (NHMUK). Paratypes (32♀, CNC, MZLU, MZUCR, NHMUK): following from same locality as holotype but collected 23-24.ii.2007 (1♀), 19-20.ii.2016 (2♀); 1♀ **COSTA RICA**, **Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson; 1♀ **COSTA RICA**, **Guanacaste**, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes; 1♀ **ECUADOR**, Pichin, Tinalandia, 2.ii.1983, Lars Huggert; 2♀ **ECUADOR**, Napo, Misahualli, 18.ii.1983, Lars Huggert; 7♀ from same locality as previous but collected 20.ii.1983; 2♀ **ECUADOR**, Napo, Tena, 18.ii.1983, Lars Huggert; 3♀ **ECUADOR**, Napo, Lumbaqui, 10-11.iii.1983, Lars Huggert; 1♀ **ECUADOR**, Napo, Papallacta, 24.ii.1983, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, 9.ii.1984, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, Barillai, 10.ii.1984, Lars Huggert; 1♀ **PERU**, Madre de Dios, Puerto Maldonado, 3.i.1984, Lars Huggert; 2♀ **PERU**, Huanucu, Tocache, 2.ii.1984, Lars Huggert; 1♀ **PERU**, Junin, Satipo, 18.i.1984, Lars Huggert; 1♀ **TRINIDAD**, St. George, Aripo Valley, 27.vii.1976, from rainforest, J.S. Noyes; 1♀ **TRINIDAD**, St. George, Arena Reserve, 6.viii.1976, from rain forest, J.S. Noyes; 1♀ **TRINIDAD**, St. George, Tumpuna Reserve, 9.viii.1976, from Caribbean Pine Plantation, J.S. Noyes; 1♀ **TRINIDAD**, St. George, Lopinot, 10.viii.1976, from Cocoa Plantation and Rainforest, J.S. Noyes. Barcoded specimen: 1♀ **COSTA RICA**, Guanacaste, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-5, 10°76'N, 85°34'W, 831m, 30.vi-7.vii.2016, D. Janzen, W. Hallwachs (BIOUG54876-F06).

***Galeopsomyia cararaensis* Hansson sp.nov.**

(Figs 324, 325, 760)

Diagnosis (female). Antenna with distinct constriction between C1 and C2, spicule long (Fig. 760); genal carina present; mesoscutellum (Fig. 324) with submedian grooves distinct and parallel, median part with weak reticulation; dorsellum with a weak median carina; propodeum (Fig. 324) with strong irregular carinae, callus with three setae; petiole transverse with some strong sculpture on dorsal part, yellowish-brown; gaster (Fig. 324) 1.6× as long as wide, tergites with relatively strong reticulation; body predominantly weakly metallic purple (Figs 324, 325).

Female holotype: length of body 1.6mm.

Scape and pedicel yellowish-brown, flagellum brown. Head black with metallic blue and purple tinges, clypeus dark brown. Mesosoma black with metallic tinges. Legs with coxae dark brown, hind coxa with postero-basal half black; trochanters yellowish-brown; fore femur pale brown, mid and hind femora yellowish-brown; tibiae and tarsi yellowish-brown. Petiole yellowish-brown. Gaster black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin ±carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, in posterior half very elongate and this part appearing striate; midlobe with a very weak median groove in anterior half, and with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with eight setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and very narrow carina that expands slightly anteriorly; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with some strong sculpture on dorsal part. Gaster ovate; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 32; POL 8.5; OOL 5.5; lateral ocellus diameter 4; head width 43; mouth width 14; malar space 10.5; eye length 18; scape length 16.5; scape width 3.5; pedicel+flagellum length 53; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 3.5; F2 length 7.5; F2 width 3.5; F3 length 6; F3 width 3.5; clava length 18.5; clava width 4; C3 length 7.5; spicule length 2.5; mesosoma length 50; mesosoma width 36; midlobe of mesoscutum length 17; mesoscutellum length 18.5; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 9; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 26; stigmal vein length 7.5; gaster length 58; gaster width 36; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 6; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Parque Nacional Carara, 9°46'N, 84°57'W, 41m, 1-7.iii.2005, C. Hansson (MZLU).

Remarks. The head was lost after imaging.

Etymology. Name referring to type locality, Parque Nacional Carara.

***Galeopsomyia carballoi* Hansson sp.nov.**
(Figs 326, 327, 761)

Diagnosis (female). Antenna with constriction between C1 and C2, F4 pale brown, F5–6 yellowish-brown (Fig. 761); genal carina present; mesoscutellum (Fig. 326) with outer margin of submedian grooves absent, grooves diverging towards both anterior and posterior parts, median part with weak reticulation, lateral parts rugose, without median groove; dorsellum with median carina; fore wing with nine setae on dorsal surface of submarginal vein (Fig. 327); propodeum (Fig. 326) with strong irregular carinae, callus with seven setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 326) 2.8× as long as wide, with strong reticulation, Gt₁ with weak reticulation in anterior half, medio-basal Gt₁ with short longitudinal carina laterally, Gt₇ 1.7× as long as wide.

Female holotype: length of body 3.2mm.

Scape dark yellowish-brown with apico-dorsal part dark brown, pedicel and F1–F3 dark brown, F4 pale brown, F5–6 yellowish-brown. Head with frons and vertex golden-green, clypeus dark brown. Thoracic dorsum golden. Legs with fore coxa golden-green, mid coxa pale brown, hind coxae black with apex yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden, Gt₂₋₅ golden-purple, Gt_{6,7} golden; gonoplac black.

Antenna with constriction between C1 and C2. Frons with median part including scrobes with strong reticulation, clypeus smooth, lateral parts rugose; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, especially strong on midlobe close to notauli, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe with a median groove in posterior half, and with 18 scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and shiny, lateral parts rugose; outer margin of submedian grooves absent; with 20 setae scattered over lateral rugose parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong and wide median carina; with strong irregular carinae and weak reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with nine setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with short longitudinal carina laterally; tergites with strong reticulation, Gt_1 with weak reticulation in anterior half.

Relative measurements: head length, dorsal view 30; head length, frontal view 52; POL 11; OOL 7; lateral ocellus diameter 6.2; head width 67; mouth width 22; malar space 19; eye length 29; scape length 26; scape width 6; pedicel+flagellum length 82; pedicel length 9; pedicel width, dorsal view 5.5; F1 length 18; F1 width 6; F2 length 15.5; F2 width 6; F3 length 12.5; F3 width 6; clava length 24; clava width 7; C3 length 8; spicule length 1.5; mesosoma length 89; mesosoma width 59; midlobe of mesoscutum length 33; mesoscutellum length 34; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 7; dorsellum length 4; propodeum length 14; costal cell length 45; costal cell width (measured at widest part) 3; marginal vein length 45; stigmal vein length 12; gaster length 138; gaster width 50; Gt_2 length (measured medially) 11.5; Gt_4 length (measured medially) 21; Gt_7 length (measured medially) 24; Gt_7 width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, San Carlos, Parque Nacional Arenal, Sendero Pilón, LN 269100_457900, 600m, 23-30.xi.1999, malaise trap, G. Carballo (NHMUK).

Etymology. Named in honour Gerardo Carballo, former parataxonomist at INBio and collector of material of this and many other Costa Rican Eulophidae.

***Galeopsomyia carbonis* Hansson sp.nov.**

(Figs 328, 329, 759)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 759); genal carina present; mesoscutellum (Fig. 328) with submedian grooves with outer margin indistinct, \pm parallel and wide apart, median part with weak reticulation and shiny, meshes elongate, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 328) with strong irregular carinae and strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 328) ovate, 1.8 \times as long as wide, medio-basal Gt_1 without carinae or edges, tergites with strong reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons below level of eyes and vertex golden-green, clypeus black, above level of eyes metallic bluish-green, antennal scrobes black. Mesosoma golden-green. Legs with coxae metallic bluish-green; trochanters pale brown, femora black with metallic bluish-green tinges

and with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt_{2,3} metallic bluish-green with posterior margin metallic purple, Gt₄ metallic purple on median part and metallic bluish-green on sides, Gt_{5,7} metallic bluish-green; gonoplac dark brown.

Antenna with distinct constriction between C1 and C2; spicule distinct. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex outside ocellar triangle with a mix of strong and weak reticulation, with transverse carinae inside ocellar triangle; with a carina between posterior ocelli in posterior part, with a strong sulcus from eye margin to posterior ocelli. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with a median groove in posterior half, with ten setae on rugose parts. Mesoscutellum with median part with weak reticulation and shiny, meshes elongate, with a median groove in anterior half; submedian grooves with outer margin predominantly indistinct, distinct only in posterior one-fifth, lateral parts rugose with ten scattered setae. Dorsellum with weak reticulation, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ without carinae or edges; tergites with strong small-meshed reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 45; POL 12.5; OOL 8; lateral ocellus diameter 5.5; head width 60; mouth width 18; malar space 18; eye length 25; scape length 21; scape width 5.5; pedicel+flagellum length 67; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 11; F1 width 5; F2 length 11.5; F2 width 5; F3 length 11; F3 width 5.5; clava length 23; clava width 6; C3 length 7; spicule length 2; mesosoma length 81; mesosoma width 59; midlobe of mesoscutum length 31; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 13.5; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 14; costal cell length 38; costal cell width (measured at widest part) 4; marginal vein length 42; stigmal vein length 15; gaster length 88; gaster width 50; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 7.5; Gt₇ width (measured at base) 13; longest cercal seta length 11; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, ii.1995, P. Hanson (NHMUK).

***Galeopsomyia carinifer* Hansson sp.nov.**

(Figs 22, 330, 331, 764, 966, 1114)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 764); genal carina absent; mesoscutellum (Fig. 330) with median part with weak reticulation, submedian grooves diverging towards posterior part; dorsellum smooth with median carina; propodeum (Fig. 330) short with strong reticulation but without irregular carinae, callus with four setae; fore coxa with a carina along both anterior and posterior margins (Fig. 22), and hind coxa with a carina along posterior margin; petiole very short, just a narrow band; gaster (Fig. 330) very long and \pm narrowed at base, 3.4 \times as long as wide, with weak reticulation and shiny, Gt₁ 0.5 \times as long as wide, Gt₂ 0.3 \times as long as Gt₄.

Female holotype: length of body 2.3mm (paratypes 1.9–4.2mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges and clypeus yellowish-brown; vertex black with metallic blue tinges. Mesoscutum black with metallic green tinges; mesoscutellum and propodeum metallic pale golden-green. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole dark brown. Gaster with Gt₁ metallic greenish-blue in anterior half and dark brown with metallic purple tinges in posterior half, Gt₂₋₅ dark brown with metallic purple tinges, Gt₆₋₇ black; gonoplac dark brown.

Antenna with a constriction between C1 and C2. Frons with strong reticulation, clypeus smooth; with scattered setae except antennal scrobes that are bare; genal carina absent. Vertex with weak reticulation, with a strong sulcus from eye margin to posterior ocelli, sulcus continuing from there to median ocellus.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated but weak, with eight adnotaular setae in two rows. Mesoscutellum with strong reticulation on lateral parts, with weak reticulation on median part, meshes strongly elongate; submedian grooves strong and diverging towards posterior part; with a weak median groove in anterior one-quarter; with five setae scattered over lateral parts. Dorsellum smooth, with median carina. Propodeum with a strong wide median carina that expands strongly posteriorly; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with very weak reticulation; fore coxa with a carina along both anterior and posterior margins, and hind coxa with a carina along posterior margin. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open below and towards base of wing.

Petiole very short, just a narrow band. Gaster elongate, \pm narrowed at base; tergites with weak reticulation and shiny.

Relative measurements: head length, dorsal view 21; head length, frontal view 32; POL 9; OOL 5; lateral ocellus diameter 3.5; head width 41; mouth width 17; malar space 9.5; eye length 18.5; scape length 16; scape width 4; pedicel+flagellum length 52; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 8; F1 width 4; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4.5; clava length 17.5; clava width 5; C3 length 5.5; spicule length 1.5; mesosoma length 55; mesosoma width 36; midlobe of mesoscutum length 24; mesoscutellum length 20; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width

in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 6.5; costal cell length 33; costal cell width (measured at widest part) 2; marginal vein length 33; stigmal vein length 11; gaster length 105; gaster width 31; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 21; Gt_7 length (measured medially) 17; Gt_7 width (measured at base) 12; longest cercal seta length 11; shortest cercal seta length 5.

Male. Length of body of body 1.6–2.6mm.

Antenna (Fig. 966) with scape widest medially; plaque dark brown, situated in apical half; dorso-basal whorls of long setae present on F1–F4, and C1 with dorso- and ventro-basal whorls of long setae, C2 with a ventro-basal whorl. Gaster as in female but shorter. Otherwise as in female.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; head width 46; mouth width 20; malar space 12; eye length 20; scape length 18.5; scape width 7; plaque length 9.5; pedicel length 7; pedicel+flagellum length 89; F1 length 5.5; F1 width 4.5; F2 length 12; F2 width 4.5; F3 length 13.5; F3 width 4.5; F4 length 14; F4 width 4; clava length 35; clava width 4; mesosoma length 67; mesosoma width 44; gaster length 85; gaster width 27; longest subbasal seta on F1, length 52.

Hosts. Reared from seeds (fruits) of *Paliocourea lasiorrhachis*, *Palicourea padifolia*, *Psychotria elata*, *Psychotria valeriana* (Rubiaceae), and *Myrsine juergensenii* (Myrsinaceae).

Distribution. Costa Rica, Ecuador, West Indies (Trinidad).

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes (NHMUK). Paratypes (85♀ 38♂, CNC, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 2♂ from same locality as holotype but collected 26.ii.2013; 1♀ COSTA RICA, Alajuela, San Carlos, Reserva Forestal Arenal, Sendero Pilón, LN 269100_457900, 600m, 9.ix.1.x.1999, malaise trap, G. Carballo; following from same locality as previous but collected 22.xii.1991 (1♀), 5.ix-7.x.2000 (1♀); 1♂ COSTA RICA, Alajuela, Parque Nacional Arenal, Sendero Ceibo, 10°27'N, 84°41'W, 620m, 22-23.ii.2016, J.S. Noyes; 1♀ COSTA RICA, Alajuela, Estación Biológica San Ramón, 10°13'N, 84°37'W, 900m, ii-iii.2000; 1♀ 1♂ COSTA RICA, **Cartago**, Humo, El Copal, 9°47'N, 83°45'W, 1050-1250m, 29.ii-6.iii.2008, C. Hansson; 1♀ COSTA RICA, **Guanacaste**, Parque Nacional Guanacaste, below Pitilla, 500m, 7-8.iii.1990, J.S. Noyes; 2♂ COSTA RICA, Guanacaste, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes; 1♀ COSTA RICA, **Heredia**, Estación Biológica La Selva, LN 264463_532850, 100-200m, 30-31.iii.2002, swept, J. Azofeifa; following from same locality as previous but collected 28-29.ii.2008 (2♀), 25.ii.2016 (1♀); 1♀ COSTA RICA, Heredia, 16km SSE La Virgen, 10°16'N, 84°05'W, 1050-1150m, 11-20.ii.2001, 11_TN_ALL, INBio-OET-ALAS intersect; 6♀ 2♂ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 9.iv.2001–iv.2002, INBio, OET, ALAS; 1♀ COSTA RICA, Heredia, Vara Blanca, 2000m, iv.2002, from *Paliocourea lasio*, seeds, K. Nishida; 1♀ COSTA RICA, Heredia, San Rafael de Vara Blanca, ii.2013, from *Myrsine juergensenii* fruit/seed; 1♀ COSTA RICA, **Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 100m, 14-18.i.1991, J.S. Noyes; following from same locality as previous but collected 24-26.ii.2008 (4♀ 1♂), 20-21.ii.2006 (2♀); 4♀ COSTA RICA, **Puntarenas**, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; following from same locality as previous but collected 15-16.ii.2006 (1♀ 1♂), 7-19.ii.2007 (6♀ 1♂), 15-16.ii.2012 (3♀); 15♀ 11♂ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes; 1♀ from same locality

as previous but collected xi-xii.1992; 1♀ 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero a Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; following from same locality as previous but collected 15.i-14.ii.2001 (1♀), 12.ix-12.x.2001 (1♀); 2♀ 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept&malaise traps, C. Hansson & Parataxonomos; 1♂ COSTA RICA, Puntarenas, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 18-25.ii.2004, C. Hansson; 1♀ COSTA RICA, Puntarenas, Monteverde, "Ecological Farm", 10°18'N, 84°49'W, 1300m, 16-17.ii.2003, J.S. Noyes; 7♀ 5♂ COSTA RICA, Puntarenas, Monteverde, 29.xii.2014, from fruit of *Psychotria valeriana*, K. Nishida; 1♀ COSTA RICA, Puntarenas, Estación Los Patos, LS 517900_281600, 210m, 21.ii.2002, J. Azofeifa; 1♂ COSTA RICA, Puntarenas, Golfito, Estación Agujas, LS 526550_276750, 300m, 9.i.2001, malaise trap, J. Azofeifa; 1♀ 1♂ COSTA RICA, Puntarenas, Corcovado, Agujas, 500m, 3.x.2000, from *Psychotria elata* seeds, J.A. Azofeifa; 1♀ COSTA RICA, Puntarenas, Parque Nacional Piedras Blancas, Estación El Bonito, 8°43'N, 83°13'W, 100m, 13-14.ii.2012, J.S. Noyes; 4♀ 4♂ COSTA RICA, **San José**, Zurqui de Moravia, 1500m, ix.2005, from *Palicourea padifolia* seeds, P. Hansson; following from same locality as previous but collected i.1995 (1♀), x.1995 (1♀), xii.1995 (1♀); 1♀ 2♂ COSTA RICA, San José, San Gerardo de Dota, El Manantial, 9°34'N, 83°43'W, 18-20.ii.2010, J.S. Noyes; 1♀ from COSTA RICA labelled "00-JAAZ-0232", i.e. collected by J.A. Azofeifa, and presumably reared, but no further information has been possible to retrieve; 1♀ **ECUADOR**, Pichin, Tinalandia, 800m, 7.ii.1983, Lars Huggert; 1♀ **TRINIDAD**, St. George, Tumpuna Reserve, 9.viii.1976, from Caribbean Pine Plantation, J.S. Noyes. Barcoded specimen: 1♀ COSTA RICA, Guanacaste, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-5, 10°76'N, 85°34'W, 831m, 4-11.v.2017, D. Janzen, W. Hallwachs (BIOUG 57707-E02).

Etymology. From the Latin *carina* = keel, and the suffix *-fer* = carry, referring to carinae on coxae.

***Galeopsomyia cecropiae* Hansson sp.nov.**

(Figs 3, 332, 333, 762, 967)

Diagnosis (female). Antennal clava solid (Fig. 762); genal carina present; mesoscutellum (Fig. 332) with weak reticulation on median part and shiny, with a weak median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 332) with strong irregular carinae and reticulation, callus with three setae; gaster (Fig. 332) 2.1× as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with weak reticulation; weakly metallic species (Figs 332, 333).

Female holotype: length of body 1.4mm (paratypes 1.3–1.7mm).

Scape yellowish-brown with dorsal edge brown, pedicel pale brown, flagellum brown. Head dark brown to black with golden-green and blue tinges, clypeus dark brown. Mesoscutum black with metallic tinges; mesoscutellum and propodeum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ with attachment point of petiole yellowish-brown, anterior two-thirds golden-green and posterior one-third metallic purple, remaining tergites metallic purple; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and shiny, with a weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong and narrow median carina; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt_1 with short longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 17; head length, frontal view 27; POL 7.5; OOL 4.5; lateral ocellus diameter 3.5; head width 35; mouth width 11.5; malar space 10.5; eye length 16; scape length 13; scape width 3; pedicel+flagellum length 36; pedicel length 5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 3; F2 length 5.5; F2 width 3.5; F3 length 5.5; F3 width 3.5; clava length 13.5; clava width 4.5; C3 length 4.5; spicule length 1; mesosoma length 43; mesosoma width 31; midlobe of mesoscutum length 17; mesoscutellum length 18; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2.5; propodeum length 7; costal cell length 23; costal cell width (measured at widest part) 1.5; marginal vein length 20; stigmal vein length 7; gaster length 58; gaster width 28; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 8; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 9; longest cercal seta length 13; shortest cercal seta length 5.

Male. Length of body of body 1.2mm.

Antenna (Fig. 967) with scape widest medially; plaque dark brown and situated medially; dorso-basal whorls of long setae present on F1–F4 and ventro-basal whorls of long setae on C1–C2. Gaster short ovate; Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation. Otherwise as in female.

Relative measurements: head length, dorsal view 15; head length, frontal view 27; head width 35; mouth width 10.5; malar space 10; eye length 15; scape length 11.5; scape width 4.5; plaque length 4; pedicel length 5; pedicel+flagellum length 46; F1 length 4; F1 width 3.5; F2 length 5; F2 width 3.5; F3 length 6.5; F3 width 3; F4 length 7; F4 width 3; clava length 16; clava width 3; mesosoma length 43; mesosoma width 30; gaster length 40; gaster width 21.5; longest subbasal seta on F1, length 28.

Hosts. Reared from blister-like leaf galls induced by an unidentified Cecidomyiidae on *Cecropia obtusifolia* (Urticaceae) (Fig. 3).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Estación Biológica A. Brenes, San Ramón, 900m, iv.2011, from *Cecropia obtusifolia* leaf galls, P. Hanson (NHMUK). Paratypes: 5♀ 2♂ with same label data as holotype (MZLU, MZUCR, NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

***Galeopsomyia cernia* Hansson sp.nov.**

(Figs 334, 335, 765)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 765); genal carina present; mesoscutellum (Fig. 334) with median part with very weak reticulation, without a median groove, outer margin of submedian grooves absent except in very posterior part, grooves with transverse and strong carinae, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 334) with median part with strong irregular carinae, lateral parts with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 334) 2.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, Gt₁ with weak reticulation, remaining tergites with relatively strong reticulation.

Female holotype: length of body 1.8mm (paratype 2.1mm).

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons black with metallic bluish-green tinges, clypeus dark brown; vertex black with metallic tinges. Mesoscutum and propodeum black with metallic tinges, mesoscutellum black with bluish-green tinges. Legs with coxae dark brown; trochanters and tibiae yellowish-brown; femora dark brown with apex yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ dark brown with bluish tinges, Gt₂₋₆ dark brown, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of antennal toruli with weak reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle, with a carina between posterior parts of posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose on part close to notauli; midlobe without a median groove, with eight scattered setae on rugose parts. Mesoscutellum with median part with very weak reticulation, without a median groove; outer margin of submedian grooves absent except in very posterior part, grooves with transverse and strong carinae; lateral parts with strong reticulation and with five scattered setae. Dorsellum smooth, with median carina. Propodeum with a strong median carina that expands posteriorly; median part with strong irregular carinae, lateral parts with strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; Gt₁ with weak reticulation, remaining tergites with relatively strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 30; POL 9; OOL 6.5; lateral ocellus diameter 3.2; head width 41; mouth width 13; malar space 10.5; eye length 17.5; scape length 15; scape width 3.5; pedicel+flagellum length 49; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4; clava length 17.5; clava width 5; C3 length 6; spicule length 2; mesosoma length 50; mesosoma width 36; midlobe of mesoscutum length 20; mesoscutellum length

19.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 9; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 29; stigmal vein length 10; gaster length 75; gaster width 30; Gt₂ length (measured medially) 7.4; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 10; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°46'N, 82°57'W, 1300m, 15-16.ii.2012, J.S. Noyes (NHMUK). Paratype 1 ♀ with same label data as holotype (MZLU).

***Galeopsomyia chrysops* Hansson sp.nov.**

(Figs 336, 337, 766, 916, 968, 1115)

Diagnosis (female). Antenna (Fig. 766) with distinct constriction between C1 and C2, flagellum elongate, flagellum+pedicel 1.5× as long as width of mesosoma, scape predominantly dark brown; vertex with weak reticulation outside ocellar triangle; with genal carina; midlobe of mesoscutum with weak reticulation (Fig. 336), hence shiny; mesoscutellum (Fig. 916) elongate, 1.2× as long as wide, submedian grooves with several transverse carinae, median part 2.6× as long as wide with weak reticulation; dorsellum with median carina; propodeum (Fig. 336) with strong irregular carinae and strong reticulation, callus with two setae; fore coxa pale brown with dark base, mid coxa yellowish-brown and hind coxa dark brown with apex yellowish-brown (Fig. 337); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 336) 2.0× as long as wide, medio-basal Gt₁ with short longitudinal carinae; body bright metallic (golden-red (e.g. holotype) (Figs 336, 337), golden-green or golden).

Female holotype: length of body 1.9mm (paratypes 1.8–2.2mm).

Antenna dark brown with base of scape pale brown. Head golden-green. Mesosoma golden-red. Legs with fore coxa pale brown with dark base, mid coxa yellowish-brown and hind coxa dark brown with apex yellowish-brown; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ golden-green with red tinges, Gt_{2,5} black with metallic purple tinges with sides golden-green, Gt_{6,7} golden-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with weak reticulation and shiny, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a very weak median groove in posterior half, with five adnotaular setae in one row. Mesoscutellum with weak reticulation and shiny, meshes elongate; submedian

grooves straight and slightly diverging towards posterior part, with several transverse carinae; with a very weak median groove; setae on lateral parts broken off in holotype (paratypes from same locality as holotype with six setae on lateral parts). Dorsellum with weak sculpture, with median carina. Propodeum with a narrow median carina that expands and is concave in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae; tergites with weak reticulation and shiny.

Relative measurements: head length, dorsal view 21; head length, frontal view 36; POL 9.5; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 12; malar space 13; eye length 20; scape length 18; scape width 4; pedicel+flagellum length 60; pedicel length 6; pedicel width, dorsal view 3.7; F1 length 10; F1 width 5; F2 length 11; F2 width 5; F3 length 10; F3 width 5; clava length 21; clava width 5.5; C3 length 7.5; spicule length 2; mesosoma length 59; mesosoma width 40; midlobe of mesoscutum length 22; mesoscutellum length 22; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 2; dorsellum length 4; propodeum length 11; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 10; gaster length 72; gaster width 37; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 10; longest cercal seta length 14; shortest cercal seta length 4.5.

Male. Length of body of body 1.7mm.

Antenna (Fig. 968) with scape widest in the middle; plaque black and situated just above the middle; dorso-basal whorls of long setae present on F1–F4 and on C1, ventro-basal whorls of long setae present on C1 and C2. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 32; head width 43; mouth width 12; malar space 16; eye length 20; scape length 17; scape width 4; plaque length 6; pedicel length 5.5; pedicel+flagellum length 66; F1 length 4.5; F1 width 4; F2 length 8.5; F2 width 4; F3 length 10; F3 width 4; F4 length 11; F4 width 4; clava length 27; clava width 4; mesosoma length 54; mesosoma width 35; gaster length 58; gaster width 25; longest subbasal seta on F1, length 25.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson (MZLU). Paratypes (32♀ 22♂, CNC, MZLU, MZUCR, NHMUK): 9♀ 6♂ with same label data as holotype; 1♀ COSTA RICA, Alajuela, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes; 1♀ COSTA RICA, Alajuela, San Carlos, Sector la Península, LN 453800_271500, 600m, 14.ix-x.2000, G. Carballo; 1♀ from same locality as previous but collected 9-14.xi.2000; 3♀ 12♂ COSTA RICA, Alajuela, Parque Nacional Arenal, La Península, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes; 1♀ COSTA RICA, Alajuela, San Carlos, Parque Nacional Arenal, Sendero Pilón, LN 269100_457900, 600m, 15.i-1.ii.2000, malaise trap, G. Carballo; following from same locality as

previous but collected 30.xi-22.xii.1999 (1♀), 6-14.xi.2000 (3♀), 26.ii.2003 (3♀); 3♀ 3♂ COSTA RICA, Alajuela, San Carlos, Fortuna, Parque Nacional Arenal, Sendero Mena, LN 271800_454170, 600m, 20.x-14.xi.2001, malaise trap, G. Carballo; 1♀ COSTA RICA, Alajuela, San Carlos, A.C.A, Reserva Forestal Arenal, Sector Cerro Chato, LN 269500_460900, 1100m, 22.x-22.xi.1999, G. Carballo; 2♀ COSTA RICA, Alajuela, Refugio Nacional de Vida Silvestre (RNVS) Cano Negro, LN 319100_450100, 20m, 9.iii-2.iv.1994, malaise trap, K. Martinez; 1♀ 1♂ COSTA RICA, Alajuela, Parque Nacional Arenal, Sendero Ceibo, 10°27'N, 84°41'W, 620m, 22-23.ii.2016, J.S. Noyes; 1♀ COSTA RICA, **Limón**, Reserva Biológica Hitoy-Cerere, 9°40'N, 83°02'W, 100m, 24-25.ii.2004, J.S. Noyes; 1♀ from same locality as previous but collected 21-22.ii.2006.

Etymology. From the Greek *chrysops* = shining like gold, referring to colour of body.

***Galeopsomyia clavata* Hansson sp.nov.**

(Figs 338, 339, 768)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 768), clava distinctly wider than funiculars; genal carina present; mesoscutellum (Fig. 338) slightly flattened, with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part; without median groove; dorsellum with a weak median carina; propodeum (Fig. 338) with strong irregular carinae and strong reticulation, callus with eight setae; petiole transverse with strong sculpture dorsally; gaster (Fig. 338) short ovate, 1.7× as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with very strong reticulation, gonoplac yellowish-brown (Fig. 339) (black in paratypes).

Female holotype: length of body 2.2mm (paratypes 2.2–2.4mm).

Scape yellowish-brown, pedicel and flagellum brown. Face below level of toruli black with golden tinges. Clypeus black, frons metallic bluish-green, scrobes black with metallic tinges; vertex golden-green. Mesoscutum and propodeum golden-green, mesoscutellum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁₋₆ golden-green, Gt₇ black; gonoplac yellowish-brown.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin ±carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior two-thirds, and with ten scattered adnotaular setae. Mesoscutellum slightly flattened, with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; without median groove; with eight setae scattered over lateral parts. Dorsellum with weak sculpture, with a weak median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with seven setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with short longitudinal carinae laterally; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 35; POL 10.2; OOL 6.5; lateral ocellus diameter 4.5; head width 53; mouth width 13.5; malar space 14; eye length 21; scape length 22; scape width 4.5; pedicel+flagellum length 65; pedicel length 7; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 10.5; F2 width 5; F3 length 11; F3 width 5; clava length 21.5; clava width 6.5; C3 length 8; spicule length 2.5; mesosoma length 70; mesosoma width 51; midlobe of mesoscutum length 26; mesoscutellum length 26; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 12.5; costal cell length 48; costal cell width (measured at widest part) 2.5; marginal vein length 33; stigmal vein length 13; gaster length 82; gaster width 49; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 18; longest cercal seta length 11; shortest cercal seta length 5.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK). Paratypes (2♀, MZLU, MZUCR): 1♀ with same label data as holotype; 1♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 10.iii.2002, INBio, OET, ALAS.

Etymology. From the Latin *clava* = club, referring to the strong antennal clava.

***Galeopsomyia clematisae* Hansson sp.nov.**

(Figs 340, 341, 767)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 767); genal carina present; mesoscutellum (Fig. 340) with median part with weak reticulation and with a very weak median groove in anterior half, parts lateral to median part rugose with numerous white setae all over, outer margins of submedian grooves absent; dorsellum with median carina; propodeum (Fig. 340) with strong reticulation and some irregular carinae, callus with three setae; gaster (Fig. 340) 3.7× as long as wide, medio-basal Gt_1 with a transverse carina dorsally, Gt_7 2.0× as long as width at base, tergites with very strong and large-meshed reticulation.

Female holotype: length of body 3.6mm (paratypes 3.1–3.6mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel pale brown, flagellum dark brown. Face below level of toruli and scrobes golden-green, clypeus yellowish-brown,

remaining parts of frons and vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae yellowish-brown, hind coxa metallic bluish-green with anterior and apical parts yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-purple, Gt₂₋₅ golden-purple, Gt₆ metallic green, Gt₇ with basal half metallic green and apical half black; gonoplac dark brown.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a median groove, with 24 scattered setae on rugose part close to notauli. Mesoscutellum with median part with weak reticulation and shiny, meshes elongate, lateral parts rugose and covered with setae; outer margins of submedian grooves indistinct. Dorsellum with strong reticulation, with median carina. Propodeum a median carina that is concave and expands gradually towards posterior part; with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ with a transverse carina dorsally; tergites with very strong and large-meshed reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 43; POL 11; OOL 8; lateral ocellus diameter 5; head width 58; mouth width 20; malar space 16; eye length 26; scape length 23; scape width 5; pedicel+flagellum length 72; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 10.5; F1 width 5.5; F2 length 12; F2 width 5.5; F3 length 11; F3 width 5.5; clava length 25; clava width 6; C3 length 6.5; spicule length 1.5; mesosoma length 82; mesosoma width 55; midlobe of mesoscutum length 34; mesoscutellum length 31; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 5; propodeum length 10; costal cell length 47; costal cell width (measured at widest part) 3; marginal vein length 42; stigmal vein length 14.5; gaster length 185; gaster width 50; Gt₂ length (measured medially) 14.5; Gt₄ length (measured medially) 30.5; Gt₇ length (measured medially) 38; Gt₇ width (measured at base) 19; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Reared from pear-shaped petiole gall induced by unidentified Cecidomyiidae on *Clematis haenkeana* (Ranunculaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Rio Macho, iv.1999, from *Clematis haenkeana* petiole gall, P. Hanson (NHMUK). Paratypes: 7♀ with same label data as holotype (MZLU, MZUCR, NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

***Galeopsomyia coccolobae* Hansson sp.nov.**

(Figs 4, 342, 343, 776, 969)

Diagnosis (female). Antennal clava solid (Fig. 776); genal carina present; mesoscutellum (Fig. 342) with strong reticulation and with a complete median groove, meshes elongate, submedian grooves distinct, straight and \pm parallel; dorsellum with median carina; propodeum (Fig. 342) with strong reticulation, callus with four setae; gaster (Fig. 342) $2.1\times$ as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.6mm (paratype 2.3mm).

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden. Legs with fore and mid coxae dark brown with metallic tinges, hind coxa metallic green; trochanters brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 metallic bluish-green with posterior margin golden-purple, Gt_{2-4} golden-purple, Gt_{5-7} dark brown with metallic tinges; gonoplac dark brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a median groove in posterior two-thirds, with 16 scattered setae on rugose parts. Mesoscutellum with strong reticulation and with a complete median groove, meshes elongate; submedian grooves distinct, straight and \pm parallel; with ten setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum partly open below; costal setal row broken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 41; POL 10.5; OOL 5; lateral ocellus diameter 5; head width 54; mouth width 16; malar space 15.5; eye length 25; scape length 18; scape width 5; pedicel+flagellum length 53; pedicel length 7; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 8; F2 width 5; F3 length 8; F3 width 5.5; clava length 20; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 75; mesosoma width 49; midlobe of mesoscutum length 30; mesoscutellum length 28; mesoscutellum width 26.5; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 4; propodeum length 11; costal cell length 37; costal cell width (measured at widest part) 3; marginal vein length 33; stigmal vein length 10.5; gaster length 104; gaster width 49; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 15; Gt_7 width (measured at base) 16; longest cercal seta length 18; shortest cercal seta length 6.

Male. Length of body of body 1.6mm.

Antenna (Fig. 969) with scape widest in median part; plaque dark brown and situated medially; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 18; head length, frontal view 30; head width 39; mouth width 13; malar space 10.5; eye length 17; scape length 13; scape width 5; plaque length 6; pedicel length 6; pedicel+flagellum length 55; F1 length 4; F1 width 3.5; F2 length 6.5; F2 width 3.5; F3 length 9; F3 width 3; F4 length 8.5; F4 width 3; clava length 17.5; clava width 3; mesosoma length 52; mesosoma width 32; gaster length 52; gaster width 24; longest subbasal seta on F1, length 30.

Hosts. Reared from blister-like leaf galls induced by unidentified Cecidomyiidae (probably *Ctenodactylomyia*) on *Coccoloba uvifera* (Polygonaceae) (Fig. 4).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Limón**, Parque Nacional Cahuita, 0m, 29.iv.1988, from Coccoloba leaf gall, Paul Hanson (NHMUK). Paratypes: 1♀ 1♂ with same label data as holotype (MZLU, NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

***Galeopsomyia codata* Hansson sp.nov.**

(Figs 344, 345, 769)

Diagnosis (female). Antenna with constriction between C1 and C2 (Fig. 769); genal carina present; mesoscutum and mesoscutellum with white setae (Fig. 344); mesoscutellum (Fig. 344) with median part with weak reticulation, lateral parts rugose, outer margin of submedian grooves absent; dorsellum with median carina; propodeum (Fig. 344) with a strong elongate triangular median carina, posterior part with a fovea, mainly with strong irregular carinae, callus with three setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 344) 2.1× as long as wide, medio-basal Gt₁ with short longitudinal carinae and a sharp transverse edge dorsally, tergites with strong large-meshed reticulation, gonoplac dark brown (Fig. 345).

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green; clypeus yellowish-brown. Thoracic dorsum metallic bluish-green. Legs with fore coxa with base metallic bluish-green and apex yellowish-brown, mid coxa pale brown, hind coxa metallic bluish-green; remaining parts of legs yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ and Gt_{6,7} metallic blue, Gt_{2,5} metallic purple on dorsal part and metallic blue on lateral parts; gonoplac dark brown.

Antenna with constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a weak median groove

in posterior two-thirds, with 17 scattered setae on rugose parts. Mesoscutellum with median part with weak reticulation, with a weak median groove in anterior two-thirds, lateral parts rugose with 18 scattered setae; outer margin of submedian grooves absent. Dorsellum with strong reticulation, with median carina. Propodeum with a strong elongate triangular median carina, posterior part with a fovea; mainly with strong irregular carinae; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae and a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 36; POL 10.5; OOL 7; lateral ocellus diameter 4; head width 49; mouth width 14; malar space 13; eye length 20; scape length 19; scape width 4; pedicel+flagellum length 52; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 8; F2 width 5; F3 length 7; F3 width 5; clava length 18; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length 67; mesosoma width 47; midlobe of mesoscutum length 27; mesoscutellum length 26; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 2; marginal vein length 33; stigmal vein length 13; gaster length 95; gaster width 46; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 25; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 17; longest cercal seta length 10; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, xii.1995, P. Hanson (NHMUK).

***Galeopsomyia copala* Hansson sp.nov.**

(Figs 346, 347, 770, 892)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 770); genal carina present; mesoscutellum (Fig. 346) with median part with weak reticulation and a complete median groove, submedian grooves curved and diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 346) with strong irregular carinae and strong reticulation, callus with five setae; gaster (Fig. 346) 2.0× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with very strong reticulation.

Female holotype: length of body 2.1mm (paratype 2.3mm).

Scape yellowish-brown, pedicel dark brown, flagellum dark brown to black. Head black

with metallic tinges. Mesoscutum metallic purple with bluish-green tinges; mesoscutellum and propodeum black with metallic bluish-green tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin metallic purple, Gt₂₋₅ metallic purple, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin \pm carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, with seven scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with a strong and complete median groove; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; POL 9.5; OOL 6; lateral ocellus diameter 4.5; head width 49; mouth width 13.5; malar space 14; eye length 23; scape length 19; scape width 4.5; pedicel+flagellum length 58; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 10; F1 width 4.5; F2 length 9.5; F2 width 4.5; F3 length 8.5; F3 width 4.5; clava length 18.5; clava width 5; C3 length 6.5; spicule length 2; mesosoma length 63; mesosoma width 44; midlobe of mesoscutum length 22.5; mesoscutellum length 24; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3.5; propodeum length 10.5; costal cell length 34; costal cell width (measured at widest part) 2.2; marginal vein length 35; stigmal vein length 8; gaster length 81; gaster width 40; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Humo, El Copal, 9°47'N, 83°45'W, 1050-1250m, 29.ii-6.iii.2008, C. Hansson (MZLU). Paratype: 1♀ with same label data as holotype (NHMUK).

Galeopsomyia coriolis Hansson sp.nov.

(Figs 348, 349, 1064)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1064); genal carina present; mesoscutellum (Fig. 348) with median part with weak reticulation and a weak median groove in posterior two-thirds, outer margin of submedian grooves absent, grooves with transverse and strong carinae, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 348) with strong irregular carinae, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 348) 2.0× as long as wide, medio-basal Gt₁ with longitudinal short carinae, tergites with weak reticulation.

Female holotype: length of body 2.1mm (paratypes 1.7–2.1mm).

Scape yellowish-brown apical part brown, pedicel and flagellum dark brown. Head with frons golden-green, scrobes black, clypeus dark brown; vertex golden-green. Mesosoma golden-green with red tinges. Legs with fore coxa dark brown to black with apical part apical yellowish-brown, mid coxa pale brown, hind coxa black with metallic tinges and with apical part yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden, Gt₂₋₄ metallic purple, Gt₅₋₇ black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of antennal toruli with strong reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with weak reticulation and shiny outside ocellar triangle, rugose inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose on parts close to notauli; midlobe with a weak median groove in posterior half, with 12 scattered adnotaular setae. Mesoscutellum with median part with weak reticulation and a weak median groove in posterior two-thirds; outer margin of submedian grooves absent, grooves with transverse and strong carinae; lateral parts with strong reticulation and with six scattered setae. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&6setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal short carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 24.5; head length, frontal view 42; POL 10.5; OOL 5.5; lateral ocellus diameter 6; head width 54; mouth width 14; malar space 14; eye length 25; scape length 20; scape width 5; pedicel+flagellum length 62; pedicel length 7; pedicel width, dorsal view 4; F1 length 10.5; F1 width 5; F2 length 10; F2 width 5; F3 length 9.5; F3 width 5; clava length 20.5; clava width 6; C3 length 6; spicule length 2; mesosoma length 68; mesosoma width 47; midlobe of mesoscutum length 25; mesoscutellum length 26; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4; propodeum length 12; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 30; stigmal vein length 11; gaster length 81; gaster width 41; Gt₂ length

(measured medially) 10; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 12; longest cercal seta length 14; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU). Paratypes (4♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 2♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson.

***Galeopsomyia cortina* Hansson sp.nov.**

(Figs 350, 351, 771)

Diagnosis (female). Antenna with a constriction between all clavomeres (Fig. 771); genal carina present and strong; mesoscutellum (Fig. 350) with rather strong reticulation on lateral parts, with weak reticulation on median part, meshes strongly elongate, submedian grooves strong and diverging towards posterior part, with a ±complete weak median groove; dorsellum with median carina; propodeum (Fig. 350) with strong reticulation in anterior half, with longitudinal carinae in posterior half, callus with seven setae; fore coxa with a carina along both anterior and posterior margins, hind coxa with a carina along posterior margin; petiole transverse with strong longitudinal carinae; gaster (Fig. 350) 2.2× as long as wide, medio-basal Gt₁ with longitudinal carinae, tergites with weak reticulation.

Female holotype: length of body 2.6mm (paratypes 1.7–2.7mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, scrobes black with metallic tinges and clypeus brown; vertex metallic bluish-green. Mesoscutum, mesoscutellum and propodeum golden-green with blue tinges. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters, femora, tibiae and tarsi yellowish-brown, hind femur with basal half and T4 on all legs brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt_{2,5} metallic bluish-green laterally and golden-purple dorsally, Gt₇ black; gonoplac black.

Antenna with a constriction between all clavomeres. Frons with strong reticulation, clypeus smooth, antennal toruli with weak reticulation; genal carina strong, reaching above level of lower margin of eyes. Vertex with strong and dense reticulation, with a strong sulcus from eye margin to posterior ocelli, sulcus continuing from there to median ocellus.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, strongly elongate on midlobe; midlobe with a strong median groove in posterior two-thirds, with eleven adnotaular setae. Mesoscutellum with rather strong reticulation on lateral parts, with weak reticulation on median part, meshes strongly elongate; submedian grooves strong and diverging towards posterior part; with a ±complete weak median groove; with seven setae scattered over lateral

parts. Dorsellum with very weak reticulation and shiny, with median carina. Propodeum with a strong median carina that is strongly expanded in anterior and posterior parts but very narrow in the middle; with strong reticulation in anterior half, with longitudinal carinae in posterior half; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with very weak reticulation; fore coxa with a carina along both anterior and posterior parts, hind coxa with a longitudinal carina along posterior margin. Fore wing with 6&8 setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse, 0.5× as long as wide, with strong longitudinal carinae. Gaster ovate-elongate; medio-basal Gt₁ with longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 27.5; head length, frontal view 43; POL 12.5; OOL 7; lateral ocellus diameter 5.5; head width 57.5; mouth width 17; malar space 17; eye length 24.5; scape length 23; scape width 5; pedicel+flagellum length 69; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 9.5; F1 width 7; F2 length 12; F2 width 7; F3 length 11; F3 width 7.5; clava length 24; clava width 7; C3 length 7; spicule length 2; mesosoma length 87; mesosoma width 56; midlobe of mesoscutum length 36; mesoscutellum length 31.5; mesoscutellum width 24.5; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 6; propodeum length 16; costal cell length 43; costal cell width (measured at widest part) 4.5; marginal vein length 40; stigmal vein length 16; gaster length 97; gaster width 45; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 12.5; Gt₇ width (measured at base) 9; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, La Cangreja, 1950m, vi-vii.1992, P. Hanson (NHMUK). Paratypes (19♀, CNC, MZLU, MZUCR, NHMUK): following from same locality as holotype but collected vii.1991 (3♀), viii-ix.1991 (3♀), iii-v.1991 (3♀), vi-vii.1992 (3♀), ix-xii.1992 (3♀); 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson; following from same locality as previous but collected i.1995 (1♀), iii.1995 (1♀), i.1996 (1♀).

***Galeopsomyia cosidis* Hansson sp.nov.**

(Figs 352, 353, 773)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 773); genal carina present; mesoscutellum (Fig. 352) with submedian grooves diverging towards posterior part, median part with weak reticulation, with a median groove in anterior four-fifths; dorsellum with median carina; propodeum (Fig. 352) with strong reticulation and strong irregular carinae, median carina wide, callus with seven setae; all coxae metallic bluish-green (Fig. 353); petiole transverse with strong irregular sculpture on dorsal part; gaster (Fig. 352)

3.0× as long as wide, medio-basal Gt_1 with short longitudinal carinae laterally, tergites with strong reticulation; body bright metallic bluish-green, Gt_{2-4} metallic purple on dorsal parts.

Female holotype: length of body 2.9mm (paratypes 2.5–3.0mm).

Scape dark brown with ventral parts dark yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, upper parts with blue tinges, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora metallic bluish-green; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt_1 and Gt_{5-6} metallic bluish-green, Gt_{2-4} metallic bluish green with dorsal part golden-purple and metallic bluish-purple, Gt_7 golden; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons with strong reticulation/rugosity, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior two-thirds, and with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with a median groove in anterior four-fifths; with seven setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster very elongate; medio-basal Gt_1 with short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 43; POL 11.5; OOL 7; lateral ocellus diameter 4.5; head width 55; mouth width 16.5; malar space 16.5; eye length 23; scape length 20; scape width 5; pedicel+flagellum length 60; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 9.5; F1 width 5; F2 length 10; F2 width 5; F3 length 9; F3 width 5; clava length 21; clava width 5; C3 length 7; spicule length 2; mesosoma length 80; mesosoma width 53; midlobe of mesoscutum length 33; mesoscutellum length 30; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 13; costal cell length 45; costal cell width (measured at widest part) 3.5; marginal vein length 40; stigmal vein length 13; gaster length 129; gaster width 43; Gt_2 length (measured medially) 13; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 24; Gt_7 width (measured at base) 15; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK). Paratypes (7♀, MZLU, MZUCR, NHMUK): all from same locality as holotype but collected ii.2002 (1♀), iii.2002 (1♀), iv.2002 (3♀), 21.iv.2002 (2♀).

***Galeopsomyia crabra* Hansson sp.nov.**

(Figs 354, 355, 772, 940)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 772); genal carina present; mesoscutellum (Fig. 354) with weak reticulation on median part, meshes elongate; submedian grooves distinct, curved and diverging towards both anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 354) with strong reticulation, callus with six setae; gaster (Fig. 354) 2.1× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation.

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel brown and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex golden-green. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters pale brown; fore and mid femora with basal half black and apical half yellowish-brown, hind femur with basal two-thirds golden-green and apical one-third yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole black. Gaster with Gt_{1,5,6} golden-green, Gt_{2,4} metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove in posterior one-third, with 14 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, curved and diverging towards both anterior and posterior parts; with seven setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 37; POL 10; OOL 6.5; lateral ocellus diameter 5; head width 52.5; mouth width 15; malar space 14; eye length 22; scape length 17; scape width 5; pedicel+flagellum length 51; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 8; F2 width 5; F3 length 7.5; F3 width 5; clava length 18.5; clava width 5.5; C3 length 6.5; spicule length 1.5; mesosoma

length 66; mesosoma width 45; midlobe of mesoscutum length 26; mesoscutellum length 25.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 11; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 10; gaster length 87; gaster width 42; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 16.ii.2013, J.S. Noyes (NHMUK).

***Galeopsomyia criniera* Hansson sp.nov.**

(Figs 356, 357, 774)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 774); genal carina present; mesoscutellum (Fig. 356) with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part, with a very weak median groove in anterior half; dorsellum without median carina; propodeum (Fig. 356) with strong irregular carinae in median part and strong reticulation laterally, callus with five setae; gaster (Fig. 356) 2.6× as long as wide with apex pointed, medio-basal Gt₁ with longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.8mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons below level of antennal toruli and scrobes metallic bluish-green, clypeus dark brown, frons and vertex metallic bluish-purple. Mesoscutum and mesoscutellum metallic bluish-purple, propodeum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; fore trochanter pale brown, mid and hind trochanters dark brown; femora metallic bluish-green with apical part yellowish-white; tibiae and tarsi yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-purple with metallic purple hind margin, Gt_{2,4} metallic purple, Gt₅ metallic purple medially and metallic bluish-green laterally, Gt₆ metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli and scrobes with weak reticulation, clypeus smooth, frons rugose; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior half, with 13 scattered adnotaular setae.

Mesoscutellum with median part with weak reticulation, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with a very weak median groove in anterior half; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, without median carina. Propodeum with a strong median carina; with strong irregular carinae on median part, strong reticulation on lateral parts; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&6 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 28; head length, frontal view 45; POL 11; OOL 6; lateral ocellus diameter 6; head width 60; mouth width 19; malar space 16; eye length 26; scape length 20; scape width 5; pedicel+flagellum length 63; pedicel length 7.5; pedicel width, dorsal view 5; F1 length 10; F1 width 5.5; F2 length 10; F2 width 5.5; F3 length 9.5; F3 width 5.5; clava length 22; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 80; mesosoma width 54; midlobe of mesoscutum length 29; mesoscutellum length 30; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 12.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 13; costal cell length 44; costal cell width (measured at widest part) 3.5; marginal vein length 35; stigmal vein length 10; gaster length 129; gaster width 50; Gt_2 length (measured medially) 12; Gt_4 length (measured medially) 18; Gt_7 length (measured medially) 20; Gt_7 width (measured at base) 14.5; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, Guanacaste, Refugio de Vida Silvestre Bosque Diría (now Parque Nacional), LN 239083_358610, 700m, 14-15.ii.2011, J.S. Noyes (NHMUK).

***Galeopsomyia crotonae* Hansson sp.nov.**

(Figs 358, 359, 1069)

Diagnosis (female). Antenna with solid clava (Fig. 1069); genal carina absent; mesoscutellum (Fig. 358) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves \pm parallel, with a weak median groove in anterior half; dorsellum without median carina; propodeum (Fig. 358) short, with strong reticulation without irregular carinae, callus with two setae; hind margin of hind coxa with a short longitudinal carina close to base; gaster (Fig. 358) 2.6 \times as long as wide, medio-basal Gt_1 with a carina shaped like an inverted U (as in Fig. 26), tergites with strong reticulation.

Female holotype: length of body 2.0mm (paratypes 1.4–1.9mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons and vertex metallic bluish-green. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with fore and hind coxae golden-green, mid coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with six scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves straight and parallel; with ten scattered setae over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a triangular median carina; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind margin of hind coxa with a short longitudinal carina close to base. Fore wing with two setae on dorsal part in basal half of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a carina shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 35; POL 9; OOL 4.5; lateral ocellus diameter 4.5; head width 44.5; mouth width 16; malar space 11.5; eye length 22; scape length 17; scape width 4.5; pedicel+flagellum length 48; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 7.5; F1 width 4; F2 length 8.5; F2 width 4.5; F3 length 7; F3 width 5; clava length 16; clava width 5.3; C3 length 6; spicule length 1.5; mesosoma length 53; mesosoma width 41.5; midlobe of mesoscutum length 21; mesoscutellum length 21; mesoscutellum width 20.5; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 7; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 26; stigmal vein length 10; gaster length 84; gaster width 32; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 11; Gt_7 length (measured medially) 12.5; Gt_7 width (measured at base) 16; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from leaf gall induced by unidentified Cecidomyiidae on *Croton schiedeanus* (Euphorbiaceae). The gall is spherical, 3–7 mm in diameter, and detachable from the leaf.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, Tirimbina, ii.2004, from spherical leaf gall on *Croton* Schn., Ley & Hanson (NHMUK). Paratypes (3♀, MZLU, NHMUK): 1♀ COSTA RICA, Heredia, Estación

Biológica La Selva, 10°26'N, 84°01'W, 100-200m, 30-31.iii.2002, swept, J.A. Azofeifa; 1♀ from same locality as previous but collected 28-29.ii.2008; 1♀ COSTA RICA, **Limón**, Puerto Viejo, Hotel Punta Cocles, 27.ii.1991, J.S. Noyes.

Etymology. Named after the host plant of the gall from which this species was reared.

***Galeopsomyia cuscoensis* Hansson sp.nov.**

(Figs 360, 361, 1071)

Diagnosis (female). Antennal clava solid (Fig. 1071); genal carina present; mesoscutellum (Fig. 360) with strong reticulation on median part, lateral parts with even stronger reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig.360) with strong reticulation and some irregular carinae medially, callus with four setae; gaster (Fig. 360) 3.0× as long as wide with gonoplac 1.0× as long as hind femur, medio-basal Gt₁ with short longitudinal carinae laterally, reticulation on tergites strong.

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel and flagellum brown. Head metallic bluish-purple, antennal scrobes black, clypeus dark brown. Thoracic dorsum metallic bluish-purple. Legs with coxae dark brown, hind coxa with metallic tinges; trochanters brown; femora dark brown with apex yellowish-white; tibiae yellowish-white; T1–3 yellowish-white, T4 brown. Petiole black. Gaster dark brown, Gt₁ with metallic blue tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with strong reticulation on median part, lateral parts with stronger reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands strongly in posterior half; with strong reticulation and some irregular carinae medially; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae laterally; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 31; POL 9; OOL 4; lateral ocellus diameter 3; head width 37.5; mouth width 14; malar space 10.5; eye length 17; scape length 12; scape width 3; pedicel+flagellum length 42; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 6.5; F2 width 3.2; F3 length 6.5; F3 width 3.5; clava length 15.5; clava width 4; C3 length 5.5; spicule length 1.5; mesosoma length 47; mesosoma width 33; midlobe of mesoscutum length 18.5; mesoscutellum length 17; mesoscutellum width 16.5; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum

length 2; propodeum length 6.5; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 6.5; gaster length 87; gaster width 29; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 10; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Peru.

Material examined.

Holotype ♀ **PERU**, Cusco, Quillabamba, 23.xiii.1983, Lars Huggert (MZLU).

Etymology. Named after type locality.

***Galeopsomyia cyaneoviridis* Hansson sp.nov.**

(Figs 362, 363, 775)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 775); genal carina present but weak; mesoscutellum (Fig. 362) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 362) with strong reticulation without irregular carinae, median carina wide, callus with two setae; all coxae metallic bluish-green (Fig. 363); petiole very short, just a narrow band; gaster (Fig. 362) 2.8× as long as wide, tergites with very strong reticulation, medio-basal Gt₁ with a sharp transverse edge dorsally; body bright metallic bluish-green (Figs 362, 363).

Female holotype: length of body 2.9mm.

Scape yellowish-brown, pedicel dark brown, flagellum dark brown to black. Head with frons metallic bluish-green with scrobes black with metallic tinges and clypeus dark brown; vertex bluish-green. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green with blue tinges. Legs with coxae metallic bluish-green; trochanters pale brown; femora black with metallic bluish-green tinges and apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a weak genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior two-thirds, with 14 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with eight setae scattered over lateral parts. Dorsellum with strong sculpture, with median

carina. Propodeum with a strong, short and wide median carina that expands in anterior and posterior parts; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp transverse edge dorsally; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 44; POL 12; OOL 7.5; lateral ocellus diameter 5; head width 57; mouth width 20; malar space 15.5; eye length 24; scape length 20.5; scape width 5.5; pedicel+flagellum length 64; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 11; F1 width 5.5; F2 length 11; F2 width 5.5; F3 length 10; F3 width 5.5; clava length 21; clava width 7; C3 length 6; spicule length 1; mesosoma length 80; mesosoma width 55; midlobe of mesoscutum length 35; mesoscutellum length 31; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 4; propodeum length 8.5; costal cell length 45; costal cell width (measured at widest part) 3; marginal vein length 44; stigmal vein length 12; gaster length 135; gaster width 49; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 19.5; Gt_7 length (measured medially) 20; Gt_7 width (measured at base) 17; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK).

Etymology. From the Latin *cyaneus* = blue, and *viridis* = green, referring to bright metallic bluish-green body.

Galeopsomyia daleskeyae Hansson sp.nov.

(Figs 364, 365, 779, 917)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 779); genal carina present; mesoscutellum (Fig. 917) with outer margin of submedian grooves absent in anterior half, grooves diverging slightly towards anterior part, median part with weak reticulation and shiny; dorsellum with median carina; propodeum (Fig. 364) with strong irregular carinae and strong reticulation, callus with two setae; all coxae dark and metallic, femora predominantly dark brown (Fig. 365); petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 364) 2.1× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-purple. Mesosoma golden-green. Legs with fore and hind coxae golden-green, mid coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with $G_{1,6,7}$ golden-green, $G_{2,5}$ metallic purple medially and golden-green laterally; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, weaker on posterior part of midlobe, meshes isodiametric, with a weak median groove in posterior half, midlobe with ten scattered adnotaular setae. Mesoscutellum with outer margin of submedian grooves absent in anterior half, grooves \pm straight and diverging slightly towards anterior part; median part with weak reticulation; lateral parts with strong reticulation, meshes elongate, with six scattered setae. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal surface. Gaster elongate; medio-basal G_1 with longitudinal carinae laterally, with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; POL 10; OOL 6.5; lateral ocellus diameter 5; head width 56; mouth width 14; malar space 16; eye length 24; scape length 20; scape width 4.5; pedicel+flagellum length 61; pedicel length 7; pedicel width, dorsal view 4.5; F1 length 11; F1 width 5; F2 length 11; F2 width 5; F3 length 9.5; F3 width 4.4; clava length 20; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 71; mesosoma width 49; midlobe of mesoscutum length 29; mesoscutellum length 26.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 11; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 41; stigmal vein length 10; gaster length 103; gaster width 48.5; G_2 length (measured medially) 11; G_4 length (measured medially) 19; G_7 length (measured medially) 14; G_7 width (measured at base) 17; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, LN 217300_526200, 1150m, 16.ii.2008, J.S. Noyes (NHMUK).

Etymology. Named in honour of Natalie Dale-Skey, Hymenoptera curator at NHMUK, who has been very helpful with processing material for this project.

***Galeopsomyia devania* Hansson sp.nov.**

(Figs 28, 366, 367, 780, 941)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 780); genal carina present; mesoscutellum (Fig. 366) with outer margin of submedian grooves absent, median part with very weak reticulation and shiny, lateral parts rugose with 12 scattered setae; dorsellum with median carina; propodeum (Fig. 366) with strong irregular carinae, median carina wide, callus with two setae; all coxae dark and metallic (Fig. 367); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 366) 2.7× as long as wide, Gt₁ 0.8× as long as wide with very weak reticulation and medio-basal part with five short longitudinal carinae (Fig. 28), remaining tergites with weak reticulation.

Female holotype: length of body 3.8mm (paratype 3.6mm).

Scape black with basal one-third yellowish-brown, pedicel and flagellum black. Head with frons metallic bluish-green, antennal scrobes golden-green and clypeus yellowish-brown; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden with red and green tinges; propodeum metallic bluish-green. Legs with fore coxa metallic bluish-green, mid and hind coxae golden-green; trochanters, femora, tibiae and tarsi yellowish-brown to yellowish-white, T4 dark brown. Petiole black. Gaster with Gt₁ golden-red with posterior margin golden-green, Gt₂₋₅ metallic purple medially and golden-green laterally, Gt₆ golden-green, Gt₇ golden-green in basal half and black in apical half; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with weak reticulation and isodiametric meshes; midlobe with parts close to notauli rugose, with a median groove in posterior half, with 14 setae scattered over rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with very weak reticulation and shiny, lateral parts rugose with 12 scattered setae. Dorsellum with weak reticulation, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and weak reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with eight setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; Gt₁ with very weak reticulation and medio-basal part with five short longitudinal carinae, remaining tergites with weak reticulation and shiny.

Relative measurements: head length, dorsal view 31; head length, frontal view 58; POL 14; OOL 9; lateral ocellus diameter 7; head width 76; mouth width 21; malar space 20; eye

length 30; scape length 32; scape width 6; pedicel+flagellum length 97; pedicel length 9; pedicel width, dorsal view 5.3; F1 length 16; F1 width 8; F2 length 20; F2 width 7; F3 length 17; F3 width 7; clava length 32; clava width 7.5; C3 length 7.5; spicule length 2; mesosoma length 106; mesosoma width 72; midlobe of mesoscutum length 42; mesoscutellum length 42; mesoscutellum width 32; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 14.5; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 7; propodeum length 20; costal cell length 56; costal cell width (measured at widest part) 4.5; marginal vein length 70; stigmal vein length 17; gaster length 150; gaster width 55; Gt₂ length (measured medially) 16; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 18; longest cercal seta length 18; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, San Gerardo de Dota, 9°34'N, 83°43'W, 20-21.ii.2013, J.S. Noyes (NHMUK). Paratype 1 ♀ COSTA RICA, Cartago, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Sendero Arboles Caídos, LN 561400_192500, 1500m, 9.vii-11.viii.2000, malaise trap, D. Rubí (MZLU).

Galeopsomyia diriaensis Hansson sp.nov.

(Figs 368, 369, 781)

Diagnosis (female). Antennal clava solid, scape with ventro-basal part expanded (Fig. 781); genal carina present; mesoscutellum (Fig. 368) 0.9× as long as wide, with weak reticulation on median part, lateral parts with stronger reticulation, meshes very elongate and mesoscutellum thus appearing striate, submedian grooves distinct, straight and diverging slightly towards posterior part; dorsellum without median carina; propodeum (Fig. 368) with a narrow median carina and strong reticulation, callus with two setae; gaster (Fig. 368) ovate, 1.5× as long as wide, medio-basal Gt₁ with a transverse edge dorsally and with short longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 1.2mm.

Scape yellowish-brown, pedicel and flagellum pale brown. Head black with metallic tinges, clypeus dark brown. Mesoscutum golden-purple, mesoscutellum golden-purple with posterior one-third golden-green, propodeum black with metallic tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora pale brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole dark brown. Gaster black with metallic tinges; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex

with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with five adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with stronger reticulation, meshes very elongate; submedian grooves distinct, straight and diverging slightly towards posterior part; with five setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with a narrow carina and strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate; medio-basal Gt_1 with a transverse edge dorsally and with short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 15.5; head length, frontal view 26; POL 7.5; OOL 4.5; lateral ocellus diameter 3; head width 34.5; mouth width 11; malar space 8.5; eye length 14; scape length 13; scape width 2.5; pedicel+flagellum length 33; pedicel length 4.5; pedicel width, dorsal view 3; F1 length 4.5; F1 width 3; F2 length 5; F2 width 3; F3 length 4.5; F3 width 3; clava length 12.5; clava width 4; C3 length 5; spicule length 1.5; mesosoma length 39; mesosoma width 31; midlobe of mesoscutum length 13.5; mesoscutellum length 14.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 7.5; costal cell length 21; costal cell width (measured at widest part) 1.5; marginal vein length 18; stigmal vein length 6; gaster length 45; gaster width 30; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 9.5; Gt_7 length (measured medially) nm; Gt_7 width (measured at base) nm; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Bosque Nacional Diría, Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 18.x-15.xi.2001, I. Jiménez (NHMUK).

Etymology. Named after type area, Bosque Nacional Diría.

***Galeopsomyia dolosa* Hansson sp.nov.**

(Figs 370, 371, 782)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 782); genal carina present; mesoscutellum (Fig. 370) with submedian grooves subdivided by transverse carinae and with outer margin indistinct, median part with weak reticulation, lateral parts with very strong reticulation; dorsellum with median carina; propodeum (Fig. 370) predominantly with strong irregular carinae, median carina wide, callus with five setae; fore and mid coxae

yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, dark brown along posterior part (Fig. 371); petiole very short, just a narrow band; gaster (Fig. 370) 3.3× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 4.0mm (paratype 2.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, scrobes black; vertex metallic blue outside ocellar triangle, metallic purple inside. Mesoscutum and propodeum golden-green, mesoscutellum golden-red. Legs with fore and mid coxae yellowish-brown, hind coxa yellowish-brown at apex and along anterior part, golden-red along posterior part; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin metallic purple, Gt₂₋₆ metallic purple, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, frons rugose; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation with isodiametric meshes on sidelobes, midlobe predominantly with elongate meshes, parts close to notauli rugose, without a median groove, with 16 scattered setae on rugose parts. Mesoscutellum with submedian grooves curved and diverging towards posterior part, with transverse carinae and with outer margin indistinct, median part with very weak reticulation and with a very weak median groove in anterior one-third, reticulation with elongate meshes, lateral parts rugose. Dorsellum with weak reticulation, with median carina. Propodeum with a strong median carina that expands in posterior part; predominantly with strong irregular carinae, laterally with some reticulation; callus with five setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 7&9 setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 32; head length, frontal view 56; POL 13.5; OOL 8; lateral ocellus diameter 6.5; head width 73; mouth width 25; malar space 21; eye length 32.5; scape length 29; scape width 6.5; pedicel+flagellum length 87; pedicel length 10; pedicel width, dorsal view 5.5; F1 length 16; F1 width 6.5; F2 length 15; F2 width 6.5; F3 length 14.5; F3 width 6.5; clava length 27; clava width 8; C3 length 9; spicule length 2; mesosoma length 103; mesosoma width 71; midlobe of mesoscutum length 45; mesoscutellum length 39; mesoscutellum width 31; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 8; dorsellum length 6; propodeum length 16.5; costal cell length 50; costal cell width (measured at widest part) 4; marginal vein length 60; stigmal vein length 14; gaster length 188; gaster width 57; Gt₂ length (measured medially) 12.5; Gt₄ length (measured medially) 27; Gt₇ length (measured medially) 35; Gt₇ width (measured at base) 26.5; longest cercal seta length 18; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU). Paratype: 1 ♀ with same label data as holotype (NHMUK).

***Galeopsomyia edera* Hansson sp.nov.**

(Figs 372, 373, 777)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 777); genal carina present; mesoscutellum (Fig. 372) with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with an indistinct median carina; propodeum (Fig. 372) with a mix of strong irregular carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 372) short ovate, 1.6× as long as wide; tergites with strong reticulation.

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head golden-green, clypeus dark brown, scrobes blackish. Mesoscutum metallic bluish-green, mesoscutellum and propodeum golden-green. Legs with fore coxa dark brown with metallic blue tinges on anterior surface, mid coxa pale brown on anterior part and yellowish-brown on posterior part, hind coxa black with metallic tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, remaining tergites black with metallic blue tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of antennal toruli and on scrobes with weak reticulation, clypeal area smooth, frons with strong reticulation; with genal carina. Vertex inside ocellar triangle with transverse carinae, with strong reticulation outside ocellar triangle.

Mesoscutum with strong reticulation, meshes slightly elongate on midlobe, isodiametric on sidelobes; midlobe without median groove, with ten scattered adnotaular setae. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with seven scattered setae on lateral parts. Dorsellum with strong sculpture, with an indistinct median carina. Propodeum with a strong median carina that expands in posterior part; with a mix of strong irregular carinae and reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal surface with strong sculpture. Gaster short ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 30; POL 8.5; OOL 5; lateral ocellus diameter 3.5; head width 41; mouth width 11.5; malar space 9; eye

length 20; scape length 15; scape width 3.5; pedicel+flagellum length 43; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7.5; F1 width 3.5; F2 length 7; F2 width 4; F3 length 7; F3 width 4; clava length 14.5; clava width 5; C3 length 5.5; spicule length 1.5; mesosoma length 48; mesosoma width 35; midlobe of mesoscutum length 17.5; mesoscutellum length 17; mesoscutellum width 16.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 9; costal cell length 23.5; costal cell width (measured at widest part) 2; marginal vein length 21; stigmal vein length 8.5; gaster length 74; gaster width 46; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 3.5; Gt₇ width (measured at base) 10; longest cercal seta length 10; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Guanacaste, Estación Maritza, 10°58'N, 85°29'W, 700m, 21.ii.2005, J.S. Noyes (NHMUK).

***Galeopsomyia elisia* Hansson sp.nov.**

(Figs 374, 375, 786)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2, spicule long (Fig. 786); genal carina present and strong; mesoscutellum (Fig. 374) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; dorsellum without median carina; propodeum (Fig. 374) with strong reticulation, callus with four setae; fore wing with two setae on dorsal surface of submarginal vein, both close to base; petiole transverse, with strong sculpture on dorsal part; gaster (Fig. 374) ovate, 1.7× as long as wide, tergites with strong reticulation; body mainly black with metallic tinges (Figs 374, 375).

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel and clava dark brown. Head, mesoscutum, mesoscutellum and Gt₂₋₇ black with metallic purple tinges, propodeum and Gt₁ black with metallic blue tinges. Legs with coxae black; fore and mid trochanters dark brown, hind trochanter yellowish-brown; femora dark brown with apex yellowish-white; tibiae and tarsi yellowish-white. Petiole black. Gaster with gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, scrobes with weak reticulation; with a strong genal carina reaching almost to level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; occipital margin with an edge behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a complete median groove, with six adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with five setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein, both close to base; speculum closed; costal setal row broken.

Petiole transverse, with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 31; POL 8.5; OOL 5.5; lateral ocellus diameter 4; head width 44; mouth width 11.5; malar space 11; eye length 19.5; scape length 15.5; scape width 3.5; pedicel+flagellum length 43; pedicel length 6; pedicel width, dorsal view 3; F1 length 6; F1 width 3.5; F2 length 7; F2 width 3.5; F3 length 6.5; F3 width 3.5; clava length 15.5; clava width 4; C3 length 5; spicule length 1; mesosoma length 47; mesosoma width 37; midlobe of mesoscutum length 14; mesoscutellum length 17; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 8; costal cell length 22; costal cell width (measured at widest part) 1.5; marginal vein length 20; stigmal vein length 6; gaster length 51; gaster width 31; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 10.5; Gt₇ length (measured medially) 4; Gt₇ width (measured at base) 10.5; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Reserva Absoluta Cabo Blanco, 9°35'N, 85°06'W, 30m, 16-17.ii.2009, J.S. Noyes (NHMUK).

Galeopsomyia eolio Hansson sp.nov.

(Figs 376, 377, 783)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 783); genal carina present; mesoscutellum (Fig. 376) with median part with very weak reticulation, without a median groove, outer margin of submedian grooves absent in anterior two-thirds, distinct in posterior one-third, grooves with transverse and strong carinae in anterior two-thirds, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 376) with median part with strong irregular carinae, lateral parts with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 376) 2.1× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, Gt₁ with weak reticulation, remaining tergites with relatively strong reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons below level of antennal toruli golden-green, clypeus dark brown, above level of antennal toruli metallic bluish-green, scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green, propodeum black with golden tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters and tibiae yellowish-brown; femora dark brown with apex yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₄ metallic purple, Gt₅ golden-green with median part metallic purple, Gt₆₋₇ black with golden-green tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of antennal toruli with strong reticulation, clypeus smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle, with a carina between posterior part of posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose on parts close to notauli; midlobe with a weak median groove in posterior half, with nine scattered setae on rugose parts. Mesoscutellum with median part with very weak reticulation, without a median groove; outer margin of submedian grooves absent in anterior two-thirds, distinct in posterior one-third, grooves with transverse and strong carinae in anterior two-thirds; lateral parts with strong reticulation and with seven scattered setae. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands posteriorly; median part with strong irregular carinae, lateral parts with strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; Gt₁ with weak reticulation, remaining tergites with relatively strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 10.5; OOL 7; lateral ocellus diameter 5; head width 57; mouth width 16; malar space 14; eye length 26; scape length 21; scape width 4.5; pedicel+flagellum length 62; pedicel length 7; pedicel width, dorsal view 4; F1 length 11.5; F1 width 4.5; F2 length 10.5; F2 width 5; F3 length 9; F3 width 5; clava length 19.5; clava width 5.5; C3 length 6; spicule length 2; mesosoma length 73; mesosoma width 50; midlobe of mesoscutum length 30; mesoscutellum length 26.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 5; propodeum length 11; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 35; stigmal vein length 11; gaster length 98; gaster width 47; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, Santo Domingo, INBio-Parque, 13.ii.2010, J.S. Noyes (NHMUK).

***Galeopsomyia eridana* Hansson sp.nov.**

(Figs 378, 379, 784)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 784); with genal carina; mesoscutellum (Fig. 378) with median part with weak reticulation, meshes elongate, submedian grooves strongly diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 378) with strong reticulation and strong irregular carinae, median carina wide, callus with four setae; gaster (Fig. 378) 1.7× as long as wide, medio-basal Gt₁ with longitudinal carinae, apex of gonoplac blunt (Fig. 379); body black (Figs 378, 379).

Female holotype: length of body 1.9mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head black with golden tinges, clypeus dark brown, antennal scrobes black. Mesosoma black. Legs with fore and hind coxae black, mid coxa dark brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,6,7} black, Gt_{2,5} golden-purplish; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation and some transverse carinae; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a complete median groove and with seven scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, with median groove indicated in anterior part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a wide median carina; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with longitudinal carinae; tergites with strong reticulation; apex of gonoplac blunt.

Relative measurements: head length, dorsal view 21; head length, frontal view 37; POL 9.5; OOL 6; lateral ocellus diameter 4.5; head width 49; mouth width 12; malar space 12; eye length 21; scape length 20; scape width 4.5; pedicel+flagellum length 55; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7.5; F1 width 5; F2 length 9.5; F2 width 5; F3 length 9; F3 width 5; clava length 20; clava width 5.5; C3 length 7; spicule length 2; mesosoma length 58; mesosoma width 43; midlobe of mesoscutum length 17; mesoscutellum length 20.5; mesoscutellum width 20.5; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2.5;

propodeum length 10.5; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 10; gaster length 69; gaster width 40; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 14.5; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Pitilla, ACG, LN 532600_380600, 22-30.i.2001, R. Thomas, C. Moraga (NHMUK).

***Galeopsomyia estrella* Hansson sp.nov.**

(Figs 380, 381, 778)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 778); genal carina present but weak; mesoscutellum (Fig. 380) with submedian grooves with outer margin indistinct and with transverse carinae, almost straight, median part with weak reticulation, without median groove, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 380) predominantly with strong reticulation, callus with three setae; fore and mid coxae pale brown and hind coxa dark brown (Fig. 381); petiole transverse, dorsal part with strong sculpture, pale brown (Fig. 380); gaster (Fig. 380) 2.8× as long as wide, medio-basal Gt₁ with several longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.8mm (paratype 2.7mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic blue, antennal scrobes mainly black, clypeus dark brown; vertex black. Mesosoma dark brown to black, mesoscutellum with weak metallic tinges. Legs with fore and mid coxae pale brown, hind coxa dark brown; trochanters yellowish-brown; femora brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole pale brown. Gaster with Gt_{1,6} pale brown, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak and small-meshed reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with weak reticulation, midlobe rugose close to notauli, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior two-thirds, and with ten scattered setae on rugose parts. Mesoscutellum with submedian grooves with outer margin indistinct and with transverse carinae, almost straight, median part with very weak reticulation, lateral parts with strong reticulation, meshes elongate; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina, with strong irregular carinae and strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with

four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster elongate; medio-basal Gt_1 with several longitudinal short carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 44; POL 10; OOL 6.5; lateral ocellus diameter 5.5; head width 55.5; mouth width 17.5; malar space 14.5; eye length 25; scape length 19.5; scape width 5; pedicel+flagellum length 67; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 14; F1 width 5; F2 length 11; F2 width 5.5; F3 length 10.5; F3 width 5.5; clava length 21.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 74; mesosoma width 49; midlobe of mesoscutum length 28; mesoscutellum length 25.5; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3; propodeum length 11.5; costal cell length 42; costal cell width (measured at widest part) 2.2; marginal vein length 36; stigmal vein length 11; gaster length 128; gaster width 46; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 25; Gt_7 length (measured medially) 21; Gt_7 width (measured at base) 15.5; longest cercal seta length 18; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Limón**, Valle de la Estrella, Reserva Biológica Hitoy Cerere, Sendero Toma de Agua, LN 184300_643500, 140m, 8.v.1999, malaise trap, F. Umaña (NHMUK). Paratype: 1♀ **COSTA RICA, Limón**, Valle Silencio, Reserva Biológica Hitoy Cerere, Sendero Toma de Agua, LN 643400_184600 100m, 18.xii.2000-18.i.2001, F. Umaña (MZLU).

***Galeopsomyia evgenyazkharovi* Hansson sp.nov.**

(Figs 382, 383, 785)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 785); genal carina present; mesoscutellum (Fig. 382) with median part with weak reticulation without median groove, meshes elongate, submedian grooves distinct, curved and diverging slightly towards both anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 382) with strong reticulation, callus with four setae; petiole very short, a very narrow band; gaster (Fig. 382) elongate, 2.6× as long as wide, tergites predominantly with rather weak reticulation, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24).

Female holotype: length of body 2.6mm (paratype 1.7mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Face below level of toruli and scrobes dark brown, remaining part metallic bluish-purple; vertex metallic bluish-purple. Mesoscutum dark brown with metallic tinges; mesoscutellum golden-green; propodeum black. Legs with fore coxa dark brown, mid coxa yellowish-brown, hind coxa black with apex

yellowish-brown; femora dark brown with apex paler; trochanters, tibiae and tarsi yellowish-brown, hind leg with T4 pale brown. Petiole dark brown. Gaster with Gt₁ golden-green, Gt_{2,6} dark brown, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle and with a sharp edge between posterior part of posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with an indistinct median groove in posterior one-third; with seven adnotaular setae in \pm two rows. Mesoscutellum with median part with very weak reticulation without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct and diverging slightly towards both anterior and posterior parts; with four setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and wide median carina that expands slightly in both anterior and posterior parts; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; Gt₁₋₄ with rather weakreticulation, Gt₅₋₇ with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 36; POL 9.5; OOL 6.5; lateral ocellus diameter 5; head width 51; mouth width 20; malar space 12.5; eye length 23; scape length 21; scape width 5; pedicel+flagellum length 64; pedicel length 7; pedicel width, dorsal view 4; F1 length 12; F1 width 5; F2 length 10; F2 width 4.5; F3 length 9; F3 width 4.5; clava length 21; clava width 4.5; C3 length 8; spicule length 3; mesosoma length 68; mesosoma width 45; midlobe of mesoscutum length 23; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 5; propodeum length 10; costal cell length 36; costal cell width (measured at widest part) 2; marginal vein length 37; stigmal vein length 10; gaster length 116; gaster width 45; Gt2 length (measured medially) 12; Gt4 length (measured medially) 14; Gt7 length (measured medially) 21; Gt7 width (measured at base) 15; longest cercal seta length 18; shortest cercal seta length 7.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-3, 10°76'N, 85°33'W, 820m, 20-27.x.2016, D. Janzen, W. Hallwachs (barcoded specimen: BIOUG53419-E11) (MZLU). Paratype: 1 ♀ from same locality as previous but collected 11-18.v.2017 (barcoded specimen: BIOUG57759-C06) (MZLU).

Etymology. Named in honour of Evgeny Zakharov in recognition of his years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia eximia* Hansson sp.nov.**

(Figs 384, 385, 787)

Diagnosis (female). Antenna with strong constriction between C1 and C2 (Fig. 787), flagellum elongate, flagellum+pedicel 1.1× as long as width of mesosoma; genal carina present and strong; mesoscutellum (Fig. 384) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves strong and slightly curved; dorsellum with median carina; hind coxa ± a weak carina along posterior margin and with 20 strong setae on posterior part; propodeum (Fig. 384) with strong irregular carinae, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 384) 2.2× as long as wide, medio-basal Gt₁ with an edge/carina shaped like an inverted U (as in Fig. 24).

Female holotype: length of body 2.6mm (paratypes 1.8–2.0mm).

Scape yellowish-brown with dorso-apical part brownish, pedicel and flagellum dark brown. Head with frons golden-green, parts close to eyes metallic greenish-blue, antennal scrobes black with metallic tinges, clypeus yellowish-brown; vertex metallic greenish-blue. Mesoscutum and mesoscutellum metallic greenish-blue with golden tinges; propodeum golden. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters yellowish-brown; femora dark brown in basal half and yellowish-brown in apical half; tibiae yellowish-brown to yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₆ golden-green with blue tinges, Gt₇ golden in basal half, black in apical half; gonoplac black.

Antenna with a strong constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; genal carina reaching level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove, and with 12 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with stronger reticulation, meshes elongate; submedian grooves strong and slightly curved; with ten setae scattered over lateral parts. Dorsellum with weak reticulation, with median carina. Propodeum with complete median carina and with some irregular carinae on either side; part close to paraspiracular carina with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa ± a weak carina along posterior margin and with 20 strong setae on posterior part. Fore wing with eight setae on dorsal surface of submarginal vein; speculum open at apex; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with an edge/carina shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 38; POL 10.5; OOL 6; lateral ocellus diameter 5; head width 54; mouth width 16; malar space 14; eye length 22; scape length 18.5; scape width 4.5; pedicel+flagellum length 56; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 8.5; F2 width 4.5; F3 length 8; F3 width 4.5; clava length 20; clava width 5; C3 length 7; spicule length 1; mesosoma

length 73; mesosoma width 51; midlobe of mesoscutum length 33; mesoscutellum length 28; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 11; gaster length 110; gaster width 51; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 14; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes (NHMUK). Paratypes (4♀, MZLU, NHMUK): 2♀ with same label data as holotype; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson; 1♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos.

***Galeopsomyia faina* Hansson sp.nov.**

(Figs 386, 387, 788)

Diagnosis (female). Antenna with constriction between C1 and C2, and between C2 and C3 (Fig. 788); genal carina present and strong; mesoscutellum (Fig. 386) with submedian grooves distinct, close and parallel, median part 3.9× as long as wide, with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 386) with a narrow median carina, with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 386) ovate, 1.9× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation, gonoplac short with blunt tip (Fig. 387). Small (1.4mm), dark brown to black non-metallic species (Figs 386, 387).

Female holotype: length of body 1.4mm.

Scape yellowish-brown, pedicel and F1–3 pale brown, F4–6 dark brown. Head, mesosoma and metasoma dark brown to black, non-metallic. Legs with fore and hind coxae dark brown to black, mid coxa pale brown; trochanters, tibiae and tarsi yellowish-white, femora brown.

Antenna with constriction between C1 and C2, and between C2 and C3. Face below level of antennal toruli with weak reticulation, clypeus smooth; frons with strong reticulation, scrobes with weak reticulation; with a strong genal carina that reaches to level of lower margin of eyes. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove indicated in posterior two-thirds, with six ad-

notaular setae. Mesoscutellum with very weak reticulation on median part and shiny, lateral parts with strong reticulation and eight setae, meshes elongate; submedian grooves distinct, close and parallel. Dorsellum with strong sculpture, with median carina. Propodeum with a narrow median carina that expands slightly towards posterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation; gonoplac short with tip blunt.

Relative measurements: head length, dorsal view 19; head length, frontal view 29; POL 7; OOL 4; lateral ocellus diameter 3.5; head width 39; mouth width 11; malar space 10; eye length 19; scape length 12; scape width 3.2; pedicel+flagellum length 49; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 3; F2 length 6; F2 width 3; F3 length 5; F3 width 3; clava length 15.5; clava width 3.2; C3 length 6.5; spicule length 2.5; mesosoma length 44; mesosoma width 32; midlobe of mesoscutum length 16; mesoscutellum length 16.5; mesoscutellum width 15; median part of mesoscutellum width (measured medially) 4.2; median part of mesoscutellum, width in anterior part 4.5; median part of mesoscutellum, width in posterior part 4.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 7; costal cell length 23; costal cell width (measured at widest part) 1.5; marginal vein length 18; stigmal vein length 6; gaster length 57; gaster width 30; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 9; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Los Charcos de Osa, 8°40'N, 83°30'W, 50m, 15-16.ii.2010, J.S. Noyes (NHMUK).

***Galeopsomyia falla* Hansson sp.nov.**

(Figs 388, 389, 789, 942)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 789); genal carina present; mesoscutellum (Fig. 388) with strong reticulation with elongate meshes; submedian grooves distinct, slightly curved and diverging towards posterior part, with a strong and complete median groove; propodeum (Fig. 388) with strong reticulation and some irregular carinae, callus with two setae; gaster (Fig. 388) 2.6× as long as wide with apex pointed, medio-basal Gt_1 with sharp edges laterally.

Female holotype: length of body 2.8mm (paratypes 1.9–3.5mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons golden-green with scrobes black with metallic tinges and clypeus dark brown; vertex metallic bluish-

green. Mesosoma golden-green. Legs with coxae golden-green; trochanters yellowish-brown; fore and mid femora with basal half to two-thirds dark brown, hind femur black with golden-green tinges, apical part on all femora yellowish-brown; tibiae and tarsi yellowish-white to yellowish-brown, T4 pale brown. Petiole black. Gaster golden-green, Gt_{2,5} golden-purple dorsally, Gt₇ black; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, with 15 adnotular setae in two rows. Mesoscutellum with strong reticulation with elongate meshes; with a strong and complete median groove; submedian grooves distinct, slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina that is expanded in posterior part; with some strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with sharp edges laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 10.5; OOL 5.5; lateral ocellus diameter 5; head width 55; mouth width 16; malar space 14.5; eye length 24.5; scape length 19; scape width 5; pedicel+flagellum length 62; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 9.5; F1 width 5; F2 length 10.5; F2 width 5; F3 length 10; F3 width 5; clava length 21.5; clava width 5.5; C3 length 6.5; spicule length 1.5; mesosoma length 74; mesosoma width 51; midlobe of mesoscutum length 31; mesoscutellum length 27; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3.5; propodeum length 11.5; costal cell length 40; costal cell width (measured at widest part) 2.5; marginal vein length 34; stigmal vein length 10.5; gaster length 131; gaster width 50; Gt₂ length (measured medially) 13; Gt₄ length (measured medially) 21.5; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 13; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, malaise trap, C. Hansson & Parataxonomos (MZLU). Paratypes (33♀, CNC, MZLU, MZUCR, NHMUK): 10♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos; 3♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C.

Hansson & Parataxonomos; 5♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson; 7♀ COSTA RICA, Puntarenas, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes; 1♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes; 1♀ COSTA RICA, **Alajuela**, Parque Nacional Arenal, Sendero Ceibo, 10°27'N, 84°41'W, 22-23.ii.2016, J.S. Noyes; 1♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ COSTA RICA, **Guanacaste**, Zona Protectorada Tenorio, Río San Lorenzo, Tierras Morenas, LN 287800_427600, 1050m, viii.1994, malaise trap, G. Rodriguez; 1♀ COSTA RICA, **Heredia**, Santo Domingo, Parque Ecológico, 09°59'N 84°06'W, 1100m, 9.ii.2018, J.S. Noyes; 1♀ COSTA RICA, Heredia, Estación Biológica La Selva, 100-200m, 10°26'N, 84°01'W, 30-31.iii.2002, swept, J.A. Azofeifa (NHMUK); 1♀ COSTA RICA, **Limón**, Reserva Biológica Hitoy-Cerere, 9°40'N, 83°02'W, 100m, 24-25.ii.2004, J.S. Noyes; 1♀ COSTA RICA, **San José**, San Gerardo de Dota, 9°34'N, 83°43'W, 18-20.ii.2010, J.S. Noyes.

***Galeopsomyia fernandezi* Hansson sp.nov.**

(Figs 390, 391, 790)

Diagnosis (female). Antenna with a short and compact clava (Fig. 790); genal carina absent; mesoscutellum (Fig. 390) transverse, 0.9× as long as wide, with weak reticulation on median part and with a weak median groove in posterior half, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and ±parallel; dorsellum with median carina; propodeum (Fig. 390) with strong irregular sculpture, callus with two setae; gaster (Fig. 390) short ovate, 1.7× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.3mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown; vertex metallic bluish-green. Median part of mesoscutum and mesoscutellum golden-green, lateral parts metallic bluish-green, propodeum metallic bluish-green. Legs with coxae golden-green; fore and mid trochanters dark brown, hind trochanter black; femora black; tibiae and tarsi yellowish-brown, T4 brown. Gaster with G₁ golden-green, remaining tergites black with metallic tinges.

Antenna with compact clava. Frons with weak reticulation, clypeus smooth; without genal carina. Vertex with strong reticulation.

Mesoscutum with sidelobes and lateral parts of midlobe with strong reticulation, median part of midlobe with weak reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with 14 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and ±parallel; with 12 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a narrow median carina; with strong irregular sculpture; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster short ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 28; POL 9; OOL 5; lateral ocellus diameter 3; head width 38; mouth width 12; malar space 10; eye length 17.5; scape length 12; scape width 2.5; pedicel+flagellum length 32; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 5; F1 width 4; F2 length 4.5; F2 width 4; F3 length 4.5; F3 width 4.5; clava length 11; clava width 5; C3 length 3; spicule length 1; mesosoma

length 45; mesosoma width 33; midlobe of mesoscutum length 19; mesoscutellum length 15; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 6; costal cell length 22; costal cell width (measured at widest part) 2; marginal vein length 22; stigmal vein length 7; gaster length 52; gaster width 31; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 9; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 8.5; longest cercal seta length 7; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Desamparaditos, 9.8832 N, 84.3326 W, 700m, v-vii.2019, P. Hanson (NHMUK).

Etymology. Named in honour of Mauricio Fernández, professor in the School of Biology and director of the Network of Protected Areas, University of Costa Rica, specialist in diversity and ecology of solitary bees.

Galeopsomyia feris Hansson sp.nov.

(Figs 392, 393, 791, 970)

Diagnosis (female). Antennal clava short with a weak constriction between C1 and C2 and with apex pointed (Fig. 791), flagellum short, flagellum+pedicel 1.2× as long as width of mesoscutum; genal carina present; mesoscutellum (Fig. 392) with median part with weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin absent, slightly curved and diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 392) with longitudinal carinae on either side of median carina, lateral to carinae with strong reticulation, callus with four setae; gaster (Fig. 392) 2.2× as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with very strong large-meshed reticulation.

Female holotype: length of body 1.9mm (paratypes 2.2mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum brown. Head with frons, including scrobes, golden-green, clypeus dark brown; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green, propodeum dark brown with metallic blue tinges. Legs with fore coxa dark brown with metallic blue tinges, mid coxa dark brown, hind coxa metallic bluish-green; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster dark brown, Gt_{1,5-7} with metallic blue tinges; gonoplac yellowish-brown.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation outside ocellar triangle,

with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a complete median groove, with 14 scattered setae on rugose parts. Mesoscutellum with median part with weak reticulation shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin absent, slightly curved and diverging slightly towards posterior part; with 11 setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands gradually towards posterior part; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae laterally; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 33; POL 10.5; OOL 6.5; lateral ocellus diameter 4; head width 43.5; mouth width 13.5; malar space 12.5; eye length 19; scape length 17; scape width 4; pedicel+flagellum length 45; pedicel length 6; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4; F2 length 8; F2 width 4.5; F3 length 6.5; F3 width 5; clava length 14.5; clava width 6; C3 length 6; spicule length 2; mesosoma length 60; mesosoma width 39; midlobe of mesoscutum length 21; mesoscutellum length 22.5; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 9.5; costal cell length 34; costal cell width (measured at widest part) 2.5; marginal vein length 33; stigmal vein length 11; gaster length 71; gaster width 32; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 12; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 12; longest cercal seta length 10; shortest cercal seta length 6.

Male. Length of body of body 2.1–2.3mm.

Antenna (Fig. 970) with scape triangular and widest at apex; plaque dark brown and situated in apical half; dorso-basal whorls of long setae present on F1–F4 and on C1–C2. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; head width 52; mouth width 16; malar space 15; eye length 23; scape length 21.5; scape width 8.5; plaque length 11; pedicel length 7; pedicel+flagellum length 78; F1 length 5.5; F1 width 5; F2 length 10; F2 width 5; F3 length 11.5; F3 width 5; F4 length 11.5; F4 width 5; clava length 26; clava width 5; mesosoma length 77; mesosoma width 52; gaster length 79; gaster width 38.5; longest subbasal seta on F1, length 33.

Hosts. Reared from leaf gall induced by unidentified Cecidomyiidae on *Schefflera rodrigueziana* (Araliaceae). The gall is spherical, up to 10 mm in diameter, detachable and usually found on the underside of the leaf.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Rio Macho, v.1998, from *Schefflera rodrigueziana* spherical leaf gall (NHMUK). Paratypes: 2♀ 4♂ with same label data as holotype (MZLU, MZUCR, NHMUK).

***Galeopsomyia flora* Hansson sp.nov.**

(Figs 40, 394, 395, 795)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 795), flagellum relatively short, flagellum+pedicel 1.3× as long as width of mesosoma; genal carina present; mesoscutellum (Fig. 394) with submedian grooves subdivided by transverse carinae and with outer margin predominantly indistinct, median part with weak reticulation, lateral parts with very strong reticulation; dorsellum with median carina; propodeum (Fig. 394) predominantly with strong irregular carinae, median carina wide, callus with two setae; fore and mid coxae yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, dark brown along posterior part (Fig. 395); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 394) 2.3× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.3mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, scrobes black; vertex black with metallic blue tinges. Mesoscutum and propodeum golden-green, mesoscutellum golden. Legs with fore and mid coxae yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, dark brown along posterior part; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin metallic purple, Gt₂₋₄ metallic purple, Gt_{5,6} golden-green, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, frons rugose; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation with isodiametric meshes on sidelobes, midlobe predominantly with strong reticulation and elongate meshes, parts close to notauli rugose, with a weak median groove in posterior half, with 14 scattered setae on rugose parts. Mesoscutellum with submedian grooves curved and diverging towards posterior part, with transverse carinae and with outer margin predominantly indistinct, median part with weak reticulation and with a very weak median groove in anterior half, lateral parts with very strong reticulation and with six scattered setae; reticulation with elongate meshes. Dorsellum with very weak reticulation, with median carina. Propodeum with a strong median carina that expands in posterior part; predominantly with strong irregular carinae, laterally with some reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 43; POL 10.5; OOL 6.5; lateral ocellus diameter 5; head width 54; mouth width 16; malar space 14; eye length 24; scape length 20.5; scape width 5; pedicel+flagellum length 63; pedicel length

7; pedicel width, dorsal view 4; F1 length 11; F1 width 5; F2 length 11; F2 width 5; F3 length 10; F3 width 5; clava length 22; clava width 6; C3 length 6; spicule length 1; mesosoma length 72; mesosoma width 47; midlobe of mesoscutum length 30; mesoscutellum length 27.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 12; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 41; stigmal vein length 10.5; gaster length 100; gaster width 43; Gt₂ length (measured medially) 14; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 16; longest cercal seta length 16; shortest cercal seta length 9.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU).

***Galeopsomyia folata* Hansson sp.nov.**

(Figs 396, 397, 1072)

Diagnosis (female). Antennal clava solid (Fig. 1072); genal carina present; mesoscutellum (Fig. 396) with very weak reticulation on median part and with a weak ±complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, almost straight and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 396) with strong reticulation, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 396) 2.9× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, gastral tergites with strong reticulation.

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel brown, and flagellum dark brown. Head golden-green, scrobes and parts below level of toruli duller in colour and clypeus dark brown. Mesosoma dark brown with metallic tinges. Coxae, trochanters and femora dark brown, tibiae yellowish-brown; fore tarsus pale brown, mid and hind tarsi with T1–3 yellowish-brown, T4 pale brown. Petiole dark brown. Gaster dark brown, Gt₁ with metallic tinges; gonoplac black.

Antennal clava solid. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, scrobes with weak reticulation; with a weak genal carina reaching about half-way up to level of lower margin of eyes. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and with a weak ±complete median groove, lateral

parts with strong reticulation, meshes elongate; submedian grooves distinct, almost straight and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture, shiny, with median carina. Propodeum with a strong and wide median carina, surface predominantly with strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 31.5; POL 8.5; OOL 4.5; lateral ocellus diameter 3.5; head width 40.5; mouth width 13; malar space 9.5; eye length 19.5; scape length 13; scape width 3.5; pedicel+flagellum length 41; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 6.5; F2 width 4; F3 length 6.5; F3 width 4.5; clava length 15; clava width 5; C3 length 4.5; spicule length 1; mesosoma length 49; mesosoma width 35; midlobe of mesoscutum length 18; mesoscutellum length 19; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 7; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 8; gaster length 81; gaster width 28; Gt_2 length (measured medially) 6.5; Gt_4 length (measured medially) 13; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 8.5; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Guanacaste, Estación Maritza, 700m, 10°58'N, 85°29'W, 21.ii.2005, J.S. Noyes (NHMUK).

***Galeopsomyia gavia* Hansson sp.nov.**

(Figs 398, 399, 794)

Diagnosis (female). Antenna with solid clava (Fig. 794); genal carina absent; mesoscutellum (Fig. 398) with submedian grooves converging slightly towards posterior part, median part with strong reticulation, with or without a weak median groove in anterior half; dorsellum without median carina; propodeum (Fig. 398) with strong reticulation, callus with two setae; fore wing with two setae on dorsal surface of submarginal vein; hind coxa with a carina along posterior margin; petiole very short, just a narrow band; gaster (Fig. 398) 2.1× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.9mm (paratypes 1.7–2.3mm).

Scape and pedicel yellowish-brown, flagellum dark brown. Head with frons with part below level of toruli golden-green with clypeus dark brown, part frons metallic blue, antennal scrobes

black with metallic tinges; vertex metallic blue with purple tinges. Mesoscutum and mesoscutellum metallic greenish-blue; propodeum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with golden-green tinges; trochanters yellowish-brown; femora dark brown with apex yellowish-brown, hind femur with metallic tinges; tibiae yellowish-brown; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁₋₆ metallic greenish-blue with posterior margin black, Gt₇ black; gonoplac black.

Antenna with a solid clava. Face below level of toruli with rather strong reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; genal carina absent. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; with ten scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes; submedian grooves strong and slightly converging towards posterior part; with seven setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a strong and narrow median carina that expands strongly posteriorly; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with two setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row broken.

Petiole short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 9.5; OOL 4.5; lateral ocellus diameter 4; head width 44; mouth width 13; malar space 11; eye length 21; scape length 16; scape width 3.5; pedicel+flagellum length 45; pedicel length 7; pedicel width, dorsal view 3.5; F1 length 7.5; F1 width 4; F2 length 7; F2 width 4.2; F3 length 7; F3 width 4.5; clava length 15; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 50; mesosoma width 40; midlobe of mesoscutum length 18; mesoscutellum length 20; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2; propodeum length 6; costal cell length 27; costal cell width (measured at widest part) 1.5; marginal vein length 29; stigmal vein length 8; gaster length 80; gaster width 39; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 17-18.ii.2011, J.S. Noyes (NHMUK). Paratypes (2♀, MZLU, NHMUK): 1♀ with same label data as holotype; 1♀ from same locality as holotype but collected 21.ii.2005.

***Galeopsomyia gigantensis* Hansson sp.nov.**

(Figs 400, 401, 1073)

Diagnosis (female). Antenna with solid clava (Fig. 1073); subocular fovea small; genal carina short and weak, present just close to mouth opening; midlobe of mesoscutum (Fig. 400) with 16 scattered adnotaular setae; mesoscutellum (Fig. 400) with weak reticulation on median part, lateral parts with stronger reticulation, meshes elongate, with a complete median groove, submedian grooves strong and slightly curved, \pm parallel; dorsellum without median carina; propodeum (Fig. 400) with strong carinae, callus with seven setae; fore coxa yellowish-brown (Fig. 401); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 400) 2.3 \times as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 2.6mm (paratypes 2.2–2.6mm).

Scape yellowish-brown, pedicel and flagellum dark brown, F1 and F2 yellowish-white ventrally. Head with frons including scrobes and vertex golden-green, clypeus yellowish-brown. Thoracic dorsum metallic greenish-blue. Legs with fore coxa yellowish-brown, mid coxa pale brown, hind coxa metallic greenish-blue; trochanters, femora, tibiae and tarsi yellowish-brown, femora darker at base. Petiole black. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₄ metallic purple, Gt₅₋₇ with basal half dark brown and apical half metallic greenish-blue, Gt₆ also with golden tinges in posterior half; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; genal carina short and weak, present just close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, and with 16 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with stronger reticulation, meshes elongate, with a complete median groove; submedian grooves strong and slightly curved, \pm parallel; with ten setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with complete median carina and with some irregular carinae on either side, with strong reticulation; callus with seven setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 42; POL 9.5; OOL 6.5; lateral ocellus diameter 4; head width 51; mouth width 19; malar space 16; eye length 23; scape length 21.5; scape width 5; pedicel+flagellum length 50; pedicel length 8; pedicel width, dorsal view 4; F1 length 10; F1 width 4.5; F2 length 8.5; F2 width 4.5; F3 length 7.5; F3 width 5; clava length 15; clava width 6; C3 length 4.5; spicule length 1; mesosoma length 78; mesosoma width 49; midlobe of mesoscutum length 31; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 12.5; costal cell length 42; costal cell width (measured at widest

part) 3; marginal vein length 34; stigmal vein length 9; gaster length 100; gaster width 44.5; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 9; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos (MZLU). Paratypes (9♀, CNC, MZUCR, NHMUK): 1♀ COSTA RICA, **Guanacaste**, Reserva Forestal Monte Alto, Cerro Romo, LN 220700_382545, 883m, 27-29.x.2001, I. Jiménez; 1♀ COSTA RICA, Guanacaste, Bosque Nacional Díría, Vista del Mar, LN 233900_358750, 890m, 18.ix-18.x.2001, malaise trap, I. Jiménez; 1♀ from same locality as previous but collected 18.x-15.xi.2001; 3♀ COSTA RICA, **Heredia**, Santo Domingo, INBio-Parque, iii.2002, J.S. Noyes & J.A. Azofeifa; 1♀ from same locality as previous but collected 12.ii.2011; 1♀ COSTA RICA, **San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, x.1993, P. Hanson; 1♀ from same locality as previous but collected x.1995.

Etymology. Named after type locality, sendero Los Gigantes.

***Galeopsomyia giria* Hansson sp.nov.**

(Figs 402, 403, 792)

Diagnosis (female). Antenna with solid clava (Fig. 792); genal carina absent; mesoscutellum (Fig. 402) with median part with strong reticulation and with a weak ±complete median groove, submedian grooves strong and diverging slightly towards posterior part; mesoscutum (Fig. 402) metallic dull purple and mesoscutellum metallic greenish-blue; dorsellum without median carina; propodeum (Fig. 402) with strong reticulation, callus with two setae; fore wing with two setae on dorsal surface of submarginal vein; hind coxa with a carina along posterior margin; petiole very short, just a narrow band; gaster (Fig. 402) 2.0× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges, clypeus brown; vertex metallic blue. Mesoscutum black with metallic purple tinges; mesoscutellum metallic greenish-blue; propodeum golden-green. Legs with coxae dark brown to black; trochanters pale brown; femora dark brown; tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt_{1-3} metallic greenish-blue with posterior margin metallic purple, Gt_{4-5} with metallic purple and blue tinges, Gt_6 metallic greenish-blue, Gt_7 black; gonoplac black.

Antenna with a solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-

lobe; with five scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes; submedian grooves strong and diverging slightly towards posterior part; with a weak \pm complete median groove; with six setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a strong but narrow median carina that expands strongly posteriorly; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a carina along posterior margin. Fore wing with two setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 27; POL 7.5; OOL 4; lateral ocellus diameter 3.2; head width 37; mouth width 9; malar space 9; eye length 17; scape length 13; scape width 3; pedicel+flagellum length 36; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 5.5; F2 width 3.5; F3 length 4.5; F3 width 4; clava length 12; clava width 5; C3 length 4; spicule length 1; mesosoma length 42; mesosoma width 32; midlobe of mesoscutum length 16.5; mesoscutellum length 16; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2; propodeum length 5; costal cell length 22; costal cell width (measured at widest part) 1.5; marginal vein length 23; stigmal vein length 7; gaster length 62; gaster width 31; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 11; longest cercal seta length 9; shortest cercal seta length 3.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 19-20.ii.2009, J.S. Noyes (NHMUK).

***Galeopsomyia globosa* Hansson sp.nov.**

(Figs 404, 405, 971, 1106)

Diagnosis (female). Antennal clava globular with distinct constriction between C1 and C2 and with apex blunt (Fig. 1106), flagellum short, flagellum+pedicel 0.8× as long as width of mesosoma; genal carina present; mesoscutellum (Fig. 404) with outer margin of submedian grooves absent, median part with very weak reticulation and shiny, lateral parts rugose; dorsellum with median carina; fore wing with an infuscate spot medially (Fig. 405); propodeum (Fig. 404) with strong irregular carinae and strong reticulation, median carina with anterior half with parallel sides and posterior half expanding gradually towards posterior part, callus with five setae; all coxae predominantly dark and metallic with apex yellowish-brown (Fig. 405); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 404) 1.9× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with very strong reticulation, dorsal part flattened.

Female holotype: length of body 2.7mm (paratypes 2.6–2.9mm).

Scape yellowish-brown, pedicel and flagellum pale brown. Head with frons metallic bluish-green with purple tinges, clypeus dark brown; vertex metallic bluish-green. Mesosoma metallic bluish-green. Legs with coxae metallic bluish-green, fore coxa with apex yellowish-brown; trochanters, femora, tibiae and tarsi yellowish-brown, femora with base dark brown, and tarsi with T4 pale brown. Fore wing with an infuscate spot medially. Petiole black. Gaster metallic bluish-green, Gt₂₋₄ blackish medially; gonoplac dark brown.

Antenna with a distinct clava with a constriction between C1 and C2; spicule indistinct. Frons with strong reticulation, clypeus smooth, frons lateral to scrobes rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with a few large irregular foveae inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with elongate meshes on median part, rugose on parts close to notauli, with a median groove in posterior half, with 18 setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with very weak reticulation and shiny, lateral parts rugose with 12 setae scattered. Dorsellum with weak sculpture, with median carina. Propodeum with median carina with anterior half with parallel sides and posterior half expanding gradually towards posterior part; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with very strong reticulation, dorsal part flattened.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 12.5; OOL 7; lateral ocellus diameter 4; head width 52; mouth width 19; malar space 13.5; eye length 23; scape length 20; scape width 5; pedicel+flagellum length 42; pedicel length 6.5; pedicel width, dorsal view 4.3; F1 length 5.5; F1 width 5; F2 length 6; F2 width 5.2; F3 length 5.5; F3 width 6; clava length 15; clava width 8; C3 length 4; spicule length 1; mesosoma length 83; mesosoma width 52; midlobe of mesoscutum length 33; mesoscutellum length 30.5; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 3; propodeum length 11; costal cell length 45; costal cell width (measured at widest part) 3.2; marginal vein length 40; stigmal vein length 13; gaster length 103; gaster width 54; Gt₂ length (measured medially) 13; Gt₄ length (measured medially) 24; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 21; longest cercal seta length 11; shortest cercal seta length 7.

Male. Length of body of body 2.0mm.

Antenna (Fig. 971) with scape triangular, widest at apex; plaque black and situated at apex; dorso-basal whorls of semilong setae present on F1, F3 and on C1. Fore wing with a strong, ovate infuscate spot below stigmal vein. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 22; head length, frontal view 34; head width 43; mouth width 12; malar space 11; eye length 20; scape length 21; scape width 8.5; plaque length 8; pedicel length 6.5; pedicel+flagellum length 42; F1 length 4.5; F1 width 4;

F2 length 4; F2 width 4; F3 length 5; F3 width 4; F4 length 4; F4 width 4; clava length 18; clava width 5; mesosoma length 67; mesosoma width 40; gaster length 75; gaster width 31; longest subbasal seta on F1, length 12.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK). Paratypes (2♀ 2♂, MZLU, NHMUK): 1♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 21.iv.2002, INBio, OET, ALAS; following from same locality as previous but collected iii.2002 (1♀ 1♂), iv.2002 (1♂).

Etymology. From the Latin *globus* = globe, ball, referring to shape of antennal clava.

***Galeopsomyia gonzalezi* Hansson sp.nov.**

(Figs 406, 407, 793, 972)

Diagnosis (female). Antennal clava solid (Fig. 793); genal carina short, present close to mouth opening; mesoscutellum (Fig. 406) with submedian grooves distinct and parallel, median part with rather strong reticulation, with a weak median groove in anterior half; dorsellum without median carina; propodeum (Fig. 406) with strong reticulation, callus with two setae; hind coxa with a very strong and complete carina along posterior margin; fore wing speculum very large with almost entire part below marginal vein bare (Fig. 407); petiole very short, just a narrow band; gaster (Fig. 406) 2.9× as long as wide, medio-basal Gt₁ with transverse blunt edge dorsally, tergites with strong reticulation.

Female holotype: length of body 2.7mm (paratypes 2.9–3.0mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-green with purple tinges. Mesoscutum with sidelobes metallic bluish-purple and midlobe golden-green; mesoscutellum metallic bluish-green; propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters dark brown; fore and mid femora dark brown, hind femur metallic bluish-green; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole dark brown. Gaster with Gt₁₋₅ metallic bluish-green, Gt₆ metallic bluish-green, Gt₇ with basal half metallic bluish-green and apical half dark brown; gonoplac black.

Antenna with solid clava. Face below level of toruli with lateral parts with weak reticulation, median part with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a weak median groove, with 11 scattered setae on rugose parts. Mesoscutellum with strong reticulation, meshes elongate; with a weak median groove in anterior half; submedian grooves distinct, straight and parallel, grooves subdivided by transverse carinae; with eight setae scattered over lateral parts. Dorsellum with

strong sculpture, without median carina. Propodeum with \pm triangular median carina; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; hind coxa with a very strong carina along posterior margin. Fore wing with five setae on dorsal surface of submarginal vein; speculum very large with almost entire part below marginal vein bare and completely open below and towards base of wing; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with transverse blunt edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 28; head length, frontal view 45; POL 13.5; OOL 7.5; lateral ocellus diameter 6; head width 60; mouth width 21; malar space 18.5; eye length 24.5; scape length 20; scape width 5; pedicel+flagellum length 52; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 8; F1 width 5.5; F2 length 8; F2 width 6; F3 length 6.5; F3 width 6.5; clava length 17; clava width 7; C3 length 6; spicule length 1; mesosoma length 82; mesosoma width 61; midlobe of mesoscutum length 36.5; mesoscutellum length 31; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 12.5; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4.5; propodeum length 11; costal cell length 43; costal cell width (measured at widest part) 3; marginal vein length 40; stigmal vein length 7.5; gaster length 120; gaster width 41; Gt_2 length (measured medially) 15; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 14; longest cercal seta length 11; shortest cercal seta length 5.

Male. Length of body of body 2.4mm.

Antenna (Fig. 972) with scape dark brown and widest in median part; plaque black and situated in anterior half; dorso-basal whorls of long setae present on F1–F4 and ventro-basal whorls of long setae on C1–C2. Gaster elongate. Otherwise as in female, i.e. fore wing with a large bare part below marginal vein.

Relative measurements: head length, dorsal view 23; head length, frontal view 45; head width 56.5; mouth width 20; malar space 17; eye length 21.5; scape length 19.5; scape width 6.5; plaque length 7; pedicel length 9; pedicel+flagellum length 77; F1 length 5.5; F1 width 6; F2 length 8.5; F2 width 6; F3 length 11; F3 width 5; F4 length 12; F4 width 5; clava length 29; clava width 5; mesosoma length 82; mesosoma width 62; gaster length 84; gaster width 30; longest subbasal seta on F1, length 48.

Hosts. Reared from galls in young fruits of avocado (*Persea americana*) (Lauraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Carrizal, 11.iv.2002, from avocado fruit gall (NHMUK). Paratypes (4♀ 1♂, MZLU, MZUCR, NHMUK): 4♀ **COSTA RICA, San José**, Santa Cruz, 3.iv.2002, from avocado fruit gall, Leon Cortez; 1♂ **COSTA RICA, San José**, Tarrazu, iii.1994, from young avocado fruit, R. Leon.

Etymology. Named in honour of Allan González, professor at the Universidad Nacional in Costa Rica, who has done research on the insect pests of avocado and also collected specimens belonging to this species.

***Galeopsomyia gouaniae* Hansson sp.nov.**

(Figs 408, 409, 973, 1075)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 1075); frons with a strong swelling below eye; genal carina present; mesoscutum and mesoscutellum with white setae (Fig. 408); mesoscutellum (Fig. 408) with median part with weak reticulation and shiny, lateral parts rugose, outer margin of submedian grooves absent; dorsellum with median carina; propodeum (Fig. 408) with strong reticulation and irregular carinae, callus with three setae; gaster (Fig. 408) 2.4× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong large-meshed reticulation, gonoplac yellowish-brown (Fig. 409). Male flagellum with dorso-basal whorls of setae with short setae (Fig. 973).

Female holotype: length of body 2.3mm (paratypes 2.4–2.7mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green; vertex golden-green. Thoracic dorsum golden-green. Legs with fore and mid coxae yellowish-brown, hind coxa golden-green with apex yellowish-brown; trochanters, femora and tibiae yellowish-white; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂ golden-green, Gt_{3,4} golden-green with posterior part metallic purple, Gt_{5,6} golden-green with anterior part metallic purple, Gt₇ golden-green; gonoplac yellowish-brown.

Antenna with constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notauli rugose; midlobe with a complete median groove, with 25 scattered setae on rugose parts. Mesoscutellum with median part with weak reticulation, lateral parts rugose; outer margin of submedian grooves absent; lateral parts with 25 setae scattered over entire part. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina, posterior part with a fovea; with strong irregular carinae and strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal line unbroken.

Petiole short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong large-meshed reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 9.5; OOL 6; lateral ocellus diameter 5; head width 51; mouth width 18.5; malar space 14; eye length 24; scape length 21; scape width 5; pedicel+flagellum length 50; pedicel length 7; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 7; F2 width 5; F3 length 7.5; F3 width 5.5; clava length 17.5; clava width 6; C3 length 5; spicule length 1; mesosoma length 70; mesosoma width 50; midlobe of mesoscutum length 26.5; mesoscutellum length 27; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 5; propodeum length 11; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 13; gaster length 102; gaster width 42;

Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 15; longest cercal seta length 14; shortest cercal seta length 6.

Male. Length of body of body 1.6mm.

Antenna (Fig. 973) with scape gradually expanding from base; plaque black and situated in apical two-thirds; dorso-basal whorls of setae short and present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 32; head width 41.5; mouth width 16; malar space 11; eye length 20; scape length 19.5; scape width 6.5; plaque length 13; pedicel length 6; pedicel+flagellum length 48; F1 length 4.5; F1 width 4; F2 length 5.5; F2 width 4; F3 length 6; F3 width 4; F4 length 6; F4 width 4; clava length 19; clava width 4; mesosoma length 60; mesosoma width 37; gaster length 62; gaster width 32; longest subbasal seta on F1, length 13.

Hosts. Reared from blister-like leaf gall on *Gouania* sp. (Rhamnaceae), probably induced by Cecidomyiidae.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Casa Mata, 1900m, 3.viii.2010, from *Gouania* leaf gall, P. Hanson (NHMUK). Paratypes (6♀ 1♂, MZLU, MZUCR, NHMUK): 4♀ 1♂ with same label data as holotype; 1♀ COSTA RICA, San José, Zurqui de Moravia, 1600m, iv.1992, P. Hanson; 1♀ COSTA RICA, Cartago, La Cangreja, 9°48'N, 83°58'W, 1950m, vi-vii.1992, P. Hanson.

Etymology. Named after the host plant of the gall from which this species was reared.

Galeopsomyia graciliclava Hansson sp.nov.

(Figs 17, 410, 411, 797)

Diagnosis (female). Antenna with a slender clava with a weak constriction between C1 and C2, spicule long (Fig. 797); genal carina present (Fig. 17); mesoscutellum (Fig. 410) transverse, 0.9× as long as wide, flattened, with submedian grooves distinct and parallel, median part with weak reticulation; dorsellum without median carina; propodeum (Fig. 410) with strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 410) 1.9× as long as wide, medio-basal Gt₁ with longitudinal short carinae, tergites with very strong reticulation; body black with metallic tinges (Figs 410, 411).

Female holotype: length of body 1.8mm.

Scape, pedicel and F1 yellowish-brown, F2-3 and C1 yellowish-brown ventrally and brown dorsally, C2-3 brown. Head with frons black with metallic blue tinges, antennal scrobes and clypeus black; vertex black with metallic tinges. Mesosoma black with metallic tinges. Legs with coxae black; fore and mid trochanters dark brown, hind trochanter yellowish-brown; fore and mid femora dark brown, hind femur yellowish-brown; tibiae and tarsi yellowish-white. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum flat, with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with seven setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt₁ with longitudinal short carinae; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 34; POL 8.2; OOL 6.5; lateral ocellus diameter 4; head width 47; mouth width 19; malar space 12; eye length 20; scape length 18; scape width 4.5; pedicel+flagellum length 51; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 9; F2 width 4; F3 length 9; F3 width 4; clava length 17; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 58; mesosoma width 43; midlobe of mesoscutum length 16.5; mesoscutellum length 19; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 2.5; propodeum length 10.5; costal cell length 31; costal cell width (measured at widest part) 3; marginal vein length 26; stigmal vein length 9; gaster length 67; gaster width 36; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 11.5; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU).

Etymology. From the Latin *gracilis* = slender, and *clava* = club, referring to slender antennal clava.

***Galeopsomyia grandis* Hansson sp.nov.**

(Figs 412, 413, 800, 893, 943, 974, 1116)

Diagnosis (female). Antenna with a constriction between C1 and C2 and between C2 and C3 (Fig. 800); with genal carina; clypeus strongly protruding (Fig. 893); mesoscutellum (Fig. 412)

with very weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves curved with outer margin absent; fore and mid coxae yellowish-brown (Fig. 413); dorsellum with median carina; propodeum (Fig. 412) with strong irregular carinae and weak reticulation, callus with seven setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 412) 4.4× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with weak reticulation. Male flagellomeres with scattered setae (Fig. 974).

Female holotype: length of body 4.3mm (paratypes 4.2–5.2mm).

Scape yellowish-brown, pedicel dark brown in dorsal half, pale brown in ventral half, flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black, clypeus yellowish-brown; vertex metallic purple. Mesosoma golden-green. Legs yellowish-brown, hind coxa with basal half dark brown. Petiole black. Gaster with Gt_1 metallic bluish-green with posterior one-third dark brown with golden tinges, Gt_{2-5} dark brown with golden tinges, Gt_{6-7} black.

Antenna with a constriction between clavomeres. Frons with strong reticulation, antennal scrobes with weak reticulation; clypeus strongly protruding and smooth; with a strong genal carina that almost reaches up to level with lower margin of eye. Vertex with weak reticulation outside ocellar triangle, inside triangle with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on midlobe, lateral part of midlobe rugose; midlobe with 18 scattered setae on rugose parts, with a median groove in posterior two-thirds. Mesoscutellum with very weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves curved with outer margin missing; with 16 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with strong irregular carinae and weak reticulation; callus with seven setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 7&9 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture. Gaster very elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 31; head length, frontal view 57; POL 12; OOL 8; lateral ocellus diameter 6.3; head width 70; mouth width 24; malar space 19; eye length 31; scape length 26; scape width 5.5; pedicel+flagellum length 90; pedicel length 9; pedicel width, dorsal view 5; F1 length 17.5; F1 width 5.5; F2 length 16.5; F2 width 6; F3 length 15; F3 width 6.5; clava length 28; clava width 7; C3 length 9; spicule length 2; mesosoma length 97; mesosoma width 63; midlobe of mesoscutum length 42; mesoscutellum length 34; mesoscutellum width 28; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 5; propodeum length 14.5; costal cell length 55; costal cell width (measured at widest part) 3; marginal vein length 57; stigmal vein length 12; gaster length 214; gaster width 49; Gt_2 length (measured medially) 15; Gt_4 length (measured medially) 23; Gt_7 length (measured medially) 53; Gt_7 width (measured at base) 20; longest cercal seta length 21; shortest cercal seta length 10.

Male. Length of body of body 2.0–2.6mm.

Antenna (Fig. 974) with scape widest in median part; plaque dark brown and situated

predominantly in apical part; flagellomeres with scattered setae. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 25; head length, frontal view 48; head width 57; mouth width 21; malar space 16; eye length 25; scape length 22; scape width 6; plaque length 11; pedicel length 7.5; pedicel+flagellum length 85; F1 length 15; F1 width 5; F2 length 15.5; F2 width 5; F3 length 14.5; F3 width 4.5; F4 length 10.5; F4 width 4.5; clava length 20; clava width 4.5; mesosoma length 79; mesosoma width 49; gaster length 97; gaster width 32; longest subbasal seta on F1, length na.

Hosts. Reared from gall on *Piper obliquum* (Piperaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 14.i.2005, ex *Piper obliquum*, J.A. Azofeifa (NHMUK). Paratypes 4♀ 4♂ with same label data as holotype (MZLU, MZUCR, NHMUK).

Etymology. From the Latin *grandis* = large, referring to large size of species.

***Galeopsomyia gridis* Hansson sp.nov.**

(Figs 414, 415, 796)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 796); genal carina present and strong; mesoscutellum (Fig. 414) with very weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, median groove indicated but indistinct, submedian grooves distinct in posterior half, indistinct in anterior half, straight and \pm parallel, subdivided by transverse carinae; dorsellum without median carina; propodeum (Fig. 414) with median part with strong irregular carinae and lateral parts with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 414) short ovate, 1.3 \times as long as wide, tergites with strong reticulation, gonoplac dark brown (Fig. 415). Small (1.5mm), predominantly black to dark brown species (Figs 414, 415).

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Body dark brown to black with very weak metallic tinges; gonoplac dark brown. Legs with fore and mid coxae dark brown, hind coxa black with anterior part dark brown; trochanters and femora dark brown, tibiae and tarsi yellowish-white.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, scrobes with weak reticulation; with a strong genal carina reaching almost to level of lower margin of eyes. Vertex with wrinkled sculpture. Occipital margin carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without a median groove, with eight scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; median groove indicated but indistinct; submedian grooves distinct in posterior half, indistinct in anterior half, straight and \pm parallel, subdivided by transverse carinae; with five setae scattered over lateral parts. Dorsellum with strong reticulation, without median carina.

Propodeum with a wide median carina that expands in anterior and posterior parts; median part with strong irregular carinae and lateral parts with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster short ovate, almost circular; tergites with strong reticulation.

Relative measurements: head length, dorsal view 17; head length, frontal view 31; POL 8.5; OOL 6; lateral ocellus diameter 4; head width 43.5; mouth width 11; malar space 11.5; eye length 19.5; scape length 15; scape width 3.5; pedicel+flagellum length 47; pedicel length 6; pedicel width, dorsal view 3; F1 length 6.5; F1 width 4; F2 length 7; F2 width 4; F3 length 7; F3 width 4; clava length 16.5; clava width 4; C3 length 6; spicule length 2; mesosoma length 49; mesosoma width 37; midlobe of mesoscutum length 17.5; mesoscutellum length 19; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 9; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 8.5; gaster length 47; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 10; Gt₇ length (measured medially) 3.5; Gt₇ width (measured at base) 12; longest cercal seta length 8; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes (NHMUK).

***Galeopsomyia gutierrezii* Hansson sp.nov.**

(Figs 416, 417, 799)

Diagnosis (female). Antennal clava solid (Fig. 799); genal carina present; midlobe of mesoscutum predominantly metallic purplish and mesoscutellum metallic bluish-purple, i.e. with distinctly different colours (Fig. 416); mesoscutellum (Fig. 416) with strong reticulation, meshes elongate, submedian grooves distinct with outer margin indistinct in anterior half, curved and diverging towards posterior part; dorsellum completely hidden by overhanging posterior part of mesoscutellum in dorsal view, with median carina; propodeum (Fig. 416) with strong irregular carinae, callus with four setae; gaster (Fig. 416) 2.1× as long as wide, medio-basal Gt₁ with a sharp transverse edge dorsally, tergites with strong reticulation.

Female holotype: length of body 1.7mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-purple, antennal scrobes black, clypeus dark brown; vertex metallic bluish. Mesoscutum with sidelobes and lateral parts of midlobe metallic bluish-purple, median part of midlobe

metallic purplish, mesoscutellum metallic bluish-purple; propodeum black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic bluish-purple tinges; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur black with metallic bluish-purple tinges; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-purple with hind margin metallic purplish, Gt₂₋₄ metallic purplish, Gt₅₋₇ black; gonoplac dark brown to black.

Antennal clava solid. Frons with strong reticulation, antennal scrobes with weak reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe without a median groove, with 12 scattered setae on rugose parts. Mesoscutellum with strong reticulation, meshes elongate; submedian grooves distinct with outer margin indistinct in anterior half, curved and diverging towards posterior part; with an indistinct \pm complete median groove; with six setae scattered over lateral parts. Dorsellum not visible in dorsal view, hidden under overhanging mesoscutellum, with strong sculpture, with median carina. Propodeum short, with a strong median carina, expanding both anteriorly and posteriorly; with strong reticulation; callus with four setae. Coxae with strong reticulation, hind coxa especially so. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short. Gaster elongate; medio-basal Gt₁ with a sharp transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 34; POL 8.5; OOL 5; lateral ocellus diameter 4; head width 43; mouth width 9.5; malar space 10.5; eye length 21.5; scape length 14; scape width 3.5; pedicel+flagellum length 40; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 4.5; F2 length 6; F2 width 4.5; F3 length 6; F3 width 5; clava length 14.5; clava width 5; C3 length 5; spicule length 1; mesosoma length 49; mesosoma width 37; midlobe of mesoscutum length 19.5; mesoscutellum length 20; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 6; costal cell length 25; costal cell width (measured at widest part) 2.5; marginal vein length 22; stigmal vein length 8; gaster length 72; gaster width 35; Gt2 length (measured medially) 7; Gt4 length (measured medially) 12; Gt7 length (measured medially) 11; Gt7 width (measured at base) 12; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, Guanacaste, Cañas, Río Chiquito, LN 292500_417000, 410m, 25.vii.2003, J. Azofeifa.

Etymology. Named in honour of Gustavo Gutiérrez, former director of the School of Biology and current rector of the University of Costa Rica, geneticist.

***Galeopsomyia hesperis* Hansson sp.nov.**

(Figs 418, 419, 798)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 798); genal carina present; mesoscutellum (Fig. 418) 1.3× as long as wide, median part with strong reticulation with ±isodiametric meshes and without a median groove, submedian grooves with outer margin absent, straight and parallel; dorsellum with an indistinct median carina; propodeum (Fig. 418) with strong irregular carinae and strong reticulation, callus with two setae; gaster (Fig. 418) 2.3× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green with purple tinges. Thoracic dorsum golden-green. Legs with fore coxa black with metallic tinges, mid coxa dark brown, hind coxa golden-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown, hind femur with metallic tinges on dark part; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₃ golden-purple, Gt₆₋₇ black with metallic tinges; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without a median groove, with 11 scattered adnotaular setae. Mesoscutellum with strong reticulation on median part, meshes ±isodiametric, without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin absent, straight and parallel, subdivided by transverse carinae; with 11 setae scattered over lateral parts. Dorsellum with strong sculpture, with an indistinct median carina. Propodeum with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 37; POL 9.5; OOL 6; lateral ocellus diameter 5; head width 48; mouth width 14; malar space 13; eye length 22; scape length 18; scape width 4.5; pedicel+flagellum length 57; pedicel length 7; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 10; F2 width 5; F3 length 8.5; F3 width 5.5; clava length 19.5; clava width 6; C3 length 6.5; spicule length 1.5; mesosoma length 65; mesosoma width 43; midlobe of mesoscutum length 25; mesoscutellum length 25; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior

part 8.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4.5; propodeum length 10.5; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 11; gaster length 81; gaster width 36; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 8; longest cercal seta length 13.5; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Golfito, Parque Nacional Corcovado, Estación Agujas, Cerro Rincón, LS 275500_521950, 745m, 6.xi-20.xii.2001, malaise trap, J. Azofeifa (NHMUK).

***Galeopsomyia hiata* Hansson sp.nov.**

(Figs 420, 421, 802, 922)

Diagnosis (female). Antenna with solid clava (Fig. 802); genal carina present; mesoscutellum (Fig. 922) transverse, 0.9× as long as wide, with submedian grooves diverging strongly towards posterior part, median part with very weak reticulation, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 420) with strong reticulation, callus with six setae; petiole very short, just a narrow band; gaster (Fig. 420) 2.0× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons black with metallic bluish tinges, antennal scrobes black and clypeus yellowish-brown; vertex black with metallic bluish tinges. Mesosoma black with metallic greenish-blue tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters pale brown; femora pale brown with apex yellowish-brown; tibiae and tarsi yellowish-white to white. Petiole black. Gaster with Gt₁ dark brown with metallic bluish tinges, Gt₂₋₆ dark brown with metallic tinges, Gt₇ black; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with transverse elongate sculpture.

Mesoscutum with strong reticulation and isodiametric meshes; midlobe with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and strongly diverging towards posterior part; with nine setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a narrow median carina that expands anteriorly and posteriorly; with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 16.5; head length, frontal view 25; POL 8; OOL 4; lateral ocellus diameter 3; head width 37; mouth width 11; malar space 9.5; eye length 16; scape length 13.5; scape width 3; pedicel+flagellum length 40; pedicel length 5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 6; F2 width 3; F3 length 6; F3 width 3; clava length 13.5; clava width 3.5; C3 length 4.5; spicule length 1; mesosoma length 44; mesosoma width 33; midlobe of mesoscutum length 16; mesoscutellum length 16; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 4.5; median part of mesoscutellum, width in anterior part 3.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2; propodeum length 7.5; costal cell length 22; costal cell width (measured at widest part) 1.5; marginal vein length 20; stigmal vein length 7; gaster length 61; gaster width 31; G₂ length (measured medially) 8; G₄ length (measured medially) 10; G₇ length (measured medially) 7; G₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 10°26'N, 84°01'W, 75m, 22-24. ii.2012, J.S. Noyes (NHMUK).

***Galeopsomyia idris* Hansson sp.nov.**

(Figs 422, 423, 1077)

Diagnosis (female). Antenna with a weak constriction between C1 and C2, and between C2 and C3 (Fig. 1077); genal carina present; mesoscutellum (Fig. 422) with very weak reticulation on median part and with median groove indicated but weak, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin mainly indistinct, straight and ±parallel; dorsellum with median carina; propodeum (Fig. 422) with a narrow median carina, with strong irregular carinae and strong reticulation, callus with four setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 422) ovate, 1.7× as long as wide; medio-basal G₁ with longitudinal short carinae, tergites with strong reticulation, gonoplac short with tip blunt (Fig. 423). Small (1.4mm), predominantly dark brown species (Figs 422, 423).

Female holotype: length of body 1.4mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head, mesosoma and metasoma dark brown. Legs with coxae dark brown; trochanters, femora, tibiae and tarsi yellowish-brown.

Antenna with a weak constriction between C1 and C2, and between C2 and C3. Frons with weak reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation. Occipital margin with an edge behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, ±elongate on midlobe; midlobe with a median groove in posterior half, and with five adnotaular setae in one row. Mesoscutellum with very weak reticulation on median part and with median groove

indicated but weak, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin mainly indistinct, straight and \pm parallel; with five setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a narrow median carina; with strong irregular carinae and strong reticulation; callus with four setae. Fore and mid coxae with weak reticulation and shiny, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with longitudinal short carinae; tergites with strong reticulation; gonoplac short with tip blunt.

Relative measurements: head length, dorsal view 16; head length, frontal view 26; POL 7; OOL 5; lateral ocellus diameter 3; head width 35; mouth width 10; malar space 10; eye length 15; scape length 13; scape width 3; pedicel+flagellum length 41; pedicel length 5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 7; F2 width 3; F3 length 6; F3 width 3; clava length 16.5; clava width 4; C3 length 5.5; spicule length 1.5; mesosoma length 40; mesosoma width 28; midlobe of mesoscutum length 14; mesoscutellum length 14; mesoscutellum width 12.5; median part of mesoscutellum width (measured medially) 4.5; median part of mesoscutellum, width in anterior part 4.5; median part of mesoscutellum, width in posterior part 5; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 2; propodeum length 6.5; costal cell length 19; costal cell width (measured at widest part) 1.5; marginal vein length 21; stigmal vein length 7; gaster length 51; gaster width 30; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 9; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Chilamate, 75m, vii-viii.1989, Paul Hanson (NHMUK).

***Galeopsomyia illydris* Hansson sp.nov.**
(Figs 27, 35, 38, 39, 424, 425, 801, 894, 975)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Figs 38, 801), flagellum relatively short, flagellum+pedicel 1.3 \times as long as width of mesoscutum; genal carina present; mesoscutellum (Fig. 424) with submedian grooves subdivided by transverse carinae and with outer margin indistinct, median part with weak reticulation, lateral parts with very strong reticulation; dorsellum with median carina; propodeum (Fig. 424) with strong carinae and strong reticulation, median carina wide, callus with four setae; fore and mid coxae yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, dark brown along posterior part (Fig. 425); petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 424) 2.4 \times as long as wide, medio-basal Gt_1 with longitudinal carinae laterally (Fig. 27), tergites with strong reticulation.

Female holotype: length of body 3.2mm (paratypes 1.8–3.2mm).

Scape yellowish-brown with apical one-quarter dark brown, pedicel and flagellum black. Head with frons metallic greenish-blue, antennal scrobes black with metallic tinges and clypeus black; vertex black with metallic blue tinges. Mesoscutum black with metallic green and purple tinges; mesoscutellum and propodeum golden-red. Legs with fore and mid coxae yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, golden along posterior part; trochanters yellowish-brown, femora, tibiae and tarsi yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ golden-green with posterior margin black, Gt₂₋₅ black with metallic purple tinges, metallic greenish-blue laterally, Gt₆ metallic greenish-blue, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin \pm carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with a weak but complete median groove; midlobe with 16 setae scattered over rugose parts. Mesoscutellum with submedian grooves subdivided by transverse carinae and with outer margin indistinct, median part with weak reticulation with elongate meshes and a weak median carina, lateral parts with very strong reticulation, with elongate meshes; with 15 setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a wide median carina that is expanded posteriorly; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with seven setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal surface. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 32; head length, frontal view 54; POL 11.5; OOL 7; lateral ocellus diameter 7; head width 70; mouth width 23; malar space 20; eye length 29; scape length 27; scape width 5.5; pedicel+flagellum length 80; pedicel length 8; pedicel width, dorsal view 5; F1 length 15; F1 width 7; F2 length 15; F2 width 7; F3 length 13.5; F3 width 7; clava length 25; clava width 7.5; C3 length 8; spicule length 2; mesosoma length 97; mesosoma width 63; midlobe of mesoscutum length 38; mesoscutellum length 36; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 6; propodeum length 15; costal cell length 50; costal cell width (measured at widest part) 3.5; marginal vein length 47; stigmal vein length 15; gaster length 120; gaster width 50; Gt₂ length (measured medially) 13; Gt₄ length (measured medially) 18.5; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 18; longest cercal seta length 18; shortest cercal seta length 7.5.

Male. Length of body of body 2.2–2.4mm.

Antenna (Fig. 975) with scape widest in the middle; plaque black and situated just above the middle; flagellomeres with scattered setae. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; head width 55; mouth width 19.5; malar space 14; eye length 25; scape length 21; scape width 5.5; plaque length 6; pedicel length 7; pedicel+flagellum length 80; F1 length 13; F1 width 5; F2 length 14; F2 width 5; F3 length 14; F3 width 4.5; F4 length 9.5; F4 width 4.5; clava length 20; clava width 4.5; mesosoma length 78; mesosoma width 50; gaster length 90; gaster width 38; longest subbasal seta on F1, length na.

Hosts. Reared from fruits/seeds of *Hoffmannia longipetiolata* (Rubiaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (63♀ 13♂, CNC, MZLU, MZUCR, NHMUK): 3♀ 3♂ with same label data as holotype; 2♂ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 7♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; following from same locality as previous but collected 15-16.ii.2006 (3♀ 1♂), 7-19.ii.2007 (10♀ 1♂), 19-22.ii.2008 (3♀), 15-16.ii.2012 (1); 1♀ **COSTA RICA, Puntarenas**, Monteverde, "Ecological Farm", 10°18'N, 84°49'W, 1300m, 16-17.ii.2003, J.S. Noyes; 3♀ 2♂ **COSTA RICA, Alajuela**, Parque Nacional Arenal, Sendero Pilón, 10°27'N, 84°43'W, 26.ii.2003, J.S. Noyes; 5♀ 4♂ **COSTA RICA, Alajuela**, Parque Nacional Arenal, Sendero Ceibo, 10°27'N, 84°41'W, 22-23.ii.2016, J.S. Noyes; 8♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ **COSTA RICA, Alajuela**, Reserva Biológica A. Brenes, 10.iii.2002, from *Hoffmannia longip.* fruit, P. Hanson; 1♀ **COSTA RICA, Cartago**, Humo, El Copal, 9°47'N, 83°45'W, 1050-1250m, 29.ii-6.iii.2008, C. Hansson; 1♀ from same locality as previous but collected 10.iv.2005; 1♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 22.ii.2003, J.S. Noyes; 1♀ from same locality as previous but collected 19-20.ii.2005; 1♀ **COSTA RICA, Guanacaste**, Río San Lorenzo, Tierras Morenas, LN 287800_427600, 1000m, xii.1994, malaise trap, G. Rodriguez; 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 500m, 22.i-2.ii.1991, J.S. Noyes; following from same locality as previous but collected 28-29.ii.2008 (5♀), 22-24.ii.2012 (2♀); 1♀ **COSTA RICA, Heredia**, Reserva Privada Selva Verde, 10°27'N, 84°04'W, 75m, 13.iii.2005, C. Hansson; 1♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-29.iii.2001, 11/M/NOTN, INBio-OET-ALAS; 3♀ **COSTA RICA, Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 9°40'N, 83°02'W, 100m, 24-26.ii.2008, J.S. Noyes.

***Galeopsomyia infusca* Hansson sp.nov.**

(Figs 426, 427, 803, 976)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 803); genal carina present; mesoscutellum (Fig. 426) with submedian grooves straight and ±parallel, median part with very weak reticulation; dorsellum with median carina; propodeum (Fig. 426) with strong carinae and strong reticulation, callus with two setae; fore coxa pale brown, mid coxa yellow, hind coxa yellow at apex and along anterior part, dark brown along posterior part (Fig. 427); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 426) ovate, 1.5× as long as wide, tergites with strong reticulation, gonoplac short with tip pointed (Fig. 427). Small (1.5mm), predominantly dark brown species (Figs 426, 427).

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head dark brown with metallic tinges. Mesoscutum and propodeum dark brown; mesoscutellum dark brown with metallic bluish tinges. Legs with fore coxa pale brown, mid coxa yellow, hind coxa yellow at apex and along anterior part, dark brown along posterior part; trochanters, femora, tibiae and tarsi yellow. Petiole black. Gaster dark brown.

Antenna with a distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove, with six adnotaular setae in one row. Mesoscutellum with weak reticulation, especially so on median part, meshes elongate; submedian grooves distinct, straight and \pm parallel; with three setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation; gonoplac short with tip pointed.

Relative measurements: head length, dorsal view 17; head length, frontal view 32; POL 7.5; OOL 5.5; lateral ocellus diameter 3.5; head width 41; mouth width 11.5; malar space 19.5; eye length 19; scape length 14; scape width 3.5; pedicel+flagellum length 47; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4.5; F2 length 6.5; F2 width 4; F3 length 6.5; F3 width 4; clava length 17; clava width 5; C3 length 6; spicule length 2; mesosoma length 49; mesosoma width 36; midlobe of mesoscutum length 17; mesoscutellum length 19; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 2.5; dorsellum length 3.5; propodeum length 8.5; costal cell length 25; costal cell width (measured at widest part) 2; marginal vein length 24; stigmal vein length 9; gaster length 51; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 2.5; Gt₇ width (measured at base) 13; longest cercal seta length 10; shortest cercal seta length 5.

Male. Length of body of body 1.4mm.

Antenna (Fig. 976) with plaque on scape black and situated close to, but below apex; dorso-basal whorls of long setae present on F1–F4 and on C1, and with a ventro-basal whorl of long setae on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 16; head length, frontal view 28; head width 38.5; mouth width 13; malar space 10; eye length 16.5; scape length 14; scape width 4; plaque length 4; pedicel length 5.5; pedicel+flagellum length 65; F1 length 5; F1 width 3.5; F2 length 8; F2 width 3; F3 length 9.5; F3 width 3.5; F4 length 10; F4 width 3.5; clava length 23; clava width 3.5; mesosoma length 45; mesosoma width 32; gaster length 45; gaster width 24; longest subbasal seta on F1, length 32.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes (NHMUK). Paratype: 1♂ COSTA RICA, **Limón**, Reserva Biológica Hitoy-Cerere, 9°40'N, 53°02'W, 100m, 24-26.ii.2008, J.S. Noyes (NHMUK).

Etymology. From the Latin *infuscus* = dark brown, referring to predominant colour of body.

***Galeopsomyia ingae* Hansson sp.nov.**

(Figs 6, 7, 428, 429, 808, 977)

Diagnosis (female). Antenna with solid clava, flagellum short (Fig. 808), flagellum+pedicel 0.9× as long as width of mesoscutum; genal carina absent; mesoscutellum (Fig. 428) with submedian grooves strong and ±parallel, median part with very weak reticulation and shiny; dorsellum with median carina; propodeum (Fig. 428) with a short but wide triangular fovea anteromedially that continues backwards as a narrow median carina, with strong reticulation, callus with two setae; hind coxa with an irregular carina along posterior margin; gaster (Fig. 428) 1.9× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U dorsally (as in Fig. 24); tergites with strong reticulation. Male flagellomeres with dorso-basal whorls of long setae absent, instead with scattered short setae (Fig. 977).

Female holotype: length of body 2.2mm (paratypes 1.7–2.8mm).

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Face below level of toruli and scrobes golden green, clypeus dark brown, frons metallic bluish-purple, vertex metallic bluish-green with purple tinges. Thoracic dorsum bluish-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Gaster with Gt₁₋₃ metallic bluish-purple, Gt₄₋₅ golden-purple, Gt₆₋₇ metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation, inside ocellar triangle also with some large pits.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a weak median groove in posterior two-thirds, with 14 scattered setae on rugose parts. Mesoscutellum with very weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with eight setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with two setae. Fore coxa with strong reticulation, mid coxa with weak reticulation, hind coxa with very strong reticulation and irregular sculpture, and an irregular carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster ovate-elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 12; OOL 5; lateral ocellus diameter 4; head width 50; mouth width 15; malar space 13; eye

length 23; scape length 20; scape width 5; pedicel+flagellum length 46; pedicel length 8; pedicel width, dorsal view 3.7; F1 length 7.5; F1 width 5; F2 length 8; F2 width 5; F3 length 7; F3 width 5.5; clava length 15; clava width 6; C3 length 5.5; spicule length 1; mesosoma length 68; mesosoma width 51; midlobe of mesoscutum length 27; mesoscutellum length 24; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 4; propodeum length 9; costal cell length 38; costal cell width (measured at widest part) 3; marginal vein length 37; stigmal vein length 9.5; gaster length 87; gaster width 46; Gt₂ length (measured medially) 9.5; Gt₄ length (measured medially) 12.5; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 12; longest cercal seta length 11.5; shortest cercal seta length 6.

Male. Length of body of body 1.0–1.8mm.

Antenna (Fig. 977) with scape slightly expanding towards apex; plaque dark brown and situated close to apex; dorso-basal whorls of long setae absent, all flagellomeres with scattered short setae. Gaster short ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 29; head width 38.5; mouth width 12; malar space 8; eye length 18; scape length 9; scape width 3.5; plaque length 5.5; pedicel length 7; pedicel+flagellum length 39; F1 length 3; F1 width 2.5; F2 length 4.5; F2 width 3; F3 length 5; F3 width 3; F4 length 5; F4 width 3; clava length 13; clava width 3.5; mesosoma length 49; mesosoma width 35; gaster length 35; gaster width 25; longest subbasal seta on F1, length na.

Hosts. Reared from several types of leaf galls induced by Cecidomyiidae on *Inga vera* (Fabaceae). These are small (1–3 mm) galls found on the underside of the leaf: “bullet gall” (capsule-shaped) (Fig. 7), “modified bullet gall” (irregular-shaped, probably modified by a Tanaostigmatidae inquiline), blister-like gall, and a fuzzy spherical gall (Fig. 6) (P. Hanson, unpublished).

Distribution. Belize, Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iv.2002, INBio, OET, ALAS (NHMUK). Paratypes (14♀ 13♂, CNC, MZLU, MZUCR, NHMUK): 1♀ 1♂ COSTA RICA, Heredia, Santo Domingo, 1200m, iii-iv.2007, from *Inga vera* fuzzy leaf gall, P. Hanson; 1♀ from same locality and host plant as previous but collected iv.2008; 1♀ COSTA RICA, Cartago, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Sendero Arboles Caídos, LN 561400_192500, 1500m, 15.ix-19.x.2000, malaise trap, D. Rubi; 2♀ 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 1♀ COSTA RICA, San José, San Pedro, Montes de Oca, 1100m, 17.xii.1987, from *Inga vera* leaf gall, P. Hanson; 1♀ from same locality as previous but collected 11.vi.1988; 10♂ from same locality as previous but collected iii.1995, from blister gall on *Inga vera*; 1♀ 1♂ from same locality as previous but collected iv.2013, from fuzzy leaf gall on *Inga vera*; 1♀ COSTA RICA, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson; following from same locality as previous but collected ix.x.1993 (1♀), ii.1995 (1♀), iii.1995 (2♀); 1♀ BELIZE, Las Cuevas, IV.1995, T. King & A. Howe.

Etymology. Named after the host plant of the galls from which species was reared.

***Galeopsomyia intesa* Hansson sp.nov.**

(Figs 430, 431, 804)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 804); genal carina present; mesoscutellum (Fig. 430) with submedian grooves with outer margin indistinct, median part with very weak reticulation and shiny, lateral parts rugose, with a weak but \pm complete median groove; dorsellum with median carina; propodeum (Fig. 430) with strong irregular carinae and weak reticulation, callus with five setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 430) 1.6 \times as long as wide with apex rounded, medio-basal Gt₁ with longitudinal carinae, tergites with strong reticulation, gonoplac with apex blunt (Fig. 431).

Female holotype: length of body 2.6mm (paratype 2.3mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, scrobes and part below level of toruli golden, clypeus dark brown; vertex metallic bluish-green. Mesosoma golden-green. Legs with coxae black with metallic tinges; trochanters, tibiae and tarsi yellowish-brown, femora yellowish-brown with basal one-third dark brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation, meshes isodiametric, midlobe with strong reticulation, meshes elongate on median part, rugose on parts close to notauli, without median groove; midlobe with 25 setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with very weak reticulation and with a weak median groove, lateral parts rugose, with 20 setae. Dorsellum with strong reticulation, with median carina. Propodeum with a wide median carina that expands in posterior and anterior parts; with strong irregular carinae and weak reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with three longitudinal carinae; tergites with strong reticulation; gonoplac with blunt apex.

Relative measurements: head length, dorsal view 26; head length, frontal view 48; POL 11,5; OOL 9; lateral ocellus diameter 6; head width 65; mouth width 16,5; malar space 19; eye length 27; scape length 25; scape width 5; pedicel+flagellum length 66; pedicel length 8,5; pedicel width, dorsal view 5; F1 length 11; F1 width 5; F2 length 11,5; F2 width 5,5; F3 length 12; F3 width 6; clava length 21; clava width 6,5; C3 length 6,5; spicule length 2; mesosoma length 87; mesosoma width 62; midlobe of mesoscutum length 35; mesoscutellum length 33; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 4,5; propodeum length 14; costal cell length 42; costal cell width (measured at widest part) 3,5; marginal vein length 43; stigmal vein length 13; gaster length 85; gaster width 54; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 5,5; Gt₇ width (measured at base) 17; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, La Cangreja, 1950m, vii.1991, P. Hanson (NHMUK). Paratype: 1 ♀ **COSTA RICA, San José**, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, vii.1996, P. Hanson (MZLU).

***Galeopsomyia intruita* Hansson sp.nov.**

(Figs 432, 433, 1076)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1076); genal carina present; mesoscutellum (Fig. 432) with submedian grooves distinct, curved and diverging slightly towards posterior part, median part with weak reticulation; dorsellum with median carina; propodeum (Fig. 432) with irregular carinae and weak reticulation, callus with four setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 432) 2.9× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.4mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex golden-green. Mesoscutum bronze; mesoscutellum golden-green; propodeum black. Legs with fore and hind coxae black with metallic blue tinges, mid coxa black; trochanters and femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt₂₋₅ golden-purple, Gt₆₋₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with seven scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a very weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with nine setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with irregular carinae and weak reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; POL 10; OOL 6; lateral ocellus diameter 4.8; head width 51; mouth width 14.5; malar space 14.5;

eye length 22; scape length 17; scape width 4; pedicel+flagellum length 55; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 9; F2 width 5.5; F3 length 8.5; F3 width 5.5; clava length 20; clava width 6; C3 length 7; spicule length 2; mesosoma length 67; mesosoma width 48; midlobe of mesoscutum length 27; mesoscutellum length 25.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3.5; propodeum length 11; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 35; stigmal vein length 11; gaster length 113; gaster width 39; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 19; Gt₇ width (measured at base) 11; longest cercal seta length 15; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Sendero Arboles Caídos, LN 561400_192500, 1500m, 15.ix-19.x.2000, malaise trap, D. Rubí (NHMUK).

***Galeopsomyia ira* Hansson sp.nov.**

(Figs 434, 435, 805, 978)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 805); genal carina present; mesoscutellum (Fig. 434) with median part 3.5× as long as wide, with weak reticulation, shiny, with sides straight and parallel, lateral parts with strong reticulation/rugosity; dorsellum with median carina; propodeum (Fig. 434) with strong irregular carinae and strong reticulation, callus with two setae; fore and mid coxae dark brown to metallic, hind coxa metallic (Fig. 435); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 434) 2.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.0mm (paratypes 1.9–2.6mm).

Scape dark brown with base yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green with scrobes black with metallic tinges, clypeus dark brown; vertex metallic bluish-green. Mesosoma metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa black with golden tinges; trochanters, femora, tibiae and tarsi yellowish-brown, base of femora and T4 brown. Petiole black. Gaster with Gt₁ dark brown with weak metallic bluish tinges, Gt_{2,7} dark brown with metallic tinges; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with six scattered setae on lateral parts; outer margin of submedian grooves absent, grooves straight and parallel. Dorsellum with weak sculpture, with median carina. Propodeum with a strong narrow median carina that expands to a triangle in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; POL 9; OOL 6; lateral ocellus diameter 4; head width 44; mouth width 12; malar space 13.5; eye length 19.51; scape length 17; scape width 3.6; pedicel+flagellum length 51; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 8; F1 width 4.5; F2 length 8.5; F2 width 5; F3 length 9; F3 width 5; clava length 19; clava width 5; C3 length 5.5; spicule length 2; mesosoma length 57; mesosoma width 36; midlobe of mesoscutum length 21; mesoscutellum length 19.5; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 9.5; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 33; stigmal vein length 7.5; gaster length 78; gaster width 31; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 12; longest cercal seta length 13; shortest cercal seta length 6.

Male. Length of body of body 1.5–2.0mm.

Antenna (Fig. 978) with plaque on scape black and situated distinctly below apex; dorso-basal whorls of long setae present on F1–F4 and on C1, C1 also with a ventro-basal whorl of long setae. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 30; head width 39; mouth width 12; malar space 11; eye length 16; scape length 15; scape width 5; plaque length 6.5; pedicel length 6; pedicel+flagellum length 64; F1 length 5; F1 width 4; F2 length 8.5; F2 width 4; F3 length 9; F3 width 4; F4 length 11; F4 width 3.5; clava length 24; clava width 4; mesosoma length 51; mesosoma width 32; gaster length 57; gaster width 24; longest subbasal seta on F1, length 32.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (35♀ 5♂, CNC, MZLU, MZUCR, NHMUK): 27♀ 4♂ with same label data as holotype; 1♂ from same locality as holotype but collected 13.i.2001; 6♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes,

9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos; 1♀ COSTA RICA, **Alajuela**, Cabro Muco, 10°43'N, 85°09'W, 1100m, 9.ix.2004, J.A. Azofeifa.

***Galeopsomyia isola* Hansson sp.nov.**

(Figs 436, 437, 806)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 806); genal carina present; mesoscutellum (Fig. 436) with median part 2.9× as long as wide, with weak reticulation and a very weak median groove, shiny, with sides curved, outer margin of submedian grooves indistinct, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 436) with a strong and wide median carina that expands backwards from median part of carina, with strong irregular carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 436) 2.4× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.6mm.

Scape yellowish-brown with apex brown, pedicel and flagellum dark brown. Head with frons below level of antennal toruli golden-green, clypeus dark brown, above toruli metallic bluish-green with scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green, propodeum golden. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters and tibiae yellowish-brown, femora dark brown to black with apical one-third to half yellowish-brown, tarsi yellowish-brown with T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ metallic purple, Gt₅ metallic purple with hind margin golden-green, Gt₆ golden-green, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation/rugosity, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, parts close to notauli rugose; midlobe with median groove indicated but very weak in posterior half, with 14 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and with a very weak median groove, lateral parts with strong reticulation, meshes elongate, with eight scattered setae on lateral parts; outer margin of submedian grooves indistinct, grooves curved. Dorsellum with strong reticulation, with median carina. Propodeum with a strong and wide median carina that expands backwards from median part of carina; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with very weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 11; OOL 6; lateral ocellus diameter 5; head width 56; mouth width 16; malar space 15.5; eye

length 24.5; scape length 20; scape width 4.5; pedicel+flagellum length 58; pedicel length 7; pedicel width, dorsal view 4; F1 length 9.5; F1 width 5; F2 length 9.5; F2 width 4.5; F3 length 9; F3 width 4.5; clava length 20.5; clava width 5; C3 length 7; spicule length 2; mesosoma length 75; mesosoma width 52; midlobe of mesoscutum length 33; mesoscutellum length 29; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4.5; propodeum length 11; costal cell length 41; costal cell width (measured at widest part) 3; marginal vein length 38; stigmal vein length 14; gaster length 112; gaster width 46; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 16; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK).

***Galeopsomyia jaymesonesae* Hansson sp.nov.**

(Figs 438, 439, 1078)

Diagnosis (female). Antenna with distinct constriction between all three clavomeres (Fig. 1078); with genal carina; mesoscutellum (Fig. 438) with submedian grooves distinct and converging towards posterior part, median part with very weak reticulation and shiny, lateral parts with strong reticulation; mid coxa dark brown (Fig. 439); propodeum (Fig. 438) with strong reticulation, callus with five setae; gaster (Fig. 438) 2.7× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head and mesosoma black with metallic tinges. Legs with fore and mid coxae dark brown, hind coxa black; femora pale brown with apical one-third yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ with golden-green tinges, remaining tergites dark brown to black; gonoplac black.

Antenna with a constriction between all three clavomeres. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin ±carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, and with eight adnotaular setae in two rows. Mesoscutellum with median part with very weak reticulation, lateral parts

with strong reticulation, meshes elongate; submedian grooves distinct, straight and converging towards posterior part; with four setae scattered over lateral parts. Dorsellum with strong reticulation, with a median carina. Propodeum with a strong and wide median carina that expands posteriorly; with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row in right wing unbroken, left wing with two setae missing in median part of setal row.

Petiole a very short transverse band. Gaster elongate; medio-basal Gt_1 with two short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 29; POL 7; OOL 5.5; lateral ocellus diameter 3.5; head width 38; mouth width 11; malar space 11; eye length 18; scape length 13; scape width 3; pedicel+flagellum length 45; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7; F1 width 3.5; F2 length 7.5; F2 width 4; F3 length 6.5; F3 width 4; clava length 16; clava width 4; C3 length 6; spicule length 2; mesosoma length 48; mesosoma width 32; midlobe of mesoscutum length 17; mesoscutellum length 17; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 6; costal cell length 26; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 6.5; gaster length 72; gaster width 27; Gt_2 length (measured medially) 6.5; Gt_4 length (measured medially) 8.5; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-3, 10°76'N, 85°33'W, 820m, 19-26.xii.2019, D. Janzen, W. Hallwachs (barcoded specimen: BIOUG61372-C04) (MZLU).

Etymology. Named in honour of Jayme Sones in recognition of her years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia juni* Hansson sp.nov.**

(Figs 440, 441, 809)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 809); genal carina present; mesoscutellum (Fig. 440) with submedian grooves distinct and parallel, median part with very weak reticulation and shiny, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 440) with strong irregular carinae and strong reticulation, callus with two setae; gaster (Fig. 440) 2.4× as long as wide, medio-basal Gt_1 with longitudinal carinae, Gt_1 with weak reticulation and shiny, remaining tergites with stronger reticulation; mesosoma golden-green (Fig. 440, 441).

Female holotype: length of body 1.9mm (paratypes 1.6–1.8mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green with scrobes black and clypeus dark brown; vertex metallic bluish-green. Mesosoma golden-green. Legs with fore and mid coxae brown, hind coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-5} dark brown with golden tinges, Gt_{6-7} black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with strong reticulation inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with eight adnotaular setae in two rows. Mesoscutellum with weak reticulation on median part, lateral parts with slightly stronger reticulation, meshes elongate; submedian grooves distinct, \pm straight and parallel; with four setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong and wide median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with longitudinal carinae; Gt_1 with weak reticulation and shiny, remaining tergites with stronger reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 32; POL 9; OOL 5.5; lateral ocellus diameter 3; head width 41; mouth width 11; malar space 11; eye length 19; scape length 15; scape width 4; pedicel+flagellum length 54; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 5; F2 length 9; F2 width 5; F3 length 8; F3 width 5; clava length 19; clava width 5; C3 length 6.5; spicule length 1.5; mesosoma length 51; mesosoma width 34; midlobe of mesoscutum length 19; mesoscutellum length 19.5; mesoscutellum width 15; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 8.5; costal cell length 26.5; costal cell width (measured at widest part) 1.7; marginal vein length 28; stigmal vein length 8; gaster length 68; gaster width 28; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 12; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 8; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21.ii-28.ii.2005, C. Hansson (MZLU). Paratypes (3♀, MZLU, NHMUK): 2♀ with same label data as holotype; 1♀ COSTA RICA, Alajuela, Parque Nacional Arenal, Sendero Mena, LN 454170_271800, 600m, 17.iv.-19.v.2001, G. Carballo.

***Galeopsomyia kateperezae* Hansson sp.nov.**

(Figs 442, 443, 979, 1080)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1080); genal carina present; mesoscutellum (Fig. 442) with submedian grooves with outer margin indistinct, median part with weak reticulation and shiny, lateral parts rugose, with a very weak but \pm complete median groove; dorsellum with median carina; propodeum (Fig. 442) with strong irregular carinae and strong reticulation, callus with eight setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 442) 1.7 \times as long as wide with apex pointed, medio-basal Gt₁ with longitudinal carinae, tergites with rather strong reticulation.

Female holotype: length of body 2.1mm (paratype 2.0mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons golden-green, scrobes black, clypeus dark brown; vertex golden-green. Mesosoma golden-green. Legs with coxae golden-green; trochanters yellowish-brown; femora dark brown in basal half and yellowish-brown in apical half; tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ and Gt₄₋₇ golden green, Gt₂₋₃ black dorsally and golden-green on lateral parts; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with short genal carina. Vertex with strong wrinkled sculpture. Occipital margin with a carina behind ocellar triangle, rounded lateral to ocellar triangle.

Mesoscutum with strong reticulation, meshes on sidelobes isodiametric, meshes elongate on midlobe, midlobe rugose on parts close to notauli, with a median groove in posterior half; midlobe with 15 setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with weak reticulation and with a very weak median groove, lateral parts rugose, with 12 setae. Dorsellum with strong reticulation, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with four longitudinal carinae; tergites with weak reticulation; gonoplac with apex pointed.

Relative measurements: head length, dorsal view 26; head length, frontal view 46; POL 12; OOL 5.5; lateral ocellus diameter 6; head width 56; mouth width 20; malar space 15; eye length 26; scape length 21; scape width 4.5; pedicel+flagellum length 56; pedicel length 8; pedicel width, dorsal view 4; F1 length 10.5; F1 width 5; F2 length 10; F2 width 5; F3 length 9; F3 width 5; clava length 18; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 75; mesosoma width 53; midlobe of mesoscutum length 32; mesoscutellum length 27; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 6; propodeum length 12; costal cell length 35; costal cell width (measured at widest part) 3; marginal vein length 28; stigmal vein length 12; gaster length 85; gaster width 51; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 17; longest cercal seta length 14; shortest cercal seta length 6.

Male. Length of body of body 1.8mm.

Antenna (Fig. 979) with scape slightly expanding towards apex; plaque dark brown and situated close to apex; dorso-basal whorls of long setae present. Gaster short ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; head width 53; mouth width 19; malar space 11; eye length 24; scape length 18; scape width 6; plaque length 12; pedicel length 7; pedicel+flagellum length 78; F1 length 6; F1 width 5; F2 length 10; F2 width 5; F3 length 12; F3 width 5; F4 length 12; F4 width 5; clava length 30; clava width 4; mesosoma length 70; mesosoma width 45; gaster length 63; gaster width 36; longest subbasal seta on F1, length 29.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Area de Conservacion, Guanacaste, Sector Pailas, Pailas Dos PL 12-3, 10°75'N, 85°33'W, 820m, 25.i-1.ii.2018, D. Janzen, W. Hallwachs (barcoded specimen: BIOUG57531-F10) (MZLU). Paratypes (MZLU, NHMUK): 1♀ 2♂ from same locality as holotype but collected 26.i-2.ii.2017, 10-17.v.2018, 10-17.i.2019.

Etymology. Named in honour of Kate Perez in recognition of her years of dedicated management of Costa Rica's data at the Centre for Biodiversity Genomics, Ontario, Canada.

***Galeopsomyia labrada* Hansson sp.nov.**

(Figs 444, 445, 1079)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1079); with a short genal carina close to mouth opening; mesoscutellum (Fig. 444) with very weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with a complete but weak median groove, outer margin of submedian grooves indistinct in anterior half and subdivided by transverse carinae, outer margin distinct in posterior half, grooves slightly curved and diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 444) with strong reticulation, callus with two setae; gaster (Fig. 444) 3.2× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation, gonoplac pale brown (Fig. 445).

Female holotype: length of body 3.3mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, above this level metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₅ golden-purple, Gt_{6,7} golden-green; gonoplac pale brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior two-thirds, with seven scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; with a complete but weak median groove; outer margin of submedian grooves indistinct in anterior half and subdivided by transverse carinae, outer margin distinct in posterior half, grooves slightly curved and diverging slightly towards posterior part; with nine setae scattered over parts lateral to grooves. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a narrow median carina that expands in posterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt_1 with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 27.5; head length, frontal view 47; POL 11.5; OOL 6.5; lateral ocellus diameter 5; head width 55; mouth width 24; malar space 16; eye length 22; scape length 21; scape width 4.5; pedicel+flagellum length 64; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 9.5; F2 width 4.5; F3 length 9.5; F3 width 5; clava length 21; clava width 6; C3 length 5.5; spicule length 1.5; mesosoma length 78; mesosoma width 57; midlobe of mesoscutum length 31; mesoscutellum length 30.5; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 2; propodeum length 10; costal cell length 43; costal cell width (measured at widest part) 3.2; marginal vein length 46; stigmal vein length 14; gaster length 160; gaster width 50; Gt_2 length (measured medially) 13; Gt_4 length (measured medially) 25; Gt_7 length (measured medially) 26; Gt_7 width (measured at base) 18; longest cercal seta length 16; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Parque Nacional La Amistad, Estación Altamira, Sendero a Casa Coca, LS 331750_574400, 1700m, 12.vi-12.vii.2001, malaise trap, D. Rubí (NHMUK).

***Galeopsomyia lacinia* Hansson sp.nov.**

(Figs 446, 447, 810, 980)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 810); genal carina present; mesoscutellum (Fig. 446) with very weak reticulation, submedian grooves distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 446) with strong reticulation, callus with seven setae; fore coxa black, mid coxa dark brown and hind coxa yellowish-brown at apex and along anterior part, black along posterior part (Fig. 447); petiole a narrow smooth band; gaster (Fig. 446) 2.7× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.9mm (paratypes 1.7–2.9mm).

Scape yellowish-brown, pedicel dark brown, flagellum black. Head with frons black with golden-green tinges, antennal scrobes black with metallic tinges and clypeus black; vertex black with pale blue metallic tinges. Mesoscutum and mesoscutellum with pale golden tinges; propodeum black with golden tinges. Legs with fore and hind coxae black, hind coxa with apex yellowish-brown, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁₋₄ with pale golden tinges and with posterior margin black with metallic purple tinges, Gt₅₋₆ with pale golden tinges, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation; with genal carina. Vertex with strong reticulation. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with nine adnotaular setae in two rows. Mesoscutellum with very weak reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with seven setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a wide median carina that expands both anteriorly and posteriorly; with strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with eight setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole a narrow smooth band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 42; POL 10.5; OOL 8.5; lateral ocellus diameter 5; head width 58; mouth width 16; malar space 14.5; eye length 24; scape length 24; scape width 5; pedicel+flagellum length 69; pedicel length 8; pedicel width, dorsal view 4; F1 length 11.5; F1 width 5; F2 length 11; F2 width 5; F3 length 9.5; F3 width 5; clava length 25; clava width 6; C3 length 9; spicule length 3; mesosoma length 82; mesosoma width 55; midlobe of mesoscutum length 32; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 5.5; propodeum length 14; costal cell length 44; costal cell width (measured at widest part) 3; marginal vein length 47; stigmal vein length 13; gaster length 126; gaster width 46; Gt₂ length (measured medially) 14; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 13.5; longest cercal seta length 19; shortest cercal seta length 6.

Male. Length of body of body 1.5–1.7mm.

Antenna (Fig. 980) with plaque on scape dark brown and situated below apex of scape; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 19.5; head length, frontal view 33; head width 44; mouth width 15; malar space 13.5; eye length 18.5; scape length 18; scape width 5.5; plaque length 4; pedicel length 6; pedicel+flagellum length 80; F1 length 6; F1 width 4.8; F2 length 9.5; F2 width 5; F3 length 14; F3 width 4; F4 length 15; F4 width 4; clava length 30; clava width 4; mesosoma length 55; mesosoma width 39; gaster length 62; gaster width 31; longest subbasal seta on F1, length 50.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, San Gerardo de Dota, 9°34'N, 83°43'W, 20-21.ii.2013, J.S. Noyes (NHMUK). Paratypes (19♀ 2♂, CNC, MZLU, MZUCR, NHMUK): 1♀ **COSTA RICA, Cartago**, Turrialba, Rio Dantas, 0.4km Aguas Arriba Margen Derecho, LN 218100_593650, 400-500m, 6.ii-10.iii.2000, E. Rojas; 1♀ **COSTA RICA, Guanacaste**, Parque Nacional Guanacaste, below Volcan Cacao, 400-600m, 3.iii.1990, J.S. Noyes; 2♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 2♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes; following from same locality as previous but collected 18-25.ii.2004 (1♂), 19.ii.2013 (1♀); 1♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; following from same locality as previous but collected 15-16.ii.2006 (1♀), 7-19.ii.2007 (6♀), 19-29.ii.2008 (1♂), 15-16.ii.2012 (4♀).

***Galeopsomyia ladrona* Hansson sp.nov.**

(Figs 448, 449, 911, 1101)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 1101); genal carina present; mesoscutellum (Fig. 911) with submedian grooves distinct and diverging slightly towards posterior part, median part rugose; dorsellum with median carina; propodeum (Fig. 448) with strong irregular carinae, anterolaterally with strong reticulation without carinae, callus with two setae; gaster (Fig. 448) 1.6× as long as wide, tergites with strong reticulation, medio-basal Gt₁ with short longitudinal carinae, apex of gonoplac blunt (Fig. 449); mesoscutum and mesoscutellum black with bluish tinges (Figs 448, 449).

Female holotype: length of body 1.7mm (paratypes 1.7–1.9mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic blue, clypeus dark brown, antennal scrobes black; vertex black with metallic blue tinges. Thoracic dorsum black with metallic blue tinges. Legs with fore and hind coxae black with metallic blue tinges, mid coxa dark brown to black; trochanters yellowish-brown; femora with basal two-thirds dark brown and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic blue, remaining tergites golden-purple; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with transverse carinae; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with a strong and complete median groove, with ten scattered adnotaular setae. Mesoscutellum rugose; submedian grooves distinct, straight and diverging slightly towards posterior part; with ten setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and anterolaterally with strong reticulation without carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with short longitudinal carinae; tergites with strong reticulation; apex of gonoplac blunt.

Relative measurements: head length, dorsal view 23; head length, frontal view 35; POL 9.5; OOL 5.5; lateral ocellus diameter 4.5; head width 49; mouth width 12; malar space 14; eye length 20; scape length 16; scape width 3.5; pedicel+flagellum length 49; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 9; F2 width 4; F3 length 8; F3 width 4; clava length 17; clava width 4.5; C3 length 4.5; spicule length 1.5; mesosoma length 57; mesosoma width 40; midlobe of mesoscutum length 18.5; mesoscutellum length 21; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 2; propodeum length 11; costal cell length 30; costal cell width (measured at widest part) 2; marginal vein length 26; stigmal vein length 8; gaster length 59; gaster width 37; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 9; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 5.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 11-12.ii.2018, J.S. Noyes (NHMUK). Paratypes (2♀, MZLU, NHMUK): 1♀ with same label data as holotype; 1♀ from same locality as holotype but collected 23-24.ii.2013.

Galeopsomyia lapsa Hansson sp.nov.

(Figs 450, 451, 807)

Diagnosis (female). Antenna with a constriction between C1 and C2 (Fig. 807); with a short genal carina; mesoscutellum (Fig. 450) with very weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves curved with outer margin missing; dorsellum with median carina; propodeum (Fig. 450) with

strong reticulation and strong irregular carinae, callus with three setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 450) 2.9× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with strong large-meshed reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge darker, pedicel and flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum dark brown with golden-green tinges, mesoscutellum golden-green, propodeum dark brown. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, tibiae paler than femora and T4 pale brown. Petiole black. Gaster dark brown to black with golden-green tinges; gonoplac dark brown.

Antenna with a constriction between C1 and C2. Frons with strong reticulation, clypeus smooth; with genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with 11 scattered adnotaular setae, without median groove. Mesoscutellum with very weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves curved with outer margin missing; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with strong reticulation and strong irregular carinae; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with strong large-meshed reticulation.

Relative measurements: head length, dorsal view 19; head length, frontal view 36; POL 10.5; OOL 6.5; lateral ocellus diameter 4; head width 44; mouth width 13; malar space 12.5; eye length 18.5; scape length 18; scape width 3.8; pedicel+flagellum length 52.5; pedicel length 6; pedicel width, dorsal view 3.8; F1 length 6.5; F1 width 5; F2 length 9; F2 width 4.5; F3 length 9; F3 width 4; clava length 19; clava width 5; C3 length 6.5; spicule length 2; mesosoma length 64; mesosoma width 40; midlobe of mesoscutum length 28; mesoscutellum length 23; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 9; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 35; stigmal vein length 12.5; gaster length 100; gaster width 35; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 15; Gt₇ width (measured at base) 18; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Gigantes, LS 331700_570700, 1200m, 12.iv-8.v.2004, malaise trap, D. Rubí, R. González, R. Delgado (NHMUK).

***Galeopsomyia latosa* Hansson sp.nov.**

(Figs 452, 453, 813)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 813); genal carina present; mesoscutellum (Fig. 452) with submedian grooves slightly curved with outer margin missing, median aprt with weak reticulation, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 452) with strong irregular carinae and strong reticulation, callus with seven setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 452) ovate-elongate, 1.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.3mm (paratype 2.4mm).

Scape yellowish-brown with apical one-fifth brown, pedicel brown, flagellum black. Head with frons metallic bluish-green with scrobes black with metallic tinges and clypeus dark brown; vertex bluish-green with purple tinges. Mesoscutum and mesoscutellum bluish-green, propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters yellowish-brown; femora with basal half black, hind femur with golden-green tinges on this part, and apical half yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt_{2,5} metallic purple with sides metallic bluish-green, Gt_{6,7} metallic bluish-green, Gt₇ with posterior half black; gonoplac dark brown.

Antenna with a distinct constriction between C1 and C2. Frons rugose, antennal scrobes with weak small-meshed reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation outside ocellar triangle, with strong and wrinkled sculpture inside ocellar triangle. Occipital margin rounded.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a median groove in posterior half, with 14 scattered setae on rugose parts. Mesoscutellum with submedian grooves slightly curved with outer margin absent, median part with weak reticulation, lateral parts rugose; with 18 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina; with strong irregular carinae and strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 43; POL 11; OOL 6; lateral ocellus diameter 6; head width 57; mouth width 17; malar space 15; eye length 25; scape length 20; scape width 4.5; pedicel+flagellum length 56; pedicel length 8; pedicel width, dorsal view 4; F1 length 7.5; F1 width 5; F2 length 8.5; F2 width 5; F3 length 8; F3 width 5; clava length 20; clava width 5.5; C3 length 6; spicule length 1; mesosoma length 75; mesosoma width 54; midlobe of mesoscutum length 31; mesoscutellum length 27.5; mesoscutellum width 24.5; median part of mesoscutellum width (measured medially) 11; median part

of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 11.5; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 33; stigmal vein length 13; gaster length 92; gaster width 51; Gt_2 length (measured medially) 12; Gt_4 length (measured medially) 20; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 11.5; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratype: 1♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (NHMUK).

***Galeopsomyia lealis* Hansson sp.nov.**

(Figs 454, 455, 814)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 814); genal carina present but weak; mesoscutellum (Fig. 454) with median part with strong reticulation, with a weak median groove in anterior three-quarters, lateral parts with strong reticulation, meshes elongate, submedian grooves ±distinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 454) with strong reticulation, callus with five setae; petiole very short, just a narrow band; gaster (Fig. 454) 2.4× as long as wide, medio-basal Gt_1 with longitudinal sharp edges laterally, tergites with strong reticulation.

Female holotype: length of body 1.8mm (paratypes 1.7–1.9mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Frons golden-green, clypeus dark brown in upper half and yellowish-brown in lower half, scrobes black; vertex metallic blue. Mesosoma golden-green. Legs with fore coxa black with metallic blue tinges, mid coxa black, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown to black with metallic tinges in basal half, apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1-6} metallic bluish-green, Gt_7 black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeal area smooth, frons above antennal toruli with strong reticulation; with genal carina. Vertex outside ocellar triangle with strong reticulation, inside with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on midlobe; midlobe with a median groove in posterior two-thirds, with ten scattered adnotaular setae. Mesoscutellum with median part with strong reticulation, with a weak median groove in anterior three-quarters, lateral parts with strong reticulation, meshes elongate; submedian

grooves \pm distinct, slightly curved and diverging towards posterior part; with eight setae on lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed below and towards base of wing; costal setal row unbroken.

Petiole very short, just a transverse band. Gaster elongate; medio-basal Gt_1 with longitudinal sharp edges laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 32; POL 8.5; OOL 5.8; lateral ocellus diameter 3.5; head width 44; mouth width 13; malar space 11; eye length 20.5; scape length 16; scape width 4; pedicel+flagellum length 52; pedicel length 6; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 9; F2 width 4; F3 length 8.5; F3 width 4; clava length 18.5; clava width 4.2; C3 length 6.5; spicule length 2; mesosoma length 53; mesosoma width 39; midlobe of mesoscutum length 18.5; mesoscutellum length 20.5; mesoscutellum width 19.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 8; costal cell length 28; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 11; gaster length 75; gaster width 31; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 12.5; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 11; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU). Paratypes (4♀, MZLU, MZUCR, NHMUK): 2♀ with same label data as holotype; 1♀ **COSTA RICA, Puntarenas, San Vito**, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson; 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 10°26'N, 84°01'W, 75m, 22.ii.2018, J.S. Noyes.

***Galeopsomyia lema* Hansson sp.nov.**

(Figs 456, 457, 815)

Diagnosis (female). Antenna with distinct constriction between between C1 and C2 (Fig. 815); genal carina present; mesoscutellum (Fig. 456) with submedian grooves curved, outer margin missing, median part with very weak reticulation, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 456) with strong irregular carinae and strong reticulation, callus with four setae; gaster (Fig. 456) 2.4× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.5mm (paratypes 1.9–2.4mm).

Scape yellowish-brown, pedicel and flagellum dark brown to black. Head with frons metallic bluish-green with scrobes black with metallic tinges and clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum black with golden-green tinges, mesoscutellum and propodeum golden-green. Legs with coxae yellowish-brown, fore coxa with very base and hind coxa with basal half dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin metallic purple, Gt₂₋₅ metallic purple, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with rather strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with an indistinct but complete median groove, with 18 setae on rugose parts. Mesoscutellum with submedian grooves with outer margin missing, median part with very weak reticulation, lateral parts rugose with 16 scattered setae. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that is expanded posteriorly; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below (apical seta absent); costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 40; POL 10.5; OOL 6.5; lateral ocellus diameter 4.5; head width 51; mouth width 16; malar space 15; eye length 22; scape length 19.5; scape width 4.5; pedicel+flagellum length 62; pedicel length 7; pedicel width, dorsal view 4; F1 length 11.5; F1 width 4.5; F2 length 12; F2 width 5; F3 length 10.5; F3 width 5; clava length 20; clava width 6; C3 length 6; spicule length 2; mesosoma length 69; mesosoma width 45; midlobe of mesoscutum length 27; mesoscutellum length 26; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 10; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 38; stigmal vein length 11; gaster length 108; gaster width 45; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 14; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W,

1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (7♀, MZLU, MZUCR, NHMUK): 1♀ with same label data as holotype; 3♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; 1♀ COSTA RICA, **Alajuela**, Estación Biológica San Ramón, 10°13'N, 84°37'W, 900m, x-xii.1995, P. Hanson; 1♀ COSTA RICA, **San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson.

***Galeopsomyia lemuris* Hansson sp.nov.**

(Figs 458, 459, 812, 895)

Diagnosis (female). Antenna with solid clava, pedicel and flagellum pale brown (Fig. 812); genal carina absent; eyes relatively small, 1.3× as long as malar space; frons with median part just below toruli smooth and metallic purple, contrasting against metallic bluish-green on remaining frons (Fig. 895); mesoscutellum (Fig. 458) elongate, 1.4× as long as wide, with very weak reticulation on median part, lateral parts with weak reticulation, meshes elongate, submedian grooves slightly curved and diverging towards posterior part, with complete median groove; dorsellum with median carina; propodeum (Fig. 458) with a mix of reticulation and irregular carinae, callus with eight setae; petiole transverse, with strong sculpture on dorsal surface; gaster (Fig. 458) 2.1× as long as wide, medio-basal Gt_1 with eight longitudinal carinae, tergites with weak reticulation.

Female holotype: length of body 2.6mm.

Scape yellowish-brown, pedicel and flagellum pale brown. Head with frons below toruli with median part metallic purple, contrasting against metallic bluish-green on remaining frons, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green. Legs with fore coxa pale brown, mid coxa dark brown, hind coxa metallic bluish-green; trochanters, tibiae and tarsi yellowish-brown; femora yellowish-brown with basal one-third pale brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-5} dark brown with metallic tinges, Gt_6 with basal half dark brown with metallic tinges and apical half metallic bluish-green, Gt_7 metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with median part smooth, remaining parts with weak reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; without genal carina. Vertex with weak reticulation inside ocellar triangle, with transverse carinae inside triangle; occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose close to notauli; midlobe with a median groove in posterior half, with 15 scattered setae on rugose parts. Mesoscutellum with very weak reticulation on median part, lateral parts with weak reticulation, meshes elongate; submedian grooves slightly curved and diverging towards posterior part; with seven scattered setae on lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands towards posterior part; with strong reticulation and strong irregular carinae; callus with eight setae. Fore coxa with very weak reticulation, almost smooth, mid coxa with weak reticulation, hind coxae with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row broken.

Petiole transverse, dorsal surface with strong sculpture. Gaster elongate; medio-basal Gt_1 with eight longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 42; POL 10; OOL 6,5; lateral ocellus diameter 4; head width 53; mouth width 20; malar space 17; eye length 22; scape length 21; scape width 4,5; pedicel+flagellum length 52; pedicel length 6,5; pedicel width, dorsal view 4; F1 length 9; F1 width 4,5; F2 length 8,5; F2 width 4,5; F3 length 7; F3 width 4,5; clava length 16; clava width 5; C3 length 5; spicule length 1,5; mesosoma length 81; mesosoma width 49; midlobe of mesoscutum length 34; mesoscutellum length 30; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 8,5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5,5; dorsellum length 5; propodeum length 12,5; costal cell length 45; costal cell width (measured at widest part) 3,5; marginal vein length 30; stigmal vein length 10; gaster length 104; gaster width 50; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 15; longest cercal seta length 15; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Zurqui de Moravia, 10°02'58"N, 84°00'57"W, 1600m, iii.1995, P. Hanson (NHMUK). Paratype: 1♀ COSTA RICA, Cartago, Dulce Nombre, Vivero Linda Vista, 1300m, viii-x.1993, P. Hanson (MZLU).

Galeopsomyia leonae Hansson sp.nov.

(Figs 460, 461, 818, 981)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 818); genal carina present; mesoscutellum (Fig. 460) with submedian grooves diverging slightly towards posterior part, with outer margin indistinct, median part with weak reticulation; dorsellum with complete median carina; propodeum (Fig. 460) with strong reticulation, callus with two setae; coxae dark brown to black (Fig. 461); petiole very short, just a narrow band; gaster (Fig. 460) 3.0× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.8mm (paratypes 1.6–2.6mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus dark brown; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore coxa dark brown with metallic tinges, mid coxa dark brown, hind coxa golden-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ metallic purple, Gt₅₋₆ golden-green, Gt₇ black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with

weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with 15 scattered adnotaular setae. Mesoscutellum with weak reticulation and shiny on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, slightly curved and diverging towards posterior part; with 12 setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 41; POL 10.5; OOL 5.5; lateral ocellus diameter 6; head width 52; mouth width nm; malar space 15; eye length 22.5; scape length 21; scape width 4.5; pedicel+flagellum length 54; pedicel length 9.5; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5.5; F2 length 8; F2 width 6; F3 length 7.5; F3 width 6; clava length 18; clava width 7; C3 length 6.5; spicule length 1.5; mesosoma length 79; mesosoma width 52; midlobe of mesoscutum length 33; mesoscutellum length 29; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4; propodeum length 11; costal cell length 41; costal cell width (measured at widest part) 3.5; marginal vein length 40; stigmal vein length 12.5; gaster length 122; gaster width 41; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 24; Gt_7 width (measured at base) 16.5; longest cercal seta length 13; shortest cercal seta length 6.

Male. Length of body of body 1.5–2.0mm.

Antenna (Fig. 981) with scape gradually expanding towards apex and widest at apex; plaque dark brown and situated at apex; dorso-basal whorls of long setae absent, instead with short scattered setae on all flagellomeres. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; head width 39; mouth width 15; malar space 9.5; eye length 18; scape length 17; scape width 4.5; plaque length 5; pedicel length 8; pedicel+flagellum length 49; F1 length 5.5; F1 width 3; F2 length 5.5; F2 width 3; F3 length 6; F3 width 3; F4 length 5; F4 width 3; clava length 19; clava width 3.5; mesosoma length 55; mesosoma width 38; gaster length 62; gaster width 29; longest subbasal seta on F1, length na.

Hosts. Reared from galls in young fruits of avocado (*Persea americana*) (Lauraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Tarrazu, 1500m, iii.1994, from young avocado fruit, R. Leon"

(NHMUK). Paratypes (11♀ 9♂, MZLU, MZUCR, NHMUK): 3♀ 4♂ with same label data as holotype; 7♀ 3♂ COSTA RICA, San José, Santa Cruz, 3.iv.2002, from avocado fruit gall, Leon Cortez; 1♀ 2♂ COSTA RICA, **Alajuela**, Carrizal, 11.iv.2002, from avocado fruit gall.

Etymology. Named in honour of Ruth Leon, collector of type material.

***Galeopsomyia limonensis* Hansson sp.nov.**

(Figs 462, 463, 817)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 817); genal carina present; mesoscutellum (Fig. 462) with submedian grooves curved, with outer margin absent, grooves subdivided by transverse carinae, median part with weak reticulation and with a median groove in posterior two-thirds, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 462) with strong irregular carinae, callus with two setae; fore coxa with basal half dark brown to black and apical half yellowish-brown, mid coxa yellowish-brown, hind coxa with basal half black with metallic tinges and apical half yellowish-brown (Fig. 463); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 462) 2.1× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with weak reticulation.

Female holotype: length of body 2.8mm (paratype 2.2mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons, including scrobes, and vertex golden-green, clypeus dark brown. Mesoscutum with sidelobes golden-green, midlobe golden-purple; mesoscutellum and propodeum golden-purple. Legs with fore coxa with basal half dark brown to black and apical half yellowish-brown, mid coxa yellowish-brown, hind coxa with basal half black with metallic tinges and apical half yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden, Gt₂₋₄ metallic purple, Gt₅₋₇ golden-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with lateral parts rugose, median part with strong small-meshed reticulation, clypeus smooth; with genal carina. Vertex with weak reticulation outside ocellar triangle and shiny, with wrinkled sculpture inside ocellar triangle and some large foveae.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose on part close to notauli; midlobe with a median groove in posterior half, with 12 scattered setae on rugose parts. Mesoscutellum with submedian grooves curved, with outer margin absent, grooves subdivided by transverse carinae, median part with weak reticulation and with a median groove in posterior two-thirds, lateral parts with strong reticulation and with eight scattered setae. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with seven setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 30; head length, frontal view 48; POL

10.5; OOL 6; lateral ocellus diameter 6; head width 82; mouth width 17; malar space 17; eye length 28.5; scape length 23; scape width 5; pedicel+flagellum length 72; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 12; F1 width 6; F2 length 12; F2 width 6; F3 length 11; F3 width 6.5; clava length 23.5; clava width 7; C3 length 7; spicule length 2; mesosoma length 83; mesosoma width 55; midlobe of mesoscutum length 31; mesoscutellum length 31; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 7; propodeum length 15; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 42; stigmal vein length 12.5; gaster length 108; gaster width 51; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 23; Gt₇ length (measured medially) 13; Gt₇ width (measured at base) 17; longest cercal seta length 16; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Limón, Área de Conservación La Amistad Caribe (A.C.L.A.C), Central, Reserva Biológica Hitoy Cerere, Estación Hitoy Cerere, LN 184600_643400, 140m 17.vi-17.vii.1999, malaise trap, F. Umaña, (NHMUK). Paratype: 1 ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes (NHMUK).

Etymology. Named after collecting area, Limón Province.

Galeopsomyia liria Hansson sp.nov.

(Figs 464, 465, 816)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 816); genal carina present; mesoscutellum (Fig. 464) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves indistinct, slightly curved and slightly diverging towards posterior part; fore wing with two setae on dorsal surface of submarginal vein; dorsellum with median carina; propodeum (Fig. 464) with strong reticulation, callus with two setae; gaster (Fig. 464) ovate, 1.4× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.4mm.

Scape and pedicel yellowish-brown, flagellum with F1 yellowish-brown, F2–3 with basal half dark brown and apical half yellowish-brown, clava dark brown. Head black with metallic green tinges, clypeus dark brown, antennal scrobes black. Mesoscutum and propodeum black with metallic tinges, mesoscutellum golden-greenish. Legs with coxae black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with

weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with eight scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves indistinct, slightly curved and slightly diverging towards posterior part; with five setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 16.5; head length, frontal view 29; POL 8; OOL 5.5; lateral ocellus diameter 3; head width 39; mouth width 10; malar space 11; eye length 16; scape length 15; scape width 3; pedicel+flagellum length 41; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 3; F2 length 6; F2 width 3; F3 length 5.5; F3 width 3; clava length 15; clava width 4; C3 length 5.5; spicule length 1.5; mesosoma length 47; mesosoma width 36; midlobe of mesoscutum length 16.5; mesoscutellum length 18; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 8; costal cell length 25; costal cell width (measured at widest part) 1.5; marginal vein length 24; stigmal vein length 8; gaster length 50; gaster width 37; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 12.5; Gt₇ length (measured medially) 2.5; Gt₇ width (measured at base) 9.5; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Macizo Miravalles, Estación Cabro Muco, LN 299769_411243, 1100m, 18.iii.2003, J. Azofeifa, B. Hernández, J.D. Gutiérrez (NHMUK).

***Galeopsomyia longicauda* Hansson sp.nov.**

(Figs 466, 467)

Diagnosis (female). Antenna with a weak constriction between C1 and C2; genal carina present; mesoscutellum (Fig. 466) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves slightly curved and diverging towards anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 466) with strong reticulation; callus with eight setae; gaster (Fig. 466) 2.8× as long as wide, medio-basal Gt₁

with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation, gonoplac 1.0× as long as length of hind femur.

Female holotype: length of body 2.1mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons and vertex metallic bluish-purple, clypeus yellowish-brown, antennal scrobes golden-green. Thoracic dorsum metallic bluish-green with purple tinges. Legs with fore coxa with basal half dark brown and apical half yellowish-brown, mid coxa brown, hind coxa metallic blue; trochanters yellowish-brown; femora yellowish-brown, hind femur with basal one-third brown; tibiae yellowish-white; T1–3 yellowish-white, T4 yellowish-brown. Petiole black. Gaster with Gt₁ metallic blue with purple tinges, remaining tergites black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe and with parts close to notauli rugose; midlobe with a median groove in posterior half, with 12 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves slightly curved and diverging towards anterior and posterior parts; with 11 setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with eight setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation; gonoplac elongate, 1.0× as long as length of hind femur.

Relative measurements: head length, dorsal view 22; head length, frontal view 32; POL 9; OOL 5.5; lateral ocellus diameter 4.5; head width 46; mouth width 15; malar space 12.5; eye length 21; scape length 17; scape width 3.5; pedicel+flagellum length 53; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 9.5; F1 width 4.5; F2 length 9.5; F2 width 4; F3 length 8.5; F3 width 4; clava length 17; clava width 5; C3 length 4.5; spicule length 1.5; mesosoma length 56; mesosoma width 39; midlobe of mesoscutum length 19; mesoscutellum length 20.5; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 30; stigmal vein length 7.5; gaster length 96; gaster width 34; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 6; Gt₇ length (measured medially) 19; Gt₇ width (measured at base) 11; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Bahia**, Mucuri, xi.1978, F. Benton (NHMUK).

Etymology. From the Latin *longus* = long, and *cauda* = tail, referring to long gonoplac.

***Galeopsomyia lumbrada* Hansson sp.nov.**

(Figs 468, 469, 822)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 822); genal carina present; mesoscutellum (Fig. 468) with weak reticulation on median part and a complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves straight and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 468) with a narrow median carina, with strong reticulation, callus with five setae; fore wing with two setae on dorsal surface of submarginal vein; gaster (Fig. 468) ovate, 1.6× as long as wide, tergites with strong reticulation; predominantly non-metallic species (Figs 468, 469).

Female holotype: length of body 1.3mm (paratypes 1.4–1.5mm).

Entire antenna yellowish-brown. Head black with metallic tinges, clypeus dark brown. Mesosoma dark brown to black. Legs with coxae dark brown; trochanters yellowish-brown; femora dark brown; tibiae and tarsi yellowish-brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, very elongate on midlobe; midlobe without median groove, with four adnotaular setae in a single row. Mesoscutellum with weak reticulation on median part and a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves ±distinct, straight and diverging towards posterior part; with eight setae scattered over lateral parts. Dorsellum with very weak sculpture and shiny, without median carina. Propodeum with a narrow median carina; with strong reticulation; callus with five setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 16; head length, frontal view 27; POL 7; OOL 4.5; lateral ocellus diameter 3.2; head width 37; mouth width nm; malar space 10.5; eye length 15; scape length 14; scape width 3; pedicel+flagellum length 35; pedicel length 5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 5; F2 width 3; F3 length 5.5; F3 width 3; clava length 12.5; clava width 3.5; C3 length 5; spicule length 1.5; mesosoma length 43; mesosoma width 31; midlobe of mesoscutum length 15.5; mesoscutellum length 15; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 1.5; propodeum length 7; costal cell length 21; costal cell width (measured at widest

part) 1.5; marginal vein length 22; stigmal vein length 6; gaster length 48; gaster width 30; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 11; Gt_7 length (measured medially) 3.5; Gt_7 width (measured at base) 9; longest cercal seta length 10; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Santa Rosa, 300m, SE-7-O, 5-26.vii.1986, D.H. Janzen & I.D. Gauld (NHMUK). Paratypes (3♀, MZLU, NHMUK): 1♀ with same label data as holotype; 1♀ **COSTA RICA, Puntarenas**, Cabo Blanco, 9°35'N, 85°06'W, 30m, 16-17.ii.2009, J.S. Noyes; 1♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 19-20.ii.2016, J.S. Noyes.

***Galeopsomyia lunaniae* Hansson sp.nov.**

(Figs 470, 471, 821)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 821); genal carina present; mesoscutellum (Fig. 470) elongate, 1.2× as long as wide, with weak reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, ±straight and diverging slightly towards posterior part; propodeum (Fig. 470) with strong reticulation and some strong irregular carinae medially, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 470) 2.5× as long as wide, medio-basal Gt_1 with short longitudinal carinae, tergites with strong reticulation.

Female holotype: length of body 2.2mm (paratypes 2.3mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black. Thoracic dorsum golden-green with blue tinges, anterior one-third of mesoscutum dark brown with weak metallic tinges. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-5} dark brown with metallic tinges, Gt_{6-7} black with metallic tinges; gonoplac black with apex yellowish-brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak median groove in posterior half, with 13 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a complete median groove,

lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, \pm straight and diverging slightly towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with strong reticulation, medially with a few strong irregular carinae; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 10; OOL 6; lateral ocellus diameter 4; head width 47; mouth width 17; malar space 12.5; eye length 21.5; scape length 16.5; scape width 4.5; pedicel+flagellum length 47.5; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 7; F2 width 5; F3 length 7.5; F3 width 5; clava length 17.5; clava width 5.5; C3 length 5.5; spicule length 1.5; mesosoma length 61; mesosoma width 44; midlobe of mesoscutum length 25; mesoscutellum length 24; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 10.5; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 11; gaster length 96; gaster width 38; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 17; Gt_7 width (measured at base) 13.5; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Reared from spherical galls (5–7 mm in diameter) on leaves, young stems and flowers, induced by an unidentified Cecidomyiidae on *Lunania mexicana* (Salicaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Estación Biológica A. Brenes, iii.2004, from *Lunania mexicana* gall, P. Hanson (NHMUK). Paratypes: 2♀ with same label data as holotype (MZLU, MZUCR).

Etymology. Named after the host plant of the gall from which this species was reared.

Galeopsomyia macanis Hansson sp.nov.

(Figs 472, 473, 819)

Diagnosis (female). Antenna with long spicule and weak constriction between C1 and C2 (Fig. 819); genal carina present; mesoscutellum (Fig. 472) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with a median groove in anterior two-thirds, submedian grooves diverging strongly towards posterior part, ratio distance between grooves anteriorly/posteriorly = 0.55; dorsellum without median carina; propodeum (Fig. 472) with strong reticulation and irregular carinae, callus with five setae; fore wing with two setae on dorsal surface of submarginal vein; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 472) 2.0× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.9mm (paratype 1.5mm).

Scape and pedicel yellowish-brown, flagellum brown. Head black with metallic tinges, clypeus brown. Mesoscutum and mesoscutellum black with metallic tinges; propodeum black with very weak metallic green tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown to yellowish-white, T4 pale brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with wrinkled sculpture; with a carina between posterior ocelli in posterior part. Occipital margin \pm carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior half, and with six adnotaular setae in one row. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging strongly towards posterior part; with median groove in anterior two-thirds; with five setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 34; POL 10.5; OOL 6.5; lateral ocellus diameter 4; head width 47; mouth width 12; malar space 13; eye length 18.5; scape length 17.5; scape width 4; pedicel+flagellum length 53; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 6; F1 width 4; F2 length 8; F2 width 4; F3 length 8; F3 width 4; clava length 20; clava width 5; C3 length 7; spicule length 2.5; mesosoma length 61; mesosoma width 43; midlobe of mesoscutum length 23.5; mesoscutellum length 23; mesoscutellum width 21.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2.5; propodeum length 11.5; costal cell length 33; costal cell width (measured at widest part) 2.5; marginal vein length 30; stigmal vein length 11; gaster length 80; gaster width 40; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 13; longest cercal seta length 20; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK). Paratype: 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia maculifer* Hansson sp.nov.**

(Figs 474, 475, 820, 920, 982)

Diagnosis (female). Antenna with distinct constrictions between clavomeres, especially so between C1 and C2 (Fig. 820); genal carina present; mesoscutellum (Fig. 920) with median part with weak reticulation and shiny, lateral parts rugose, submedian grooves with outer margin absent, with 22 setae scattered over lateral parts; dorsellum with median carina; propodeum (Fig. 474) with strong irregular carinae and weak reticulation, callus with three setae; petiole transverse, dorsal part with strong sculpture; gaster (Fig. 474) 2.0× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with very strong reticulation with large meshes. Male with an infuscate round spot in median part of fore wing, and scape yellowish-brown with black sensory plaque (Fig. 982).

Female holotype: length of body 2.8mm (paratypes 2.0–3.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons, including antennal scrobes, and vertex golden-green, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore coxa golden-green with apex yellowish-brown, mid coxa dark brown, hind coxa golden-green with anterior part yellowish-brown; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-4} metallic purple medially and golden-green laterally, Gt_{5-6} golden-green, Gt_7 golden-green in anterior half, black in posterior half; gonoplac pale brown.

Antenna with distinct constrictions between all clavomeres, especially so between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior part of posterior ocelli.

Mesoscutum with strong reticulation, rugose close to notauli, meshes isodiametric on side lobes, elongate on midlobe; with a weak but complete median groove; with three scattered adnotaular setae. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts rugose, outer margin of submedian grooves absent; with 22 setae scattered over rugose lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a narrow median carina that is pointed anteriorly and expands posteriorly, expanded posterior part concave; with strong irregular carinae and weak reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with nine setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster ovate-elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with very strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 42; POL 11.5; OOL 6.5; lateral ocellus diameter 5; head width 56; mouth width 17.5; malar space 15; eye length 23; scape length 23; scape width 5; pedicel+flagellum length 55; pedicel length 6.5; pedicel width, dorsal view 4.2; F1 length 8; F1 width 5; F2 length 8; F2 width 5; F3 length 8; F3 width 5; clava length 20; clava width 6; C3 length 6; spicule length 2; mesosoma length 85; mesosoma width 57; midlobe of mesoscutum length 35; mesoscutellum length 30; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 5.5;

propodeum length 14; costal cell length 44; costal cell width (measured at widest part) 3.5; marginal vein length 43; stigmal vein length 14; gaster length 110; gaster width 54; Gt_2 length (measured medially) 12; Gt_4 length (measured medially) 24; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 13; longest cercal seta length 15; shortest cercal seta length 7.

Male. Length of body of body 1.6–2.3mm.

Antenna (Fig. 982) with scape widest at apex; plaque dark brown and reaching along almost entire length of scape; dorso-basal whorls of long setae present on F1–F4 and C1. Fore wing with a round infuscate spot in median part. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; head width 46; mouth width 14; malar space 11; eye length 20; scape length 21; scape width 6; plaque length 17.5; pedicel length 6.5; pedicel+flagellum length 66; F1 length 5; F1 width 5; F2 length 7; F2 width 5; F3 length 9.5; F3 width 4.5; F4 length 10.5; F4 width 4; clava length 27; clava width 4; mesosoma length 65; mesosoma width 45; gaster length 67; gaster width 31; longest subbasal seta on F1, length 22.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N, 84°49'W, 1540m, 26.ii.2007, J.S. Noyes (NHMUK). Paratypes (25♀ 8♂, CNC, MZLU, MZUCR, NHMUK): 2♀ with same label data as holotype; 1♀ **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Send a Casa Coca, LS 574400_331750, 1700m, 21.x-22.xi.2000, malaise trap, D. Rubí; 1♀ **COSTA RICA, Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de La Muerte, Torre ICE #28, LN 561700_189400, 1700m, 9.vii-11.viii.2000, malaise trap, D. Rubí; 1♀ **COSTA RICA, Cartago**, 4km NE Cañon, Genesis II, 9°42-43'N, 83°54-55'W, 2350m, viii.1995, P. Hanson; 1♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes; 1♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 1050-1150m, 10°16'N, 84°05'W, 9-29.iii.2001, 11/M/NOTN, INBio-OET-ALAS intersect; 16♀ 8♂ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 9.iv.2001–21. iv.2002, INBio, OET, ALAS; 1♀ **COSTA RICA, Limón**, Parque Internacional La Amistad, Valle del Silencio, Zona de Acampar, LS 341250_577200, 2400m, 17.v-17.vi.2001, malaise trap, D. Rubí; 1♀ **COSTA RICA, San José**, Zurqui de Moravia, 1600m, 24.xii.1988, P. Hanson.

Etymology. From the Latin *macula* = spot, and the suffix *-fer* = carry, referring to the male fore wing with infuscate spot.

Galeopsomyia magra Hansson sp.nov.

(Figs 476, 477, 823)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 823); genal carina absent; mesoscutellum (Fig. 476) with very weak reticulation on median part and with median groove in anterior one-quarter indicated but weak, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum without median carina; propodeum (Fig. 476) with strong irregular carinae and strong reticulation, callus with two setae; gaster (Fig. 476) short ovate, 1.8× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.6mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesosoma metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters brown; femora brown with apex yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Gaster with Gt₁ metallic bluish-green, remaining tergites black with metallic tinges.

Antenna with a weak constriction between C1 and C2. Face below level of antennal toruli and scrobes with weak reticulation, clypeus smooth, frons with strong reticulation; without genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior half, with nine scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and with median groove in anterior one-quarter indicated but weak, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with seven setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a narrow median carina; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole not visible. Gaster short ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 33; POL 8; OOL 4.5; lateral ocellus diameter 4; head width 40; mouth width 12; malar space 9.5; eye length 21; scape length 15; scape width 4; pedicel+flagellum length 45; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 7; F1 width 4; F2 length 7.5; F2 width 4; F3 length 7; F3 width 4; clava length 16; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 51; mesosoma width 36; midlobe of mesoscutum length 18; mesoscutellum length 20; mesoscutellum width 16.5; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3; propodeum length 8; costal cell length 25.5; costal cell width (measured at widest part) 1.5; marginal vein length 27; stigmal vein length 8; gaster length 58; gaster width 33; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 9; longest cercal seta length 11; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Parque Nacional Guanacaste, Estación Maritza, 10°58'N, 85°29'W, 700m, 21.ii.2005, J.S. Noyes (NHMUK).

Galeopsomyia majalis Hansson sp.nov.

(Figs 478, 479, 827, 983)

Diagnosis (female). Antennal clava solid (Fig. 827); genal carina present; mesoscutellum (Fig. 478) with strong reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves slightly curved with outer margin indistinct; dorsellum with median carina; propodeum (Fig. 478) medially with a few strong irregular carinae, laterally with strong reticulation, callus with six setae; petiole transverse; gaster (Fig. 478) 2.1× as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, tergites with strong reticulation, gonoplac yellowish-brown (Fig. 479).

Female holotype: length of body 2.0mm (paratypes 1.6–2.6mm).

Scape yellowish-brown, pedicel pale brown, flagellum brown. Face below level of toruli golden-green with median part metallic bluish-green, above level of toruli metallic bluish-purple, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green with purple tinges. Legs with fore and hind coxae dark brown with metallic blue tinges and with apex yellowish-brown, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-purple with posterior margin golden-purple, Gt_{2,4} golden-purple, Gt_{5,6} metallic bluish-purple, Gt₇ dark brown; gonoplac yellowish-brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a median groove in posterior half, with 18 scattered setae on rugose parts. Mesoscutellum with strong reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, curved and diverging towards posterior part; with ten setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum medially with a few strong irregular carinae, laterally with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 36; POL 9.5; OOL 5; lateral ocellus diameter 5; head width 50; mouth width 17; malar space 13; eye length 25; scape length 17; scape width 4; pedicel+flagellum length 50; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4.5; F2 length 8; F2 width 4.5; F3 length 7.5; F3 width 5; clava length 17.5; clava width 5; C3 length 6; spicule length 1; mesosoma length 63; mesosoma width 46; midlobe of mesoscutum length 26; mesoscutellum length 25; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 6; dorsellum

length 3; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 2.2; marginal vein length 27; stigmal vein length 10; gaster length 84; gaster width 40; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 12.5; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 11; longest cercal seta length 12.5; shortest cercal seta length 5.5.

Male. Length of body of body 1.3–1.6mm.

Antenna (Fig. 983) with scape widest just above the middle; plaque dark brown and situated in apical half, but below apex; dorso-basal whorls of long setae present on F1–F4 and a ventro-basal whorl of long setae on C1. Gaster long ovate; Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation. Otherwise as in female.

Relative measurements: head length, dorsal view 19; head length, frontal view 32; head width 43.5; mouth width 14.5; malar space 11; eye length 19; scape length 15; scape width 5.5; plaque length 7; pedicel length 5.5; pedicel+flagellum length 62; F1 length 4.5; F1 width 3.5; F2 length 8.5; F2 width 3.5; F3 length 9.5; F3 width 3.5; F4 length 10.5; F4 width 3.5; clava length 22; clava width 3.5; mesosoma length 59; mesosoma width 39; gaster length 60; gaster width 25; longest subbasal seta on F1, length 30.

Hosts. Reared from flower galls (spherical, 5 mm in diameter) on *Inga punctata* (Fabaceae) and leaf galls on *Cissampelos* sp. (Menispermaceae), both induced by unidentified Cecidomyiidae.

Distribution. Costa Rica, Ecuador, Peru.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Santo Domingo, xi.2002, from *Inga punctata* flower gall, P. Hanson (NHMUK). Paratypes (46♀ 17♂, CNC, MZLU, MZUCR, NHMUK): 4♀ 2♂ with same label data as holotype; 1♀ COSTA RICA, Heredia, Santo Domingo, INBio-Parque, 11-25.ii.2006, J.S. Noyes; 1♀ from same locality as previous but collected 14.ii.2009; 6♀ 2♂ COSTA RICA, **Guanacaste**, Zona Protectorada Miravalles, Las Hornillas, Tajo ICE, LN 299400_409200, 900m, 21.viii.2004, swept, J.A. Azofeifa; 8♀ 2♂ COSTA RICA, Guanacaste, Zona Protectorada Miravalles, Cabro Muco, LN 299151_410000, 9.ix.2004, J.A. Azofeifa; 7♀ 4♂ COSTA RICA, **Puntarenas**, Parque Nacional Carara, 360m, viii.1999, from *Cissampelos* leaf gall, Sakurai; 8♀ 7♂ COSTA RICA, Puntarenas, San Vito, Jardín Botánico, Las Cruces, 5.vi.1988, 1200m, from leaf gall on *Cissampelos*, P. Hanson; 1♀ COSTA RICA, Puntarenas, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 19-20.ii.2009, J.S. Noyes; 4♀ **ECUADOR**, Napo, Misahualli, 18-20.ii.1983, Lars Huggert; 1♀ **ECUADOR**, Napo, Lumbaqui, 10-11.iii.1983, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, Rio Nanay, 4-6.ii.1984, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, 9.ii.1984, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, Barillai, 10.ii.1984, Lars Huggert; 1♀ **PERU**, Junin, Satipo, 20.i.1984, Lars Huggert; 1♀ **PERU**, Madre de Dios, Puerto Maldonado, 3.i.1984, Lars Huggert.

Galeopsomyia malandrina Hansson sp.nov.

(Figs 480, 481, 824)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 824); flagellum short, pedicel+flagellum 0.9× as long as width of mesoscutum (Fig. 824); with a short genal carina close to mouth opening; mesoscutellum (Fig. 480) with very strong reticulation throughout, submedian grooves with outer margin absent and inner margin indistinct; propodeum (Fig. 480) with strong irregular carinae and strong reticulation, callus with two

setae; gaster (Fig. 480) 1.7× as long as wide, tergites with strong reticulation with large meshes, gonoplac yellowish-brown (Fig. 481).

Female holotype: length of body 1.8mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head golden-green, clypeus dark brown. Mesoscutum and mesoscutellum metallic bluish-green, propodeum golden-green. Legs with fore coxa metallic bluish-green, mid coxa black, hind coxa golden-green; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1-2,5-7} golden-green, Gt_{3,4} metallic purple; gonoplac yellowish-brown.

Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with a complete but weak median groove, with 15 scattered adnotaular setae. Mesoscutellum with median part with strong reticulation, lateral parts with even stronger reticulation, meshes elongate; submedian grooves with outer margin absent and inner margin indistinct; with 16 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands gradually towards posterior part, concave; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster ovate; tergites with strong reticulation with large meshes.

Relative measurements: head length, dorsal view 23; head length, frontal view 39; POL 10; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 16.5; malar space 13; eye length 22; scape length 19; scape width 4; pedicel+flagellum length 40; pedicel length 7.5; pedicel width, dorsal view 4; F1 length 5.5; F1 width 4; F2 length 5; F2 width 4; F3 length 5; F3 width 4.5; clava length 14; clava width 5.5; C3 length 5; spicule length 2; mesosoma length 64; mesosoma width 45; midlobe of mesoscutum length 22; mesoscutellum length 28; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 3.5; propodeum length 11.5; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 35; stigmal vein length 10.5; gaster length 65; gaster width 39; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from a large leaf gall found on the ground; the host plant is unknown but is possibly a species of *Inga* (Fabaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Parque Nacional Braulio Carrillo, 9.5km NE tunel, 1000m, 2.iv.1989, from Inga? large gall on fallen leaf, P. Hanson (NHMUK).

***Galeopsomyia manga* Hansson sp.nov.**

(Figs 482, 483, 825)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 825); genal carina present; mesoscutellum (Fig. 482) with very weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves \pm distinct, straight and diverging slightly towards posterior part, with a weak median groove in anterior three-quarters; dorsellum with median carina; propodeum (Fig. 482) with strong reticulation and a few strong carinae, callus with two setae; gaster (Fig. 482) short ovate, 1.4 \times as long as wide, medio-basal Gt_1 with longitudinal carinae, tergites with strong reticulation, gonoplac yellowish-brown (Fig. 483); body black with metallic tinges (Figs 482, 483).

Female holotype: length of body 1.1mm.

Scape yellowish-white, pedicel yellowish-brown, flagellum pale brown. Head black with metallic blue tinges, clypeus dark brown. Mesoscutum black with metallic purple tinges; mesoscutellum black with metallic bluish tinges; propodeum black. Legs with fore and hind coxae dark brown, mid coxa pale brown; trochanters pale brown; femora dark brown with apical one-third yellowish-brown; tibiae and tarsi yellowish-white, T4 pale brown. Gaster dark brown; gonoplac yellowish-brown.

Antennal clava with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle; with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with five scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm distinct, straight and diverging slightly towards posterior part, with a weak median groove in anterior three-quarters; with five setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a narrow median carina; with a few irregular carinae and strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation and shiny, hind coxa with strong reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, with strong sculpture on dorsal surface. Gaster short ovate; medio-basal Gt_1 with longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 15.5; head length, frontal view 23; POL 7.5; OOL 4.5; lateral ocellus diameter 3; head width 32.5; mouth width 9; malar space 9; eye length 14; scape length 13; scape width 2.5; pedicel+flagellum length 37; pedicel length 4.5; pedicel width, dorsal view 3; F1 length 6; F1 width 3; F2 length 5.5; F2 width 2.5; F3 length 5.5; F3 width 2.5; clava length 13.5; clava width 3.5; C3 length 5; spicule length 1.5; mesosoma length 36; mesosoma width 25; midlobe of mesoscutum length 12.5; mesoscutellum length 13.5; mesoscutellum width 14; median part of mesoscutellum width (measured medially) 4.5; median part of mesoscutellum, width in anterior part 4.5; median part of mesoscutellum, width

in posterior part 5.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 6; costal cell length 21; costal cell width (measured at widest part) 1.5; marginal vein length 19; stigmal vein length 5.5; gaster length 39; gaster width 27; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 7; Gt₇ length (measured medially) 2.5; Gt₇ width (measured at base) 9.5; longest cercal seta length 10; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Limón**, Reserva Biológica Hitoy-Cerere, 9°40'N, 83°02'W, 100m, 21-22.ii.2006, J.S. Noyes (NHMUK).

***Galeopsomyia manotris* Hansson sp.nov.**

(Figs 484, 485, 826)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 826); genal carina present; mesoscutellum (Fig. 484) with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and ±parallel; propodeum (Fig. 484) with strong irregular carinae and strong reticulation, callus with two setae; gaster (Fig. 484) short ovate, 1.6× as long as wide, tergites with strong reticulation, gonoplac very short, hardly protruding beyond Gt₇ (Fig. 485).

Female holotype: length of body 1.4mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae black with metallic tinges, mid coxa dark brown; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt_{2,4} golden-purple, Gt_{3,7} metallic bluish-green; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak but complete median groove, and with nine scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and ±parallel; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands posteriorly, expanded

part concave; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 19.5; head length, frontal view 31; POL 8; OOL 5; lateral ocellus diameter 4; head width 40.5; mouth width 11; malar space 10.5; eye length 17.5; scape length 14; scape width 3; pedicel+flagellum length 40; pedicel length 5; pedicel width, dorsal view 3.2; F1 length 6.5; F1 width 4; F2 length 7; F2 width 4; F3 length 6; F3 width 4.5; clava length 14; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 49; mesosoma width 34; midlobe of mesoscutum length 18; mesoscutellum length 16.5; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 2.5; propodeum length 8; costal cell length 24; costal cell width (measured at widest part) 1.8; marginal vein length 19; stigmal vein length 8; gaster length 51; gaster width 32; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 4; Gt₇ width (measured at base) 12; longest cercal seta length 10; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, La Cruz, Estación Biológica Maritza, LN 326900_373000, 600m, 27.i-2.ii.2001, E. Negro (NHMUK).

***Galeopsomyia marbis* Hansson sp.nov.**

(Figs 486, 487, 837)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 837); genal carina present; mesoscutellum (Fig. 486) with median part with weak reticulation, lateral parts rugose, submedian grooves straight and parallel, outer margin indistinct in anterior half; dorsellum with complete median carina; propodeum (Fig. 486) with strong reticulation and irregular carinae, callus with two setae; petiole transverse, 0.5× as long as wide, with strong sculpture on dorsal part; gaster (Fig. 486) short ovate with apex ±rounded, 1.5× as long as wide, medio-basal Gt₁ with longitudinal carina laterally, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.0mm.

Scape yellowish-brown with apico-dorsal part dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green with purple tinges. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown;

femora black with metallic bluish-green tinges and with apical one-quarter to half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂ metallic bluish-green, Gt_{3,4} golden-purple medially and metallic bluish-green laterally, Gt₅₋₇ metallic bluish-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex outside ocellar triangle with weak reticulation just lateral to ocelli, otherwise with strong reticulation, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a median groove in posterior three-quarters, with 16 scattered adnotaular setae. Mesoscutellum with submedian grooves subdivided by transverse carinae, straight and parallel, outer margin indistinct in anterior half; median part with weak reticulation, lateral parts with strong reticulation, meshes elongate; with 18 setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with longitudinal carina laterally; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 40; POL 11; OOL 7.5; lateral ocellus diameter 5; head width 55; mouth width 15; malar space 15; eye length 23; scape length 19.5; scape width 5; pedicel+flagellum length 58; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 9.5; F1 width 5; F2 length 9.5; F2 width 5; F3 length 9.5; F3 width 5; clava length 20; clava width 6; C3 length 6.5; spicule length 1.5; mesosoma length 72; mesosoma width 53; midlobe of mesoscutum length 28.5; mesoscutellum length 27; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 11.5; costal cell length 37; costal cell width (measured at widest part) 3.5; marginal vein length 39; stigmal vein length 14; gaster length 72; gaster width 47; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 5.5; Gt₇ width (measured at base) 12.5; longest cercal seta length 12; shortest cercal seta length 6.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iv.2002, INBio, OET, ALAS (NHMUK).

***Galeopsomyia matearis* Hansson sp.nov.**

(Figs 488, 489, 830)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 830); genal carina present; mesoscutellum (Fig. 488) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and converging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 488) with strong irregular carinae, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 488) 1.9× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with coxae dark brown to black; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁₋₆ metallic bluish-green, Gt_{3,5} with median part golden-purple, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose on parts close to notauli; midlobe without a median groove, with 16 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and converging slightly towards posterior part; with seven setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong and wide median carina that expands in posterior part; with strong irregular carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; POL 11; OOL 5.5; lateral ocellus diameter 5.5; head width 56; mouth width 15; malar space 14.5; eye length 24; scape length 20; scape width 4.5; pedicel+flagellum length 63; pedicel length 7; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 10.5; F2 width 5; F3 length 11; F3 width 5; clava length 21.5; clava width 5.5; C3 length 6.5; spicule length 1.5; mesosoma length 72; mesosoma width 51; midlobe of mesoscutum length 28.5; mesoscutellum length 27; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4.5; propodeum length 12; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 34; stigmal vein length 12; gaster length 85; gaster width 46; Gt₂ length (measured medially) 10.5; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, San Carlos, Reserva Forestal Arenal, Sendero Pilón, LN 269100_457900, 600m, 9.iii-7.iv.2000, malaise trap, G. Carballo (NHMUK).

***Galeopsomyia maya* Hansson sp.nov.**

(Figs 490, 491, 829)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 829); genal carina present; mesoscutellum (Fig. 490) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin absent, subdivided by transverse carinae, slightly curved and diverging slightly towards posterior part, median part 3.9× as long as wide; dorsellum with median carina; propodeum (Fig. 490) with a long and narrow median carina, with strong irregular carinae, callus with eight setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 490) 1.6× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 2.1mm (paratype 1.9mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus yellowish-brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-purple, Gt₂₋₄ golden-purple, Gt_{5,6} golden-purple with posterior margin metallic bluish-green, Gt₇ dark brown; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notauli rugose; midlobe with an indistinct median groove, with 18 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin absent, subdivided by transverse carinae, slightly curved and diverging slightly towards posterior part; with 12 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a long and narrow median carina; with strong irregular carinae; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; POL 11.5; OOL 5.5; lateral ocellus diameter 4.5; head width 56; mouth width 15.5; malar space 16; eye length 24.5; scape length 17; scape width 4; pedicel+flagellum length 55; pedicel length 6; pedicel width, dorsal view 4; F1 length 9; F1 width 4.5; F2 length 9.5; F2 width 5; F3 length 8.5; F3 width 5; clava length 17.5; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length 71; mesosoma width 52; midlobe of mesoscutum length 25; mesoscutellum length 27.5; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4; propodeum length 11; costal cell length 36; costal cell width (measured at widest part) 3; marginal vein length 27; stigmal vein length 11; gaster length 82; gaster width 50; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 8; Gt₇ width (measured at base) 14; longest cercal seta length 12; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Ecuador.

Material examined.

Holotype ♀ **ECUADOR**, Napo, Misahualli, 20.ii.1983, Lars Huggert (MZLU). Paratype: 1♀ with same label data as holotype (MZLU).

***Galeopsomyia medrosa* Hansson sp.nov.**

(Figs 492, 493, 828)

Diagnosis (female). Antenna with a solid clava (Fig. 828); genal carina present; mesoscutellum (Fig. 492) with weak reticulation on median part and a weak median groove in anterior one-third, lateral parts with strong reticulation, meshes elongate, submedian grooves indistinct in anterior one-third, distinct in posterior two-thirds, straight and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 492) with strong irregular carinae medially, and with strong reticulation, median carina narrow, callus with six setae; petiole very short, just a narrow band; gaster (Fig. 492) 1.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites predominantly with weak reticulation.

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel and flagellum pale brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Mesoscutum metallic bluish-purple; mesoscutellum and propodeum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters pale brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-purple, Gt_{2,4} golden-purple, Gt_{5,7} metallic bluish-green; gonoplac dark brown.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth,

frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a complete median groove, and with 12 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and a weak median groove in anterior one-third, lateral parts with strong reticulation, meshes elongate; submedian grooves indistinct in anterior one-third, distinct in posterior two-thirds, straight and diverging towards posterior part; with seven setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a narrow median carina; with strong irregular carinae medially, and with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 41; POL 11.2; OOL 5; lateral ocellus diameter 4.5; head width 51; mouth width 15.5; malar space 14.5; eye length 23; scape length 18; scape width 4.5; pedicel+flagellum length 51; pedicel length 7; pedicel width, dorsal view 4.2; F1 length 7.5; F1 width 5; F2 length 8.5; F2 width 5; F3 length 7.5; F3 width 5.5; clava length 16; clava width 6; C3 length 4.5; spicule length 1.5; mesosoma length 62; mesosoma width 51; midlobe of mesoscutum length 24.5; mesoscutellum length 24; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3.5; propodeum length 11; costal cell length 32; costal cell width (measured at widest part) 2.7; marginal vein length 24; stigmal vein length 10; gaster length 79; gaster width 45; Gt_2 length (measured medially) 6; Gt_4 length (measured medially) 17.5; Gt_7 length (measured medially) 8; Gt_7 width (measured at base) 12.5; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Los Patos, LS 517900_281600, 210m, 4-5.v.2001, J. Azoifeifa, (NHMUK).

Galeopsomyia melasoma Hansson sp.nov.

(Figs 494, 495, 834)

Diagnosis (female). Antenna yellowish-brown with a solid clava (Fig. 834); genal carina present; mesoscutellum (Fig. 494) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves \pm straight and parallel, indistinct in anterior one-third; propodeum (Fig. 494) with strong reticulation, callus with six setae; gaster (Fig. 494) 1.9 \times as long as wide, tergites with strong reticulation; body black non-metallic (Figs 494, 495).

Female holotype: length of body 1.7mm (paratype 1.9mm).

Scape yellowish-brown, pedicel and flagellum pale brown. Head, mesosoma and gaster black non-metallic. Legs with coxae black non-metallic; fore and mid trochanters dark brown, hind trochanter yellowish-brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with transverse carinae inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with nine scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm straight and parallel, indistinct in anterior one-third; with 11 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina; with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 34.5; POL 9.5; OOL 6; lateral ocellus diameter 3.5; head width 44; mouth width nm; malar space 13.5; eye length 17; scape length 16; scape width 3.5; pedicel+flagellum length 36; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 4.5; F1 width 3.5; F2 length 6; F2 width 4; F3 length 5.5; F3 width 4; clava length 13.5; clava width 5; C3 length 5; spicule length 1; mesosoma length 52; mesosoma width 39; midlobe of mesoscutum length 15; mesoscutellum length 20; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 2.5; propodeum length 7.5; costal cell length 29; costal cell width (measured at widest part) 2.5; marginal vein length 25; stigmal vein length 9; gaster length 59; gaster width 31; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 6; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 10; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from a blister-like leaf gall induced by an unidentified Cecidomyiidae on *Roupala* sp. (Proteaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Reserva Forestal Grecia, 1500m, 18.iii.1992, from Roupala leaf gall, P. Hanson (NHMUK). Paratype: 1♀ with same label data as holotype (MZLU).

Etymology. From the Greek *melas* = black, and *soma* = body, referring to colour of body.

***Galeopsomyia meleadis* Hansson sp.nov.**

(Figs 496, 497, 831)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 831); genal carina present; mesoscutellum (Fig. 496) with median part 3.3× as long as wide, with weak reticulation, submedian grooves with anterior half with outer margin indistinct, subdivided by transverse carinae, slightly curved and diverging towards both anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 496) with strong irregular carinae and reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 496) 2.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.0mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex black with metallic tinges. Thoracic dorsum golden-green. Legs with fore and mid coxae dark brown, hind coxa golden; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,5} golden-purple, Gt_{6,7} black with metallic bluish-green tinges; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior two-thirds, and with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with anterior half with outer margin indistinct, subdivided by transverse carinae, slightly curved and diverging towards both anterior and posterior parts; with ten setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with strong irregular carinae and reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum partly open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 34; POL 9; OOL 5.5; lateral ocellus diameter 4; head width 44; mouth width 13; malar space 13; eye length 19.5; scape length 17; scape width 4; pedicel+flagellum length 52; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 9.5; F1 width 4; F2 length 9; F2 width 4; F3 length 8; F3 width 4.5; clava length 17.5; clava width 6; C3 length 5.5; spicule length 1.5; mesosoma length 57; mesosoma width 39; midlobe of mesoscutum length 22; mesoscutellum length 21.5; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3.5; propodeum length 9.5; costal cell length 31; costal cell width (measured at widest

part) 2.5; marginal vein length 29; stigmal vein length 10; gaster length 80; gaster width 32; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 12.5; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 14; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-29.iii.2001, INBio, OET, ALAS (NHMUK).

***Galeopsomyia minoris* Hansson sp.nov.**

(Figs 498, 499, 832)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 832); genal carina present; mesoscutellum (Fig. 498) with median part 3.3× as long as wide, strongly rugose, with a complete median groove, submedian grooves with outer margin missing, straight and diverging towards posterior part, lateral parts strongly rugose; dorsellum with median carina; propodeum (Fig. 498) with strong irregular carinae and some strong reticulation, propodeal callus with two setae; petiole transverse; gaster (Fig. 498) 2.6× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation; head and mesosoma predominantly golden-green (Figs 498, 499).

Female holotype: length of body 3.1mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head golden-green, antennal scrobes golden-red, clypeus dark brown. Thoracic dorsum golden-green with median one-third of mesoscutellum metallic blue. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ metallic bluish-green, remaining tergites golden-purple; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with strong reticulation; with genal carina. Vertex rugose outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a complete median groove, with parts close to notauli rugose with 16 scattered setae. Mesoscutellum with median part strongly rugose, with a complete median groove, submedian grooves with outer margin missing, straight and diverging towards posterior part, lateral parts strongly rugose with 16 scattered setae. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands to a cup anteriorly; with strong irregular carinae and some strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with dorsal part smoothly rounded; tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 51; POL 13; OOL 7; lateral ocellus diameter 6.5; head width 69; mouth width 21; malar space 15; eye length 29; scape length 22; scape width 5.5; pedicel+flagellum length 73; pedicel length 7; pedicel width, dorsal view 5; F1 length 13; F1 width 6.5; F2 length 13; F2 width 6; F3 length 13; F3 width 6; clava length 25; clava width 6; C3 length 8; spicule length 2; mesosoma length 90; mesosoma width 57; midlobe of mesoscutum length 29; mesoscutellum length 33; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 5.5; propodeum length 13; costal cell length 47; costal cell width (measured at widest part) 4; marginal vein length 40; stigmal vein length 12; gaster length 130; gaster width 50; Gt_2 length (measured medially) 13; Gt_4 length (measured medially) 16; Gt_7 length (measured medially) 23; Gt_7 width (measured at base) 19; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, 20.x.1949, F. Plaumann (NHMUK).

***Galeopsomyia mesana* Hansson sp.nov.**

(Figs 500, 501, 833, 984)

Diagnosis (female). Antennal clava solid, flagellum short (Fig. 833); genal carina present; mesoscutellum (Fig. 500) with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate, with an indistinct median groove in anterior one-third, submedian grooves diverging towards posterior part, with outer margin absent; dorsellum with median carina; propodeum (Fig. 500) with strong irregular carinae and weak reticulation, callus with eight setae; gaster (Fig. 500) 1.9× as long as wide, tergites with strong reticulation, strongly metallic golden-red. Male flagellum (Fig. 984) with dorso-basal whorls of long setae present only on F1; scape different from male of similar *G. lasallei*.

Female holotype: length of body 2.0mm (paratypes 1.9mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head golden-green with red tinges, clypeus dark brown. Mesoscutum with sidelobes golden-green, midlobe golden-red; mesoscutellum and propodeum golden-red. Legs with coxae golden-green with red tinges; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster golden-red; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with parts close to notauli rugose with 12 scattered setae, with a median groove in posterior half. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate, with an indistinct median groove in anterior one-third, submedian grooves diverging towards posterior part, with outer margin absent, lateral parts with ten scattered setae. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a wide median carina, anteriorly expanding into a cup; with strong irregular carinae and weak reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 10; OOL 5.5; lateral ocellus diameter 4.3; head width 51; mouth width nm; malar space 12; eye length 23; scape length 18; scape width 3.5; pedicel+flagellum length 43; pedicel length 7; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 6.5; F2 width 5; F3 length 6; F3 width 5; clava length 14; clava width 6; C3 length 5; spicule length 1; mesosoma length 62; mesosoma width 44; midlobe of mesoscutum length 23; mesoscutellum length 24; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 9; costal cell length 30; costal cell width (measured at widest part) 3; marginal vein length 30; stigmal vein length 11; gaster length 76; gaster width 41; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Length of body 1.7mm.

Antenna (Fig. 984) with scape with almost equal width throughout; plaque dark brown and extending along major part of scape; dorso-basal whorls of long setae present only on F1. Gaster short ovate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation. Otherwise as in female.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; head width 46; mouth width 16; malar space 11; eye length 22; scape length 18.5; scape width 5; plaque length 13.5; pedicel length 7; pedicel+flagellum length 51; F1 length 4.5; F1 width 4; F2 length 6.5; F2 width 4; F3 length 7; F3 width 3.5; F4 length 7; F4 width 3.5; clava length 18; clava width 4; mesosoma length 59; mesosoma width 40; gaster length 55; gaster width 33; longest subbasal seta on F1, length 27.5.

Hosts. Unknown.

Distribution. St Vincent.

Material examined.

Holotype ♀ **ST VINCENT**, Charlotte, La Soufrieri, Eastern Slope, 9.vii.1976, from rainforest, J.S. Noyes (NHMUK). Paratypes (2♀ 1♂, NHMUK): 1♀ **ST VINCENT**, Charlotte, Montreal, 8.vii.1976, from edge of rainforest, J.S. Noyes; 1♀ 1♂ **ST VINCENT**, St. George, Belmont, 6.vii.1976, from wasteground, J.S. Noyes.

***Galeopsomyia methea* Hansson sp.nov.**

(Figs 502, 503, 838, 912)

Diagnosis (female). Antennal clava solid (Fig. 838); genal carina strong, reaching above level of lower margin of eyes; mesoscutellum (Fig. 502) with strong wrinkled sculpture, submedian grooves with outer margin missing, diverging slightly towards posterior part, with a strong median groove in anterior half; dorsellum with median carina; propodeum (Fig. 502) with a strong narrow median carina, with strong reticulation, callus with four setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 502) 2.0× as long as wide, medio-basal Gt₁ with an edge shaped like an inverted U (as in Fig. 24), tergites with weak reticulation.

Female holotype: length of body 2.2mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Face below level of toruli and scrobes golden-green, frons and vertex metallic bluish-green, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with metallic tinges; trochanters dark brown; femora dark brown with metallic bluish-green tinges and with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₆ metallic bluish-green and golden-purple, Gt₇ dark brown; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; with a median groove in posterior half, with 14 scattered setae on rugose parts. Mesoscutellum with strong wrinkled sculpture; submedian grooves with outer margin missing, diverging slightly towards posterior part; with a strong median groove in anterior half; with ten setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong narrow median carina that expands in anterior and posterior parts; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with an edge shaped like an inverted U; tergites with weak reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 39; POL 10; OOL 5.5; lateral ocellus diameter 4.5; head width 54; mouth width nm; malar space 13; eye length 23.5; scape length 17; scape width 4.2; pedicel+flagellum length 53; pedicel length 7; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4.5; F2 length 8.5; F2 width 5; F3 length 8.5; F3 width 5; clava length 18.5; clava width 5.5; C3 length 6; spicule length 1.5; mesosoma length 66; mesosoma width 48; midlobe of mesoscutum length 26.5; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 11; costal cell length 36; costal cell width (measured at widest part) 2.5; marginal vein length 27; stigmal vein length 9; gaster length 88; gaster width 44; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 16; Gt₇ length (measured

medially) 10; Gt_7 width (measured at base) 16; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Ecuador.

Material examined.

Holotype ♀ **ECUADOR**, Napo, Lumbaqui, 10-11.iii.1983, Lars Huggert (MZLU).

***Galeopsomyia miga* Hansson sp.nov.**

(Figs 504, 505, 1081)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 1081), genal carina present; mesoscutellum (Fig. 504) with median part with weak reticulation and a weak median groove in anterior one-third, lateral parts with strong reticulation, outer margin of submedian grooves absent, grooves diverging slightly towards both anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 504) with strong irregular carinae and weak reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 504) 2.8× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 2.3mm.

Scape pale brown with base yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black and clypeus yellowish-brown; vertex black with metallic tinges. Mesoscutum and propodeum black with golden-green tinges, mesoscutellum with lateral parts black with metallic tinges and median part metallic bluish-purple. Legs with fore and hind coxae dark brown, mid coxa pale brown; trochanters yellowish-brown; femora pale brown with apex yellowish-brown, tibiae and T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_1 metallic bluish-purple, Gt_{2-4} golden-purple, Gt_{5-7} black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, sidelobes with isodiametric meshes, midlobe with elongate meshes, midlobe with parts close to notauli rugose, with a weak median groove, with ten setae scattered over rugose parts. Mesoscutellum with median part with weak reticulation and a weak median groove in anterior one-third, lateral parts with strong reticulation and with six scattered setae; submedian grooves diverging slightly towards anterior and posterior parts, with outer margin absent. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and weak reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein;

speculum open slightly below, with one seta absent in cubital hairline, costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; Gt_1 with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 36; POL 10; OOL 6; lateral ocellus diameter 4; head width 47; mouth width 14; malar space 14.5; eye length 21; scape length 19; scape width 4.5; pedicel+flagellum length 58; pedicel length 7; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 10; F2 width 5.5; F3 length 9.5; F3 width 5.5; clava length 21; clava width 5.5; C3 length 7; spicule length 2.5; mesosoma length 62; mesosoma width 44; midlobe of mesoscutum length 25; mesoscutellum length 23; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 9; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 37; stigmal vein length 12; gaster length 98; gaster width 35.5; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 13; Gt_7 width (measured at base) 11; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, Paraíso, Parque Nacional Tapantí-Macizo de la Muerte, Torre ICE #32, LN 561600_187400, 1700m, 7.vii-11.viii 2000, malaise trap, D. Rubí (NHMUK).

***Galeopsomyia milagra* Hansson sp.nov.**

(Figs 506, 507, 839)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 839); genal carina present; mesoscutellum (Fig. 506) with weak reticulation on median part and a weak but complete median groove, lateral parts rugose, submedian grooves with outer margin indistinct, inner margins uneven, subdivided by transverse carinae, and diverging towards posterior part, median part 3.7× as long as wide; dorsellum with median carina; propodeum (Fig. 506) with strong irregular carinae, callus with ten setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 506) 2.3× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 3.2mm (paratype 2.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum golden-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown; fore and mid femora with basal half dark brown, hind femur with basal half metallic bluish-green, apical half of all femora yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with

Gt_{1,5,6} metallic bluish-green, Gt_{2,4} golden-purple, Gt₇ with basal half metallic bluish-green and apical half black; gonoplac dark brown.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe with a weak median groove in posterior two-thirds, with 17 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and a weak but complete median groove, lateral parts rugose; submedian grooves with outer margin indistinct, inner margins uneven, with transverse carinae, and diverging towards posterior part; with 15 setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae; callus with ten setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 37; POL 9; OOL 5.5; lateral ocellus diameter 5; head width 51; mouth width nm; malar space 16; eye length 21; scape length 18; scape width 4.5; pedicel+flagellum length 57; pedicel length 7.5; pedicel width, dorsal view 3.5; F1 length 9.5; F1 width 4.5; F2 length 10; F2 width 4.5; F3 length 9; F3 width 4.5; clava length 17.5; clava width 5; C3 length 5.5; spicule length 1.5; mesosoma length 69; mesosoma width 49; midlobe of mesoscutum length 29.5; mesoscutellum length 26; mesoscutellum width 23.5; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 12; costal cell length 38; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 11.5; gaster length 97; gaster width 42.5; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 14; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-22.iv.2001, 11/M/NOTN, INBio-OET-ALAS (NHMUK). Paratype 1 ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 14-15.ii.2005, J.S. Noyes (NHMUK).

Galeopsomyia miliaris Hansson sp.nov.

(Figs 508, 509, 840)

Diagnosis (female). Antennal clava short with a weak constriction between C1 and C2 and with apex pointed (Fig. 840), flagellum short, pedicel+flagellum $1.0\times$ as long as width of mesosoma; with a short genal carina close to mouth opening; mesoscutellum (Fig. 508) with median part with very weak reticulation and shiny, lateral parts rugose, submedian grooves with outer margin absent, diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 508) with irregular carinae and reticulation, callus with three setae; gaster (Fig. 508) ovate, $1.6\times$ as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with very strong and large-meshed reticulation.

Female holotype: length of body 1.3mm.

Scape yellowish-brown, pedicel and flagellum brown. Head with frons, including scrobes, and vertex bluish-green, vertex also with purple tinges, clypeus dark brown. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with strong reticulation; with a short genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe without median groove, with 12 scattered adnotaular setae. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts rugose with 12 scattered setae; submedian grooves with outer margin absent, diverging towards posterior part. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with median carina expanding anteriorly and posteriorly; with some strong irregular carinae and strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with very strong reticulation with large meshes.

Relative measurements: head length, dorsal view 18; head length, frontal view 28.5; POL 8.5; OOL 5; lateral ocellus diameter 2.7; head width 34.5; mouth width 12; malar space 9; eye length 16; scape length 15.5; scape width 3.5; pedicel+flagellum length 31; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 4.5; F1 width 4; F2 length 4; F2 width 4; F3 length 4; F3 width 4; clava length 12.5; clava width 5; C3 length 5; spicule length 1; mesosoma length 46; mesosoma width 32; midlobe of mesoscutum length 17; mesoscutellum length 19; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 7; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 28; stigmal vein length 9; gaster length 47; gaster width 30; Gt_2 length

(measured medially) 5.5; Gt₄ length (measured medially) 7.5; Gt₇ length (measured medially) 4.5; Gt₇ width (measured at base) 9; longest cercal seta length 9; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK).

***Galeopsomyia miria* Hansson sp.nov.**

(Figs 510, 511, 841)

Diagnosis (female). Antenna with solid clava (Fig. 841); genal carina present; mesoscutellum (Fig. 510) 0.9× as long as wide, with submedian grooves diverging towards posterior part, median part with strong reticulation with weak reticulation posteriorly, lateral parts with strong reticulation, meshes elongate, with a ±complete median groove; dorsellum without median carina; propodeum (Fig. 510) with a very narrow median carina and with strong reticulation, callus with four setae; gaster (Fig. 510) ovate, 1.5× as long as wide, medio-basal Gt₁ with a carina shaped like an inverted U (as in Fig. 26), tergites with strong reticulation; head and mesosoma black with metallic tinges (Figs 510, 511).

Female holotype: length of body 1.4mm (paratype 1.4mm).

Scape yellowish-brown, pedicel and flagellum pale brown. Head black with metallic tinges. Mesoscutum black with metallic purple tinges; mesoscutellum and propodeum black with metallic green tinges. Legs with coxae dark brown, hind coxa with posterior part black; fore trochanter brown, mid and hind trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster dark brown; gonoplac brown.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong transverse carinae; with a carina between posterior ocelli in posterior part. Occipital margin ±carinate.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with eight adnotaular setae in one row. Mesoscutellum with median part with strong reticulation with weak reticulation posteriorly, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with five setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with a very narrow median carina; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with two setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with a carina shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18; head length, frontal view 27; POL

7.5; OOL 4.5; lateral ocellus diameter 3.5; head width 38; mouth width 11; malar space 9.5; eye length 16; scape length 19.5; scape width 2.5; pedicel+flagellum length 37; pedicel length 5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 5; F2 width 3; F3 length 5; F3 width 3; clava length 14; clava width 3.5; C3 length 5.5; spicule length 1.5; mesosoma length 43; mesosoma width 32; midlobe of mesoscutum length 17.5; mesoscutellum length 15.5; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2; propodeum length 7; costal cell length 24; costal cell width (measured at widest part) 1.5; marginal vein length 21; stigmal vein length 6; gaster length 51; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 3; Gt₇ width (measured at base) 8; longest cercal seta length 10; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

***Galeopsomyia moleris* Hansson sp.nov.**

(Figs 512, 513, 944, 1082)

Diagnosis (female). Antennal clava solid (Fig. 1082); genal carina present but weak and short; mesoscutellum (Fig. 512) with strong reticulation and elongate meshes, submedian grooves distinct and diverging slightly towards posterior part, with a ±complete but weak median groove; dorsellum with median carina; propodeum (Fig. 512) with strong carinae and strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 512) 2.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally and with a sharp transverse edge dorsally, tergites with weak reticulation and shiny.

Female holotype: length of body 1.9mm.

Scape yellowish-brown, pedicel pale brown, flagellum brown. Head with frons metallic bluish-green with scrobes black and clypeus dark brown; vertex metallic bluish-green. Mesoscutum and mesoscutellum metallic bluish-green; propodeum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown with metallic tinges; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur metallic bluish-green with apical one-third yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,5,6} metallic bluish-green, Gt_{2,4} golden-purple, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with a weak genal carina close to mouth opening. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; without median groove; with 13 scattered adnotaular setae. Mesoscutellum with strong reticulation and elongate meshes; submedian grooves distinct and diverging slightly towards posterior part; with a \pm complete but weak median groove; with four setae scattered over lateral parts. Dorsellum with strong sculpture but shiny, with median carina. Propodeum with a strong median carina that expands posteriorly, anterior part as a triangular fovea; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate with apex pointed; medio-basal Gt_1 with longitudinal carinae laterally and with a sharp transverse edge dorsally; tergites with weak reticulation and shiny.

Relative measurements: head length, dorsal view 20; head length, frontal view 32; POL 8.5; OOL 4.5; lateral ocellus diameter 4; head width 40; mouth width nm; malar space 10; eye length 19; scape length 13.5; scape width 4; pedicel+flagellum length 38; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 4; F2 length 6; F2 width 4; F3 length 5.5; F3 width 4.5; clava length 13; clava width 5; C3 length 5; spicule length 1; mesosoma length 51; mesosoma width 36; midlobe of mesoscutum length 19; mesoscutellum length 20; mesoscutellum width 17.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 7; costal cell length 25; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 7.5; gaster length 77; gaster width 31; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 9; Gt_7 length (measured medially) 13; Gt_7 width (measured at base) 10; longest cercal seta length 12; shortest cercal seta length 5.5.

Male. Unknown.

Hosts. Unknown.

Distribution. The West Indies (Trinidad & Tobago).

Material examined.

Holotype ♀ **TRINIDAD**, St. George, Tumpuna Reserve, 9.viii.1976, from caribbeal pine plantation, J.S. Noyes (NHMUK).

***Galeopsomyia montanis* Hansson sp.nov.**

(Figs 514, 515, 842, 896)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 842); genal carina present; mesoscutellum (Fig. 514) with median part with weak reticulation and a strong median groove in at least anterior half, lateral parts with strong reticulation, meshes elongate, submedian grooves slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 514) with strong irregular carinae and strong reticulation, callus with four setae; gaster (Fig. 514) 2.2 \times as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.4mm (paratypes 2.0–2.9mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, scrobes black with metallic tinges and clypeus dark brown; vertex metallic bluish-green. Mesoscutum golden-green; mesoscutellum with lateral parts golden-green and median part metallic bluish-green; propodeum golden-green laterally and metallic blue medially. Legs with coxae metallic bluish-green; fore and mid trochanters pale brown, hind trochanter dark brown; femora with basal two-thirds golden-green and apical one-third yellowish-brown; tibiae and tarsi yellowish-white to yellowish-brown, T4 pale brown. Petiole black. Gaster metallic bluish-green, Gt_{2,5} metallic purple dorsally, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe without median groove, with 15 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, with six scattered setae; submedian grooves distinct, slightly curved and diverging towards posterior part, with a ±complete median groove. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with rather strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 43; POL 12; OOL 6.5; lateral ocellus diameter 5.5; head width 59; mouth width 19; malar space 14; eye length 23.5; scape length 20.5; scape width 5; pedicel+flagellum length 62; pedicel length 7.5; pedicel width, dorsal view 4.8; F1 length 11; F1 width 6; F2 length 9.5; F2 width 6; F3 length 9.5; F3 width 6.5; clava length 23.5; clava width 6.5; C3 length 7; spicule length 2; mesosoma length 82; mesosoma width 54; midlobe of mesoscutum length 34; mesoscutellum length 30.5; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4.4; propodeum length 14; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 39; stigmal vein length 14; gaster length 108; gaster width 50; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 14; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratypes (15♀, CNC, MZLU, MZUCR, NHMUK): 4♀ with same label data as holotype, 1♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°46'N, 82°57'W, 1300m, 15-16.ii.2006, J.S. Noyes; 1♀ **COSTA RICA, Puntarenas**, Estación Biológica Monteverde, 10°20'N 84°49'W, 1540m, 18-25.ii.2004, C. Hansson; 1♀ from same locality as previous but collected 26.ii.2007; 1♀ **COSTA RICA, Alajuela**, Reserva Biológica San Ramón, 900m, v.2000, P. Hanson; 7♀ **COSTA RICA, San José**, San Gerardo de Dota, 9°34'N, 83°43'W, 18-20.ii.2010, J.S. Noyes.

***Galeopsomyia mora* Hansson sp.nov.**

(Figs 516, 517, 835, 985)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 835); genal carina present; mesoscutellum (Fig. 516) with median part with strong reticulation in anterior one-fifth, with weak reticulation in posterior part, lateral parts rugose, submedian grooves curved and diverging towards posterior part, outer margin absent; dorsellum with median carina; propodeum (Fig. 516) with strong irregular carinae and strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 516) 2.1× as long as wide, medio-basal Gt₁ with short longitudinal carinae laterally, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 3.2mm (paratype 3.1mm).

Scape yellowish-brown in basal half, dark brown in apical half, pedicel and flagellum black. Face below level of toruli golden-green with clypeus dark brown, frons metallic bluish-green with scrobes black with metallic tinges; vertex metallic bluish-green. Mesosoma golden-green. Legs with coxae metallic bluish-green; trochanters yellowish-brown; fore and mid femora with basal two-thirds black, hind femur with basal two-thirds metallic bluish-green, apical one-third yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green, Gt_{2,5} with purple tinges dorsally; gonoploc brown.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation, meshes elongate on median part, rugose on parts close to notauli, with a complete median groove; midlobe with 20 setae scattered over rugose parts. Mesoscutellum with median part with strong reticulation in anterior one-fifth, with weak reticulation in posterior part, with an indistinct median groove in anterior half, lateral parts rugose with 16 scattered setae; submedian grooves curved and diverging towards posterior part, outer margin absent. Dorsellum with very weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands anterior and posteriorly; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with short longitudinal carinae laterally; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation; longest cercal seta broken off.

Relative measurements: head length, dorsal view 29; head length, frontal view 51; POL 12; OOL 7; lateral ocellus diameter 6.3; head width 67; mouth width 16.5; malar space 21.5; eye length 28.5; scape length 24; scape width 6; pedicel+flagellum length 78; pedicel length 7.5; pedicel width, dorsal view 5; F1 length 15; F1 width 6; F2 length 14; F2 width 5.5; F3 length 12.5; F3 width 5.5; clava length 27; clava width 6; C3 length 9; spicule length 2.5; mesosoma length 96; mesosoma width 65; midlobe of mesoscutum length 39; mesoscutellum length 36; mesoscutellum width 31; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 5; propodeum length 16; costal cell length 44; costal cell width (measured at widest part) 3.5; marginal vein length 47; stigmal vein length 14; gaster length 120; gaster width 56; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 26.5; Gt₇ length (measured medially) 14.5; Gt₇ width (measured at base) 18; longest cercal seta length broken; shortest cercal seta length 6.

Male. Length of body 2.2–2.6mm.

Antennal scape (Fig. 985) with plaque black and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 21; head length, frontal view 41; head width 54; mouth width 15.5; malar space 16.5; eye length 22; scape length 18; scape width 5; plaque length 7; pedicel length 6; pedicel+flagellum length 78; F1 length 5.5; F1 width 5; F2 length 10.5; F2 width 5; F3 length 13; F3 width 4.5; F4 length 13; F4 width 4.5; clava length 28; clava width 4.5; mesosoma length 77; mesosoma width 50; gaster length 87; gaster width 37; longest subbasal seta on F1, length 38.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (1♀ 2♂, MZLU, NH-MUK): 1♀ 1♂ with same locality data as holotype; 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos.

***Galeopsomyia moradis* Hansson sp.nov.**

(Figs 518, 519, 843)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 843); clypeus black; genal carina present; mesoscutellum (Fig. 518) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight, parallel and wide apart; dorsellum with median carina; propodeum (Fig. 518) with strong reticulation, median carina short and ±triangular, and mainly concave, callus with two setae; gaster (Fig. 518) 1.9× as long as wide, medio-basal Gt₁ with a carina shaped like an inverted U (as in Fig. 26), tergites with strong reticulation.

Female holotype: length of body 1.9mm (paratypes 1.7–2.4mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons with golden-green and metallic blue tinges, antennal scrobes and clypeus black; vertex black with metallic bluish tinges. Mesosoma black with golden-green tinges. Legs with coxae black with metallic tinges; trochanters pale brown; femora dark brown with apex yellowish-brown, hind femur with metallic tinges on dark parts; tibiae and tarsi yellowish-brown to yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic greenish-blue, Gt₂₋₆ black with metallic tinges, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight, parallel and wide apart; with an indistinct median groove; with eight setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a wide, concave median carina that expands strongly towards posterior part; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster ovate; medio-basal Gt₁ with a carina shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 9.5; OOL 6; lateral ocellus diameter 4; head width 45; mouth width 14; malar space 12.5; eye length 18; scape length 16; scape width 4; pedicel+flagellum length 50; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 7; F2 width 4; F3 length 6.5; F3 width 4; clava length 19; clava width 4.5; C3 length 6.5; spicule length 2; mesosoma length 58; mesosoma width 41; midlobe of mesoscutum length 24.5; mesoscutellum length 22; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 8; costal cell length 32; costal cell width (measured at widest part) 2; marginal vein length 31; stigmal vein length 11; gaster length 77; gaster width 40; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 7.5; Gt₇ width (measured at base) 12; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK). Paratypes: 7♀ with same label data as holotype (MZLU, NHMUK).

***Galeopsomyia munda* Hansson sp.nov.**

(Figs 520, 521, 1083)

Diagnosis (female). Antenna with a \pm solid clava (Fig. 1083); genal carina present; mesoscutellum (Fig. 520) with submedian grooves with outer margin indistinct, median part with very weak reticulation and shiny, lateral parts rugose, with a weak median groove in anterior two-thirds; dorsellum with median carina; propodeum (Fig. 520) with strong irregular carinae, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 520) 1.6 \times as long as wide with apex rounded apex, medio-basal Gt_1 with longitudinal carinae, tergites with strong reticulation, gonoplac with apex blunt (Fig. 521).

Female holotype: length of body 2.1mm.

Scape yellowish-brown with dorsal edge dark brown, pedicel and flagellum dark brown. Head with frons golden-green, scrobes golden and clypeus dark brown; vertex metallic bluish-green. Mesosoma metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa dark and metallic; trochanters, tibiae and tarsi yellowish-brown, femora yellowish-brown with basal half dark brown. Petiole black. Gaster dark brown with metallic tinges; gonoplac dark brown.

Antenna with \pm solid clava. Face below level of toruli with strong reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part, with a strong sulcus from eye margin to posterior ocelli and continuing from there to median ocellus. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with an indistinct median groove; midlobe with 18 setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with very weak reticulation and shiny, lateral parts rugose with 12 scattered setae, with a weak median groove in anterior two-thirds. Dorsellum with weak reticulation, with median carina. Propodeum with strong irregular carinae, median carina wide and expanded in posterior part; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum slightly open below (one seta at apex missing); costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate with apex rounded; medio-basal Gt_1 with four longitudinal carinae; tergites with strong reticulation; gonoplac with apex blunt.

Relative measurements: head length, dorsal view 23; head length, frontal view 42; POL 11; OOL 7,5; lateral ocellus diameter 4,5; head width 55; mouth width 14; malar space 14; eye length 25; scape length 20; scape width 4,5; pedicel+flagellum length 55; pedicel length 7; pedicel width, dorsal view 4; F1 length 8,5; F1 width 4,5; F2 length 10; F2 width 5; F3 length 8,5; F3 width 6; clava length 17,5; clava width 7; C3 length 6; spicule length 2; mesosoma length 72; mesosoma width 51; midlobe of mesoscutum length 28,5; mesoscutellum length 27,5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 7,5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 9,5; lateral part of mesoscutellum, width (measured medially) 4,5; dorsellum length 5; propodeum length 12,5; costal cell length 36; costal cell width (measured at widest

part) 2,5; marginal vein length 36; stigmal vein length 12; gaster length 67; gaster width 43; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 3; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Cartago, 4km NE Cañon, Genesis II, 2300m, x-xii.1995, P. Hanson (NHMUK).

Galeopsomyia myrciae Hansson sp.nov.

(Figs 9, 522, 523, 844, 986)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 844); genal carina present; mesoscutellum (Fig. 522) with strong reticulation on median part and with a weak median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, ±straight and parallel, subdivided by transverse carinae; dorsellum with median carina; propodeum (Fig. 522) with strong reticulation, callus with six setae; petiole very short, just a narrow band; gaster (Fig. 522) 2.7× as long as wide, medio-basal Gt₁ with a blunt edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation.

Female holotype: length of body 2.6mm (paratypes 2.0–2.9mm).

Scape yellowish-brown, pedicel and flagellum brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Mesoscutum and mesoscutellum golden-green, propodeum golden-red. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters yellowish-brown; fore and mid femora yellowish-brown, hind femur with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂ metallic bluish-green, Gt₃₋₆ golden-purple medially and metallic bluish-green laterally, Gt₇ black with metallic tinges; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a complete median groove, with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and with a weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, ±straight and parallel subdivided by transverse carinae; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation,

mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a blunt edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26.5; head length, frontal view 42; POL 10; OOL 6.5; lateral ocellus diameter 6; head width 58; mouth width 17.5; malar space 13.5; eye length 26; scape length 20; scape width 5; pedicel+flagellum length 60; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 10; F1 width 5; F2 length 10; F2 width 5.5; F3 length 10; F3 width 5.5; clava length 22; clava width 6; C3 length 7; spicule length 2; mesosoma length 73; mesosoma width 52; midlobe of mesoscutum length 26; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 5; propodeum length 11; costal cell length 38; costal cell width (measured at widest part) 2.5; marginal vein length 40; stigmal vein length 11.5; gaster length 115; gaster width 43; Gt_2 length (measured medially) 8.5; Gt_4 length (measured medially) 15; Gt_7 length (measured medially) 18; Gt_7 width (measured at base) 18; longest cercal seta length 19; shortest cercal seta length 7.

Male. Length of body 1.7–2.0mm.

Antenna (Fig. 986) with scape widest just above the middle; plaque dark brown and situated in apical half, but distinctly behind apex; dorso-basal whorls of long setae present on F1–F4, with a ventro-basal whorl of long setae on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 24.5; head length, frontal view 39; head width 54; mouth width 20; malar space 15; eye length 25; scape length 20; scape width 7; plaque length 6; pedicel length 6; pedicel+flagellum length 92; F1 length 7; F1 width 6; F2 length 10.5; F2 width 6; F3 length 14; F3 width 5.5; F4 length 15; F4 width 4.5; clava length 36; clava width 4.5; mesosoma length 71; mesosoma width 48; gaster length 71; gaster width 34; longest subbasal seta on F1, length 47.

Hosts. Reared from leaf galls possibly induced by a Eurytomidae (though this requires confirmation) on *Myrcia splendens* (Myrtaceae). The gall is large (up to 2 cm in diameter) and spherical, sometimes transforming nearly the entire leaf into a gall; the interior consists numerous fibers in which are embedded several enclosed, whitish chambers, like seeds in a spongy matrix (P. Hanson, unpublished) (Fig. 9).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Salitral de Santa Ana, 27.ii.1991, from *Myrcia* spongy leaf gall, P. Hanson (NHMUK). Paratypes (2♀ 1♂, MZLU, NHMUK): 1♀ 1♂ with same label data as holotype; 1♀ COSTA RICA, San José, Jerico, Desamparados, 1650m, v.1992, from gall on *Myrcia splendens*".

Etymology. Named after the host plant of the gall from which this species was reared.

Galeopsomyia myrsineae Hansson sp.nov.

(Figs 18, 524, 525, 850, 987)

Diagnosis (female). Flagellum short, clava very distinct without distinct constrictions between clavomeres (Fig. 850); genal carina absent; mesoscutellum (Fig. 524) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; with a strong and complete median groove, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 524) with an elongate cup in medio-anterior part that continues as a narrow carina backwards, with strong reticulation lateral to median carina, callus with seven setae; both sexes: fore coxa with a carina along anterior margin (Fig. 18) and hind coxa with a carina along posterior margin; gaster (Fig. 524) 2.1× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with weak reticulation.

Female holotype: length of body 2.3mm (paratypes 1.7–2.8mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, and vertex golden-green, clypeus dark brown. Thoracic dorsum metallic bluish-green, propodeum with medio-anterior half golden. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-4} black with metallic blue tinges, Gt_{5-6} golden, Gt_7 black; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; without genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, and with 16 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; with a strong and complete median groove; submedian grooves distinct, slightly curved and diverging towards posterior part; with nine setae scattered over lateral parts. Dorsellum smooth and shiny, with median carina. Propodeum with a narrow strong median carina that expands anteriorly and posteriorly; with strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation; fore coxa with a carina along anterior margin and hind coxa with a carina along posterior margin. Fore wing with 5&7 setae on dorsal surface of submarginal vein; speculum open below (apical seta absent); costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with a sharp edge dorsally; tergites with weak reticulation, shiny.

Relative measurements: head length, dorsal view 25; head length, frontal view 39; POL 10.7; OOL 5.2; lateral ocellus diameter 4; head width 48; mouth width 20; malar space 14.5; eye length 21; scape length 21; scape width 4.5; pedicel+flagellum length 47; pedicel length 8; pedicel width, dorsal view 4; F1 length 8; F1 width 5; F2 length 7; F2 width 5; F3 length 7; F3 width 5.5; clava length 14.5; clava width 7; C3 length 4.5; spicule length 1; mesosoma length 71; mesosoma width 47; midlobe of mesoscutum length 30; mesoscutellum length 26; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width

in posterior part 12; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 4; propodeum length 11; costal cell length 41; costal cell width (measured at widest part) 3; marginal vein length 35; stigmal vein length 13; gaster length 105; gaster width 50; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 12; Gt_7 width (measured at base) 16; longest cercal seta length 12; shortest cercal seta length 6.

Male. Length of body of body 1.6–2.0mm.

Antenna (Fig. 987) with scape widest in the middle; plaque dark brown, situated in apical half; dorso-basal whorls of long setae present on F1–F4 and C1, and a ventro-basal whorl on C1. Gaster elongate and narrowing off in posterior part of Gt_1 . Otherwise as in female.

Relative measurements: head length, dorsal view 19; head length, frontal view 31; head width 40; mouth width 15; malar space 12; eye length 17.5; scape length 15.5; scape width 5; plaque length 7; pedicel length 6.5; pedicel+flagellum length 77; F1 length 5.5; F1 width 4.5; F2 length 9.5; F2 width 4.5; F3 length 11.5; F3 width 4; F4 length 12; F4 width 4; clava length 31; clava width 3.5; mesosoma length 60; mesosoma width 37; gaster length 85; gaster width 25; longest subbasal seta on F1, length 32.

Hosts. Reared from seeds of *Myrsine juergensenii* and *Myrsine* sp. (Myrsinaceae). The latter (from Zurquí de Moravia) is probably *M. coriacea* and the seeds of this species harbor an undescribed, phytophagous species of *Megastigmus* (Megastigmidae) (P. Hanson, unpublished).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000–1300m, 7-19.ii.2007, C. Hansson (MZLU). Paratypes (28♀ 2♂, CNC, MZLU, MZUCR, NHMUK): 1♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS; 1♀ from same locality as previous but collected iv.2002; 4♀ 1♂ COSTA RICA, Heredia, San Rafael de Vara Blanca, ii.2013, from *Myrsine juergensenii* fruit/seed; 5♀ COSTA RICA, San José, Zurquí de Moravia, 1600m, x.2001, from *Myrsine* seeds, P. Hanson; following from same locality as previous but collected vi.1995 (2♀), xii.1995 (9♀ 1♂), i.1996 (4♀); 1♀ COSTA RICA, San José, San Gerardo de Dota, 9°34'N, 83°43'W, 18-20.ii.2010, J.S. Noyes; 1♀ COSTA RICA, San José, 26km N San Isidro, 9°30'N, 83°43'W, 2100m, ii-v.1992, P. Hanson.

Etymology. Name referring to the host plant, *Myrsine*, from which this species was reared.

Galeopsomyia nana Hansson sp.nov.

(Figs 526, 527, 836, 988)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 836); genal carina present; mesoscutellum (Fig. 526) with weak reticulation on median part and a complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 526) with strong reticulation, callus with four setae; gaster (Fig. 526) ovate, 1.7× as long as wide, tergites with strong reticulation, apex of gonoplac blunt (Fig. 527).

Female holotype: length of body 1.4mm (paratypes 1.0–2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons and vertex black with metallic blue tinges, clypeus dark brown, antennal scrobes black. Thoracic dorsum black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 yellowish-brown. Petiole black. Gaster with Gt₁ black with metallic blue tinges, Gt₂₋₄ golden-purple, Gt₅₋₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, inside ocellar triangle with strong reticulation and a transverse carina; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, and with seven scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with eight setae scattered over lateral parts. Dorsellum with weak sculpture, without median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate; tergites with strong reticulation; apex of gonoplac blunt.

Relative measurements: head length, dorsal view 18; head length, frontal view 28; POL 7.5; OOL 5; lateral ocellus diameter 3.5; head width 40; mouth width 11; malar space 10; eye length 16.5; scape length 14; scape width 3; pedicel+flagellum length 43; pedicel length 5; pedicel width, dorsal view 3; F1 length 6; F1 width 4; F2 length 7; F2 width 4; F3 length 7; F3 width 4; clava length 16.5; clava width 4.5; C3 length 6; spicule length 1.5; mesosoma length 45; mesosoma width 33; midlobe of mesoscutum length 15.5; mesoscutellum length 17; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 1.5; propodeum length 8; costal cell length 22; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 8; gaster length 51; gaster width 31; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 8; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 4.5.

Male. Length of body 1.1–1.4mm.

Antenna (Fig. 988) with scape widest just above the middle; plaque whitish/infusate and situated in apical part but distinctly below apex; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster short ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 16; head length, frontal view 28.5; head width 38.5; mouth width 12; malar space 10; eye length 16.5; scape length 14; scape width 4.5; plaque length 3; pedicel length 5; pedicel+flagellum length 58; F1 length 4.5; F1 width 4; F2 length 8; F2 width 4; F3 length 9; F3 width 4; F4 length 9.5; F4 width 3.5; clava length 21; clava width 3.5; mesosoma length 47; mesosoma width 33; gaster length 45; gaster width 27; longest subbasal seta on F1, length 30.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 11-12.ii.2018, J.S. Noyes (NHMUK). Paratypes (33♀ 4♂, CNC, MZLU, MZUCR, NHMUK): 5♀ 2♂ with same label data as holotype; following from same locality as holotype but collected 14-15.ii.2005 (1♀), 19-20.ii.2009 (2♀), 17-18.ii.2011 (7♀ 1♂), 23-24.ii.2013 (3♀ 1♂), 19-20.ii.2016 (2♀), 18-19.ii.2019 (1♀); 1♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 19-22.ii.2008, C. Hansson; 3♀ **COSTA RICA, Puntarenas**, Parque Nacional Piedras Blancas, Estación El Bonito, 8°43'N, 83°13'W, 100m, 13-14.ii.2012, J.S. Noyes; 3♀ **COSTA RICA, Puntarenas**, Los Charcos de Osa, 8°40'N, 83°30'W, 50m, 18-19.ii.2008, J.S. Noyes; 1♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Estación Los Patos, 08°33'N, 83°30'W, 200m, ii.2000, malaise trap & yellow pan trap, J.S. Noyes & J.A. Azofeifa; 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, LN 264463_532850, 100-200m, 30-31.iii.2002, swept, J. Azofeifa; 1♀ **COSTA RICA, Limón**, Reserva Biológica Hitoy-Cerere, 9°40'N, 53°02'W, 100m, 22-23.ii.2010, J.S. Noyes; 1♀ from same locality as previous but collected 24-26.ii.2008; 1♀ **COSTA RICA, Limón**, Valle de la Estrella, Reserva Biológica Hitoy Cerere, Sendero Toma de Agua, LN 184300_643500, 140m, 8.v.1999, malaise trap, F. Umaña.

Etymology. From the Latin *nana* = small, referring to small size of this species.

***Galeopsomyia navia* Hansson sp.nov.**

(Figs 528, 529, 845)

Diagnosis (female). Antenna with distinct constrictions between clavomeres (Fig. 845); genal carina present; mesoscutellum (Fig. 528) with weak reticulation and elongate meshes, submedian grooves with outer margin absent and slightly converging towards posterior part; dorsellum with median carina; propodeum (Fig. 528) short with strong reticulation, median carina wide, callus with 6–7 setae; petiole very short, just a narrow band; gaster (Fig. 528) elongate, 2.6× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24), Gt_7 heavily setose (Fig. 529).

Female holotype: length of body 2.5mm (paratypes 1.8–2.9mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel brown, flagellum blackish. Face below level of toruli black with golden-green tinges and clypeus brown, frons golden green with scrobes black with weak metallic tinges; vertex black with metallic blue tinges. Mesoscutum metallic greenish-blue; mesoscutellum and propodeum golden-green. Legs with coxae black with metallic blue tinges; trochanters yellowish-brown; femora with basal half brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 golden-green, Gt_2 metallic greenish-blue, Gt_{3-7} metallic purple; gonoplac black.

Antenna with distinct constrictions between clavomeres. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle and with a carina between posterior part of posterior ocelli.

Mesoscutum with strong reticulation, postero-median midlobe with weak reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with eight adnotaular setae in two rows. Mesoscutellum with weak reticulation and elongate meshes; submedian grooves with outer margin absent and converging slightly towards posterior part; with three setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and wide median carina that expands strongly posteriorly; with strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 39; POL 9; OOL 7.5; lateral ocellus diameter 4.5; head width 53; mouth width 17; malar space 14; eye length 22.5; scape length 19.5; scape width 5; pedicel+flagellum length 60; pedicel length 7; pedicel width, dorsal view 4; F1 length 9.5; F1 width 5; F2 length 10.5; F2 width 5; F3 length 9; F3 width 5; clava length 21; clava width 5.5; C3 length 7.5; spicule length 2; mesosoma length 70; mesosoma width 49; midlobe of mesoscutum length 30; mesoscutellum length 25; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 10; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 11; gaster length 107; gaster width 41; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 22; Gt_7 width (measured at base) 16; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK). Paratypes (33 ♀, CNC, MZLU, MZUCR, NHMUK): 21 ♀ with same label data as holotype; 1 ♀ from same locality as holotype but collected 22.ii.2003; 2 ♀ **COSTA RICA, Guanacaste**, Estación Maritza, 10°58'N, 85°29'W, 700m, 21.ii.2005, J.S. Noyes; 4 ♀ **COSTA RICA, Guanacaste**, 18km N Liberia, Buena Vista Lodge, 10°48'N, 85°24'W, 770m, 15-17.ii.2016, J.S. Noyes; 1 ♀ **COSTA RICA, Alajuela**, Cabro Muco, 10°43'N, 85°09'W, 1100m, 13.ii.2004, C. Hansson & J.A. Azofeifa; 1 ♀ **COSTA RICA, Cartago**, Humo, El Copal, 9°47'N, 83°45'W, 1050-1250m, 29.ii-6.iii.2008, C. Hansson; 1 ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°46'N, 82°57'W, 1300m, 15-16.ii.2006, J.S. Noyes; following from same locality as previous but collected 7-19.ii.2007 (1 ♀), 19-22.ii.2008 (1 ♀).

***Galeopsomyia neblina* Hansson sp.nov.**

(Figs 530, 531, 1088)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1088); with genal carina; mesoscutellum (Fig. 530) with strong reticulation throughout and with a weak but complete median groove, submedian grooves with outer margin absent, curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 530) short, with strong reticulation and some irregular carinae, median carina \pm triangular, callus with six setae; gaster (Fig. 530) 3.3 \times as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation, Gt₇ 1.7 \times as long as width at base.

Female holotype: length of body 2.8mm (paratypes 2.6–2.8mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, golden-green, clypeus dark brown; vertex golden-green. Thoracic dorsum golden-green with red tinges. Legs with coxae metallic bluish-green; trochanters yellowish-brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster black with golden-green and metallic blue tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe rugose close to notauli, with a median groove in posterior half, with 18 scattered setae on rugose parts. Mesoscutellum with median part with rather strong reticulation but shiny and with a \pm complete median groove, outer margin of submedian grooves absent, lateral parts with very strong reticulation and with seven scattered setae. Dorsellum with strong sculpture, with median carina. Propodeum with triangular median carina; with strong reticulation and some short irregular carinae; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 38; POL 10.5; OOL 6.5; lateral ocellus diameter 4.8; head width 52; mouth width 19; malar space 13; eye length 21; scape length 19; scape width 5; pedicel+flagellum length 61; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 9.5; F1 width 5; F2 length 11; F2 width 5; F3 length 10; F3 width 5; clava length 20; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 71; mesosoma width 50; midlobe of mesoscutum length 28; mesoscutellum length 27.5; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4.5; propodeum length 8; costal cell length 41; costal cell width (measured at widest part) 2.5; marginal vein length 40; stigmal vein length 13; gaster length 127; gaster width 39; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 25; Gt₇ width (measured at base) 15; longest cercal seta length 17; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes (NHMUK). Paratypes (3♀, MZLU, NHMUK): 2♀ with same label data as holotype; 1♀ **COSTA RICA, Heredia**, Santo Domingo, INBio-Parque, 1-12.iv.2002, J.S. Noyes & D. Rubi.

***Galeopsomyia nebulosa* Hansson sp.nov.**

(Figs 532, 533, 915, 989, 1087)

Diagnosis (female). Antenna with distinct constrictions between clavomeres (Fig. 1087); genal carina present; mesoscutellum (Fig. 915) with weak reticulation and shiny, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 532) long, with strong reticulation, callus with 11 setae; petiole about 0.5× as long as wide with strong longitudinal carinae; fore wing speculum small (Fig. 533); gaster (Fig. 532) with anterior part narrow for an extended part before smoothly expanding backwards, 2.0× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation; body black with metallic tinges (Figs 532, 533).

Female holotype: length of body 2.6mm (paratypes 2.4mm).

Scape yellowish-brown with dorsal edge brown, pedicel brown, flagellum dark brown. Head black with golden-green tinges, clypeus dark brown. Mesosoma black with metallic tinges. Legs with fore and hind coxae predominantly black, mid coxa dark brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with weak reticulation, especially so on midlobe, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a very weak median groove in posterior half, with eight adnotaular setae in two rows. Mesoscutellum with weak reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with 11 setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum small and closed; costal setal row unbroken.

Petiole about 0.5× as long as wide with strong longitudinal carinae. Gaster ovate-elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; POL 10.5; OOL 8; lateral ocellus diameter 4.5; head width 56; mouth width 14.5; malar space 17;

eye length 23.5; scape length 23; scape width 5; pedicel+flagellum length 65; pedicel length 8; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 11; F2 width 5; F3 length 10.5; F3 width 5; clava length 23; clava width 6; C3 length 8.5; spicule length 1.5; mesosoma length 83; mesosoma width 55; midlobe of mesoscutum length 29; mesoscutellum length 30; mesoscutellum width 25.5; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 16; costal cell length 45; costal cell width (measured at widest part) 3; marginal vein length 38; stigmal vein length 12; gaster length 92; gaster width 46; Gt₂ length (measured medially) 9; Gt₄ length (measured medially) 18.5; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 19; longest cercal seta length 14; shortest cercal seta length 7.

Male. Length of body 1.7mm.

Antenna (Fig. 989) with scape gradually expanding from base towards plaque, narrowed at apex; plaque dark brown and situated in apical half; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 17; head length, frontal view 29.5; head width 41; mouth width 11.5; malar space 11; eye length 17; scape length 16; scape width 4.5; plaque length 6; pedicel length 5.5; pedicel+flagellum length 52; F1 length 3.5; F1 width 4; F2 length 5; F2 width 4; F3 length 7.5; F3 width 3.5; F4 length 7.5; F4 width 3; clava length 21; clava width 3.5; mesosoma length 55; mesosoma width 35; gaster length 57; gaster width 25; longest subbasal seta on F1, length 35.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, 19km S 1km W Empalme, Mirador Quetzal, 2600m, iv.2000, P. Hanson (NHMUK). Paratypes (2♀ 1♂, MZLU, MZUCR): 1♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, ii.2002, INBio, OET, ALAS; following from same locality as previous but collected 10.iii.2002 (1♂), 9.iv.2002 (1♀).

Galeopsomyia neotropicalis Hansson sp.nov.

(Figs 534, 535, 846)

Diagnosis (female). Antenna with solid clava (Fig. 846); genal carina strong, reaching to level of lower margin of eye; mesoscutellum (Fig. 534) with median part with strong reticulation, meshes ±isodiametric, without median groove, lateral parts rugose, submedian grooves with outer margin absent, diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 534) with strong reticulation, callus with seven setae; gaster (Fig. 534) 1.9× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), Gt₁₋₅ with weak reticulation, Gt₆₋₇ with strong reticulation.

Female holotype: length of body 2.2mm (paratypes 1.7–2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons and vertex

metallic greenish-blue, antennal scrobes black with metallic tinges, clypeus dark brown. Thoracic dorsum golden-green with blue tinges. Legs with coxae golden-green; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind coxa golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic greenish-blue; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, clypeus smooth and scrobes with weak reticulation; with genal carina reaching to level of lower margin of eye. Vertex with strong reticulation, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation; midlobe with 16 scattered adnotaular setae. Mesoscutellum with median part with strong reticulation, meshes \pm isodiametric, without median groove, lateral parts rugose, submedian grooves with outer margin absent, diverging towards posterior part; with 10 scattered setae on lateral parts. Dorsellum with strong reticulation, without median carina. Propodeum with strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken below.

Petiole short. Gaster elongate; medio-basal Gt_1 with a sharp edge shaped like an inverted U; Gt_{1-5} with weak reticulation, Gt_{6-7} with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 37; POL 10.5; OOL 5; lateral ocellus diameter 5; head width 50; mouth width 15; malar space 15; eye length 22.5; scape length 17; scape width 4; pedicel+flagellum length 46; pedicel length 6; pedicel width, dorsal view 4; F1 length 7; F1 width 4; F2 length 7; F2 width 4.5; F3 length 6.5; F3 width 5; clava length 16; clava width 6; C3 length 4.5; spicule length 1.5; mesosoma length 62; mesosoma width 48; midlobe of mesoscutum length 27; mesoscutellum length 24.5; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 8.5; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 10; gaster length 96; gaster width 52; Gt_2 length (measured medially) 9.5; Gt_4 length (measured medially) 19; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica, Ecuador, Peru.

Material examined.

Holotype ♀ **COSTA RICA**, **Heredia**, Santo Domingo, INBio-Parque, 1-12.iv.2002, J.S. Noyes & D. Rubi (NHMUK). Paratypes (10♀, MZLU, MZUCR, NHMUK): 1♀ from same locality as holotype but collected 13.ii.2010; 6♀ **COSTA RICA**, **Guanacaste**, Cañas, Río Chiquito, LN 292500_417000, 410m, 25.vii.2003, J. Azofeifa; 1♀ **COSTA RICA**, **Puntarenas**, Parque Nacional Corcovado, Estación Aguas, Cerro Quebraditos, LS 274300_521400, 782m, 25.v-17.vii.2001, malaise trap, J. Azofeifa; 1♀ **ECUADOR**, Napo, Lumbaqui, 10-11.iii.1983, Lars Huggert; 1♀ **PERU**, Loreto, Iquitos, Rio Nanay, 4-6.ii.1984, Lars Huggert.

Etymology. Named after distribution.

Galeopsomyia nicoyae Hansson sp.nov.

(Figs 536, 537, 847)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 847); genal carina present; mesoscutellum (Fig. 536) with strong reticulation on lateral parts, with weak reticulation on median part, meshes elongate, submedian grooves strong and \pm parallel; dorsellum with median carina; propodeum (Fig. 536) with strong carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 536) 1.9 \times as long as wide, tergites with strong reticulation. Small species (1.6–1.8mm), predominantly dark brown with metallic blue tinges (Figs 536, 537).

Female holotype: length of body 1.7mm (paratypes 1.6–1.8mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons including scrobes black with weak metallic tinges, clypeus dark brown; vertex dark brown to black. Mesoscutum dark brown with metallic tinges; mesoscutellum dark brown with metallic blue tinges; propodeum black with metallic tinges. Legs with coxae dark brown; trochanters yellowish-brown; femora brown with apex yellowish-brown; tibiae yellowish-brown to yellowish-white; T1–3 yellowish-white, T4 brown. Petiole black. Gaster with Gt₁ dark brown with metallic purple tinges, Gt₂₋₅ dark brown, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina reaching level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; with six adnotaular setae in two rows. Mesoscutellum with strong reticulation on lateral parts, with weak reticulation on median part, meshes elongate, without median groove; submedian grooves strong and \pm parallel; with five scattered setae over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 33; POL 9; OOL 5; lateral ocellus diameter 4.3; head width 43; mouth width 12; malar space 12; eye length 19.5; scape length 15.5; scape width 3.5; pedicel+flagellum length 48; pedicel length 6; pedicel width, dorsal view 3.2; F1 length 8; F1 width 4; F2 length 7.5; F2 width 3.5; F3 length 7; F3 width 3.5; clava length 17; clava width 4; C3 length 6; spicule length 1.5; mesosoma length 53; mesosoma width 36; midlobe of mesoscutum length 21; mesoscutellum length 20.5; mesoscutellum width 16; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3.5; propodeum length 9; costal cell length 29; costal cell width (measured at widest part) 1.8; marginal vein length 25; stigmal vein length 8; gaster length 66; gaster width 35; Gt₂ length (measured medially) 7; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 9; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 17-18.ii.2011, J.S. Noyes (NHMUK). Paratypes (5♀, MZLU, NHMUK): 1♀ with same label data as holotype; following from same locality as holotype but collected 11-21.ii.2005 (1♀), 14-15.ii.2005 (1♀), 23-24.ii.2013 (2♀).

Etymology. Named after type area, the Nicoya Peninsula.

Galeopsomyia nigricans **Hansson sp.nov.**

(Figs 538, 539, 856)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 856); genal carina present; mesoscutellum (Fig. 538) with weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum hidden by overhanging posterior part of mesoscutellum in dorsal view, with median carina; propodeum (Fig. 538) with strong irregular carinae mixed with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 538) 1.8× as long as wide, medio-basal Gt₁ with short longitudinal carinae, tergites with strong reticulation, apex of gonoplac blunt (Fig. 539); body black non-metallic (Figs 538, 539).

Female holotype: length of body 1.8mm (paratype 2.0mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head, mesosoma and metasoma black. Legs with fore and hind coxae black, mid coxa dark brown; trochanters yellowish-brown; femora pale brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weaker reticulation; with genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe with parts close to notauli rugose; midlobe without a median groove, with 16 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, hidden by overhanging posterior part of mesoscutellum in dorsal view, with median carina. Propodeum with a strong median carina, expanding both anteriorly and posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Coxae with strong reticulation, hind coxa especially so. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with short longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 39; POL 10; OOL 4.5; lateral ocellus diameter 4.5; head width 48; mouth width 13.5; malar space 13; eye length 23; scape length 17; scape width 4; pedicel+flagellum length 52; pedicel length 7; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4; F2 length 8; F2 width 4; F3 length 7.5; F3 width 4; clava length 18.5; clava width 4.5; C3 length 7.5; spicule length 1.5; mesosoma length 60; mesosoma width 45; midlobe of mesoscutum length 21; mesoscutellum length 23.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 11; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 26; stigmal vein length 9; gaster length 70; gaster width 40; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 12; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 14; longest cercal seta length; shortest cercal seta length.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Limón, Parque Nacional Braulio Carrillo, Estación Quebrada Gonzalez, 10°09'N, 83°57'W, 450m, 15.ii.2003, J.S. Noyes (NHMUK). Paratype: 1♀ COSTA RICA, Heredia, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 11-20.ii.2001, 11/TN/ALL, INBio, OET, ALAS intersect (MZLU).

Etymology. From the Latin *nigricans* = blackish, referring to colour of body.

Galeopsomyia nishidai Hansson sp.nov.

(Figs 540, 541, 852)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 852); genal carina present; mesoscutellum (Fig. 540) with submedian grooves curved and diverging towards both anterior and posterior parts, outer margin absent in anterior two-thirds, median part 3.6× as long as wide with very weak reticulation, lateral parts with strong reticulation; dorsellum with median carina; propodeum (Fig. 540) with strong irregular carinae, median carina with a longitudinal fovea, callus with five setae; fore and hind coxae dark and metallic, mid coxa dark brown (Fig. 541); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 540) 2.4× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, Gt_1 with weak reticulation, Gt_{2-7} with strong reticulation.

Female holotype: length of body 2.4mm (paratypes 2.6–3.0mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown to black. Head with frons golden-green with scrobes black and clypeus dark brown; vertex

golden-green. Mesosoma golden-green. Legs with fore and hind coxae black with metallic green tinges, hind coxa with anterior part yellowish-brown, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown, femora with base and T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂ golden-green in anterior half and metallic purple in posterior half, Gt₃₋₅ metallic purple with sides golden-green, Gt₆ golden-green, Gt₇ black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation, with isodiametric meshes on sidelobes, midlobe with elongate meshes on median part, rugose on parts close to notauli, with a weak median groove in posterior three-quarters; midlobe with 15 scattered setae on rugose parts. Mesoscutellum with submedian grooves curved and diverging towards both anterior and posterior parts, outer margin absent in anterior two-thirds, median part with very weak reticulation, lateral parts with strong reticulation with seven scattered setae. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that gradually widens towards posterior part, concave; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below (apical seta absent); costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; Gt₁ with weak reticulation in anterior half, tergites otherwise with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 42; POL 11; OOL 7; lateral ocellus diameter 5.2; head width 56.5; mouth width 15; malar space 14.5; eye length 23.5; scape length 21; scape width 5; pedicel+flagellum length 65; pedicel length 6.5; pedicel width, dorsal view 4.5; F1 length 10; F1 width 6; F2 length 12; F2 width 6; F3 length 10.5; F3 width 5.5; clava length 23; clava width 5.5; C3 length 7.5; spicule length 2.5; mesosoma length 73; mesosoma width 51; midlobe of mesoscutum length 32; mesoscutellum length 28.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 5; propodeum length 12; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 37; stigmal vein length 14; gaster length 100; gaster width 41; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 13; longest cercal seta length 17; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratypes (8♀, MZLU, MZUCR, NHMUK): 7♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos.

Etymology. Named in honour of Kenji Nishida for his work to investigate the biology of insects in Costa Rica, and also imaging them.

***Galeopsomyia nitida* Hansson sp.nov.**

(Figs 542, 543, 848, 990)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 848), flagellum elongate, flagellum+pedicel 1.5× as long as width of mesosoma; genal carina present; mesoscutellum (Fig. 542) with weak reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 542) with strong irregular carinae and strong reticulation, median carina wide, expanded in anterior and posterior parts, callus with three setae; petiole very short, just a narrow band; gaster (Fig. 542) 2.2× as long as wide, tergites with relatively weak reticulation, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation.

Female holotype: length of body 2.1mm (paratypes 1.7–2.2mm).

Scape yellowish-brown, pedicel dark brown, flagellum black. Face below level of toruli black with golden tinges and clypeus black, frons metallic greenish-blue with scrobes black; vertex metallic greenish-blue. Mesoscutum with sidelobes black with metallic purple tinges, midlobe golden-green; mesoscutellum and propodeum golden-green. Legs with fore coxa brown, mid coxa yellowish-brown and hind coxa yellowish-brown at apex and along anterior part, dark brown along posterior part; trochanters yellowish-white; femora, tibiae and tarsi yellowish-white to yellowish-brown. Petiole black. Gaster with Gt₁ metallic golden-green, Gt₂₋₆ black with metallic green and purple tinges, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C1. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, weak reticulation and elongate meshes on midlobe; midlobe with five adnotaular setae in one row. Mesoscutellum with weak reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with five setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands both in anterior and posterior parts; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 35; POL 9; OOL 6.5; lateral ocellus diameter 4.5; head width 48; mouth width 14; malar space 12.5; eye

length 21; scape length 20; scape width 4.2; pedicel+flagellum length 65; pedicel length 7; pedicel width, dorsal view 4; F1 length 10; F1 width 4.5; F2 length 10.5; F2 width 4; F3 length 9; F3 width 4; clava length 23.5; clava width 4.5; C3 length 8; spicule length 3.5; mesosoma length 63; mesosoma width 43; midlobe of mesoscutum length 23.5; mesoscutellum length 22; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 3; dorsellum length 3.5; propodeum length 10; costal cell length 34; costal cell width (measured at widest part) 2; marginal vein length 35; stigmal vein length 10; gaster length 87; gaster width 40; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 15; longest cercal seta length 16; shortest cercal seta length 5.

Male. Length of body 1.4mm.

Antenna (Fig. 990) with scape widest in the middle; plaque small, dark brown and situated just above the middle; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 18; head length, frontal view 30; head width 41; mouth width 12; malar space 12; eye length 16; scape length 17; scape width 4; plaque length 2.5; pedicel length 5.5; pedicel+flagellum length 73; F1 length 6; F1 width 4; F2 length 10; F2 width 4; F3 length 12; F3 width 4; F4 length 12; F4 width 3.5; clava length 26; clava width 3; mesosoma length 49; mesosoma width 36; gaster length 53; gaster width 34; longest subbasal seta on F1, length 39.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes (NHMUK). Paratypes (20♀ 1♂, CNC, MZLU, MZUCR, NHMUK): 2♀ **COSTA RICA, Alajuela**, Parque Nacional Volcan Arenal, Sendero Pilón, 10°27'N, 84°43'W, 26.ii.2013, J.S. Noyes; 1♀ **COSTA RICA, Alajuela**, 7km N Boca Tapada, Laguna Lagerta Lodge, 10°41'N, 84°11'W, 55m, 18-19.ii.2018, J.S. Noyes; 2♀ **COSTA RICA, Guanacaste**, Estación Pitilla, 21.ii.2011, J.S. Noyes; 1♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 22.ii.2003, J.S. Noyes; 1♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 75m, 10°26'N, 84°01'W, 27-28.ii.2003, J.S. Noyes; following from same locality as previous but collected 22-24.ii.2012 (1♀), 25.ii.2016 (1♀ 1♂); 1♀ **COSTA RICA, Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 9°40'N, 83°02'W, 100m, 24-26.ii.2008, J.S. Noyes; 5♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, Wilson Botanico, 1150m, 18-22.iii.1990, J.S. Noyes; following from same locality as previous but collected 15-16.ii.2006 (2♀), 7-19.ii.2007 (2♀), 17-18.ii.2012 (1♀).

Etymology. From the Latin *niteo* = shiny, referring to the shiny thoracic dorsum.

***Galeopsomyia noblitis* Hansson sp.nov.**

(Figs 544, 545, 853)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 853); genal carina present; mesoscutellum (Fig. 544) with weak reticulation on median part and with a \pm complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves \pm distinct, curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 544) with strong reticulation and some irregular carinae medially; petiole very short, just a narrow band; gaster (Fig. 544) 2.5 \times as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 3.0mm (paratypes 1.6–2.9mm).

Scape yellowish-brown with apico-dorsal part dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, part frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Mesoscutum golden-green, mesoscutellum and propodeum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster metallic bluish-green, Gt₇ with apical half black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, frons partly with strong reticulation and partly rugose, antennal scrobes with weak reticulation; with a strong genal carina that reaches to level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with an indistinct median groove in posterior half, with 18 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a \pm complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm distinct, curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong reticulation and some irregular carinae medially; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 45; POL 12; OOL 7; lateral ocellus diameter 6; head width 58; mouth width 20; malar space 17; eye length 25; scape length 21; scape width 5; pedicel+flagellum length 67; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 10; F1 width 6; F2 length 12; F2 width 5.5; F3 length 11.5; F3 width 6; clava length 23; clava width 6; C3 length 6.5; spicule length 1.5; mesosoma length 84; mesosoma width 55; midlobe of mesoscutum length 33; mesoscutellum length 32; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 3.5; propodeum length 14; costal cell length 46; costal cell width (measured at widest

part) 3; marginal vein length 44; stigmal vein length 13.5; gaster length 133; gaster width 53; Gt_2 length (measured medially) 13; Gt_4 length (measured medially) 25; Gt_7 length (measured medially) 16; Gt_7 width (measured at base) 17; longest cercal seta length 17; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos (MZLU). Paratypes (17♀, CNC, MZLU, MZUCR, NHMUK): 3♀ with same label data as holotype; 3♀ COSTA RICA, Puntarenas, Estación Altamira, Estacion, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept&malaise trap, C. Hansson & Parataxonomos; 4♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept&malaise trap, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson; 1♀ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes; 1♀ COSTA RICA, **Alajuela**, Parque Nacional Volcan Arenal, 10°26'N, 84°43'W, 600m, 26.ii.2013, J.S. Noyes; 3♀ COSTA RICA, **San José**, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson; 1♀ from same locality as previous but collected ix-x.1993.

***Galeopsomyia oasis* Hansson sp.nov.**

(Figs 546, 547, 1102)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1102); genal carina present; mesoscutellum (Fig. 546) with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves ±distinct, straight and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 546) with some irregular carinae medially and with strong reticulation, callus with three setae; gaster (Fig. 546) 2.0× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.0mm (paratype 2.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae black with metallic tinges, mid coxa pale brown; trochanters yellowish-brown; femora yellowish-brown, hind femur with basal half dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green, Gt_{2-4} golden-purple, Gt_5 golden-purple on median part and bluish-green laterally, Gt_{6-7} metallic bluish-green; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a indistinct median groove in posterior half, and with 11 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves \pm distinct, straight and diverging towards posterior part; with nine setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that is gradually expanding towards posterior part; with some irregular carinae medially, and with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 38; POL 9; OOL 6; lateral ocellus diameter 4.5; head width 51; mouth width 14.5; malar space 12; eye length 22.5; scape length 19; scape width 4.5; pedicel+flagellum length 59; pedicel length 7; pedicel width, dorsal view 4.2; F1 length 9; F1 width 4; F2 length 10.5; F2 width 4.5; F3 length 9.5; F3 width 5; clava length 20; clava width 6; C3 length 7; spicule length 2; mesosoma length 65; mesosoma width 48; midlobe of mesoscutum length 25.5; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 2.5; propodeum length 11.5; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 31; stigmal vein length 12; gaster length 79; gaster width 40; Gt_2 length (measured medially) 7.5; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 10.5; longest cercal seta length 11; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Monteverde, "Ecological Farm", 10°18'N, 84°49'W, 1300m, 16-17.ii.2003, J.S. Noyes (NHMUK). Paratype: 1 ♀ with same label data as holotype (MZLU).

Galeopsomyia ocoteae Hansson sp.nov.

(Figs 548, 549, 1086)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1086); genal carina present; mesoscutellum (Fig. 548) with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct but with outer margin indistinct in anterior one-third, curved and diverging towards both anterior and posterior parts; dorsellum with median carina; propodeum (Fig. 548) medially with strong irregular carinae, laterally with strong reticulation, callus with two setae;

petiole very short, just a narrow band; gaster (Fig. 548) 2.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.6mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with fore coxa dark brown with very base metallic, mid coxa dark brown, hind coxae dark brown with bluish-green tinges; trochanters yellowish-brown; femora dark brown with apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,4} golden-purple, Gt_{5,6} metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a complete median groove, with 19 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct but with outer margin indistinct in anterior one-third, curved and diverging towards both anterior and posterior parts; with 19 setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum medially with strong irregular carinae, laterally with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum open at apex; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 42; POL 11.5; OOL 6.5; lateral ocellus diameter 5; head width 56; mouth width 21; malar space 15; eye length 26.5; scape length 20; scape width 5; pedicel+flagellum length 58; pedicel length 7; pedicel width, dorsal view 4.5; F1 length 9.5; F1 width 5.5; F2 length 10; F2 width 6; F3 length 8.5; F3 width 6; clava length 18; clava width 6; C3 length 5.5; spicule length 1.5; mesosoma length 77; mesosoma width 56; midlobe of mesoscutum length 34; mesoscutellum length 29; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 10.5; median part of mesoscutellum, width in posterior part 12.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4; propodeum length 10; costal cell length 40; costal cell width (measured at widest part) 3.5; marginal vein length 37; stigmal vein length 12.5; gaster length 108; gaster width 44; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 15.5; Gt₇ length (measured medially) 18; Gt₇ width (measured at base) 16; longest cercal seta length 14; shortest cercal seta length 7.

Male. Unknown.

Hosts. Reared from galls induced by an unidentified Cecidomyiidae on *Ocotea tenera* (Lauraceae). The galls are induced in male flowers on male trees and resemble the fruits produced on female trees.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Monteverde vicinity, 1200–1500m, iii.1997, from *Ocotea* male flower, N. Wheelsprite (NHMUK).

Etymology. Named after the host plant from which this species was reared.

***Galeopsomyia octava* Hansson sp.nov.**

(Figs 550, 551, 849, 991)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 849); genal carina present; mesoscutellum (Fig. 550) with submedian grooves with outer margin absent, diverging towards both anterior and posterior parts, median part with very weak reticulation and shiny, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 550) with strong irregular carinae and weak reticulation, callus with eight setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 550) 2.0× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation. Males of this species have scattered setae on F1–F4 (Fig. 991), not subbasal whorls of long setae.

Female holotype: length of body 3.2mm (paratypes 2.3–3.1mm).

Scape black with ventro-basal half yellowish-brown, pedicel and flagellum black. Head with frons golden-green, antennal scrobes golden and clypeus black; vertex metallic greenish-blue. Mesosoma golden with red tinges. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster with Gt₁ golden with posterior margin metallic purple, Gt_{2,7} metallic purple; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with a complete median groove; midlobe with 18 setae on rugose parts. Mesoscutellum with submedian grooves with outer margin absent, diverging towards both anterior and posterior parts, median part with very weak reticulation and shiny, lateral parts rugose with 20 scattered setae. Dorsellum with weak reticulation, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and weak reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with eight setae on dorsal surface of submarginal vein; speculum open below.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 31; head length, frontal view 55; POL 11; OOL 8.5; lateral ocellus diameter 6.5; head width 69; mouth width 21; malar space 20; eye length 29; scape length 30; scape width 6.5; pedicel+flagellum length 89; pedicel length 9.5; pedicel width, dorsal view 5; F1 length 16.5; F1 width 7; F2 length 11; F2 width 7; F3 length 8.5; F3 width 7; clava length 27; clava width 7.5; C3 length 8; spicule length 1.5; mesosoma length 101; mesosoma width 65; midlobe of mesoscutum length 39; mesoscutellum length 37; mesoscutellum width 31; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 11; median part of mesoscutellum, width in posterior part 15; lateral part of mesoscutellum, width (measured medially) 7; dorsellum length 6.5; propodeum length 16.5; costal cell length 52; costal cell width (measured at widest part) 4; marginal vein length 56; stigmal vein length 15; gaster length 115; gaster width 58; Gt_2 length (measured medially) 13; Gt_4 length (measured medially) 21; Gt_7 length (measured medially) 14; Gt_7 width (measured at base) 16; longest cercal seta length 17; shortest cercal seta length 6.

Male. Length of body 1.7–2.8mm.

Antenna (Fig. 991) with scape widest in the middle; plaque black and situated just above the middle; flagellomeres with scattered setae. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 24; head length, frontal view 44; head width 56; mouth width 18; malar space 17; eye length 24; scape length 24; scape width 5.5; plaque length 8; pedicel length 8; pedicel+flagellum length 98; F1 length 18; F1 width 5; F2 length 16; F2 width 5; F3 length 16; F3 width 5; F4 length 13; F4 width 5; clava length 22.5; clava width 5; mesosoma length 88; mesosoma width 55; gaster length 100; gaster width 42; longest subbasal seta on F1, length na.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, San Gerardo de Dota, 9°34'N, 83°43'W, 20-21.ii.2013, J.S. Noyes (NHMUK). Paratypes (8♀ 28♂, CNC, MZLU, MZUCR, NHMUK): 7♀ 28♂ with same label data as holotype; 1♀ COSTA RICA, Cartago, La Cangreja, 9°48'N, 83°58'W, 1950m, vi-vii.1992, P. Hansson.

***Galeopsomyia opala* Hansson sp.nov.**

(Figs 552, 553, 854)

Diagnosis (female). Antenna with distinct constriction between C1 and C2, flagellum narrow (Fig. 854); genal carina present; mesoscutellum (Fig. 552) rugose throughout and with a complete median groove, submedian grooves with outer margin absent, straight and slightly diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 552) with a mix of irregular carinae and strong reticulation, callus with three setae; gaster (Fig. 552) 2.2× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation.

Female holotype: length of body 2.2mm (paratypes 1.8–2.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons black with metallic green and blue tinges, antennal scrobes black and clypeus dark brown; vertex black with metallic blue tinges. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic tinges; trochanters yellowish-brown; femora dark brown to black with apical one-quarter yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁₋₂ metallic bluish-green, Gt₃₋₄ metallic bluish-green on sides, black with purplish tinges medially, Gt₅₋₆ black with purplish tinges, Gt₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a very weak median groove in posterior half, with nine scattered adnotaular setae. Mesoscutellum with strong rugosity; submedian grooves with outer margin absent, straight and slightly diverging towards posterior part; with a complete but weak median groove; with nine setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong and relatively wide median carina that expands posteriorly; with a mix of irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation; longest cercal seta broken off.

Relative measurements: head length, dorsal view 21; head length, frontal view 31; POL 7.6; OOL 6; lateral ocellus diameter 3.5; head width 42; mouth width 12; malar space 11.5; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 52; pedicel length 6; pedicel width, dorsal view 3.8; F1 length 7.5; F1 width 4; F2 length 8.5; F2 width 4; F3 length 8.5; F3 width 4; clava length 19; clava width 4.3; C3 length 6; spicule length 2; mesosoma length 51; mesosoma width 36; midlobe of mesoscutum length 17; mesoscutellum length 19; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 9.5; costal cell length 28; costal cell width (measured at widest part) 2.5; marginal vein length 23; stigmal vein length 9.5; gaster length 75; gaster width 34; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 9; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos (MZLU). Paratypes (4♀, MZLU, MZUCR, NHMUK): 3♀ with same label data as holotype; 1♀ from same locality as previous but collected 10.iii.2001.

***Galeopsomyia opima* Hansson sp.nov.**

(Figs 554, 555, 855)

Diagnosis (female). Antenna with constriction between C1 and C2 (Fig. 855); with a short genal carina close to mouth opening; mouth wide, 1.6× malar space; mesoscutellum (Fig. 554) 1.2× as long as wide, with weak reticulation on median part and with a ±complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, ±straight and parallel; dorsellum with median carina; propodeum (Fig. 554) with strong reticulation, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 554) 3.9× as long as wide, Gt₇ 2.2× as long as width at base, medio-basal Gt₁ with longitudinal short carinae, tergites with strong reticulation.

Female holotype: length of body 3.9mm.

Scape yellowish-brown with dorsal edge darkened, pedicel and flagellum dark brown. Head with lower half of frons golden-green, upper half of frons and vertex metallic bluish-green, antennal scrobes black, clypeus dark brown. Mesosoma metallic bluish-green with dorsellum and propodeum golden-green. Legs with coxae metallic bluish-green; trochanters pale brown; femora dark brown with metallic tinges and with apical one-third yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt_{2,5} metallic purple, Gt₇ black; gonoplac yellowish-brown.

Antenna with a constriction between C1 and C2. Frons with strong reticulation, clypeus with weak reticulation; with a short and weak genal carina close to mouth opening. Vertex with strong reticulation outside ocellar triangle, inside triangle with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes and elongate on midlobe; midlobe with 14 scattered adnotaular setae, with a median groove in posterior half. Mesoscutellum with weak reticulation on median part and with a ±complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, ±straight and parallel; with 16 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with seven setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal short carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 34; head length, frontal view 58; POL 14; OOL 9; lateral ocellus diameter 5.5; head width 69; mouth width 33; malar space 21; eye length 30; scape length 25; scape width 6; pedicel+flagellum length 75; pedicel length 10; pedicel width, dorsal view 4.5; F1 length 13; F1 width 5.5; F2 length 13; F2 width 5.5; F3 length 13; F3 width 5.5; clava length 23; clava width 6.5; C3 length 7; spicule length 2; mesosoma length 94; mesosoma width 67; midlobe of mesoscutum length 41; mesoscutellum length 37; mesoscutellum width 31.5; median part of mesoscutellum width (measured medially) 13;

median part of mesoscutellum, width in anterior part 12; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 7.5; dorsellum length 5; propodeum length 10.5; costal cell length 51; costal cell width (measured at widest part) 4.5; marginal vein length 49; stigmal vein length 16; gaster length 197; gaster width 50; Gt₂ length (measured medially) 21; Gt₄ length (measured medially) 34; Gt₇ length (measured medially) 38; Gt₇ width (measured at base) 17; longest cercal seta length 13; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ labelled "ACG8" [COSTA RICA, Guanacaste, Area de Conservación Guanacaste, no date] (MZLU).

Galeopsomyia orbitis Hansson sp. nov.

(Figs 556, 557, 1091)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2, scape dark brown (Fig. 1091); genal carina present; mesoscutellum (Fig. 556) with weak reticulation on median part and with a weak median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 556) with strong reticulation, callus with six setae; petiole transverse and smooth; gaster (Fig. 556) 2.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, Gt₁ with weaker reticulation and more shiny than remaining tergites that have strong reticulation.

Female holotype: length of body 2.4mm.

Entire antenna dark brown to black. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa dark brown; trochanters dark brown; femora golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt_{2,5} golden-purple, Gt₇ black with metallic tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a median groove in posterior two-thirds, with 15 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and with a weak median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, diverging slightly towards posterior part; with eight setae scattered

over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse and smooth. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally, Gt_1 with weaker reticulation and more shiny than remaining tergites that have strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 39; POL 11; OOL 7.5; lateral ocellus diameter 4.5; head width 50; mouth width 18; malar space 15.5; eye length 21.5; scape length 18.5; scape width 4; pedicel+flagellum length 58; pedicel length 8; pedicel width, dorsal view 4; F1 length 9; F1 width 5; F2 length 10; F2 width 5; F3 length 10; F3 width 5; clava length 21.5; clava width 5.5; C3 length 6.5; spicule length 1.5; mesosoma length 71; mesosoma width 47; midlobe of mesoscutum length 26; mesoscutellum length 29; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 9.5; costal cell length 37; costal cell width (measured at widest part) 2.5; marginal vein length 35; stigmal vein length 10.5; gaster length 108; gaster width 39; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 17.5; Gt_7 length (measured medially) 15; Gt_7 width (measured at base) 11; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Parque Nacional La Amistad, Estación Altamira, Cerro Quemado, LS 336200_575560, 2279m, 17.vi-17.vii.2001, malaise trap, D. Rubí (NHMUK).

***Galeopsomyia orillia* Hansson sp.nov.**

(Figs 558, 559, 857)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 857); genal carina present; mesoscutellum (Fig. 558) with strong reticulation on lateral parts, with weak reticulation on median part, meshes strongly elongate and surface thus appearing striate, submedian grooves strong and parallel; dorsellum without median carina; propodeum (Fig. 558) with strong reticulation and irregular carinae, callus with seven setae; petiole transverse, dorsal part with strong sculpture; gaster (Fig. 558) 1.7× as long as wide, tergites with strong reticulation, medio-basal Gt_1 with longitudinal short carinae, apex of gonoplac blunt (Fig. 559); body black without metallic tinges (Figs 558, 559).

Female holotype: length of body 2.2mm (paratypes 1.6–1.9mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head and mesosoma

black without metallic tinges. Legs with fore and hind coxae black, mid coxa brown; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole and gaster black.

Antenna with a strong constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with irregular carinae inside triangle, with a carina between posterior part of posterior ocelli. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with median groove indicated but weak, with 14 scattered adnotaular setae. Mesoscutellum with strong reticulation on lateral parts, with weak reticulation on median part, meshes strongly elongate; submedian grooves strong and parallel; with nine setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a strong wide median carina that expands both anteriorly and posteriorly; with strong reticulation and strong irregular carinae; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with very weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal part with strong sculpture. Gaster ovate; medio-basal Gt₁ with longitudinal short carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 43; POL 10.5; OOL 7.5; lateral ocellus diameter 5.5; head width 59; mouth width 16; malar space 17.5; eye length 25; scape length 21; scape width 4.5; pedicel+flagellum length 57; pedicel length 6.5; pedicel width, dorsal view 4.5; F1 length 8; F1 width 4.5; F2 length 9; F2 width 4.5; F3 length 8.5; F3 width 4.5; clava length 22; clava width 5; C3 length 7; spicule length 2; mesosoma length 77; mesosoma width 53; midlobe of mesoscutum length 27; mesoscutellum length 28; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4; propodeum length 12.5; costal cell length 37; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 11; gaster length 79; gaster width 48; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 13; Gt₇ length (measured medially) 6; Gt₇ width (measured at base) 11; longest cercal seta length 15; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK). Paratypes: 2♀ with same label data as holotype (MZLU, NHMUK).

***Galeopsomyia osaensis* Hansson sp.nov.**

(Figs 24, 36, 560, 561, 851)

Diagnosis (female). Antenna with solid clava (Fig. 851); genal carina present; mesoscutellum

(Fig. 560) with strong reticulation on median part but shiny, with a median groove in anterior three-quarters, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 560) with strong reticulation, callus with three setae; gaster (Fig. 560) 1.8× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (Fig. 24), tergites with strong reticulation.

Female holotype: length of body 1.4mm (paratypes 1.4–1.8mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons and vertex metallic bluish-green, antennal scrobes black, clypeus dark brown. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green in anterior half, posterior half and remaining tergites golden-purple; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior two-thirds, with ten scattered adnotaular setae. Mesoscutellum with strong reticulation on median part but shiny, with a median groove in anterior three-quarters, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly and anteriorly; with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt_1 with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 30; POL 8.2; OOL 4.7; lateral ocellus diameter 4; head width 41; mouth width 13; malar space 9.5; eye length 18; scape length 13; scape width 3.5; pedicel+flagellum length 36; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 5.5; F1 width 4; F2 length 4.5; F2 width 4; F3 length 5; F3 width 4; clava length 13.5; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 48; mesosoma width 35; midlobe of mesoscutum length 20; mesoscutellum length 18.5; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 2.5; propodeum length 8; costal cell length 26; costal cell width (measured at widest part) 2; marginal vein length 21; stigmal vein length 9; gaster length 58; gaster width 33; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 10; Gt_7 length (measured medially) 6; Gt_7 width (measured at base) 11; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Reared from leaf galls induced by an unidentified trioqid (Hemiptera: Triozidae) on *Pseudolmedia spurea* (Moraceae). It is possible that the *Galeopsomyia* specimens wereinquilines (J.A. Azofeifa, personal communication).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Golfito, Estación Agujas, LS 276750_526550, 300m. 9.ix.2001, J. Azofeifa (NHMUK). Paratypes (44♀, CNC, MZLU, MZUCR, NHMUK): 7♀ with same label data as holotype; 37♀ **COSTA RICA, Puntarenas**, Golfito, Estación Agujas, LS 276750_526550, 300m, 20.vi.2001, from leaf galls on *Pseudolmedia spurea*, J. Azofeifa.

Etymology. Named after collecting area, Osa Peninsula where Estación Agujas is located.

***Galeopsomyia osmia* Hansson sp.nov.**

(Figs 562, 563, 1084)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 1084); genal carina present; mesoscutellum (Fig. 562) with very weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin indistinct, with transverse carinae, curved and diverging towards posterior part from the middle of mesoscutellum; dorsellum with median carina; propodeum (Fig. 562) with strong irregular carinae in median part, laterally with reticulation, callus with two setae; petiole transverse, dorsal part with strong sculpture; gaster (Fig. 562) 2.8× as long as wide, medio-basal Gt₁ with longitudinal carinae, Gt₁₋₂ with weak reticulation, Gt₃₋₇ with strong reticulation.

Female holotype: length of body 2.5mm.

Scape yellowish-brown in basal half, dark brown in apical half, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, scrobes black; vertex black with metallic bluish-green tinges. Mesoscutum golden-green; mesoscutellum metallic bluish-green, propodeum black with metallic bluish-green tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters and tibiae yellowish-brown; femora yellowish-brown with basal half pale brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₄ golden-purple, Gt₅₋₇ black with metallic tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeal area smooth, frons rugose, scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, with parts close to notauli rugose; midlobe with a very weak median groove in posterior half, with 12 scattered setae on rugose parts. Mesoscutellum with very weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, with transverse carinae, curved and diverging towards posterior part from the middle of mesoscutellum; with eight setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a

strong median carina that expands posteriorly; median part with strong irregular carinae and laterally with reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse, dorsal surface with strong sculpture. Gaster elongate; medio-basal Gt_1 with two longitudinal carinae; Gt_{1-2} with weak reticulation, Gt_{3-7} with strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 39; POL 10.5; OOL 7; lateral ocellus diameter 5; head width 52; mouth width 14; malar space 15; eye length 22; scape length 19; scape width 4.5; pedicel+flagellum length 63; pedicel length 6.5; pedicel width, dorsal view 4.5; F1 length 10; F1 width 6; F2 length 10.5; F2 width 6; F3 length 10; F3 width 6; clava length 23; clava width 6; C3 length 7; spicule length 2; mesosoma length 74; mesosoma width 47; midlobe of mesoscutum length 29; mesoscutellum length 27.5; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 5.5; propodeum length 12.5; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 43; stigmal vein length 13; gaster length 106; gaster width 38.5; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 15; Gt_7 width (measured at base) 15; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Cartago, Tapantí, 1100-1200m, iv.2011-ii.2012, R. Zúñiga (NHMUK).

Galeopsomyia pagana Hansson sp.nov.

(Figs 42, 564, 565, 859)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 859); genal carina present; mesoscutellum (Fig. 564) with strong reticulation on median part, meshes slightly elongate, submedian grooves with outer margin indistinct, curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 564) with strong reticulation and some irregular carinae, callus with six setae; gaster (Fig. 564) 2.2× as long as wide, medio-basal Gt_1 with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with strong reticulation.

Female holotype: length of body 2.0mm.

Scape and pedicel yellowish-brown, flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex golden-green. Thoracic dorsum golden-green, median part of mesoscutellum metallic bluish-green. Legs with coxae golden-green; trochanters brown; femora golden-green; tibiae yellowish-brown; T1–3 yellowish-brown, T4

brown. Petiole black. Gaster with Gt_{1,6,7} metallic bluish-green, Gt_{2,5} golden-purple with sides metallic bluish-green; gonoplac black. Antenna with a weak constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina connecting posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric, elongate on median part of midlobe; midlobe without median groove, and with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation, meshes elongate, with a \pm complete median groove; submedian grooves with outer margin indistinct, curved and diverging towards posterior part; with ten setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with strong reticulation and some irregular carinae; callus with six setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 38; POL 10; OOL 5.5; lateral ocellus diameter 4; head width 47; mouth width nm; malar space 12.5; eye length 20; scape length 16; scape width 4.5; pedicel+flagellum length 43; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 7; F1 width 4; F2 length 7; F2 width 4; F3 length 6.5; F3 width 4; clava length 15.5; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 63; mesosoma width 48.5; midlobe of mesoscutum length 24; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2.5; propodeum length 8.5; costal cell length 29; costal cell width (measured at widest part) 2.5; marginal vein length 34; stigmal vein length 9; gaster length 93; gaster width 42; Gt₂ length (measured medially) 9.5; Gt₄ length (measured medially) 14.5; Gt₇ length (measured medially) 14; Gt₇ width (measured at base) 14; longest cercal seta length 16; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, Parque Internacional La Amistad, Estación Altamira, Casa Coca, LS 332800_574250, 1900m, 12.ix-12.x.2001, malaise trap, D. Rubí (NHMUK).

***Galeopsomyia palenta* Hansson sp.nov.**

(Figs 566, 567, 858)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 858); genal carina present; mesoscutellum (Fig. 566) with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate, submedian

grooves with outer margin indistinct, \pm straight and parallel, subdivided by a few transverse carinae, median part 3.2 \times as long as wide; propodeum (Fig. 566) with strong irregular carinae and reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 566) 1.9 \times as long as wide, medio-basal Gt_1 with longitudinal carinae, tergites with rather strong reticulation.

Female holotype: length of body 2.4mm.

Scape dark brown with basal one-third yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-red, clypeus dark brown, antennal scrobes black; vertex golden-green. Thoracic dorsum golden-green with red tinges. Legs with fore coxa golden-green, mid coxa dark brown, hind coxa golden-red; trochanters yellowish-brown; femora yellowish-brown with basal one-third infuscate; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt_{1-5} golden-green, Gt_{6-7} golden-red; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe without a median groove, with 12 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, \pm straight and parallel, subdivided by a few transverse carinae; with 12 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum medially with a few strong irregular carinae, laterally with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt_1 with longitudinal carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 44; POL 11.5; OOL 6.5; lateral ocellus diameter 5.5; head width 56; mouth width 16; malar space 18.5; eye length 24.5; scape length 21.5; scape width 5; pedicel+flagellum length 68; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 12; F1 width 5; F2 length 11; F2 width 5; F3 length 12; F3 width 5; clava length 22; clava width 6; C3 length 7; spicule length 2; mesosoma length 78; mesosoma width 53; midlobe of mesoscutum length 31; mesoscutellum length 27; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 5.5; propodeum length 14; costal cell length 42; costal cell width (measured at widest part) 3; marginal vein length 39; stigmal vein length 11; gaster length 95; gaster width 51; Gt_2 length (measured medially) 10; Gt_4 length (measured medially) 21; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 13; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Sendero Gigantes, LS 572100_331800, 1460m, 10.iii.2001, D. Rubí (NHMUK).

***Galeopsomyia palotis* Hansson sp.nov.**

(Figs 568, 569, 923, 1089)

Diagnosis (female). Antennal clava solid, flagellum short, funiculars as long as wide (Fig. 1089); genal carina present; entire midlobe of mesoscutum with scattered setae, leaving a median bare stripe (Fig. 568); mesoscutellum (Fig. 568) with weak reticulation on median part, lateral parts with coarse sculpture, with a very weak median groove, submedian grooves with outer margin indistinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 568) with strong reticulation and irregular carinae, callus with five setae; gaster (Fig. 568) 1.8× as long as wide, medio-basal Gt_1 with a strong carina shaped like an inverted U (as in Fig. 26) and with short longitudinal carinae pointing backwards from carina, tergites with strong reticulation, apex of gonoplac blunt (Fig. 569).

Female holotype: length of body 1.7mm.

Scape yellowish-brown, pedicel and flagellum brown. Head with frons metallic bluish, antennal scrobes black and clypeus dark brown; vertex metallic blue. Mesoscutum and mesoscutellum metallic bluish-purple; propodeum black with metallic tinges. Legs with coxae, trochanters and femora dark brown; tibiae and tarsi yellowish-white to yellowish-brown, T4 pale brown. Petiole black. Gaster dark brown, Gt_1 with purple tinges; gonoplac black.

Antenna with solid clava. Frons with strong reticulation, above scrobes with weak reticulation, clypeus smooth; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a bare median stripe and with 15 scattered setae on either side of bare stripe. Mesoscutellum with weak reticulation on median part, lateral parts with coarse sculpture; with a very weak median groove; submedian grooves with outer margin indistinct, straight and parallel; with nine scattered setae. Dorsellum with very weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 3&4 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt_1 with a strong carina shaped like an inverted U and with short longitudinal carina from the carina pointing backwards; tergites with strong reticulation; apex of gonoplac blunt.

Relative measurements: head length, dorsal view 20; head length, frontal view 32; POL 8.5; OOL 4.5; lateral ocellus diameter 3.5; head width 40; mouth width 11; malar space 11; eye length 19; scape length 14; scape width 3; pedicel+flagellum length 35; pedicel length 6.5;

pedicel width, dorsal view 3; F1 length 5; F1 width 3; F2 length 5; F2 width 4; F3 length 4.5; F3 width 4.5; clava length 11.5; clava width 5; C3 length 4.5; spicule length 1.5; mesosoma length 52; mesosoma width 35; midlobe of mesoscutum length 17; mesoscutellum length 20; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 6.5; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 9; costal cell length 30; costal cell width (measured at widest part) 2; marginal vein length 25; stigmal vein length 6; gaster length 65; gaster width 37; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 13.5; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, yellow pan trap, C. Hansson & Parataxonomos (MZLU).

***Galeopsomyia pardis* Hansson sp.nov.**

(Figs 570, 571, 860)

Diagnosis (female). Antenna with a solid clava (Fig. 860); genal carina present but short; mesoscutellum (Fig. 570) with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; outer margin of submedian grooves indistinct, ±straight and diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 570) with strong irregular carinae and strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 570) 1.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 1.7mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-green. Thoracic dorsum metallic bluish-green with golden tinges. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt_{2,4} golden-purple, Gt₅ golden-purple medially and metallic bluish-green laterally, Gt_{6,7} metallic bluish-green; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; genal carina short, present just close to mouth opening. Vertex with strong reticulation outside ocellar triangle, with transverse carinae inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with nine scattered adnotaular

setae. Mesoscutellum with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; outer margin of submedian grooves indistinct, \pm straight and diverging slightly towards posterior part; with nine setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a narrow median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster ovate-elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 33; POL 8; OOL 5; lateral ocellus diameter 4; head width 41; mouth width 13.5; malar space 11; eye length 19; scape length 14.5; scape width 3.5; pedicel+flagellum length 39; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 6; F1 width 3.5; F2 length 6; F2 width 4; F3 length 6; F3 width 5; clava length 12.5; clava width 5; C3 length 4; spicule length 1; mesosoma length 50; mesosoma width 38; midlobe of mesoscutum length 21; mesoscutellum length 20; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 6.5; median part of mesoscutellum, width in anterior part 6; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2; propodeum length 7; costal cell length 28; costal cell width (measured at widest part) 2; marginal vein length 22; stigmal vein length 8.5; gaster length 67; gaster width 37; Gt_2 length (measured medially) 7; Gt_4 length (measured medially) 13; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 12; longest cercal seta length nm; shortest cercal seta length nm.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Reserva Forestal Monte Alto, Cerro Romo, LN 220700_382545, 883m, 27-29.x.2001, swept, I. Jimenez (NHMUK).

***Galeopsomyia patina* Hansson sp.nov.**

(Figs 572, 573, 1092)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1092); genal carina present; mesoscutellum (Fig. 572) with strong reticulation on median part, meshes \pm isodiametric, without median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with a weak median carina; propodeum (Fig. 572) with strong reticulation, callus with five setae; gaster (Fig. 572) 2.7 \times as long as wide, medio-basal Gt_1 with a transverse edge dorsally, tergites with strong reticulation.

Female holotype: length of body 1.9mm.

Scape and pedicel yellowish-brown, flagellum brown. Face below level of toruli golden-green, clypeus dark brown, above level metallic bluish-purple; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-purple. Legs with fore coxa black with metallic bluish-purple tinges, mid coxa dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; fore and mid femora with basal half infuscate and apical half yellowish-brown, hind femur with basal half black with metallic bluish-green tinges and apical half yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₅ metallic purple, Gt₆₋₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a median groove in posterior two-thirds, with ten scattered setae on rugose parts. Mesoscutellum with strong reticulation on median part, meshes ±isodiametric, without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with strong sculpture, with a weak median carina. Propodeum with strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum partly open below; costal setal row broken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a transverse edge dorsally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 8.5; OOL 5; lateral ocellus diameter 4; head width 43; mouth width 15; malar space 10.5; eye length 21; scape length 16.5; scape width 3.5; pedicel+flagellum length 52; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 4; F2 length 8.5; F2 width 4; F3 length 8.5; F3 width 4; clava length 17.5; clava width 4.5; C3 length 6; spicule length 2; mesosoma length 49; mesosoma width 37; midlobe of mesoscutum length 16.5; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 2; propodeum length 5; costal cell length 27; costal cell width (measured at widest part) 2.2; marginal vein length 26; stigmal vein length 8; gaster length 84; gaster width 31; Gt₂ length (measured medially) 6.5; Gt₄ length (measured medially) 12; Gt₇ length (measured medially) 14.5; Gt₇ width (measured at base) 13; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Bahia**, Mucuri, xi.1978, F. Benton (NHMUK).

***Galeopsomyia pava* Hansson sp.nov.**

(Figs 574, 575, 861)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 861); genal carina present; mesoscutellum (Fig. 574) with strong sculpture on median part and with a strong and complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 574) with strong irregular carinae and strong reticulation, callus with four setae; gaster (Fig. 574) 1.9× as long as wide, medio-basal Gt₁ with a transverse carina dorsally and with four longitudinal carinae posterior to carina, tergites with strong reticulation.

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel and flagellum brown. Head black with bluish tinges, clypeus dark brown, antennal scrobes black. Thoracic dorsum black with bluish tinges. Legs with fore and mid coxae dark brown, hind coxa black with bluish tinges; trochanters pale brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ dark brown with metallic tinges, remaining tergites golden-purplish; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric, midlobe striate medially, without a median groove, with ten scattered adnotaular setae. Mesoscutellum with strong sculpture on median part and with a strong and complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with nine setae scattered over lateral parts. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with four setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt₁ with a transverse carina dorsally and with four longitudinal carinae posterior to carina; tergites with strong reticulation.

Relative measurements: head length, dorsal view 18.5; head length, frontal view 30; POL 7; OOL 5.5; lateral ocellus diameter 3.5; head width 41; mouth width 11; malar space 10; eye length 17.5; scape length 15; scape width 3.5; pedicel+flagellum length 43; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 5.5; F1 width 3; F2 length 7.5; F2 width 3; F3 length 7; F3 width 3; clava length 16; clava width 4; C3 length 6; spicule length 1.5; mesosoma length 45; mesosoma width 34; midlobe of mesoscutum length 14; mesoscutellum length 17; mesoscutellum width 17; median part of mesoscutellum width (measured medially) 5; median part of mesoscutellum, width in anterior part 4; median part of mesoscutellum, width in posterior part 6; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2; propodeum length 7; costal cell length 24; costal cell width (measured at widest part) 2; marginal vein length 23; stigmal vein length 7; gaster length 58; gaster width 31; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 11; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Peru.

Material examined.

Holotype ♀ **PERU**, Huanucu, Tingo Maria, Cueva de Las Pavas, 30.i.1984, Lars Huggert (MZLU).

***Galeopsomyia pensada* Hansson sp.nov.**

(Figs 576, 577, 862)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 862); genal carina present; mesoscutellum (Fig. 576) with outer margin of submedian grooves absent, grooves curved and diverging towards posterior part, median part with very weak reticulation, with a very weak median groove, lateral parts rugose with four scattered setae; dorsellum with median carina; propodeum (Fig. 576) with strong irregular carinae mixed with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 576) 1.8× as long as wide, medio-basal Gt₁ with longitudinal short carinae, tergites with weak reticulation.

Female holotype: length of body 2.4mm (paratypes 1.9–2.7mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head with frons golden-green, antennal scrobes black with metallic tinges and clypeus dark brown; vertex metallic bluish-green. Mesosoma golden-red. Legs with fore coxa black with metallic green tinges and apex yellowish-brown, mid coxa dark brown with apex yellowish-brown, hind coxa golden-red with anterior part and apex yellowish-brown; trochanters, femora, tibiae and tarsi yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-red, Gt_{2,5} metallic purple medially and golden laterally, Gt_{6,7} black with golden tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes, midlobe with parts close to notauli rugose, with median groove indicated but very weak; midlobe with 16 setae scattered over rugose parts. Mesoscutellum with median part with very weak reticulation and shiny, lateral parts rugose with four scattered setae; with outer margin of submedian grooves absent, grooves curved and diverging slightly towards posterior part. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae mixed with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal short carinae; tergites with rather weak reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 42; POL 10.5; OOL 5.5; lateral ocellus diameter 6; head width 58; mouth width 16; malar space 14.5; eye length 25.5; scape length 21; scape width 5; pedicel+flagellum length 66; pedicel length 7; pedicel width, dorsal view 4; F1 length 11; F1 width 5.5; F2 length 11; F2 width 5; F3 length 10.5; F3 width 5; clava length 21.5; clava width 6; C3 length 6.5; spicule length 2; mesosoma length 76; mesosoma width 51; midlobe of mesoscutum length 31; mesoscutellum length 27; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 9; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 13; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 4.5; propodeum length 14; costal cell length 39; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 12; gaster length 85; gaster width 48; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 9; Gt₇ width (measured at base) 11.5; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, **Puntarenas**, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratypes (7♀, MZLU, MZUCR, NHMUK): 1♀ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 1♀ COSTA RICA, Puntarenas, San Vito, Las Cruces, 8°46'N, 82°57'W, 1150m, 18-22.iii.1990, J.S. Noyes; 1♀ from same locality as previous but collected 7-19.ii.2007; 1♀ COSTA RICA, Puntarenas, Golfito, Parque Nacional Corcovado, Cerro Rincón, La Tigrilla, LS 274500_523600, 600m, 16.xi-20.xii.2001, J. Azofeifa; 1♀ COSTA RICA, Puntarenas, Estación Agujas, Cerro Quebraditos, LS 521400_274300, 782m, 15.iii-28.iv.2001, malaise trap, J. Azofeifa; 1♀ COSTA RICA, **Alajuela**, Parque Nacional Arenal, 10°28'N, 84°45'W, 617m, 21-28.ii.2005, C. Hansson; 1♀ COSTA RICA, **Limón**, Pococí, Parque Nacional Braulio Carrillo, Estación Quebrada González, LN 238380_543100, 400-500m, 4.vii.2002, P. Hanson & C. Godoy.

Galeopsomyia perasphondyliae Hansson sp.nov.

(Figs 578, 579, 992, 1093)

Diagnosis (female). Antennal clava solid (Fig. 1093); genal carina strong and long, reaching up to level of middle of eye; mesoscutellum (Fig. 578) with strong reticulation on median part and isodiametric meshes, lateral parts with strong reticulation, meshes elongate, submedian grooves indistinct, straight and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 578) with strong reticulation, callus with ten setae; gaster (Fig. 578) elongate, 3.1× as long as wide, medio-basal Gt₁ with a strong transverse carina dorsally, Gt₁₋₄ with a smooth median line, tergites with strong reticulation.

Female holotype: length of body 2.5mm (paratype 2.2mm).

Scape yellowish-white, pedicel and flagellum pale brown (antenna appears bleached by

light). Face below level of toruli metallic bluish-purple, clypeus yellowish-brown, frons metallic-bluish-green, antennal scrobes black; vertex black with blue-green tinges. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-white; femora with basal half dark brown and apical half yellowish-white; tibiae and tarsi yellowish-white. Gaster with Gt_1 black with blue tinges, remaining tergites black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a very weak median groove in posterior one-third, and with ten scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and isodiametric meshes, lateral parts with strong reticulation, meshes elongate; submedian grooves indistinct, straight and diverging towards posterior part; with three setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a strong and wide median carina; with strong reticulation; callus with ten setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole not visible. Gaster elongate; medio-basal Gt_1 with a strong transverse carina dorsally; tergites with strong reticulation, Gt_{1-4} with a smooth median line.

Relative measurements: head length, dorsal view 22; head length, frontal view 41; POL 12; OOL 6; lateral ocellus diameter 4; head width 51; mouth width 15; malar space 16; eye length 21.5; scape length 17; scape width 4.5; pedicel+flagellum length 47; pedicel length 8; pedicel width, dorsal view 4; F1 length 7; F1 width 4.5; F2 length 7; F2 width 4.5; F3 length 6.5; F3 width 5; clava length 16; clava width 6; C3 length 5.5; spicule length 1; mesosoma length 66; mesosoma width 47.5; midlobe of mesoscutum length 23.5; mesoscutellum length 25; mesoscutellum width 24.5; median part of mesoscutellum width (measured medially) 8; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length nm; propodeum length 7; costal cell length 35; costal cell width (measured at widest part) 2.5; marginal vein length 31; stigmal vein length 9; gaster length 110; gaster width 35.5; Gt_2 length (measured medially) 6.5; Gt_4 length (measured medially) 21; Gt_7 length (measured medially) 11; Gt_7 width (measured at base) 11; longest cercal seta length 10; shortest cercal seta length 5.

Male. Length of body 1.7–2.0mm.

Antenna (Fig. 992) with scape gradually expanding towards apex and widest at apex; plaque pale brown and situated close to apex; dorso-basal whorls of long setae present on F1–F4 and C1, and a ventro-basal whorl of long setae on C1. Gaster elongate. Otherwise as in female.

Relative measurements: head length, dorsal view 18; head length, frontal view 36; head width 46; mouth width 13.5; malar space 14; eye length 18.5; scape length 17; scape width 5; plaque length 7; pedicel length 6.5; pedicel+flagellum length 60; F1 length 4.5; F1 width 5; F2 length 6; F2 width 5; F3 length 8.5; F3 width 4.5; F4 length 9; F4 width 3.5; clava length 22; clava width 3.5; mesosoma length 62; mesosoma width 43.5; gaster length 80; gaster width 28; longest subbasal seta on F1, length 23.

Hosts. According to the label data this species was reared from *Perasphondylia odoratum* (Diptera Cecidomyiidae). This name does not appear in the most recent catalogue of Cecidomyiidae (Gagné & Jaschhof 2021); however, one of the host plants of *P. reticulata* Möhn is *Chromolaena odorata* (Asteraceae) so presumably the label refers to the bud gall induced by this cecidomyiid on this plant; *P. reticulata* is recorded from Bolivia as well as Brazil, El Salvador and Mexico.

Distribution. Bolivia.

Material examined.

Holotype ♀ **BOLIVIA**: Santa Cruz, v.1971, from *Perasphondylia odoratum* (NHMUK). Paratypes: 1♀ 2♂ with same label data as holotype (NHMUK).

Etymology. Named after the host.

Galeopsomyia perla Hansson sp.nov.

(Figs 580, 581, 864)

Diagnosis (female). Antennal clava solid (Fig. 864); genal carina present; mesoscutellum (Fig. 580) with median part with strong reticulation and a complete median groove, with submedian grooves curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 580) with strong irregular carinae and strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 580) 3.4× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), Gt₇ 2.0× as long as width at base, tergites with strong reticulation.

Female holotype: length of body 2.3mm (paratype 2.1mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons, including scrobes, and vertex golden-green, clypeus dark brown. Thoracic dorsum golden-green. Legs with coxae golden-green; trochanters dark brown; femora golden-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ with anterior two-thirds metallic bluish-green, posterior one-third and remaining tergites metallic purple; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior half, with nine scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and with a complete median groove, lateral parts with strong reticulation and with six scattered setae, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a wide median carina that expands strongly posteriorly; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ with a sharp

edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 9; OOL 5; lateral ocellus diameter 4; head width 43; mouth width nm; malar space 10.5; eye length 19; scape length 15; scape width 4; pedicel+flagellum length 45; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7; F1 width 5; F2 length 7; F2 width 5; F3 length 7; F3 width 5; clava length 16; clava width 5; C3 length 5; spicule length 1.5; mesosoma length 54; mesosoma width 38; midlobe of mesoscutum length 21.5; mesoscutellum length 21; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 7; costal cell length 31; costal cell width (measured at widest part) 2.2; marginal vein length 28; stigmal vein length 10; gaster length 104; gaster width 31; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 14; Gt₇ length (measured medially) 22; Gt₇ width (measured at base) 11; longest cercal seta length 13; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica, Trinidad & Tobago.

Material examined.

Holotype ♀ **COSTA RICA**, **Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 100m, 14-18.i.1991, J.S. Noyes (NHMUK). Paratype: 1♀ **TRINIDAD**, St George, St Augustine, viii.1976, F.D. Bennett (NHMUK).

Galeopsomyia philodendrae Hansson sp.nov.

(Figs 5, 582, 583, 919, 1095)

Diagnosis (female). Antennal flagellum short and clavate (Fig. 1095); genal carina present; mesoscutellum (Fig. 582) completely flat, in same plane as dorsellum and propodeum, with very weak reticulation on median part, lateral parts with slightly stronger reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part; dorsellum with weak median carina; propodeum (Fig. 582) with strong reticulation, callus with 3–4 setae; gaster (Fig. 582) dorsally flattened, medio-basal Gt₁ with a blunt edge shaped like an inverted U (as in Fig. 24), tergites with engraved and strong reticulation.

Female holotype: length of body 2.3mm (paratypes 1.8–2.6mm).

Scape yellowish-brown with apico-dorsal part pale brown, pedicel brown, flagellum dark brown. Head with frons and vertex golden-green, clypeus dark brown. Thoracic dorsum golden-green. Legs with coxae golden-green; trochanters yellowish-brown; fore and mid femora yellowish-brown, hind femur with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 infusate. Petiole black. Gaster with Gt₁ metallic bluish-green in anterior two-thirds and metallic purple in posterior one-third, remaining tergites metallic purple; gonoplac black.

Antenna with constriction between C1 and C2. Frons with strong reticulation, antennal

scrobes with weak reticulation and clypeus smooth; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with an edge behind ocellar triangle.

Mesoscutum slightly flattened, with strong reticulation, meshes isodiametric on sidelobes, slightly elongate on midlobe; midlobe with a complete median groove, with eight scattered adnotaular setae. Mesoscutellum flat, with very weak reticulation on median part, lateral parts with slightly stronger reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum flat and in same plane as mesoscutellum, with weak sculpture, median carina weak. Propodeum with a strong median carina that expands both anteriorly and posteriorly; with strong reticulation; callus with 3–4 setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with a blunt edge shaped like an inverted U; tergites with engraved and strong reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 36; POL 9.5; OOL 5; lateral ocellus diameter 5.5; head width 50; mouth width 15.5; malar space 12; eye length 22.5; scape length 16; scape width 4.7; pedicel+flagellum length 45; pedicel length 7; pedicel width, dorsal view 4; F1 length 6.5; F1 width 6; F2 length 7; F2 width 6; F3 length 7.5; F3 width 6; clava length 15.5; clava width 7; C3 length 5; spicule length 1; mesosoma length 65; mesosoma width 45; midlobe of mesoscutum length 24; mesoscutellum length 21.5; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 10.5; median part of mesoscutellum, width in anterior part 9; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3; propodeum length 11; costal cell length 37; costal cell width (measured at widest part) 2; marginal vein length 27; stigmal vein length 10; gaster length 103; gaster width 44.5; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 17; Gt_7 length (measured medially) 14.5; Gt_7 width (measured at base) 13.5; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from leaf galls induced by *Monitoriella elongata* Hedqvist (Hymenoptera: Braconidae) on *Philodendron radiatum* (Araceae). (Fig. 5). Evidence from gall dissections suggests that the larva of *G. philodendrae* feeds on the braconid gall-inducer, as opposed to one of the other hymenopterans (Eurytomidae Pirenidae, Pteromalidae) present in these galls (Infante *et al.* 1995).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Limón, 4km NE Bataam, x-xi.1999, P. Hanson (NHMUK). Paratypes (15♀, CNC, MZLU, MZUCR, NHMUK): 11♀ COSTA RICA, Heredia, OTS La Selva, iii-iv.2002, from leaf gall *Philodendron radiatum*, P. Hanson; following from same locality and host as previous but collected 5.iii.1994 (1♀), i.1998 (1♀, this also with information on gallmaker, *Monitoriella* sp.); 1♀ COSTA RICA, Limón, 13km W, 3km N Guápiles, 9.xii.1990, from *Philodendron radiatum* leaf gall, Paul Hanson; 1♀ from same locality as previous but collected 20.xi.1991.

Etymology. Named after host plant of the gall-inducer from which this species was reared.

***Galeopsomyia picuda* Hansson sp.nov.**

(Figs 584, 585, 865)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 865); genal carina present; mesoscutellum (Fig. 584) with median part with strong reticulation with elongate meshes and with a median groove, submedian grooves distinct, diverging slightly towards posterior part; dorsellum with median carina; propodeum (Fig. 584) with strong irregular carinae and strong reticulation, callus with seven setae; gaster (Fig. 584) 2.8× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 3.2mm.

Scape dark brown with inner ventral margin yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green. Mesoscutum metallic bluish-green, mesoscutellum metallic bluish-purple, propodeum golden-green. Legs with coxae metallic bluish-green; trochanters dark brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt_{2,3} metallic bluish-purple in anterior half and golden-purple in posterior half, Gt₄ golden-purple, Gt_{5,6} metallic bluish-green, Gt₇ golden-green; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeal area smooth, frons with strong reticulation/rugosity, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove, with 12 scattered adnotaular setae. Mesoscutellum with strong reticulation on median part, meshes elongate, with median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, diverging slightly towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with strong irregular carinae and strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 45; POL 12.5; OOL 7.5; lateral ocellus diameter 5; head width 59; mouth width 20; malar space 20; eye length 24; scape length 21; scape width 5; pedicel+flagellum length 63; pedicel length 9; pedicel width, dorsal view 5; F1 length 10.5; F1 width 5; F2 length 10; F2 width 5; F3 length 11; F3 width 5; clava length 23.5; clava width 5.5; C3 length 7.5; spicule length 2; mesosoma length 87; mesosoma width 59; midlobe of mesoscutum length 36.5; mesoscutellum length 32; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 13; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 13.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 5; propodeum length 14; costal cell length 49; costal cell width (measured at widest

part) 4; marginal vein length 44; stigmal vein length 13; gaster length 139; gaster width 50; Gt₂ length (measured medially) 15; Gt₄ length (measured medially) 22; Gt₇ length (measured medially) 23; Gt₇ width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, iii.2002, INBio, OET, ALAS (NHMUK).

Galeopsomyia pilonensis Hansson sp.nov.

(Figs 586, 587, 867)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 867); genal carina present; mesoscutellum (Fig. 586) with weak reticulation and elongate meshes on median part, lateral parts rugose, submedian grooves slightly curved and diverging towards both anterior and posterior parts, with outer margin indistinct; dorsellum without median carina; propodeum (Fig. 586) with strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 586) 2.0× as long as wide, medio-basal Gt₁ with longitudinal short carinae, Gt₁₋₄ with weak reticulation.

Female holotype: length of body 2.7mm (paratypes 2.0–2.6mm).

Scape dark brown with base yellowish-brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes golden-purple; vertex metallic bluish-green. Mesoscutum golden, mesoscutellum and propodeum golden-red. Legs with fore and mid coxae metallic bluish-green, hind coxa golden-red; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster with Gt₁ metallic golden, remaining tergites golden-green with purple tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Frons rugose and also with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a very weak median groove, and with 14 scattered setae on rugose parts. Mesoscutellum with weak reticulation with elongate meshes on median part, lateral parts rugose; submedian grooves slightly curved and diverging towards both anterior and posterior parts, with outer margin indistinct; with ten setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with a strong median carina that expands in posterior part, with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum slightly open below; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal short carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 34; POL 8; OOL 5; lateral ocellus diameter 4.5; head width 42.5; mouth width 12.5; malar space 12; eye length 20; scape length 16; scape width 4.5; pedicel+flagellum length 52; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 4; F2 length 9; F2 width 4; F3 length 8.5; F3 width 4.5; clava length 17.5; clava width 5; C3 length 5.5; spicule length 1; mesosoma length 62; mesosoma width 40; midlobe of mesoscutum length 23; mesoscutellum length 22.5; mesoscutellum width 18.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 10; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 9; gaster length 81; gaster width 40; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 7.5; Gt₇ width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Alajuela**, San Carlos, Reserva Forestal Arenal, Sendero Pilón, LN 269100_457900, 600m, 9.iii-7.iv.2000, malaise trap, G. Carballo (NHMUK). Paratypes (2♀, MZLU, NHMUK): 1♀ **COSTA RICA, Alajuela**, San Carlos, Parque Nacional Arenal, Sector Cerro Chato, LN 269500_460900, 1100m, 14.iii-24.iv.2001, G. Carballo; 1♀ **COSTA RICA, Alajuela**, Parque Nacional Arenal, La Peninsula, 10°27'N, 84°45'W, 25.ii.2003, J.S. Noyes.

Etymology. Named after type locality, Sendero Pilón.

***Galeopsomyia piperæ* Hansson sp.nov.**

(Figs 8, 588, 589, 993, 1096)

Diagnosis (female). Antennal clava with all clavomeres distinctly separated (Fig. 1096); genal carina present; mesoscutum (Fig. 588) predominantly rugose with setae scattered all over surface; mesoscutellum (Fig. 588) with median part narrow with strong reticulation and shiny, lateral parts strongly rugose and covered with setae, submedian grooves and median groove missing; dorsellum with an irregular median carina; propodeum (Fig. 588) with strong carinae and strong reticulation, callus with eight setae; fore wing speculum absent, this part covered with setae; petiole transverse with strong longitudinal carinae; gaster (Fig. 588) very long, 4.0× as long as wide, medio-basal Gt₁ with several longitudinal carinae, Gt₁₋₆ with weak reticulation, Gt₇ with strong reticulation. Male flagellum (Fig. 993) with F1 2.3× as long as wide (most other known males in the genus have F1 about as long as wide).

Female holotype: length of body 3.7mm (paratypes 3.5–4.1mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head golden-green with blue tinges, clypeus yellowish-brown. Thoracic dorsum golden-green. Legs with fore and mid coxae yellowish-brown, hind coxa yellowish-brown with postero-basal half dark brown with metallic tinges; trochanters, femora, tibiae and tarsi yellowish-brown. Petiole black. Gaster dark brown to black with golden-green tinges; gonoplac black.

Antenna with clavomeres distinctly separated. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with sidelobes with strong reticulation, meshes isodiametric, midlobe with a median stripe with strong reticulation, meshes isodiametric, remaining parts rugose and covered with setae, without median groove. Mesoscutellum with median part narrow with strong reticulation and shiny, lateral parts strongly rugose and covered with setae; submedian grooves and median groove absent. Dorsellum with strong sculpture, with an irregular median carina. Propodeum with a strong median carina that expands in posterior part; with strong carinae and strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 11&13 setae on dorsal surface of submarginal vein; speculum absent, covered with setae; costal setal row unbroken.

Petiole transverse with strong longitudinal carinae. Gaster very elongate; medio-basal Gt_1 with several longitudinal carinae; Gt_{1-6} with weak reticulation and shiny, Gt_7 with strong reticulation.

Relative measurements: head length, dorsal view 29; head length, frontal view 52; POL 11; OOL 8; lateral ocellus diameter 6; head width 68; mouth width 19; malar space 19; eye length 29; scape length 26; scape width 7; pedicel+flagellum length 100; pedicel length 8.5; pedicel width, dorsal view 5; F1 length 19; F1 width 7; F2 length 18.5; F2 width 7; F3 length 17.5; F3 width 7; clava length 35; clava width 7; C3 length 12.5; spicule length 3.5; mesosoma length 97; mesosoma width 65; midlobe of mesoscutum length 34; mesoscutellum length 36; mesoscutellum width 30; median part of mesoscutellum width (measured medially) 5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 8; dorsellum length 5; propodeum length 15; costal cell length 51; costal cell width (measured at widest part) 3; marginal vein length 65; stigmal vein length 12; gaster length 170; gaster width 43; Gt_2 length (measured medially) 14; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 25; Gt_7 width (measured at base) 15; longest cercal seta length 18; shortest cercal seta length 8.

Male. Length of body 2.6mm.

Antenna (Fig. 993) with scape widest medially; plaque brown and situated in apical half; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster elongate. Otherwise as in female.

Relative measurements: head length, dorsal view 24; head length, frontal view 47; head width 57; mouth width 18; malar space 16; eye length 25; scape length 23.5; scape width 7; plaque length 11; pedicel length 8; pedicel+flagellum length 94; F1 length 11.5; F1 width 5; F2 length 16; F2 width 5; F3 length 15; F3 width 5; F4 length 13.5; F4 width 4.5; clava length 26; clava width 5; mesosoma length 83; mesosoma width 53; gaster length 99; gaster width 33; longest subbasal seta on F1, length 20.

Hosts. Reared from a detachable gall on the stem of *Piper sinugaudens* (Piperaceae) induced by an unidentified Cecidomyiidae. The gall is spherical, 2.5 cm in diameter and covered with green bracts (Fig. 8). It may actually originate from a bud on the stem (P. Hanson, unpublished).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Cartago, Finca Urabá, from Piper gall, M. Blanco (NHMUK). Paratypes (6♀ 1♂, MZLU, MZUCR, NHMUK): 5♀ with same label data as holotype; 1♀ 1♂ COSTA RICA, Alajuela, Estación Biológica A. Brenes, iii.2002, from Piper sinugaud. stem gall, P. Hanson.

Etymology. Named after the host plant of the gall from which this species was reared.

Galeopsomyia preta Hansson sp.nov.

(Figs 590, 591, 863)

Diagnosis (female). Antenna short and stout, clava solid (Fig. 863); genal carina present; mesoscutellum (Fig. 590) with weak reticulation on median part and a weak ±complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum with a weak indistinct median carina; with strong reticulation, callus with four setae; gaster (Fig. 590) 1.6× as long as wide, tergites with strong reticulation, gonoplac short, not protruding beyond apex of Gt, (Fig. 591); body black, mesoscutellum and propodeum with metallic tinges (Figs 590, 591).

Female holotype: length of body 1.3mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head black with metallic tinges, clypeus dark brown. Mesosoma black, mesoscutellum and propodeum with bluish tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora with basal two-thirds dark brown and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with strong reticulation inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a weak but complete median groove, and with nine scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and a weak ±complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with eight setae scattered over lateral parts. Dorsellum with strong sculpture, with a weak indistinct median carina. Propodeum with a strong and narrow median carina; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse. Gaster ovate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 17; head length, frontal view 27; POL 7; OOL 5; lateral ocellus diameter 3.5; head width 35; mouth width 10.5; malar space 9.5; eye

length 15; scape length 15; scape width 3; pedicel+flagellum length 33; pedicel length 4.5; pedicel width, dorsal view 3; F1 length 6; F1 width 3.5; F2 length 5; F2 width 4; F3 length 4.5; F3 width 4; clava length 11; clava width 5; C3 length 4; spicule length 1; mesosoma length 38; mesosoma width 30; midlobe of mesoscutum length 14; mesoscutellum length 13.5; mesoscutellum width 14; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 5.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 2.5; propodeum length 8.5; costal cell length 19; costal cell width (measured at widest part) 1.5; marginal vein length 21; stigmal vein length 6.5; gaster length 45; gaster width 28; Gt₂ length (measured medially) 5.5; Gt₄ length (measured medially) 9; Gt₇ length (measured medially) 3.5; Gt₇ width (measured at base) 9; longest cercal seta length 9; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Estación el Tigre, LS 277800_529600, 34m, 19.i.2003, J. Azoifeifa (NHMUK).

***Galeopsomyia pyrillia* Hansson sp.nov.**

(Figs 592, 593, 869)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 869); genal carina present; mesoscutellum (Fig. 592) with submedian grooves distinct and ±parallel, median part with weak reticulation and without median groove, lateral parts with strong reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 592) with strong reticulation and strong irregular carinae, callus with four setae; fore and mid coxae dark brown, hind coxa black with metallic tinges (Fig. 593); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 592) 1.9× as long as wide, medio-basal Gt₁ with longitudinal short carinae, tergites with strong reticulation, apex of gonoplac blunt (Fig. 593).

Female holotype: length of body 2.2mm (paratypes 1.9mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with metallic blue tinges, antennal scrobes black, clypeus dark brown. Mesosoma black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters yellowish-brown; fore and mid femora dark brown with apex yellowish-brown, hind femur yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ black with metallic blue tinges, G_{2,5} golden-purple, Gt_{6,7} black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong sculpture and reticulation, clypeus smooth, antennal scrobes with weak reticulation; with a strong genal carina that reaches level of lower margin of eye. Vertex with wrinkled sculpture.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with an indistinct but complete median groove, with ten scattered adnotaular

setae. Mesoscutellum with submedian grooves distinct and \pm parallel, median part with weak reticulation and without median groove, lateral parts with strong reticulation and with seven scattered setae, meshes elongate. Dorsellum with weak sculpture, with median carina. Propodeum with a wide median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate-ovate; medio-basal Gt_1 with longitudinal short carinae; tergites with strong reticulation; apex of gonoplac blunt.

Relative measurements: head length, dorsal view 22; head length, frontal view 39; POL 10; OOL 7.5; lateral ocellus diameter 4.5; head width 53; mouth width 16; malar space 15; eye length 21; scape length 20; scape width 4.5; pedicel+flagellum length 62; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 12; F2 width 5; F3 length 11; F3 width 5; clava length 22; clava width 5.5; C3 length 8; spicule length 3; mesosoma length 68; mesosoma width 48; midlobe of mesoscutum length 23; mesoscutellum length 25; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 12.5; costal cell length 38; costal cell width (measured at widest part) 2.5; marginal vein length 37; stigmal vein length 11; gaster length 76; gaster width 41; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 11; Gt_7 length (measured medially) 7.5; Gt_7 width (measured at base) 13; longest cercal seta length 16; shortest cercal seta length 7.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratypes: 2♀ with same label data as holotype (MZLU, NHMUK).

Galeopsomyia reticulata Hansson sp.nov.

(Figs 594, 595, 1097)

Diagnosis (female). Antenna with solid clava (Fig. 1097); genal carina present; mesoscutellum (Fig. 594) with very strong reticulation, meshes isodiametric, with median groove indicated in anterior one-quarter, submedian grooves distinct, close together and diverging towards posterior part; dorsellum without median carina; propodeum (Fig. 594) with strong reticulation and strong carinae, callus with seven setae; gaster (Fig. 594) 2.4× as long as wide, tergites with strong reticulation.

Female holotype: length of body 2.2mm.

Scape and pedicel yellowish-brown, flagellum brown. Head with frons black with metallic blue tinges, antennal scrobes black with metallic tinges, clypeus dark brown; vertex black with metallic blue tinges. Mesoscutum and mesoscutellum black with metallic blue tinges, propodeum golden-green. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters yellowish-brown; femora with basal two-thirds dark brown and apical one-third yellowish-brown; tibiae yellowish-white; T1–3 yellowish-white, T4 yellowish-brown. Petiole black. Gaster with Gt₁ metallic greenish-blue with posterior margin metallic purple, Gt₂₋₆ golden-purple, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina reaching level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with very strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak complete median groove, and with 14 scattered adnotaular setae. Mesoscutellum with very strong reticulation, meshes isodiametric; with median groove indicated in anterior one-quarter; submedian grooves distinct, close and diverging towards posterior part; with 13 setae scattered over lateral parts. Dorsellum with strong sculpture, without median carina. Propodeum with strong median carina that expands in both anterior and posterior parts; with strong irregular carinae and strong reticulation; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 9.5; OOL 4.5; lateral ocellus diameter 4; head width 47.5; mouth width 15; malar space 13; eye length 20.5; scape length 18; scape width 3.5; pedicel+flagellum length 50; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 8.5; F1 width 4; F2 length 9; F2 width 4; F3 length 8; F3 width 4; clava length 17; clava width 4.5; C3 length 5.5; spicule length 1.5; mesosoma length 56; mesosoma width 42; midlobe of mesoscutum length 21; mesoscutellum length 21; mesoscutellum width 22; median part of mesoscutellum width (measured medially) 6; median part of mesoscutellum, width in anterior part 5.5; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 2; propodeum length 7.5; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 30; stigmal vein length 9; gaster length 100; gaster width 41; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 19; Gt₇ length (measured medially) 16; Gt₇ width (measured at base) 12; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Reserva Privada Karen Mogensen, 9°52'N, 85°03'W, 305m, 20.ii.2009, J.S. Noyes (NHMUK).

Etymology. Named for the strong reticulation on thoracic dorsum.

***Galeopsomyia roupalae* Hansson sp.nov.**

(Figs 596, 597, 1094)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1094); genal carina present; mesoscutellum (Fig. 596) with narrow median part with strong reticulation and a complete median groove, lateral parts rugose, submedian grooves indistinct; dorsellum with median carina; propodeum (Fig. 596) with strong irregular carinae and strong reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 596) 2.2× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.7mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with blue-green tinges, clypeus dark brown, antennal scrobes black. Thoracic dorsum black with blue-green tinges. Legs with coxae black with blue tinges; trochanters brown; femora dark brown to black; fore and mid tibiae with basal half brown and apical half yellowish-brown, hind tibia yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₅ metallic purple dorsally, black with golden-green tinges laterally, Gt₆₋₇ black with blue-green tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with transverse irregular carinae.

Mesoscutum with strong reticulation on sidelobes, meshes isodiametric, rugose on midlobe; midlobe with a wide median groove, with 16 scattered adnotaular setae. Mesoscutellum with narrow median part with strong reticulation and a complete median groove, lateral parts rugose with 15 scattered setae; submedian grooves indistinct. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 30; head length, frontal view 50; POL 12; OOL 8; lateral ocellus diameter 5.5; head width 65; mouth width 22; malar space 19.5; eye length 27; scape length 25; scape width 5; pedicel+flagellum length 65; pedicel length 9; pedicel width, dorsal view 4; F1 length 11; F1 width 6; F2 length 11.5; F2 width 6; F3 length 10; F3 width 6; clava length 20; clava width 7; C3 length 6; spicule length 1; mesosoma length 83; mesosoma width 57; midlobe of mesoscutum length 30; mesoscutellum length 32; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 9; dorsellum length 4; propodeum length 12; costal cell length 40; costal cell width (measured at widest part) 3.5; marginal vein length 37; stigmal vein length 11; gaster length 107; gaster width 48; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 12; Gt₇ length (measured

medially) 20; Gt₇ width (measured at base) 17.5; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Reared from a blister-like leaf gall induced by an unidentified Cecidomyiidae on *Roupala* sp. (Proteaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Alajuela, Reserva Forestal Grecia, 1500m, 18.iii.1992, from *Roupala* leaf gall, P. Hanson (NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

***Galeopsomyia rugosa* Hansson sp.nov.**

(Figs 598, 599, 870)

Diagnosis (female). Antenna with constriction between all clavomeres, especially distinct between C1 and C2 (Fig. 870); genal carina present; mesoscutellum (Fig. 598) completely rugose without submedian grooves but with a narrow raised stripe medially, lateral parts with setae all over; dorsellum without median carina; propodeum (Fig. 598) with strong reticulation and irregular carinae, callus with five setae; gaster (Fig. 598) 2.3× as long as wide, medio-basal Gt₁ with several longitudinal short carinae, tergites with strong reticulation.

Female holotype: length of body 2.5mm.

Scape yellowish-brown with apical one-fifth infusate, pedicel and flagellum dark brown. Face below level of toruli golden-green with clypeus dark brown, above toruli metallic blue, antennal scrobes black with metallic tinges; vertex metallic blue. Mesoscutum and mesoscutellum golden-green with blue tinges; propodeum golden-green. Legs with fore and hind coxae black with metallic blue tinges, mid coxa dark brown; trochanters yellowish-brown; femora yellowish-brown with base infusate; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁₋₆ metallic greenish-blue, Gt₇ black; gonoplac black.

Antenna with a strong constriction between C1 and C2 and weak constriction between C2 and C3. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior part of posterior ocelli.

Mesoscutum with very strong reticulation, meshes isodiametric on sidelobes, slightly elongate to isodiametric on midlobe; with 26 scattered adnotaular setae. Mesoscutellum rugose; submedian grooves absent; with setae scattered over entire part except a bare median narrow stripe. Dorsellum with strong sculpture, without median carina. Propodeum with a strong and wide median carina that expands both anteriorly and posteriorly; with strong reticulation and strong irregular carinae; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse, dorsal part with strong sculpture. Gaster elongate; medio-basal Gt_1 with several longitudinal short carinae; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 42; POL 11; OOL 6.5; lateral ocellus diameter 5; head width 54; mouth width 17; malar space 16; eye length 23; scape length 20; scape width 4.5; pedicel+flagellum length 63; pedicel length 7; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 11; F2 width 5; F3 length 10.5; F3 width 5; clava length 21.5; clava width 5; C3 length 7; spicule length 2; mesosoma length 71; mesosoma width 50; midlobe of mesoscutum length 24; mesoscutellum length 27.5; mesoscutellum width 25; median part of mesoscutellum width (measured medially); median part of mesoscutellum, width in anterior part; median part of mesoscutellum, width in posterior part; lateral part of mesoscutellum, width (measured medially); dorsellum length 3.5; propodeum length 12; costal cell length 37; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 10; gaster length 100; gaster width 44; Gt_2 length (measured medially) 9; Gt_4 length (measured medially) 14.5; Gt_7 length (measured medially) 13; Gt_7 width (measured at base) 15.5; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK).

Etymology. Name referring to the rugose sculpture on mesoscutellum.

***Galeopsomyia scarpia* Hansson sp.nov.**

(Figs 600, 601, 1090)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1090); genal carina present; mesoscutellum (Fig. 600) elongate, 1.2× as long as wide, with strong reticulation on median part and with a weak median groove in anterior two-thirds, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, slightly curved and diverging towards posterior part; dorsellum with median carina; propodeum (Fig. 600) medially with a few strong irregular carinae, laterally with strong reticulation, callus with four setae; petiole very short, just a narrow band; gaster (Fig. 600) 3.0× as long as wide, medio-basal Gt_1 with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 2.6mm.

Scape yellowish-brown with apico-dorsal part dark brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black. Thoracic dorsum golden-green. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters dark brown; fore and mid femora dark brown with apex yellowish-brown, hind femur golden-green with apex yellowish-brown;

tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic golden-green, Gt_{2,4} golden-purple with anterior margin metallic bluish-green, Gt_{5,7} metallic bluish-green; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; midlobe with a median groove in posterior half, with 13 scattered adnotaular setae. Mesoscutellum with strong reticulation on median part and with a weak median groove in anterior two-thirds, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, slightly curved and diverging towards posterior part; with six setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum medially with a few strong irregular carinae, laterally with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 24; head length, frontal view 41; POL 12; OOL 7; lateral ocellus diameter 4.5; head width 52; mouth width 18; malar space 13; eye length 30; scape length 18; scape width 5; pedicel+flagellum length 57; pedicel length 7.5; pedicel width, dorsal view 4.2; F1 length 8; F1 width 5; F2 length 9; F2 width 5.5; F3 length 9.5; F3 width 6; clava length 21; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 73; mesosoma width 51; midlobe of mesoscutum length 28; mesoscutellum length 28; mesoscutellum width 23; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 10.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 12; costal cell length 37; costal cell width (measured at widest part) 3; marginal vein length 42; stigmal vein length 11; gaster length 116; gaster width 39; Gt₂ length (measured medially) 11.5; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 19; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 6.

Male. Unknown.

Hosts. Reared from stem gall induced by *Procecidochares* sp. (Diptera: Tephritidae) on *Ageratina* sp. (Asteraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, San José, San Gerardo de Dota, 9°34'N, 83°43'W, 6.viii.1995, from *Procecidochares*, *Ageratina*, A. Norrbom (NHMUK).

***Galeopsomyia schefflerae* Hansson sp.nov.**

(Figs 602, 603, 868, 994)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 868); genal carina present; mesoscutellum (Fig. 602) with median part with very weak reticulation, lateral parts rugose, outer margin of submedian grooves absent; dorsellum with median carina; propodeum (Fig. 602) with strong reticulation, propodeal callus with three setae; petiole transverse with some longitudinal carinae; gaster (Fig. 602) 2.5× as long as wide, relatively narrow, 0.82× as wide as width of mesoscutum, medio-basal Gt₁ with a carina shaped like an inverted U (as in Fig. 26), tergites with very strong large-meshed reticulation and with dorsal part ±flattened.

Female holotype: length of body 2.1mm (paratypes 2.2–2.6mm).

Scape dark yellowish-brown with dorsal edge brown, pedicel and flagellum dark brown. Head with frons, including scrobes, and vertex metallic bluish-green, clypeus dark brown. Mesoscutum and mesoscutellum golden-green, propodeum black with golden-green tinges. Legs with fore and hind coxae golden-green, mid coxa dark brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 dark brown. Petiole black. Gaster black with golden-green tinges; gonoplac black.

Antenna with a strong constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe rugose close to notauli; with a weak but complete median groove; with 11 scattered setae on rugose parts. Mesoscutellum with median part with very weak reticulation, lateral parts rugose; outer margin of submedian grooves absent; lateral parts with 14 scattered setae. Dorsellum with weak sculpture and shiny, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with some longitudinal carinae, otherwise smooth and shiny. Gaster elongate; medio-basal Gt₁ with a carina shaped like an inverted U; tergites with very strong reticulation with large meshes and dorsal surface ±flattened.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; POL 11.5; OOL 6.5; lateral ocellus diameter 4; head width 44; mouth width 14; malar space 12.5; eye length 18; scape length 19; scape width 4; pedicel+flagellum length 51; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7; F1 width 5; F2 length 9.5; F2 width 5; F3 length 8; F3 width 5; clava length 17.5; clava width 6; C3 length 6; spicule length 1.5; mesosoma length 63; mesosoma width 42; midlobe of mesoscutum length 24.5; mesoscutellum length 24; mesoscutellum width 20.5; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 10; costal cell length 32; costal cell width (measured at widest part) 2.5; marginal vein length 36; stigmal vein length 11; gaster length 90; gaster width 36; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 16.5; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 14; longest cercal seta length 13; shortest cercal seta length 7.

Male. Length of body 2.0–2.2mm.

Antenna (Fig. 994) with scape triangular, gradually expanding towards apex; plaque dark brown and reaching from apex and backwards; dorso-basal whorls of long setae present on F1–F4 and C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 35; head width 48; mouth width 13.5; malar space 12; eye length 19; scape length 20; scape width 7.5; plaque length 10; pedicel length 6.5; pedicel+flagellum length 65; F1 length 4.5; F1 width 4.5; F2 length 8; F2 width 4.5; F3 length 9; F3 width 4; F4 length 10; F4 width 4; clava length 24; clava width 4; mesosoma length 66; mesosoma width 42; gaster length 70; gaster width 32; longest subbasal seta on F1, length 37.

Hosts. Reared from a leaf gall induced by an unidentified Cecidomyiidae on *Schefflera rodriguesiana* (Araliaceae). The gall is spherical, up to 10 mm in diameter, detachable and usually found on the underside of the leaf.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Heredia, 6km ENE Vara Blanca, 10°11'N, 84°07'W, 2000m, 10.iii.2002, INBio, OET, ALAS (NHMUK). Paratypes (4♀ 2♂, MZLU, NHMUK): COSTA RICA, Cartago, Rio Macho, v.1998, *Schefflera rodriguesiana* spherical leaf gall.

Etymology. Named after the host plant of the gall from which this species was reared.

Remarks. The female paratypes are bleached by light.

Galeopsomyia teronadis Hansson sp.nov.

(Figs 604, 605, 866)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 866); with a short and weak genal carina close to mouth opening; mesoscutellum (Fig. 604) with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and diverging towards posterior part, outer margin indistinct in anterior half; propodeum (Fig. 604) with strong irregular carinae, callus with two setae; petiole transverse; gaster (Fig. 604) 2.1× as long as wide, medio-basal Gt₁ with dorsal part rounded, tergites with strong reticulation.

Female holotype: length of body 1.9mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with coxae metallic bluish-green; trochanters pale brown; femora metallic bluish-green with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,6,7} metallic bluish-green, Gt_{2,5} golden-purple; gonoplac dark brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation;

with a short and weak genal carina close to mouth opening. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove, and with ten scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging towards posterior part, outer margin indistinct in anterior half; with ten setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that is gradually expanding towards posterior part; with strong irregular carinae; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with dorsal part rounded; tergites with strong reticulation.

Relative measurements: head length, dorsal view 20.5; head length, frontal view 35; POL 9.5; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 14; malar space 10.5; eye length 20; scape length 16; scape width 4; pedicel+flagellum length 46; pedicel length 6; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4; F2 length 7.5; F2 width 4.5; F3 length 7; F3 width 4.5; clava length 16; clava width 5.5; C3 length 5.5; spicule length 1; mesosoma length 56; mesosoma width 41; midlobe of mesoscutum length 24; mesoscutellum length 21.5; mesoscutellum width 21; median part of mesoscutellum width (measured medially) 8.5; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 9.5; lateral part of mesoscutellum, width (measured medially) 4; dorsellum length 3; propodeum length 6; costal cell length 30; costal cell width (measured at widest part) 2.5; marginal vein length 26; stigmal vein length 11; gaster length 81; gaster width 38; Gt_2 length (measured medially) 8.5; Gt_4 length (measured medially) 13.5; Gt_7 length (measured medially) 10; Gt_7 width (measured at base) 12; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Maritza, LN 326900_373000, 500m, 25.i-2.ii.2001, Thomas, Rio, Moraga (NHMUK).

***Galeopsomyia tigrensis* Hansson sp.nov.**

(Figs 606, 607, 873)

Diagnosis (female). Antenna with solid clava (Fig. 873); genal carina present; mesoscutellum (Fig. 606) with very weak reticulation on median part and with a weak median groove in anterior half, lateral parts with strong reticulation, meshes elongate, submedian grooves

distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 606) with strong irregular carinae, median carina narrow, callus with five setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 606) ovate-elongate, 1.5× as long as wide, tergites with strong reticulation.

Female holotype: length of body 1.6mm (paratypes 1.7mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head metallic blue, clypeus dark brown. Thoracic dorsum metallic blue. Legs with fore and hind coxae black, mid coxa brown; trochanters yellowish-brown; femora with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic blue, remaining tergites golden-purple; gonoplac black.

Antenna with solid clava. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with an edge behind ocellar triangle.

Mesoscutum with strong reticulation, strongest on midlobe close to notauli, meshes isodiametric on sidelobes, elongate on midlobe; with a median groove in posterior half; with 11 scattered adnotaular setae. Mesoscutellum with very weak reticulation on median part and with a weak median groove in anterior half, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with nine setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a strong and narrow median carina; with strong irregular carinae and strong reticulation; callus with five setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 9.5; OOL 5.5; lateral ocellus diameter 4.5; head width 46; mouth width 12.5; malar space 11; eye length 19.5; scape length 15.5; scape width 4; pedicel+flagellum length 44; pedicel length 6.5; pedicel width, dorsal view 4; F1 length 7.5; F1 width 4; F2 length 7; F2 width 4; F3 length 6; F3 width 4; clava length 14; clava width 5; C3 length 5; spicule length 1; mesosoma length 54; mesosoma width 41; midlobe of mesoscutum length 20; mesoscutellum length 20; mesoscutellum width 18; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 6.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 10; costal cell length 27; costal cell width (measured at widest part) 1.6; marginal vein length 26; stigmal vein length 8; gaster length 57; gaster width 39; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 10.5; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 11; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Puntarenas**, Golfito, Estación el Tigre, LS 529600_277800, 30m, 19.vii. 2000. swept, J. Azofeifa (NHMUK). Paratype: 1♀ with same label data as holotype (MZLU).

Etymology. Named after type locality, Estación el Tigre.

***Galeopsomyia triozae* Hansson sp.nov.**

(Figs 608, 609, 872)

Diagnosis (female). Antennal clava solid (Fig. 872); genal carina present; mesoscutellum (Fig. 608) with strong reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, ±straight and parallel; dorsellum with median carina; propodeum (Fig. 608) with strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 608) 2.1× as long as wide, medio-basal Gt₁ with a ±sharp edge shaped like an inverted U, tergites with strong reticulation.

Female holotype: length of body 1.8mm (paratypes 1.5–2.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with fore and mid coxae dark brown to black, hind coxa golden-green; trochanters brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin golden-purple, Gt_{2,4} golden-purple, Gt_{5,6} metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a weak but ±complete median groove, with 12 scattered setae on rugose parts. Mesoscutellum with strong reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, ±straight and parallel; with seven setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; medio-basal Gt₁ with a ±sharp edge shaped like an inverted U; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 34; POL 9.5; OOL 5.5; lateral ocellus diameter 4; head width 46; mouth width 15; malar space 11; eye length 21; scape length 14.5; scape width 3.5; pedicel+flagellum length 45; pedicel length 6; pedicel width, dorsal view 4; F1 length 6.5; F1 width 4.5; F2 length 6.5; F2 width 5; F3 length 6.5; F3 width 5; clava length 15; clava width 5.5; C3 length 5; spicule length 1.5; mesosoma length 60; mesosoma width 43; midlobe of mesoscutum length 25; mesoscutellum length 23.5; mesoscutellum width 22.5; median part of mesoscutellum width (measured medially)

10; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 11; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 8; costal cell length 31; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 11; gaster length 68; gaster width 33; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 10; Gt₇ length (measured medially) 10; Gt₇ width (measured at base) 14; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Reared from trioqid leaf gall (Hemiptera: Triozidae) on *Pseudolmedia glabrata* (Moraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, San José, Santa Maria de Dota, from trioqid gall *Pseudolmedia glabrata*, I. Jiménez [no date] (NHMUK). Paratypes: 5♀ with same label data as holotype (MZLU, MZUCR, NHMUK).

Etymology. Named after the host, an unidentified species of Triozidae.

***Galeopsomyia truncata* Hansson sp.nov.**

(Figs 610, 611, 876, 995)

Diagnosis (female). Antenna with a weak to distinct constriction between C1 and C2 (Fig. 876); genal carina present; mesoscutellum (Fig. 610) with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum with weak median carina; propodeum (Fig. 610) with strong reticulation, callus with four setae; fore and mid coxae dark brown, hind coxa metallic (Fig. 611); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 610) 1.9× as long as wide, medio-basal Gt₁ with several longitudinal short carinae, tergites with strong reticulation, tip of gonoplac abruptly cut off and blunt (Fig. 611).

Female holotype: length of body 1.9mm (paratypes 1.4–2.0mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head, mesosoma and gaster black. Legs with coxae dark brown to black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae and tarsi yellowish-brown.

Antenna with a weak to distinct constriction between C1 and C2. Frons with strong reticulation, clypeus smooth, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a median groove in posterior half, with eight scattered adnotaular setae. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with seven setae scattered over lateral parts. Dorsellum with strong reticulation, with a weak median carina. Propodeum

with a wide median carina that expands anteriorly and posteriorly and with expanded parts concave; with strong reticulation; callus with four setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum small and closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with several longitudinal short carinae; tergites with strong reticulation; tip of gonoplac blunt.

Relative measurements: head length, dorsal view 21; head length, frontal view 35; POL 9.5; OOL 7.5; lateral ocellus diameter 3.5; head width 47; mouth width 11; malar space 14; eye length 17.5; scape length 16.5; scape width 4; pedicel+flagellum length 49; pedicel length 5.5; pedicel width, dorsal view 3.5; F1 length 6; F1 width 4; F2 length 8; F2 width 4; F3 length 7; F3 width 4; clava length 19; clava width 4.5; C3 length 7; spicule length 2.5; mesosoma length 61; mesosoma width 41; midlobe of mesoscutum length 21.5; mesoscutellum length 22; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 8; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 4; propodeum length 10.5; costal cell length 31; costal cell width (measured at widest part) 2; marginal vein length 31; stigmal vein length 9.5; gaster length 69; gaster width 36; Gt_2 length (measured medially) 8; Gt_4 length (measured medially) 10; Gt_7 length (measured medially) 7; Gt_7 width (measured at base) 14; longest cercal seta length 9; shortest cercal seta length 5.

Male. Length of body 1.4–1.9mm.

Antenna (Fig. 995) with plaque on scape dark brown and situated below apex of scape; dorso-basal whorls of long setae present on F1–F4 and on C1, C1 also with a ventro-basal whorl of long setae. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 37; head width 49; mouth width 13; malar space 15; eye length 19; scape length 18; scape width 5.5; plaque length 6; pedicel length 6; pedicel+flagellum length 70; F1 length 5; F1 width 4; F2 length 7; F2 width 4; F3 length 10.5; F3 width 3.5; F4 length 12; F4 width 3.5; clava length 26.5; clava width 3.5; mesosoma length 66; mesosoma width 45; gaster length 70; gaster width 36; longest subbasal seta on F1, length 26.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Puntarenas, San Vito, Estación Biológica Las Alturas, 8°57'N, 82°50'W, 1500m, 17-18.ii.2012, J.S. Noyes (NHMUK). Paratypes (10♀ 4♂, CNC, MZLU, MZUCR, NHMUK): 7♀ 3♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 3♀ 1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, C. Hansson & Parataxonomos.

Etymology. From the Latin *truncus* = cut off, referring to tip of gonoplac abruptly cut off and blunt.

Galeopsomyia umanai Hansson sp.nov.

(Figs 612, 613, 874)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 874); genal carina present; mesoscutellum (Fig. 612) with weak reticulation on median part and without median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin indistinct, subdivided by transverse carinae, \pm straight and \pm parallel; dorsellum with median carina; propodeum (Fig. 612) medially with strong irregular carinae and laterally with strong reticulation, callus with two setae; petiole very short, just a narrow band; gaster (Fig. 612) 2.8 \times as long as wide, medio-basal Gt₁ with six longitudinal carinae; tergites with weak reticulation.

Female holotype: length of body 3.1mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black; vertex black with parts lateral to ocellar triangle with blue tinges. Thoracic dorsum black with golden and golden-green tinges. Legs with fore and mid coxae dark brown, hind coxa black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ black with golden-green tinges, Gt₂₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe; midlobe with a median groove in posterior two-thirds, and with 12 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin indistinct, subdivided by transverse carinae, \pm straight and \pm parallel; with eight setae scattered over lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a strong median carina that expands anteriorly and posteriorly; medially with strong irregular carinae and laterally with strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with three setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt₁ with six longitudinal carinae; tergites with weak reticulation.

Relative measurements: head length, dorsal view 29; head length, frontal view 47; POL 11; OOL 7; lateral ocellus diameter 6; head width 60.5; mouth width 20; malar space 18; eye length 25.5; scape length 22; scape width 6; pedicel+flagellum length 73; pedicel length 8.5; pedicel width, dorsal view 4.5; F1 length 14; F1 width 6; F2 length 13; F2 width 6; F3 length 12; F3 width 6; clava length 23; clava width 6; C3 length 7; spicule length 2; mesosoma length 80; mesosoma width 53.5; midlobe of mesoscutum length 31.5; mesoscutellum length 28; mesoscutellum width 23.5; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8.5; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 12; costal cell length 44; costal cell width (measured at widest

part) 3; marginal vein length 42; stigmal vein length 11.5; gaster length 132; gaster width 47; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 31; Gt_7 length (measured medially) 19; Gt_7 width (measured at base) 16; longest cercal seta length 17; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Limón**, Valle de la Estrella, Reserva Biológica Hitoy Cerere, Sendero Toma de Agua, LN 643400_184600, 100m, 19.x-19.xi.2000, malaise trap, F. Umaña (NHMUK).

Etymology. Named in honour of Francisco “Chico” Umaña, former parataxonomist at INBio and collector of type specimen.

Galeopsomyia veluda **Hansson sp.nov.**

(Figs 616, 617, 875)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 875); genal carina present; mesoscutellum (Fig. 616) with median part with weak reticulation, submedian grooves curved and diverging towards both anterior and posterior parts, subdivided by several transverse carinae and with outer margin indistinct, lateral parts with strong reticulation; dorsellum without median carina; propodeum (Fig. 616) with strong irregular carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 616) 2.2× as long as wide, medio-basal Gt_1 with longitudinal carinae, $Gt_{1,3}$ with weak reticulation, $Gt_{4,7}$ with strong reticulation.

Female holotype: length of body 1.7mm.

Scape yellowish-brown with apico-dorsal part brown, pedicel and flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black; vertex metallic bluish-green with purple tinges. Thoracic dorsum golden-green. Legs with fore and hind coxae black with metallic bluish-green tinges, mid coxa dark brown; trochanters yellowish-brown; femora with basal half fuscous and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 metallic bluish-green, $Gt_{2,5}$ golden-purple, $Gt_{6,7}$ golden-green; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe without a median groove, with 15 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and without median groove, submedian grooves curved and diverging towards anterior and posterior parts,

subdivided by transverse carinae and with outer margin indistinct; lateral parts with strong reticulation and with 12 scattered setae. Dorsellum with strong reticulation, without median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal carinae; Gt₁₋₃ with weak reticulation, Gt₄₋₇ with strong reticulation.

Relative measurements: head length, dorsal view 18.5; head length, frontal view 34.5; POL 9; OOL 5; lateral ocellus diameter 4; head width 41.5; mouth width 11.5; malar space 13; eye length 18; scape length 17; scape width 4; pedicel+flagellum length 51; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 8; F1 width 4; F2 length 8.5; F2 width 4; F3 length 7.5; F3 width 4.5; clava length 17.5; clava width 5; C3 length 5.5; spicule length 1.5; mesosoma length 56; mesosoma width 41; midlobe of mesoscutum length 23; mesoscutellum length 22; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 5.5; median part of mesoscutellum, width in anterior part 7; median part of mesoscutellum, width in posterior part 8.5; lateral part of mesoscutellum, width (measured medially) 3.5; dorsellum length 3; propodeum length 9.5; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 35; stigmal vein length 10; gaster length 83; gaster width 37; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Buenos Aires, Estación Altamira, Sendero Los Gigantes, LS 572200_331700, 1450m, 15.vii-16.viii 2000, D. Rubí (NHMUK).

***Galeopsomyia ventrosa* Hansson sp.nov.**

(Figs 618, 619, 1100)

Diagnosis (female). Antennal clava with a weak constriction between C1 and C2 (Fig. 1100); genal carina present; mesoscutellum (Fig. 618) with weak reticulation on median part and with a weak median groove in anterior two-thirds, lateral parts with strong reticulation, meshes elongate, submedian grooves distinct, straight and parallel; dorsellum with median carina; propodeum (Fig. 618) medially with a few strong irregular carinae, laterally with strong reticulation, callus with six setae; petiole transverse with strong sculpture on dorsal surface; gaster (Fig. 618) 3.1× as long as wide, medio-basal Gt₁ with longitudinal sharp edges laterally, tergites with strong reticulation.

Female holotype: length of body 3.0mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Face below level of toruli golden-green, clypeus dark brown, frons metallic bluish-green, antennal scrobes black. Thoracic dorsum metallic bluish-green. Legs with fore coxa dark brown with metallic blue tinges, mid coxa dark brown, hind coxa golden-green; trochanters dark brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₅ golden-purple, Gt₆ metallic bluish-green, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe rugose close to notauli; midlobe with a median groove in posterior two-thirds, with 16 scattered setae on rugose parts. Mesoscutellum with weak reticulation on median part and with a weak median groove in anterior two-thirds, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with six setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum medially with a few strong irregular carinae, laterally with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 4&5 setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with longitudinal sharp edges laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 45; POL 11; OOL 7; lateral ocellus diameter 6; head width 59; mouth width 20; malar space 17; eye length 27; scape length 21; scape width 5; pedicel+flagellum length 62; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 9; F1 width 6; F2 length 10.5; F2 width 6; F3 length 10; F3 width 6; clava length 21.5; clava width 6.5; C3 length 7; spicule length 2; mesosoma length 80; mesosoma width 60; midlobe of mesoscutum length 33; mesoscutellum length 29; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 11.5; median part of mesoscutellum, width in anterior part 11.5; median part of mesoscutellum, width in posterior part 12; lateral part of mesoscutellum, width (measured medially) 5.5; dorsellum length 4; propodeum length 12; costal cell length 41; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 11; gaster length 137; gaster width 44; Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 18; Gt₇ length (measured medially) 26; Gt₇ width (measured at base) 16; longest cercal seta length 16; shortest cercal seta length 7.

Male. Unknown.

Hosts. Reared from leaf galls (swelling of veins) induced by an unidentified Agromyzidae (Diptera) on *Casearia commersoniana* (Salicaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, San José**, Universidad de la Paz, xii.2004, from agromyzid leaf gall on *Casearia comers.*, P. Hanson (NHMUK).

***Galeopsomyia verbesinae* Hansson sp.nov.**

(Figs 620, 621, 878, 996)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 878); genal carina present and strong; mesoscutellum (Fig. 620) with weak reticulation on median part, meshes elongate, and with a complete median groove, submedian grooves distinct, straight and diverging slightly towards posterior part; dorsellum with median carina; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 620) 2.9× as long as wide, medio-basal Gt₁ with a sharp edge shaped like an inverted U (as in Fig. 24), tergites with weak reticulation, gonoplac elongate, as long as length of hind femur (Fig. 621).

Female holotype: length of body 2.6mm (paratypes 2.4mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum metallic bluish-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black; trochanters pale brown; femora with basal two-thirds black with golden-green tinges and apical one-third yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_{1,6} metallic bluish-green, Gt_{2,5} golden-purple, Gt₇ black; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with a strong genal carina, reaching to level of lower margin of eye. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe; midlobe with a weak median groove in posterior half, with 12 scattered adnotaular setae. Mesoscutellum with weak reticulation on median part and with a complete median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and diverging slightly towards posterior part; with seven setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum medially with strong irregular carinae and laterally with strong reticulation; callus with six setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with a sharp edge shaped like an inverted U; tergites with weak reticulation.

Relative measurements: head length, dorsal view 23; head length, frontal view 41; POL 10.5; OOL 6; lateral ocellus diameter 4.5; head width 54; mouth width 15; malar space 15.5; eye length 24; scape length 18; scape width 4.5; pedicel+flagellum length 54; pedicel length 7; pedicel width, dorsal view 4; F1 length 8.5; F1 width 5; F2 length 8.5; F2 width 5; F3 length 8; F3 width 5.5; clava length 18.5; clava width 6; C3 length 6.5; spicule length 2; mesosoma length 71; mesosoma width 49; midlobe of mesoscutum length 28.5; mesoscutellum length 26; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 9.5; median part of mesoscutellum, width in anterior part 9.5; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 3.5; propodeum length 6; costal cell length 34; costal cell width (measured at widest part) 3; marginal vein length 34; stigmal vein length 10.5; gaster length 121; gaster width 42;

Gt₂ length (measured medially) 11; Gt₄ length (measured medially) 21; Gt₇ length (measured medially) 17; Gt₇ width (measured at base) 13; longest cercal seta length 14; shortest cercal seta length 7.

Male. Length of body 1.2–2.0mm.

Antenna (Fig. 996) with scape widest in the middle; plaque brown and situated just above of the middle but does not reach apex; dorso-basal whorls of long setae present on F1–F4 and C, with a ventro-basal whorl of long setae on C1. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 20; head length, frontal view 38; head width 50; mouth width 12.5; malar space 13.5; eye length 21; scape length 17; scape width 5; plaque length 7; pedicel length 7; pedicel+flagellum length 73; F1 length 5; F1 width 4.5; F2 length 9; F2 width 4.5; F3 length 11; F3 width 4; F4 length 11.5; F4 width 3.5; clava length 28.5; clava width 3.5; mesosoma length 68; mesosoma width 44; gaster length 75; gaster width 34; longest subbasal seta on F1, length 30.

Hosts. Reared from leaf gall induced by an unidentified Cecidomyiidae on *Verbesina turbaensis* (Asteraceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Guanacaste, Bosque Nacional Diría, Cerro Retallano, Alrededores Torre de Control de Incendio, LN 238550_358650, 600-700m, 18.ix-18.x.2001, malaise trap, I. Jiménez (NHMUK). Paratypes: 3♀ 14♂ COSTA RICA, Guanacaste, Reserva Forestal Monte Alto, Hojancha, 17.viii.2001, from cecid gall *Verbesina turb.*, I. Jimenez (MZLU, MZUCR, NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared

Galeopsomyia weinmanniae Hansson sp.nov.

(Figs 614, 615, 871)

Diagnosis (female). Antennal clava with distinct constriction between C1 and C2 (Fig. 871); genal carina present; mesoscutellum (Fig. 614) with median part with weak reticulation and with a very weak median groove in anterior half, lateral parts with very strong reticulation with numerous white setae all over; dorsellum with median carina; propodeum (Fig. 614) with strong reticulation and some irregular carinae, callus with three setae; gaster (Fig. 614) 3.5× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with very strong and large-meshed reticulation, Gt₇ 1.7× as long as width at base.

Female holotype: length of body 3.5mm.

Scape yellowish-brown, pedicel brown, flagellum dark brown. Head golden-green, frons below eyes golden-red, clypeus dark brown. Thoracic dorsum golden-green. Legs with fore and hind coxae metallic bluish-green, mid coxa black with golden-green tinges; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, remaining tergites golden-green; gonoplac yellowish-brown.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with weak

reticulation, clypeus smooth, frons rugose and with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture and strong reticulation inside ocellar triangle. Occipital margin with a carina behind ocellar triangle.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on midlobe, midlobe \pm rugose on part close to notauli; midlobe with a complete median groove, with 25 scattered setae on rugose parts. Mesoscutellum with median part with weak reticulation and shiny, lateral parts with strong reticulation, meshes elongate; submedian grooves subdivided by carinae, curved and diverging towards both anterior and posterior parts; with 25 setae scattered over lateral parts. Dorsellum with strong reticulation, with median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum open below; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with very strong and large-meshed reticulation.

Relative measurements: head length, dorsal view 31; head length, frontal view 47; POL 13; OOL 7; lateral ocellus diameter 6; head width 62; mouth width 22; malar space 18; eye length 27; scape length 25; scape width 5; pedicel+flagellum length 69; pedicel length 7.5; pedicel width, dorsal view 4.5; F1 length 11; F1 width 5; F2 length 13.5; F2 width 5; F3 length 10; F3 width 5; clava length 21; clava width 6.5; C3 length 6.5; spicule length 1; mesosoma length 90; mesosoma width 60; midlobe of mesoscutum length 33; mesoscutellum length 36; mesoscutellum width 26; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 7.5; dorsellum length 5.5; propodeum length 12.5; costal cell length 47; costal cell width (measured at widest part) 3.5; marginal vein length 42; stigmal vein length 16; gaster length 162; gaster width 46; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 22; Gt_7 length (measured medially) 34; Gt_7 width (measured at base) 20; longest cercal seta length 15; shortest cercal seta length 8.

Male. Unknown.

Hosts. Reared from a stem gall (stem swelling) induced by an unidentified Cecidomyiidae on *Weinmannia* sp. (Cunoniaceae).

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Cartago**, 4km NE Cañon, Genesis II, 2300m, 5.ii.2013, from *Weinmannia* stem gall, M. Gates (NHMUK).

Etymology. Named after the host plant of the gall from which this species was reared.

Galeopsomyia wilsonae Hansson sp.nov.

(Figs 622, 623, 877)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 877); genal carina present; mesoscutellum (Fig. 622) with outer margin of submedian grooves absent, median part with very weak reticulation with elongate meshes, with a median groove in anterior one-fifth, lateral parts rugose; dorsellum with median carina; propodeum (Fig. 622) with strong irregular carinae and strong reticulation, callus with five setae; fore and mid coxae yellowish-brown, hind coxa golden-green with anterior and apical parts yellowish-brown (Fig. 623); petiole very short, just a narrow band; gaster (Fig. 622) 4.6× as long as wide with Gt₇ very long, 2.9× as long as width at base, medio-basal Gt₁ with longitudinal carinae laterally, Gt₁₋₂ with weak reticulation, Gt₃₋₇ with stronger reticulation.

Female holotype: length of body 3.7mm (paratypes 3.5–4.6mm).

Scape yellowish-brown, pedicel brown, flagellum dark brown to black. Head with frons golden-green, antennal scrobes black with metallic tinges and clypeus dark brown with sides yellowish-brown; vertex black with metallic blue and purple tinges. Mesoscutum golden-green with red tinges, propodeum golden-green. Legs yellowish-white, hind coxa with postero-basal half golden-green. Petiole black. Gaster with Gt₁ metallic bluish-green with posterior margin metallic purple, Gt₂₋₅ metallic purple, Gt₆₋₇ black; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with very weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation and isodiametric meshes on sidelobes, midlobe with strong reticulation and elongate meshes on median part, rugose on parts close to notauli, with median groove in posterior two-thirds; midlobe with 17 scattered setae on rugose parts. Mesoscutellum with outer margin of submedian grooves absent, median part with very weak reticulation with elongate meshes, and with a median groove in anterior one-fifth, lateral parts rugose with ten scattered setae. Dorsellum with very weak reticulation, with median carina. Propodeum with a wide median carina that is expanded in posterior part, posterior part with a shallow fovea; with strong irregular carinae and strong reticulation; callus with five setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with 7&8 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster very elongate; medio-basal Gt₁ with longitudinal carinae laterally; Gt₁₋₂ with weak reticulation, remaining tergites with stronger reticulation.

Relative measurements: head length, dorsal view 26; head length, frontal view 48; POL 11; OOL 7.5; lateral ocellus diameter 5.5; head width 61; mouth width 20; malar space 17; eye length 26; scape length 24; scape width 5.3; pedicel+flagellum length 80; pedicel length 8.5; pedicel width, dorsal view 4; F1 length 14; F1 width 5.2; F2 length 14.5; F2 width 5.2; F3 length 13.5; F3 width 5.2; clava length 25; clava width 6; C3 length 8.5; spicule length 2; mesosoma length 83; mesosoma width 53; midlobe of mesoscutum length 35; mesoscutellum length 29; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 10; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 6; dorsellum

length 4; propodeum length 12; costal cell length 47; costal cell width (measured at widest part) 3; marginal vein length 51; stigmal vein length 11.5; gaster length 192; gaster width 42; Gt₂ length (measured medially) 15; Gt₄ length (measured medially) 25; Gt₇ length (measured medially) 52; Gt₇ width (measured at base) 18; longest cercal seta length 18; shortest cercal seta length 7.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU). Paratypes (4♀, MZLU, MZUCR, NHMUK): 3♀ from same locality as holotype but collected 18-22.iii.1990; 1♀ **COSTA RICA, Heredia**, 11km SE La Virgen, 10°20'N, 84°04'W, 450-550m, 23.ii-20.iv.2003, INBio, OET, ALAS.

Etymology. Named in honour of Catherine Wilson, one of the founders of Wilson Botanical Garden, type locality for this species.

***Galeopsomyia wilsoni* Hansson sp.nov.**

(Figs 624, 625, 881, 997)

Diagnosis (female). Antenna with distinct constriction between C1 and C2, scape predominantly dark brown to black (Fig. 881); genal carina present; mesoscutellum (Fig. 624) with outer margin of submedian grooves absent, grooves curved and diverging towards posterior part, median part shiny with very weak reticulation, meshes elongate, lateral parts with strong reticulation with elongate meshes; dorsellum with median carina; propodeum (Fig. 624) with strong irregular carinae and strong reticulation, callus with two setae; all coxae dark and metallic (Fig. 625); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 624) 1.9× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with weak reticulation.

Female holotype: length of body 2.4mm (paratypes 2.2–2.6mm).

Scape dark brown to black with base yellowish-brown, pedicel and flagellum dark brown to black. Head with frons metallic bluish-green, clypeus black; vertex metallic bluish-purple, golden-green inside ocellar triangle. Mesosoma golden-green with blue tinges. Legs with fore and hind coxae golden-green, mid coxa dark brown with metallic tinges; trochanters yellowish-brown; fore femur yellowish-brown with basal half dark brown, mid and hind femora yellowish-brown; tibiae and tarsi yellowish-brown, T4 brown. Petiole black. Gaster with Gt₁ metallic bluish-green, Gt₂₋₅ metallic purple medially and metallic bluish-green laterally, Gt₆ metallic bluish-green, Gt₇ black with metallic blue tinges; gonoplac black.

Antenna with distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin carinate.

Mesoscutum with strong reticulation, weaker on posterior part of midlobe, meshes isodiametric, midlobe with parts close to notauli rugose, with a weak median groove in posterior part, with 12 setae scattered over rugose parts. Mesoscutellum with outer margin of submedian grooves absent, grooves curved and diverging towards posterior part; median part shiny with very weak reticulation with elongate meshes, lateral parts with strong reticulation with elongate meshes, with six scattered setae. Dorsellum with very weak sculpture, almost smooth, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&8 setae on dorsal surface of submarginal vein; speculum open below and towards base of wing; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt_1 with longitudinal carinae laterally; tergites with weak reticulation.

Relative measurements: head length, dorsal view 25; head length, frontal view 45; POL 12; OOL 8; lateral ocellus diameter 5.5; head width 65; mouth width 18; malar space 18; eye length 25.5; scape length 25; scape width 5; pedicel+flagellum length 78; pedicel length 7; pedicel width, dorsal view 5; F1 length 15; F1 width 6; F2 length 15; F2 width 6; F3 length 13; F3 width 6; clava length 24; clava width 7; C3 length 6.5; spicule length 3; mesosoma length 83; mesosoma width 57; midlobe of mesoscutum length 33; mesoscutellum length 31; mesoscutellum width 27; median part of mesoscutellum width (measured medially) 10; median part of mesoscutellum, width in anterior part 13; median part of mesoscutellum, width in posterior part 14; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 4; propodeum length 15; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 42; stigmal vein length 14.5; gaster length 90; gaster width 48; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 14; Gt_7 length (measured medially) 9; Gt_7 width (measured at base) 13; longest cercal seta length 12; shortest cercal seta length 4.

Male. Length of body 2.3mm.

Antenna (Fig. 997) with scape widest in the middle; plaque black and situated just above the middle; dorso-basal whorls of long setae present on F1–F4 and C1, ventro-basal whorls of setae on C1 and C2. Gaster long ovate. Otherwise as in female.

Relative measurements: head length, dorsal view 24; head length, frontal view 47; head width 61.5; mouth width 17; malar space 17; eye length 24; scape length 23; scape width 6; plaque length 9; pedicel length 7.5; pedicel+flagellum length 98; F1 length 7; F1 width 6; F2 length 14; F2 width 6; F3 length 15; F3 width 5.5; F4 length 16; F4 width 5.5; clava length 36; clava width 5; mesosoma length 85; mesosoma width 59; gaster length 83; gaster width 43; longest subbasal seta on F1, length 52.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU). Paratypes (19♀ 1♂, CNC, MZLU, MZUCR, NHMUK): 2♀ with same label data as holotype; 1♀ from same locality as holotype but collected 15-16.ii.2012; 8♀ **COSTA RICA, Puntarenas, Estación Altamira, Sendero Casa Coca**, 9°02'N, 83°00'W, 1450-1700m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 1♀ from same locality as previous but collected 13.i.2001; 3♀

1♂ COSTA RICA, Puntarenas, Estación Altamira, Sendero Los Gigantes, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos; 4♀ COSTA RICA, Puntarenas, Estación Altamira, Estación, 9°02'N, 83°00'W, 1450m, 7.ii-5.iii.2002, swept, C. Hansson & Parataxonomos.

Etymology. Named in honour of Robert Wilson, one of the founders of Wilson Botanical Garden, type locality for this species.

***Galeopsomyia zurquiensis* Hansson sp.nov.**

(Figs 626, 627, 1099)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 1099); genal carina present; mesoscutellum (Fig. 626) with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate, submedian grooves with outer margin absent, curved and diverging towards both anterior and posterior parts, subdivided by transverse carinae; dorsellum with a weak median carina; propodeum (Fig. 626) with strong irregular carinae and reticulation, callus with seven setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 626) 3.2× as long as wide, Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Female holotype: length of body 3.0mm (paratype 2.9mm).

Scape yellowish-brown with apico-dorsal part brown, pedicel with basal half dark brown and apical half pale brown, flagellum dark brown. Head with frons golden-green, clypeus dark brown, antennal scrobes black in lower half; vertex metallic bluish-green. Thoracic dorsum golden-green. Legs with fore coxa black with apical part yellowish-brown, mid coxa pale brown, hind coxa black with metallic tinges and apical part yellowish-brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ with basal half golden-green and apical half golden-purple, Gt_{2,5} golden-purple, Gt_{6,7} black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part. Occipital margin with a carina behind ocelli.

Mesoscutum with strong reticulation, meshes isodiametric on sidelobes, elongate on mid-lobe, midlobe with parts close to notauli rugose; midlobe without a median groove, with 16 setae scattered over rugose parts. Mesoscutellum with weak reticulation on median part and without a median groove, lateral parts with strong reticulation, meshes elongate; submedian grooves with outer margin absent, curved and diverging towards both anterior and posterior parts, interrupted by transverse carinae; with 18 setae scattered over lateral parts. Dorsellum with weak sculpture, with a weak median carina. Propodeum with strong irregular carinae and reticulation; callus with seven setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with seven setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 26.5; head length, frontal view 45; POL

10.5; OOL 7; lateral ocellus diameter 5; head width 57; mouth width 19; malar space 16; eye length 26; scape length 23; scape width 5.5; pedicel+flagellum length 74; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 14; F1 width 5.5; F2 length 14; F2 width 6; F3 length 12.5; F3 width 6; clava length 25.5; clava width 6.5; C3 length 8; spicule length 1.5; mesosoma length 81; mesosoma width 53; midlobe of mesoscutum length 28; mesoscutellum length 30; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 7.5; median part of mesoscutellum, width in anterior part 8; median part of mesoscutellum, width in posterior part 10; lateral part of mesoscutellum, width (measured medially) 5; dorsellum length 4; propodeum length 13.5; costal cell length 43; costal cell width (measured at widest part) 3; marginal vein length 47; stigmal vein length 12; gaster length 131; gaster width 41; Gt₂ length (measured medially) 12; Gt₄ length (measured medially) 20; Gt₇ length (measured medially) 21; Gt₇ width (measured at base) 17; longest cercal seta length 20; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, San José, Zurqui de Moravia, 10°03'03"N, 84°00'22"W, 1600m, iv.1992, P. Hanson (NHMUK). Paratype 1 ♀ from same locality as holotype but collected x.1995 (MZLU).

Etymology. Named after type locality, Zurqui de Moravia.

The species listed below probably belong in species-group *cuprea*, but they distinguish themselves in having midlobe of mesoscutum and/or mesoscutellum strongly sculptured (reticulate and/or rugose) and ±evenly covered with setae.

***Galeopsomyia capillosa* Hansson sp.nov.**

(Figs 628, 629, 879, 899, 932, 945)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 879); genal carina present; pronotum, mesoscutum and mesoscutellum (Figs 628, 932) with strong reticulation and rugosity, midlobe of mesoscutum and mesoscutellum evenly covered with setae, mesoscutellum without submedian grooves; dorsellum with median carina; propodeum (Fig. 628) with strong reticulation and irregular carinae, median carina wide, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 628) elongate, medio-basal Gt₁ with a transverse carina dorsally and with short longitudinal carinae pointing backwards from the carina, tergites with strong reticulation.

Female holotype: length of body 2.6mm (paratypes 2.2–2.6mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons golden-green, antennal scrobes black, clypeus dark brown, vertex metallic bluish-green. Thoracic dorsum golden-green with blue tinges, pronotum and mesoscutum with a purple stripe

medially. Legs with fore and hind coxae golden-green with blue tinges, mid coxa dark brown; trochanters, femora and tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ golden-green, Gt₂₋₅ golden-purple dorsally and metallic bluish-green laterally, Gt₆₋₇ metallic bluish-green; gonoplac black.

Antenna with a strong constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Pronotum, mesoscutum and mesoscutellum with strong reticulation and rugosity, and scattered all over with strong tubercles on which setae are attached; mesoscutum and mesoscutellum, apart from notauli, without grooves. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands posteriorly; with strong irregular carinae and strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 6&7 setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster elongate; medio-basal Gt₁ with a strong transverse carina and with longitudinal carinae pointing backwards from transverse carina; tergites with strong reticulation.

Relative measurements: head length, dorsal view 29; head length, frontal view 49; POL 12; OOL 6.5; lateral ocellus diameter 6; head width 65; mouth width 18.5; malar space 19; eye length 29.5; scape length 23; scape width 6; pedicel+flagellum length 73; pedicel length 9; pedicel width, dorsal view 5; F1 length 14; F1 width 7; F2 length 13; F2 width 6; F3 length 12.5; F3 width 6; clava length 23; clava width 6; C3 length 8; spicule length 2; mesosoma length 85; mesosoma width 58; midlobe of mesoscutum length 27; mesoscutellum length 32; mesoscutellum width 29; median part of mesoscutellum width (measured medially) na; median part of mesoscutellum, width in anterior part na; median part of mesoscutellum, width in posterior part na; lateral part of mesoscutellum, width (measured medially) na; dorsellum length 5; propodeum length 15; costal cell length 40; costal cell width (measured at widest part) 3; marginal vein length 44; stigmal vein length 14; gaster length 100; gaster width 52; Gt₂ length (measured medially) 13; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 12; Gt₇ width (measured at base) 18; longest cercal seta length 14; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, Estación Agujas, LS 526550_276750, 300m, 10.iv-10.v.2001, malaise trap, J. Azofeifa (NHMUK). Paratypes (5♀, MZLU, MZUCR, NHMUK): 1♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Estación Los Patos, 08°33'N, 83°30'W, 200m, ii.2000, malaise trap&yellow pan trap, J.S. Noyes & J. A. Azofeifa; 1♀ **COSTA RICA, Puntarenas**, Golfito, Parque Nacional Corcovado, Estación Agujas, Cerro Quebraditos, LS 521400_274300, 782m, ix.2000, malaise trap, J. Azofeifa; 1♀ **COSTA RICA, Puntarenas**, Reserva Forestal Golfo Dulce, 300m N. Estación Agujas, LS 276750_526550, 300m, 20.xii.-20.i 2002, malaise trap, J. Azofeifa; 2♀ labelled

"89-JAA" but without further information ("JAA" is an abbreviation for J.A. Azofeifa (Tonio), one of the parataxonomists at INBio, so the material is with all probability from Costa Rica and from the Osa Peninsula where Tonio was stationed, and where the other type specimens were collected, but more information has not been possible to retrieve).

Etymology. From the Latin *capillosus* = hairy, referring to the hairy midlobe of mesoscutum and mesoscutellum.

***Galeopsomyia gobis* Hansson sp.nov.**

(Figs 630, 631, 882, 946)

Diagnosis (female). Antenna with a distinct constriction between C1 and C2 (Fig. 882); genal carina present; mesoscutum (Fig. 630) with strong reticulation, midlobe rugose close to notauli, without median groove, \pm uniformly covered with setae but with a narrow median stripe bare; mesoscutellum (Fig. 630) rugose with submedian grooves indicated but very indistinct, \pm parallel and close, \pm uniformly covered with setae except median bare part; dorsellum with median carina; propodeum (Fig. 630) with strong irregular carinae and strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 630) 1.7 \times as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation; mesoscutum and mesoscutellum black with metallic blue-green tinges (Figs 630, 631).

Female holotype: length of body 1.5mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head black with metallic blue-green tinges, clypeus dark brown, scrobes black. Mesosoma black with metallic blue-green tinges. Legs with fore and hind coxae black with metallic blue-green tinges, mid coxa dark brown; trochanters yellowish-brown; femora black with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster black with blue-green tinges; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeal area smooth, frons rugose, scrobes with strong reticulation; with genal carina. Vertex with strong reticulation; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric, midlobe rugose close to notauli, without median groove, \pm uniformly covered with setae but with a narrow median bare stripe. Mesoscutellum rugose with submedian grooves indicated but indistinct, \pm parallel and close, \pm uniformly covered with setae but with median part bare. Dorsellum with strong sculpture, with median carina. Propodeum with a strong median carina that expands only slightly in posterior part; with strong irregular carinae and strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken (one seta missing in median part).

Petiole transverse with strong sculpture on dorsal part. Gaster ovate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 21; head length, frontal view 33; POL 9; OOL 5; lateral ocellus diameter 4; head width 42; mouth width 12; malar space 11; eye length 18.5; scape length 15; scape width 3.5; pedicel+flagellum length 50; pedicel length 6; pedicel width, dorsal view 3.5; F1 length 7.5; F1 width 3.5; F2 length 8; F2 width 3.5; F3 length 8;

F3 width 4; clava length 18; clava width 4.5; C3 length 6; spicule length 2; mesosoma length 51; mesosoma width 38; midlobe of mesoscutum length 15; mesoscutellum length 20; mesoscutellum width 20; median part of mesoscutellum width (measured medially) 4; median part of mesoscutellum, width in anterior part 4; median part of mesoscutellum, width in posterior part 3.5; lateral part of mesoscutellum, width (measured medially) 6.5; dorsellum length 2; propodeum length 8; costal cell length 28; costal cell width (measured at widest part) 2; marginal vein length 24; stigmal vein length 7.5; gaster length 58; gaster width 35; Gt₂ length (measured medially) 10; Gt₄ length (measured medially) 5; Gt₇ length (measured medially) 6.5; Gt₇ width (measured at base) 9; longest cercal seta length 10; shortest cercal seta length 4.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ COSTA RICA, Limón, Reserva Biológica Hitoy-Cerere, 9°40'N, 83°02'W, 100m, 20-21.ii.2006, J.S. Noyes (NHMUK).

Galeopsomyia hirsuta Hansson sp.nov.

(Figs 632, 633, 883, 900, 927, 947)

Diagnosis (female). Antenna with a solid clava (Fig. 883); eyes small (Fig. 900), HE/MS = 1.3; head (Fig. 900) distinctly transverse, 2.3× as wide as long in dorsal view, without genal carina; midlobe of mesoscutum (Fig. 632) with large pits and uniformly covered with setae; mesoscutellum (Figs 632, 927) rugose, with submedian grooves as strong pit-rows which are smoothly curved; dorsellum without median carina; propodeum (Fig. 632) with strong reticulation, callus with two setae; fore wing with speculum completely open below and towards base of wing (Fig. 633); petiole yellowish-brown, very short, just a narrow band; gaster (Fig. 632) 2.2× as long as wide, tergites with strong reticulation.

Female holotype: length of body 2.6mm (paratype 2.2mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head black with weak metallic blue-green tinges, clypeus dark brown. Mesoscutum and mesoscutellum black with weak metallic bluish-green tinges, propodeum golden-green. Legs with coxae black; trochanters yellowish-brown; femora dark brown with apex yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown to yellowish-white, T4 brown. Petiole yellowish-brown. Gaster with Gt₁₋₂ golden-green, Gt₃₋₄ black with metallic purple tinges and anterior margin with bluish tinges, Gt₅₋₇ black; gonoplac black.

Antenna with a solid clava. Face below level of toruli rugose, frons with large pits, clypeus and scrobes with strong small-meshed reticulation; without genal carina. Vertex with transverse carinae. Occipital margin with irregular carinae.

Mesoscutum with sidelobes rugose and midlobe with large pits; entire midlobe with setae. Mesoscutellum rugose; submedian grooves as strong pit-rows which are smoothly curved; with three setae on parts lateral to pit-rows. Dorsellum with strong reticulation, without median

carina. Propodeum with a strong median carina that expands strongly posteriorly; with strong reticulation; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with 5&6 setae on dorsal surface of submarginal vein; speculum completely open below and towards base of wing; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; tergites with strong reticulation.

Relative measurements: head length, dorsal view 27; head length, frontal view 50; POL 16; OOL 6.5; lateral ocellus diameter 6; head width 63; mouth width 19; malar space 20; eye length 27; scape length 21; scape width 5; pedicel+flagellum length 58; pedicel length 9; pedicel width, dorsal view 4; F1 length 10; F1 width 5; F2 length 9.5; F2 width 5; F3 length 8.5; F3 width 5; clava length 17; clava width 6; C3 length 4.5; spicule length 1.5; mesosoma length 77; mesosoma width 57; midlobe of mesoscutum length 32; mesoscutellum length 30.5; mesoscutellum width 29; median part of mesoscutellum width (measured medially) 11; median part of mesoscutellum, width in anterior part 15; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 7; dorsellum length 5.5; propodeum length 9.5; costal cell length 46; costal cell width (measured at widest part) 3.5; marginal vein length 41; stigmal vein length 16; gaster length 105; gaster width 47; Gt₂ length (measured medially) 6; Gt₄ length (measured medially) 16; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 21; longest cercal seta length 13; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Guanacaste**, Estación Cacao, 10°55'N, 85°30'W, 1100m, 19-20.ii.2005, J.S. Noyes (NHMUK). Paratype: 1 ♀ with same label data as holotype (NHMUK).

Etymology. From the Latin *hirsutus* = hairy, referring to hairy midlobe of mesoscutum.

Remarks. Holotype with head detached from body, glued to same card.

***Galeopsomyia hirta* Hansson sp.nov.**

(Figs 634, 635, 928, 948)

Diagnosis (female). Antenna with a weak constriction between C1 and C2; genal carina present; midlobe of mesoscutum (Fig. 634) rugose to strongly reticulate with a strong median groove, and with white setae all over; mesoscutellum (Figs 634, 928) with distinct submedian grooves, situated close to one another, median part with strong reticulation in anterior half, weak reticulation in posterior half, lateral parts strongly rugose with white setae all over; dorsellum with median carina; propodeum (Fig. 634) with strong irregular carinae; callus with seven setae; gaster (Fig. 634) 1.6× as long as wide, medio-basal Gt₁ with longitudinal carinae laterally, tergites with strong reticulation.

Female holotype: length of body 1.9mm.

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with frons, including scrobes, and vertex metallic bluish-green, clypeus dark brown. Thoracic dorsum black with metallic blue tinges. Legs with fore and mid coxae dark brown, hind coxa black with metallic blue tinges; trochanters and femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 pale brown. Petiole black. Gaster with Gt₁ black with metallic blue tinges, remaining tergites black with metallic purple tinges; gonoplac black.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with strong transverse carinae; with a carina between posterior ocelli in posterior part.

Mesoscutum with strong reticulation, meshes isodiametric; midlobe with a complete median groove, with white setae scattered all over. Mesoscutellum with median part with strong reticulation in anterior half and weak reticulation in posterior half, lateral parts with strong reticulation/rugosity; submedian grooves distinct, situated close to one another, ±straight and diverging towards posterior part; with 16 white setae scattered over lateral parts. Dorsellum with weak sculpture and shiny, with median carina. Propodeum a strong median carina that expands anteriorly and posteriorly; with strong irregular carinae; callus with seven setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum closed; costal setal row sparse but unbroken.

Petiole very short, just a narrow band. Gaster ovate; medio-basal Gt₁ with longitudinal carinae laterally; tergites with strong reticulation.

Relative measurements: head length, dorsal view 22; head length, frontal view 37; POL 10; OOL 5.5; lateral ocellus diameter 4; head width 50; mouth width nm; malar space 12.5; eye length 21; scape length 12.5; scape width 3.5; pedicel+flagellum length 48; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 7; F1 width 4; F2 length 8; F2 width 4; F3 length 8.5; F3 width 4.5; clava length 16; clava width 4.5; C3 length 5.5; spicule length 1.5; mesosoma length 62; mesosoma width 46; midlobe of mesoscutum length 21; mesoscutellum length 24; mesoscutellum width 24; median part of mesoscutellum width (measured medially) 4.5; median part of mesoscutellum, width in anterior part 4.5; median part of mesoscutellum, width in posterior part 7; lateral part of mesoscutellum, width (measured medially) 8; dorsellum length 2; propodeum length 10; costal cell length 33; costal cell width (measured at widest part) 2.5; marginal vein length 28; stigmal vein length 10; gaster length 70; gaster width 44; Gt₂ length (measured medially) 8.5; Gt₄ length (measured medially) 9.5; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 13.5; longest cercal seta length 15; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Brazil.

Material examined.

Holotype ♀ **BRAZIL, Santa Catarina**, Nova Teutonia, ix.1943, F. Plaumann (NHMUK).

Etymology. From the Latin *hirtus* = hairy, referring to hairy mesoscutum.

***Galeopsomyia papillosa* Hansson sp.nov.**

(Figs 636, 637, 901, 929, 949, 1098)

Diagnosis (female). Antennal clava with a distinct constriction between C1 and C2 (Fig. 1098); genal carina present; midlobe of mesoscutum (Fig. 636, 929) and most parts of mesoscutellum strongly papillate and rugose, and uniformly setose, mesoscutellum (Fig. 929) with a narrow median bare stripe and submedian grooves absent; dorsellum concave with median carina; propodeum (Fig. 636) with strong reticulation and strong irregular carinae medially, callus with two setae; petiole transverse; gaster (Fig. 636) 1.9× as long as wide, medio-basal Gt_1 with a transverse carina dorsally and with short longitudinal carinae pointing backwards from carina, tergites with strong reticulation.

Female holotype: length of body 2.5mm.

Scape and pedicel yellowish-brown, flagellum dark brown. Head with frons golden-green with upper lateral part metallic bluish-purple, clypeus dark brown, antennal scrobes black; vertex metallic bluish-purple. Thoracic dorsum golden-green. Legs with fore coxa metallic bluish-purple, mid coxa dark brown, hind coxa golden-green; trochanters yellowish-brown; fore and mid femora yellowish-brown, hind femur pale brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole black. Gaster with Gt_1 golden-green, Gt_{2-4} golden-purple, Gt_{5-6} metallic bluish-green, Gt_7 black; gonoplac black.

Antenna with a distinct constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with weak reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle; with a carina between posterior ocelli in posterior part.

Mesoscutum with sidelobes with strong reticulation, meshes isodiametric, midlobe with papillate sculpture and uniformly setose, without median groove. Mesoscutellum with papillate sculpture, partly rugose, uniformly setose except a narrow median bare stripe; submedian grooves absent. Dorsellum concave with weak sculpture, with median carina. Propodeum with a strong median carina; with strong reticulation and strong irregular carinae medially; callus with two setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster elongate; medio-basal Gt_1 with a transverse carina dorsally and with short longitudinal carinae pointing backwards from carina; tergites with strong reticulation.

Relative measurements: head length, dorsal view 29; head length, frontal view 46; POL 11; OOL 6; lateral ocellus diameter 5.5; head width 58; mouth width 20; malar space 16; eye length 27; scape length 20; scape width 6; pedicel+flagellum length 67; pedicel length 8; pedicel width, dorsal view 4.5; F1 length 12; F1 width 5.5; F2 length 11; F2 width 5; F3 length 9; F3 width 5; clava length 22; clava width 5.5; C3 length 7; spicule length 2; mesosoma length 78; mesosoma width 53.5; midlobe of mesoscutum length 25; mesoscutellum length 27; mesoscutellum width 25; median part of mesoscutellum width (measured medially) 3.5; median part of mesoscutellum, width in anterior part 4; median part of mesoscutellum, width in posterior part 4.5; lateral part of mesoscutellum, width (measured medially) 8; dorsellum length 4.5; propodeum length 11.5; costal cell length 37; costal cell width (measured at widest part) 3;

marginal vein length 40; stigmal vein length 12; gaster length 98; gaster width 51; Gt₂ length (measured medially) 15; Gt₄ length (measured medially) 15; Gt₇ length (measured medially) 11; Gt₇ width (measured at base) 21; longest cercal seta length 19; shortest cercal seta length 6.

Male. Unknown.

Hosts. Unknown.

Distribution. Peru.

Material examined.

Holotype ♀ **PERU**, Loreto, Iquitos, Barillai, 10.ii.1984, Lars Huggert (MZLU).

Etymology. Named for the strongly papillate midlobe of mesoscutum and mesoscutellum.

***Galeopsomyia scabiosa* Hansson sp.nov.**

(Figs 638, 639, 884, 902, 931, 1117)

Diagnosis (female). Antenna with distinct constriction between C1 and C2 (Fig. 884); genal carina present; mesoscutum (Fig. 638) with very strong reticulation, meshes isodiametric, midlobe also with very strong short longitudinal carinae, with numerous scattered setae all over surface; mesoscutellum (Figs 638, 931) with same sculpture and setation as midlobe of mesoscutum, without submedian grooves; dorsellum with indistinct median carina; propodeum (Fig. 638) with strong irregular carinae and strong reticulation, callus with two setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 638) ovate, 1.7× as long as wide, Gt₁ with weak reticulation, Gt₂₋₇ with strong reticulation; mesoscutum, mesoscutellum and Gt₂₋₆ metallic purple (Figs 638, 931).

Female holotype: length of body 1.6mm (paratypes 1.4–1.6mm).

Scape yellowish-brown, pedicel pale brown, flagellum dark brown. Head with lower frons, including scrobes, black with metallic blue tinges, upper frons and vertex metallic purple, clypeus dark brown. Mesoscutum and mesoscutellum metallic purple, propodeum black with metallic blue tinges. Legs with coxae dark brown; trochanters pale brown; femora dark brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole dark brown. Gaster with Gt₁ black with metallic blue tinges, remaining tergites metallic purple; gonoplac black.

Antenna with a constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with strong reticulation outside ocellar triangle, with wrinkled sculpture inside ocellar triangle and with a carina between posterior ocelli. Occipital margin with a carina behind ocellar triangle.

Pronotum with very strong reticulation, meshes isodiametric, with posterior margin smooth. Mesoscutum with very strong reticulation, meshes isodiametric, with numerous scattered setae all over surface; midlobe with very strong short longitudinal carinae, without median groove. Mesoscutellum with same sculpture and setation as midlobe of mesoscutum; without submedian grooves. Dorsellum with strong sculpture, with an indistinct median carina. Propodeum with a strong median carina that expands in posterior part; with strong irregular carinae and

strong reticulation; callus with two setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row broken.

Petiole transverse with strong sculpture on dorsal part. Gaster ovate-elongate; Gt₁ with weak reticulation and shiny, remaining tergites with strong reticulation.

Relative measurements: head length, dorsal view 17.5; head length, frontal view 31; POL 8.5; OOL 4.5; lateral ocellus diameter 3; head width 38.5; mouth width 10.5; malar space 19.5; eye length 18; scape length 14; scape width 3; pedicel+flagellum length 43; pedicel length 6; pedicel width, dorsal view 3; F1 length 6.5; F1 width 3; F2 length 6; F2 width 3; F3 length 6; F3 width 3; clava length 17; clava width 4; C3 length 6; spicule length 2; mesosoma length 42; mesosoma width 31; midlobe of mesoscutum length 13.5; mesoscutellum length 18; mesoscutellum width 16.5; median part of mesoscutellum width (measured medially) -; median part of mesoscutellum, width in anterior part-; median part of mesoscutellum, width in posterior part -; lateral part of mesoscutellum, width (measured medially) -; dorsellum length 2; propodeum length 8; costal cell length 24; costal cell width (measured at widest part) 1.5; marginal vein length 21; stigmal vein length 6.5; gaster length 50; gaster width 29; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 6; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 13; longest cercal seta length 12; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, swept, C. Hansson (MZLU). Paratypes (2♀, NHMUK): 1♀ from same locality as holotype but collected 15-16.ii.2006; 1♀ **COSTA RICA, Puntarenas**, Parque Nacional Corcovado, Sirena, 8°29'N, 83°35'W, 5m, 19-20.ii.2004, J.S. Noyes.

Etymology. From the Latin *scabiosus* = rough, scurfy, referring to the rough sculpture on midlobe of mesoscutum and mesoscutellum.

Species-group *aspratilis*

***Galeopsomyia aspratilis* Hansson sp.nov.**

(Figs 640, 641, 903, 950, 1103)

Diagnosis (female). Antenna with a weak constriction between C1 and C2 (Fig. 1103); genal carina present; mesoscutum and mesoscutellum (Fig. 640) with very strong sculpture and with numerous scattered setae, mesoscutellum without submedian grooves but with two complete median grooves; fore wing speculum small (Fig. 641); dorsellum with two submedian carinae but without median carina, shiny; propodeum (Fig. 640) with part between median and paraspiracular carinae with strong irregular carinae and strong reticulation, callus with three setae; petiole transverse with strong sculpture on dorsal part; gaster (Fig. 640) circular, 1.1× as long

as wide, with weak reticulation, Gt_1 large, $0.5\times$ as long as length of gaster with several short longitudinal carina medio-basally; black non-metallic species (Figs 640, 641).

Female holotype: length of body 1.5mm (paratype 1.6mm).

Scape yellowish-brown, pedicel and flagellum pale brown. Body black non-metallic. Legs with coxae black; fore trochanter dark brown, mid and hind trochanters yellowish-brown; fore femur dark brown, mid femur with basal half dark brown and apical half yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown.

Antenna with a weak constriction between C1 and C2. Face below level of toruli with strong reticulation, clypeus smooth, frons rugose, antennal scrobes with weak reticulation; with genal carina. Vertex with wrinkled sculptur. Occipital margin with a sharp edge.

Pronotum with very strong sculpture, with posterior margin smooth. Mesoscutum and mesoscutellum with very strong sculpture and with numerous scattered setae; mesoscutellum without submedian grooves but with two median grooves. Dorsellum with two submedian carinae but without median carina, shiny. Propodeum with a strong narrow median carina; part between median and paraspiracular carinae with strong irregular carinae and strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa with strong reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum small and closed; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster circular; tergites with weak reticulation, Gt_1 large, covering half the length of gaster.

Relative measurements: head length, dorsal view 23; head length, frontal view 35; POL 12; OOL 3; lateral ocellus diameter 3.8; head width 44; mouth width 13; malar space 12.5; eye length 21.5; scdape length 16.5; scape width 3.5; pedicel+flagellum length 42; pedicel length 6.5; pedicel width, dorsal view 3; F1 length 6.5; F1 width 3; F2 length 6; F2 width 3; F3 length 5; F3 width 3; clava length 15; clava width 3.5; C3 length 6; spicule length 2; mesosoma length 57; mesosoma width 41; midlobe of mesoscutum length 17; mesoscutellum length 22; mesoscutellum width 21; median part of mesoscutellum width (measured medially) -; median part of mesoscutellum, width in anterior part-; median part of mesoscutellum, width in posterior part _; lateral part of mesoscutellum, width (measured medially) -; dorsellum length 3.5; propodeum length 11; costal cell length 29; costal cell width (measured at widest part) 2; marginal vein length 22; stigmal vein length 9.5; gaster length 51; gaster width 48; Gt_2 length (measured medially) 11; Gt_4 length (measured medially) 2; Gt_7 length (measured medially) 5; Gt_7 width (measured at base) 12; longest cercal seta length 13; shortest cercal seta length 5.5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, Estación Biológica La Selva, 10°26'N, 84°01'W, 75m, 23-24. ii.2005, J.S. Noyes (NHMUK). Paratype: 1♀ with same label data as holotype (NHMUK).

Etymology. From the Latin *aspera* = rough, referring to the rough sculpture on mesoscutum and mesoscutellum.

Galeopsomyia curiosa Hansson sp.nov.

(Figs 642, 643, 880, 930)

Diagnosis (female). Antenna with solid clava (Fig. 880); genal carina present; midlobe of mesoscutum (Fig. 642) with strong short longitudinal carinae and with setae scattered all over surface; mesoscutellum (Figs 642, 930) rugose with two complete median grooves, submedian grooves absent; dorsellum with an indistinct median carina; propodeum (Fig. 642) with strong reticulation, callus with eight setae; fore wing speculum absent (Fig. 643); petiole transverse with strong sculpture on dorsal part; gaster (Fig. 642) circular, 1.3× as long as wide, tergites with weak reticulation and shiny, Gt₁ large, covers half the length of gaster, mediobasal part with several short longitudinal carinae; petiole yellowish-brown; body dark brown non-metallic (Figs 642, 643).

Female holotype: length of body 1.2mm.

Scape yellowish-brown, pedicel and flagellum pale brown. Head dark brown to black, part above mouth opening yellowish-brown. Mesosoma dark brown to black. Legs with coxae brown; trochanters yellowish-brown; fore and mid femora brown, hind femur yellowish-brown; tibiae yellowish-brown; T1–3 yellowish-brown, T4 brown. Petiole yellowish-brown. Gaster dark brown to black; gonoplac black.

Antenna with solid clava. Face below level of toruli with weak reticulation, clypeus smooth, frons with strong reticulation, antennal scrobes with weak reticulation; with genal carina. Vertex with wrinkled sculpture. Occipital margin with a carina.

Mesoscutum with strong reticulation on sidelobes, midlobe with short longitudinal carinae and with scattered setae all over surface. Mesoscutellum with three complete longitudinal carinae medially, submedian grooves absent; lateral parts rugose with 14 scattered setae. Dorsellum with strong sculpture, with an indistinct median carina. Propodeum with a strong and narrow median carina; with strong reticulation; callus with eight setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with five setae on dorsal surface of submarginal vein; speculum absent; costal setal row unbroken.

Petiole transverse with strong sculpture on dorsal part. Gaster circular, tergites with weak reticulation and shiny, Gt₁ large, covers half the length of gaster, mediobasal part with several short longitudinal carinae.

Relative measurements: head length, dorsal view 17.5; head length, frontal view 28; POL 9; OOL 3; lateral ocellus diameter 3; head width 35; mouth width nm; malar space 10; eye length 15.5; scape length 12; scape width 2.5; pedicel+flagellum length 33; pedicel length 5.5; pedicel width, dorsal view 3; F1 length 4.5; F1 width 3; F2 length 4.5; F2 width 3; F3 length 4.5; F3 width 3.5; clava length 12; clava width 4; C3 length 5; spicule length 2.5; mesosoma length 43; mesosoma width 30; midlobe of mesoscutum length 13.5; mesoscutellum length 15.5; mesoscutellum width 15.5; median part of mesoscutellum width (measured medially) nm; median part of mesoscutellum, width in anterior part nm; median part of mesoscutellum, width in posterior part nm; lateral part of mesoscutellum, width (measured medially) nm; dorsellum length 3; propodeum length 8.5; costal cell length 23; costal cell width (measured at widest part) 2; marginal vein length 21; stigmal vein length 8; gaster length 40; gaster width 31; Gt₂ length (measured medially) 7.5; Gt₄ length (measured medially) 3; Gt₇ length (measured medially) 5; Gt₇ width (measured at base) 11; longest cercal seta length 11; shortest cercal seta length 4.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA**, **Limón**, Reserva Biológica Hitoy-Cerere, Headquarter, 100m, 14-18.i.1991, J.S. Noyes (NHMUK).

Species-group *alveolus*

***Galeopsomyia alveolus* Hansson sp.nov.**

(Figs 644, 645, 1104)

Diagnosis (female). Antenna with solid clava (Fig. 1104); clypeus yellowish-brown; large frontal orifices as elongate pale non-metallic stripes reaching from just below and lateral of toruli down to clypeus (as in Fig. 904), genal carina absent; frons and midlobe of mesoscutum with large pits around attachment points of setae (Fig. 644); mesoscutellum (Fig. 644) with submedian grooves parallel, strong and distinct, median part with weak reticulation, meshes elongate; dorsellum with median carina; propodeum (Fig. 644) with strong reticulation; petiole yellowish-brown, very short; gaster (Fig. 644) 2.5× as long as wide, Gt₁ with very weak reticulation, remaining tergites with weak reticulation, gaster hence shiny. Shape of gaster similar to gaster of *G. carinifer*.

Female holotype: length of body 2.0mm.

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black and clypeus yellowish-brown; vertex black with metallic tinges. Mesosoma metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; femora dark brown; tibiae and tarsi yellowish-brown. Petiole yellowish-brown. Gaster with Gt₁ metallic bluish-purple in anterior two-thirds, dark brown in posterior one-third, Gt₂₋₇ black with metallic purple tinges; gonoplac black.

Antenna with solid clava. Frons with weak reticulation and with pits, each pit with a seta, clypeus and scrobal grooves smooth; without genal carina. Vertex with weak reticulation and with pits with a seta.

Pronotum rugose. Mesoscutum with strong reticulation with small meshes on sidelobes, midlobe rugose and with a strong median groove in posterior half, with ten adnotaular setae in two rows, each seta set in a pit. Mesoscutellum with weak reticulation on median part, lateral parts with strong reticulation, meshes elongate; submedian grooves distinct, straight and parallel; with three setae on lateral parts. Dorsellum with weak sculpture, with median carina. Propodeum with a narrow median carina, with strong reticulation; callus with three setae. Fore and hind coxae with strong reticulation, mid coxa with weak reticulation. Fore wing with four setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole very short, just a narrow band. Gaster elongate; Gt₁ with very weak reticulation, almost smooth, remaining tergites with weak reticulation.

Relative measurements: head length, dorsal view 20; head length, frontal view 33; POL 8; OOL 5; lateral ocellus diameter 4; head width 39.5; mouth width 13; malar space 9.5; eye length 20; scape length 15; scape width 4; pedicel+flagellum length 47; pedicel length 6.5; pedicel width, dorsal view 3.5; F1 length 8; F1 width 5; F2 length 7; F2 width 5; F3 length 6.5; F3 width 5; clava length 17; clava width 5; C3 length 6; spicule length 1.5; mesosoma length 54; mesosoma width 36; midlobe of mesoscutum length 22; mesoscutellum length 19; mesoscutellum width 19; median part of mesoscutellum width (measured medially) 7; median part of mesoscutellum, width in anterior part 7.5; median part of mesoscutellum, width in posterior part 7.5; lateral part of mesoscutellum, width (measured medially) 4.5; dorsellum length 3; propodeum length 7; costal cell length 27; costal cell width (measured at widest part) 2; marginal vein length 34; stigmal vein length 8; gaster length 81; gaster width 33; Gt₂ length (measured medially) 8; Gt₄ length (measured medially) 17; Gt₇ length (measured medially) 7; Gt₇ width (measured at base) 8; longest cercal seta length 11; shortest cercal seta length 5.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Puntarenas**, San Vito, Las Cruces, 8°47'N, 82°58'W, 1000-1300m, 7-19.ii.2007, C. Hansson (MZLU).

Etymology. From the Latin *alveolus* = small pit, referring to pits around attachment points of setae on frons and midlobe of mesoscutum.

***Galeopsomyia asilis* Hansson sp.nov.**

(Figs 646, 647, 904, 925, 1105)

Diagnosis (female). Antenna with solid clava (Fig. 1105); clypeus yellowish-brown; large frontal orifices (Fig. 904) elongate reaching from just below and lateral of toruli down to clypeus, genal carina absent; frons and midlobe of mesoscutum with large pits around attachment point of setae (Figs 646, 904); mesoscutellum (Fig. 925) with relatively strong reticulation on median part, lateral parts with strong sculpture, submedian grooves distinct, straight, parallel, relatively wide and subdivided by strong transverse carinae; dorsellum strongly concave with median carina; propodeum (Fig. 646) with strong reticulation, callus with three setae; petiole yellowish-brown; hind coxa rugose with a strong carina along posterior margin; gaster (Fig. 646) 3.6× as long as wide, Gt_{1,2} with very weak reticulation, remaining tergites with weak reticulation, gaster hence shiny. Shape of gaster similar to *G. carinifer*.

Female holotype: length of body 3.3mm (paratype 3.0mm).

Scape yellowish-brown, pedicel and flagellum dark brown. Head with frons metallic bluish-green, antennal scrobes black and clypeus yellowish-brown; vertex metallic purple. Mesosoma metallic bluish-green. Legs with fore and mid coxae dark brown, hind coxa metallic bluish-green; trochanters yellowish-brown; fore and mid femora yellowish-brown with some

infuscation, hind femur dark brown with apex yellowish-brown; tibiae and tarsi pale yellowish-brown. Petiole yellowish-brown. Gaster with Gt_1 metallic bluish-purple in anterior two-thirds, golden-purple in posterior one-third, remaining tergites golden-purple; gonoplac black.

Antenna with solid clava. Frons with weak reticulation and with pits, each pit with a seta, clypeus smooth and scrobal grooves with weak reticulation without foveae; without genal carina. Vertex with weak reticulation and with setal pits.

Pronotum and mesoscutum rugose, sidelobes of mesoscutum close to notauli with small-meshed strong reticulation, with 17 scattered adnotaular setae, each seta in a pit. Mesoscutellum with relatively strong reticulation on median part, lateral parts with strong sculpture; submedian grooves distinct, straight, parallel, relatively wide and subdivided by strong transverse carinae; with three setae scattered over lateral parts. Dorsellum strongly concave with strong sculpture, with median carina. Propodeum with median carina narrow with sides parallel in anterior half and triangular in posterior half, with a large fovea on either side of median carina, with strong reticulation; callus with three setae. Fore and mid coxae with weak reticulation, hind coxa rugose with a strong carina along posterior margin. Fore wing with six setae on dorsal surface of submarginal vein; speculum closed; costal setal row unbroken.

Petiole transverse. Gaster elongate; Gt_{1-2} with very weak reticulation, remaining tergites with weak reticulation.

Relative measurements: head length, dorsal view 28; head length, frontal view 47; POL 11; OOL 6.5; lateral ocellus diameter 6; head width 61; mouth width 24; malar space 19; eye length 27; scape length 22; scape width 5.7; pedicel+flagellum length 66; pedicel length 9; pedicel width, dorsal view 4.5; F1 length 12; F1 width 6; F2 length 11; F2 width 6; F3 length 10.5; F3 width 6; clava length 21; clava width 6.5; C3 length 7; spicule length 2; mesosoma length 87; mesosoma width 61; midlobe of mesoscutum length 40; mesoscutellum length 32; mesoscutellum width 26.5; median part of mesoscutellum width (measured medially) 12; median part of mesoscutellum, width in anterior part 13.5; median part of mesoscutellum, width in posterior part 11.5; lateral part of mesoscutellum, width (measured medially) 6; dorsellum length 3; propodeum length 11.5; costal cell length 45; costal cell width (measured at widest part) 3; marginal vein length 56; stigmal vein length 15; gaster length 156; gaster width 44; Gt_2 length (measured medially) 4; Gt_4 length (measured medially) 30; Gt_7 length (measured medially) 21; Gt_7 width (measured at base) 16; longest cercal seta length 14; shortest cercal seta length 8.

Male. Unknown.

Hosts. Unknown.

Distribution. Costa Rica.

Material examined.

Holotype ♀ **COSTA RICA, Heredia**, 16km SSE La Virgen, 10°16'N, 84°06'W, 1050-1150m, 9-24.ii.2001, 11_M_NOTN, INBio-OET-ALAS (NHMUK). Paratype: 1 ♀ from same locality as holotype but collected 21.v.2001 (MZLU).

Unidentifiable species***Galeopsomyia squamosa* (Girault)**

No illustrations

Galeopsomopsis squamosus Girault 1917b:3. Syntype ♀ (USNM type no. 20911), examined through images. U.S.A. (Kansas).

Galeopsomyia squamosa (Girault), (LaSalle 1994:176).

Male. Unknown.

Hosts. Unknown.

Distribution. U.S.A. (Kansas) (Girault 1917b).

Material examined.

Syntype female in USNM, through images.

Remarks. The syntype female in USNM is badly damaged with several body parts missing: head detached from body and glued separately, antennae missing; mesosoma missing, hind leg with coxae, femora and tibiae glued together with gaster, right fore wing glued on separate card. This species is not possible to incorporate into this study because crucial body parts missing. It belongs in *Galeopsomyia*, but the lack of antennae and mesosoma makes it impossible to include here.

Species with uncertain taxonomic placement***Galeopsomyia glypta* Perioto, Costa & Lara**

No illustrations

Galeopsomyia glypta Perioto, Costa & Lara 2011:165-166. Holotype ♀ (MZSP). Brazil. Not examined.

Description. See Perioto *et al.* (2011).

Distribution. Brazil (Perioto *et al.* 2011).

Hosts. Reared from cocoons of *Glyptapanteles* sp. parasitizing *Thyrintaina arnobia* (Lepidoptera: Geometridae) larvae on eucalyptus leaves.

Comments. This is not a species of *Galeopsomyia*. It lacks the features on the head mentioned in the diagnosis for *Galeopsomyia* above, and the host does not fit the biology for *Galeopsomyia*, which is an association with galls and gall-makers. The actual genus association is difficult to ascertain. It does not fit in any of the described genera of Tetrastichinae, and furthermore the phylogeny and classification of this subfamily in the Neotropical region are poorly understood.

LIST OF SPECIES

- abatis* **sp.nov.**
abra **sp.nov.**
abraxas **sp.nov.**
aciana **sp.nov.**
actis **sp.nov.**
admirabilis **sp.nov.**
adobia **sp.nov.**
agonis **sp.nov.**
ajax **sp.nov.**
alambra **sp.nov.**
alanis **sp.nov.**
alas **sp.nov.**
alegra **sp.nov.**
aliante **sp.nov.**
aliosa **sp.nov.**
allisonbrownae **sp.nov.**
alloris **sp.nov.**
altmiraensis **sp.nov.**
altura **sp.nov.**
alveolus **sp.nov.**
amadea **sp.nov.**
ambigua **sp.nov.**
amphis **sp.nov.**
amyra **sp.nov.**
anis **sp.nov.**
anomala **sp.nov.**
anysia **sp.nov.**
apicis **sp.nov.**
arada **sp.nov.**
aramis **sp.nov.**
arenalicola **sp.nov.**
aronia **sp.nov.**
artis **sp.nov.**
asilis **sp.nov.**
aspratilis **sp.nov.**
assai **sp.nov.**
atrata **sp.nov.**
aureoviridis **sp.nov.**
avis **sp.nov.**
azofeifai **sp.nov.**
baldosa **sp.nov.**
bariolis **sp.nov.**
beltanis **sp.nov.**
beltearis **sp.nov.**
bentoni **sp.nov.**
- bestis* **sp.nov.**
bicolor **sp.nov.**
bidensiae **sp.nov.**
bimaculata **sp.nov.**
blakeae **sp.nov.**
blancaensis **sp.nov.**
blendis **sp.nov.**
boria **sp.nov.**
brasiliensis **sp.nov.**
bravis **sp.nov.**
briannestjacquesae **sp.nov.**
bricenoi **sp.nov.**
brinaris **sp.nov.**
burra **sp.nov.**
burreadis **sp.nov.**
cabroensis **sp.nov.**
camachoi **sp.nov.**
candica **sp.nov.**
capillosa **sp.nov.**
cararaensis **sp.nov.**
carballoi **sp.nov.**
carbonis **sp.nov.**
caribaeae **sp.nov.**
carinata **sp.nov.**
carinifer **sp.nov.**
casacocaensis **sp.nov.**
cecropiae **sp.nov.**
cernia **sp.nov.**
chrysops **sp.nov.**
cissusae **sp.nov.**
clavata **sp.nov.**
clematisae **sp.nov.**
cocolobae **sp.nov.**
codata **sp.nov.**
collina **sp.nov.**
compacta (Howard)
copala **sp.nov.**
copalensis **sp.nov.**
coralis **sp.nov.**
coriolis **sp.nov.**
corista **sp.nov.**
cortina **sp.nov.**
cosidis **sp.nov.**
crabra **sp.nov.**
cresta **sp.nov.**
- criniera* **sp.nov.**
crotonae **sp.nov.**
crucensis **sp.nov.**
cuprea (Ashmead)
curiosa **sp.nov.**
cuscoensis **sp.nov.**
cyaneoviridis **sp.nov.**
daleskeyae **sp.nov.**
deilochus (Walker)
devania **sp.nov.**
diriaensis **sp.nov.**
dolosa **sp.nov.**
domingoensis **sp.nov.**
doradis **sp.nov.**
druparum **sp.nov.**
duniagarciae **sp.nov.**
eberhardi **sp.nov.**
edera **sp.nov.**
elegans **sp.nov.**
elisia **sp.nov.**
eolio **sp.nov.**
epidius (Walker)
eridana **sp.nov.**
eroica **sp.nov.**
estera **sp.nov.**
estrella **sp.nov.**
evgenyzakharovi **sp.nov.**
eximia **sp.nov.**
fabia **sp.nov.**
faina **sp.nov.**
falla **sp.nov.**
fausta LaSalle **sp.nov.**
fernandezae **sp.nov.**
fernandezi **sp.nov.**
ferula **sp.nov.**
fieris **sp.nov.**
flavipes (Howard)
flora **sp.nov.**
folata **sp.nov.**
fresa **sp.nov.**
fucata **sp.nov.**
fuga **sp.nov.**
gabela **sp.nov.**
gala **sp.nov.**
gallarum **sp.nov.**

- gavia* **sp.nov.**
gigantensis **sp.nov.**
giria **sp.nov.**
globosa **sp.nov.**
gobis **sp.nov.**
gonzalezi **sp.nov.**
gouaniae **sp.nov.**
graciliclava **sp.nov.**
grandis **sp.nov.**
gridis **sp.nov.**
guanacastensis **sp.nov.**
guillermopereirai **sp.nov.**
gutierrezii **sp.nov.**
haemon (Walker)
hallwachsae **sp.nov.**
harryramirezi **sp.nov.**
herediensis **sp.nov.**
hesperis **sp.nov.**
hiata **sp.nov.**
hirsuta **sp.nov.**
hirta **sp.nov.**
iangauldi **sp.nov.**
ibis **sp.nov.**
idris **sp.nov.**
illydris **sp.nov.**
incisa **sp.nov.**
infusca **sp.nov.**
ingae **sp.nov.**
insignis **sp.nov.**
intesa **sp.nov.**
intruita **sp.nov.**
ira **sp.nov.**
isola **sp.nov.**
itabunaensis **sp.nov.**
Itauna Perioto & Costa
janzeni **sp.nov.**
jaymesonesae **sp.nov.**
jimenezi **sp.nov.**
juni **sp.nov.**
kateperezae **sp.nov.**
labilis **sp.nov.**
labrada **sp.nov.**
lacinia **sp.nov.**
ladrona **sp.nov.**
lama **sp.nov.**
lapra **sp.nov.**
lapsa **sp.nov.**
larshuggerti **sp.nov.**
lasallei **sp.nov.**
latosa **sp.nov.**
lealis **sp.nov.**
lema **sp.nov.**
lemuris **sp.nov.**
leonae **sp.nov.**
limonensis **sp.nov.**
liosa **sp.nov.**
liria **sp.nov.**
loboi **sp.nov.**
longicauda **sp.nov.**
lumbrada **sp.nov.**
lunaniae **sp.nov.**
macanis **sp.nov.**
macaxeira Perioto,
 Costa & Lara
maculifer **sp.nov.**
magra **sp.nov.**
majalis **sp.nov.**
malandrina **sp.nov.**
malia **sp.nov.**
mandria **sp.nov.**
manga **sp.nov.**
maniata **sp.nov.**
manotris **sp.nov.**
manuelpereirai **sp.nov.**
marbis **sp.nov.**
marea **sp.nov.**
matearis **sp.nov.**
maura **sp.nov.**
maya **sp.nov.**
medrosa **sp.nov.**
melasoma **sp.nov.**
meleadis **sp.nov.**
menoris **sp.nov.**
mesana **sp.nov.**
methea **sp.nov.**
miga **sp.nov.**
milagra **sp.nov.**
militaris **sp.nov.**
mimosa **sp.nov.**
miopis **sp.nov.**
miria **sp.nov.**
mogensena **sp.nov.**
moleris **sp.nov.**
montanis **sp.nov.**
monteverdensis **sp.nov.**
mora **sp.nov.**
moradis **sp.nov.**
morula **sp.nov.**
mucuriensis **sp.nov.**
multisulcata (Girault)
munda **sp.nov.**
mynta **sp.nov.**
myrciae **sp.nov.**
myrsineae **sp.nov.**
nana **sp.nov.**
navia **sp.nov.**
neblina **sp.nov.**
nebulosa **sp.nov.**
neotropicalis **sp.nov.**
nicaraguaensis (Cameron)
nicoyae **sp.nov.**
nigricans **sp.nov.**
nigrocyanea (Ashmead)
nishidai **sp.nov.**
nitida **sp.nov.**
noblitis **sp.nov.**
noyesi **sp.nov.**
oasis **sp.nov.**
ocoteae **sp.nov.**
octava **sp.nov.**
opala **sp.nov.**
opima **sp.nov.**
orbitis **sp.nov.**
orillia **sp.nov.**
osaensis **sp.nov.**
osmia **sp.nov.**
pagana **sp.nov.**
palenta **sp.nov.**
palotis **sp.nov.**
papillosa **sp.nov.**
pardis **sp.nov.**
patina **sp.nov.**
pava **sp.nov.**
pelora **sp.nov.**
pensada **sp.nov.**
perasphondyliae **sp.nov.**
perla **sp.nov.**
perseae **sp.nov.**

- persimilis* (Ashmead)
peruviensis **sp.nov.**
philodendrae **sp.nov.**
philyra **sp.nov.**
picuda **sp.nov.**
pilonensis **sp.nov.**
piperae **sp.nov.**
plaumanni **sp.nov.**
preta **sp.nov.**
pyrillia **sp.nov.**
ramyamanjunathae **sp.nov.**
reticulata **sp.nov.**
rosea **sp.nov.**
roupalae **sp.nov.**
rubii **sp.nov.**
rugosa **sp.nov.**
saga **sp.nov.**
santarosensis **sp.nov.**
scabiosa **sp.nov.**
scadius (Walker)
scarpia **sp.nov.**
schefflerae **sp.nov.**
seminarum **sp.nov.**
springerae **sp.nov.**
squamosa (Girault)
sulcata (Howard)
sureshnaiki **sp.nov.**
talamancaensis **sp.nov.**
tandayapaensis **sp.nov.**
teronadis **sp.nov.**
tigrensis **sp.nov.**
transcarinata (Gahan)
trinidadensis **sp.nov.**
triozae **sp.nov.**
truncata **sp.nov.**
umanai **sp.nov.**
valerus (Walker)
valmiri **sp.nov.**
weinmanniae **sp.nov.**
veluda **sp.nov.**
ventrosa **sp.nov.**
verbesinae **sp.nov.**
verdensis **sp.nov.**
wilsonae **sp.nov.**
wilsoni **sp.nov.**
viridicyanea (Ashmead)
- volcanensis* **sp.nov.**
zunigai **sp.nov.**
zurquiensis **sp.nov.**

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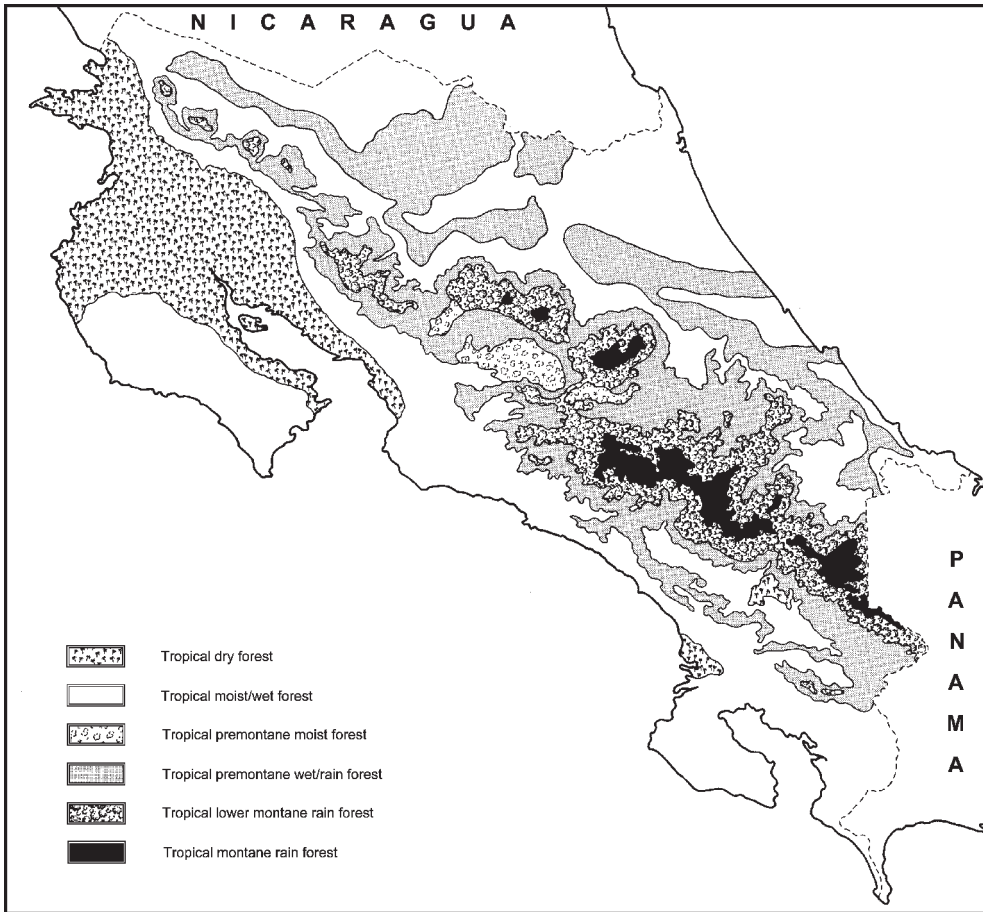


Fig. 8. Costa Rica, showing approximate limits of the major Holdridge life zones.

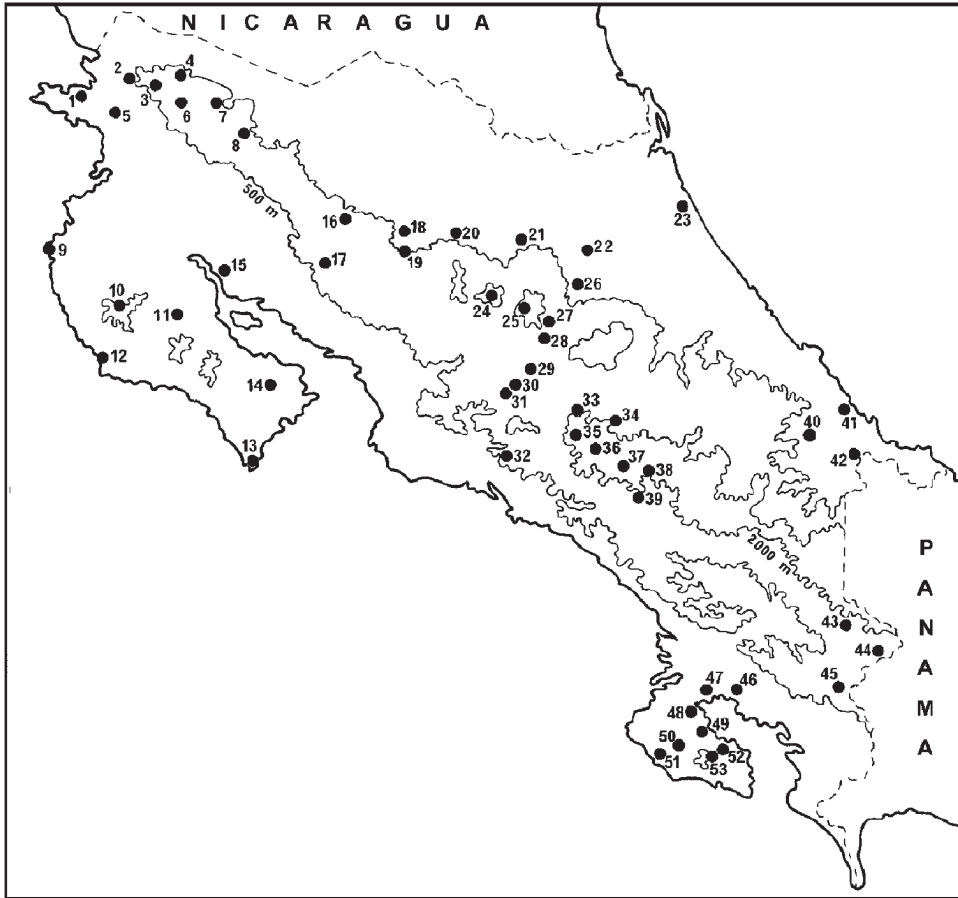
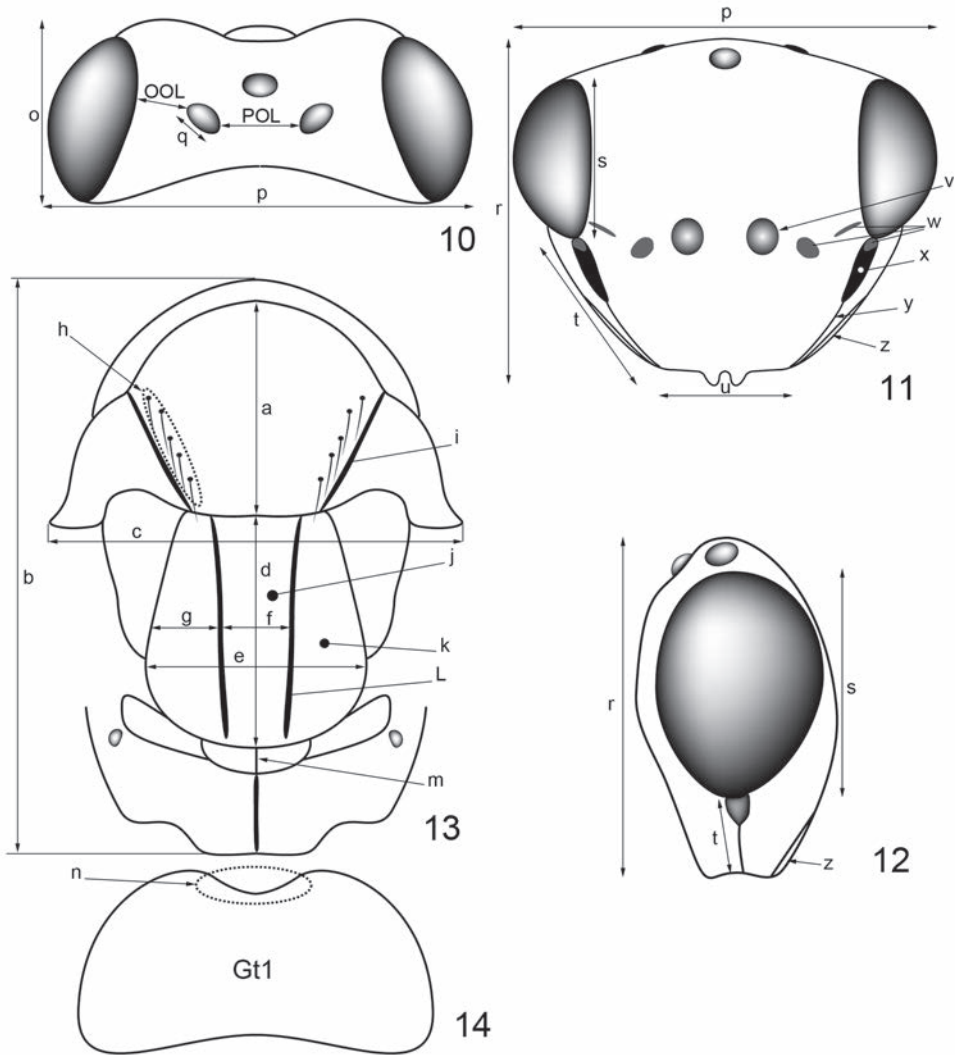
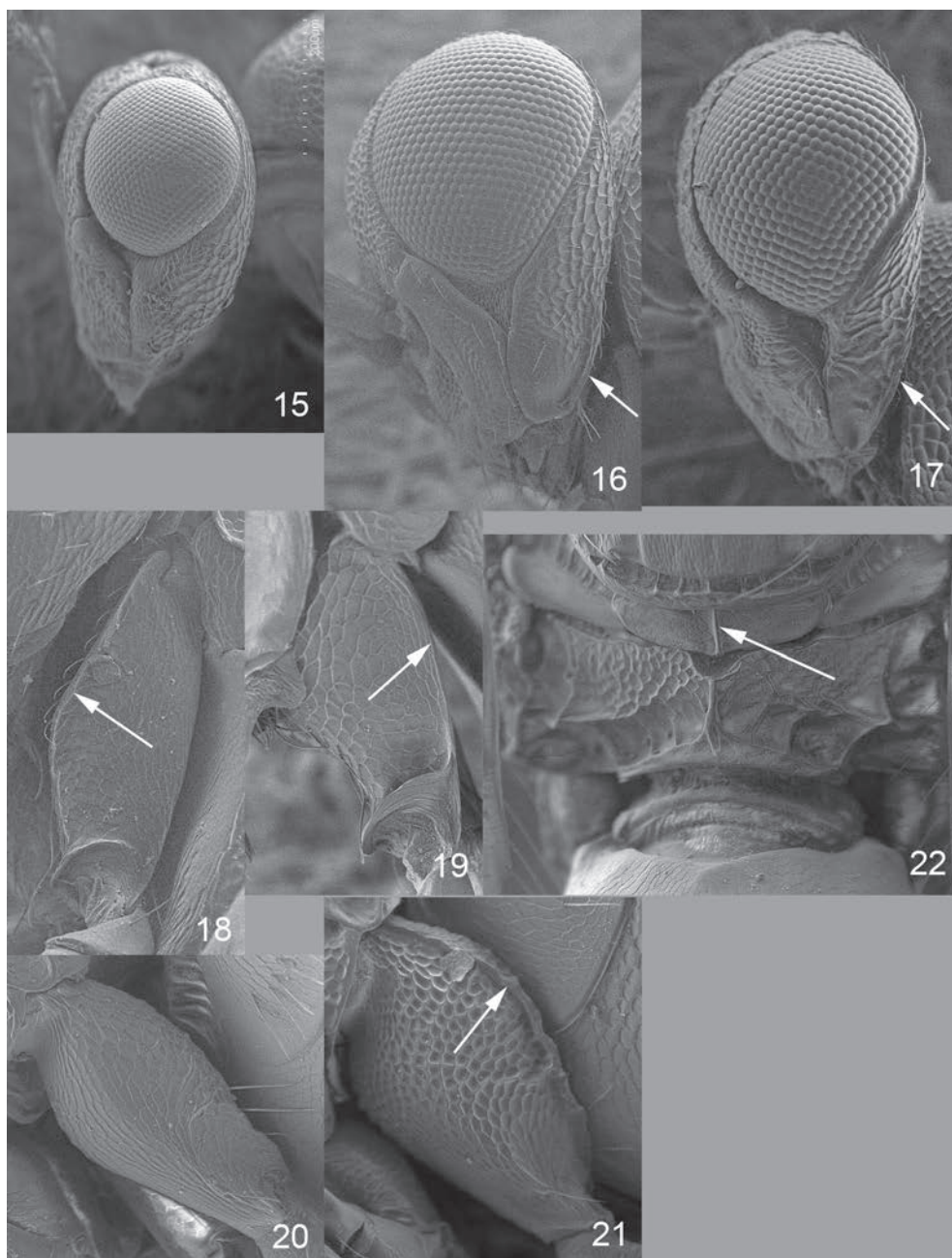


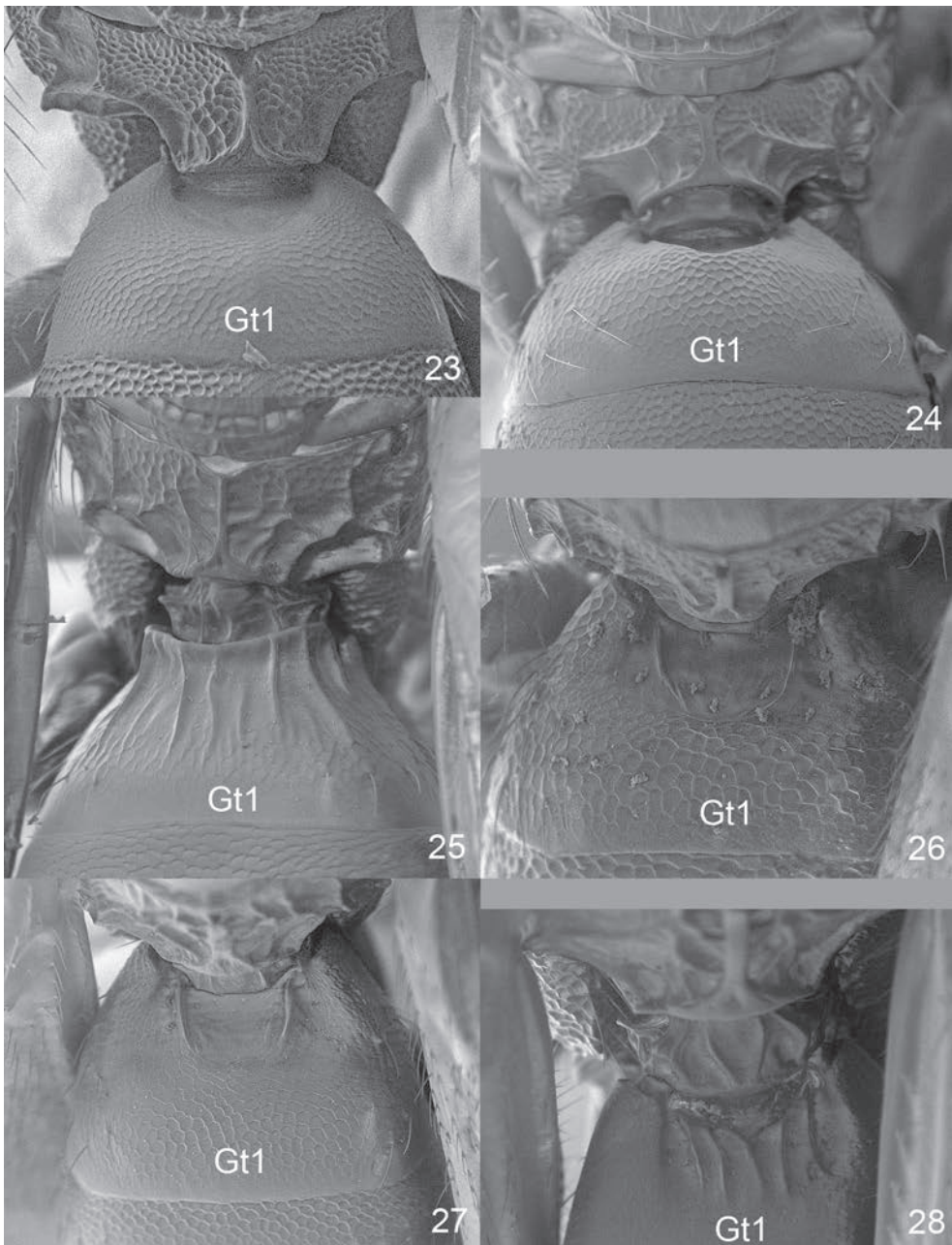
Fig. 9. Costa Rica, showing the collecting localities from which significant Malaise trap, yellow pan trap and sweep-net samples have been collected and processed. These are: 1. Santa Rosa; 2. Cerro el Hacha; 3. Est. Maritza; 4. Est. Pitilla; 5. Est. Cacao; 6. Finca San Gabriel; 7. Barra Honda; 8. Palo Verde; 9. Monteverde; 10. Jabillos; 11. Aguas Zarcas; 12. Finca La Selva; 13. Rio Frio; 14. 16 km W Guapiles; 15. Volcán Poas; 16. Vara Blanca; 17. El Tunel (Zurqui); 18. Zurqui de Moravia; 19. San Antonio de Escazú; 20. Cerros de Escazú; 21. Carrara; 22. La Cangreja; 23. Cerro de la Muerte; 24. Villa Mills; 25. 26 km N San Isidro; 26. Corcovado; 27. Puerto Jiménez; 28. La Palma; 29. Rincón de Osa; 30. Golfo Dulce; 31. 5 km W. Peñas Blancas; 32. San Vito, Las Cruces Botanic Garden; 33. Las Alturas; 34. Bribri; 35. Hitoy-Cerere; 36. Cahuita; 37. Tortuguero; 38. P.N. Arenal; 39. Est. Biol. San Ramón; 40. Mirador Quetzales; 41. P.N. Tapantí; 42. Est. Biol. Cuericí; 43. Est. Altamira; 44. Los Patos; 45. Est. Agujas. Modified from Gauld (2000) and Noyes (2010). For a description of these localities see Hansson (2002, 2004).



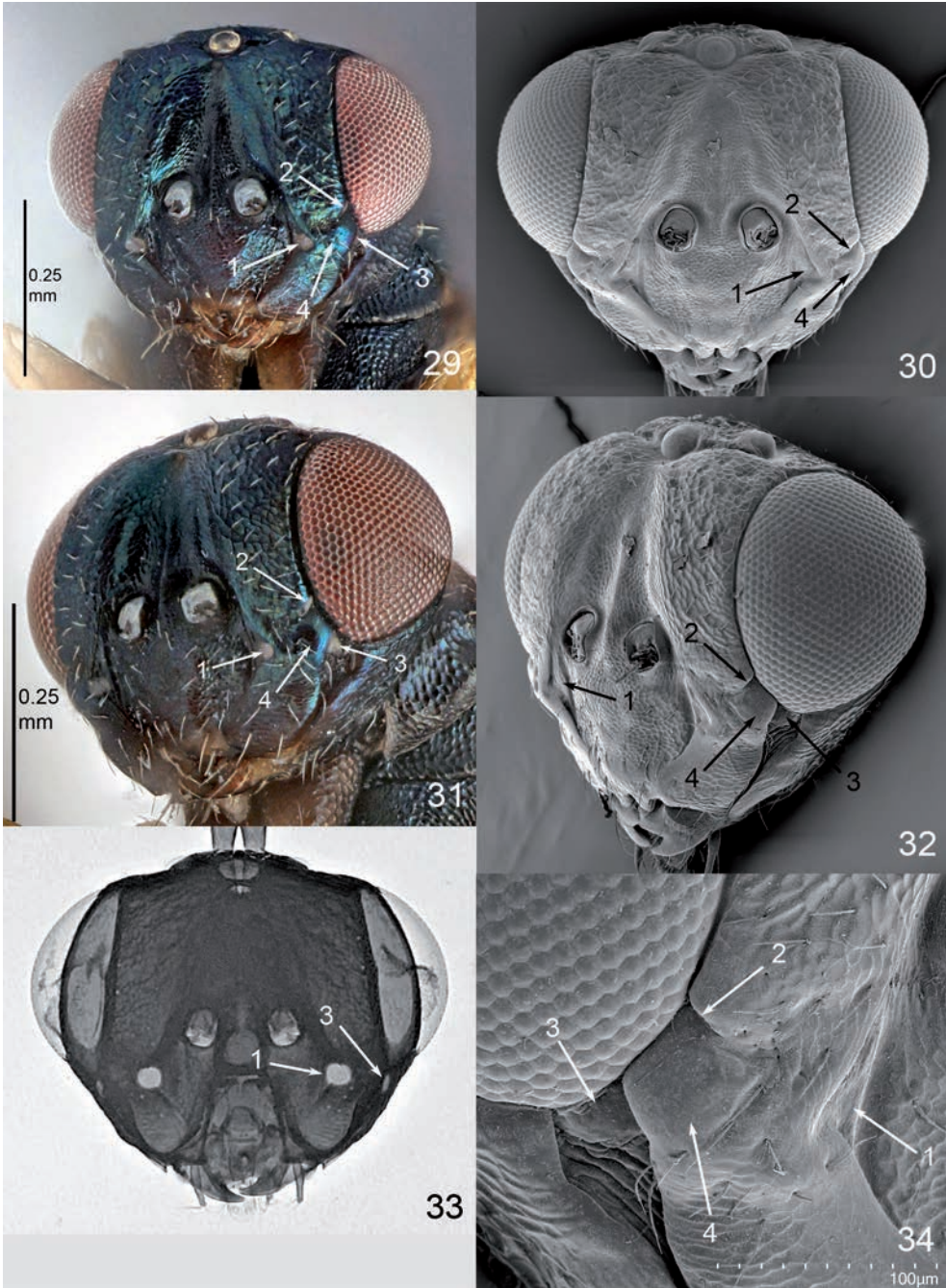
Figs 10–14. Terminology – (10) head dorsal view, (11) head frontal view, (12) head lateral view, (13) mesosoma dorsal view, (14) first gastral tergite dorsal view. Terms: a: midlobe of mesoscutum length; b: mesosoma length; c: mesosoma width; d: mesoscutellum length; e: mesoscutellum width; f: median part of mesoscutellum width; g: lateral part of mesoscutellum width; h: adnotaular setae; i: notaulus; j: median part of mesoscutellum; k: lateral part of mesoscutellum; L: submedian groove; m: dorsellum with median carina; n: medio-basal part of first gastral tergite; o: head length in dorsal view; p: head width; q: lateral ocellus diameter; r: head length in frontal view; s: eye length; t: malar space length; u: mouth width; v: torulus; w: membranous areas; x: subocular fovea; y: malar sulcus; z: genal carina.



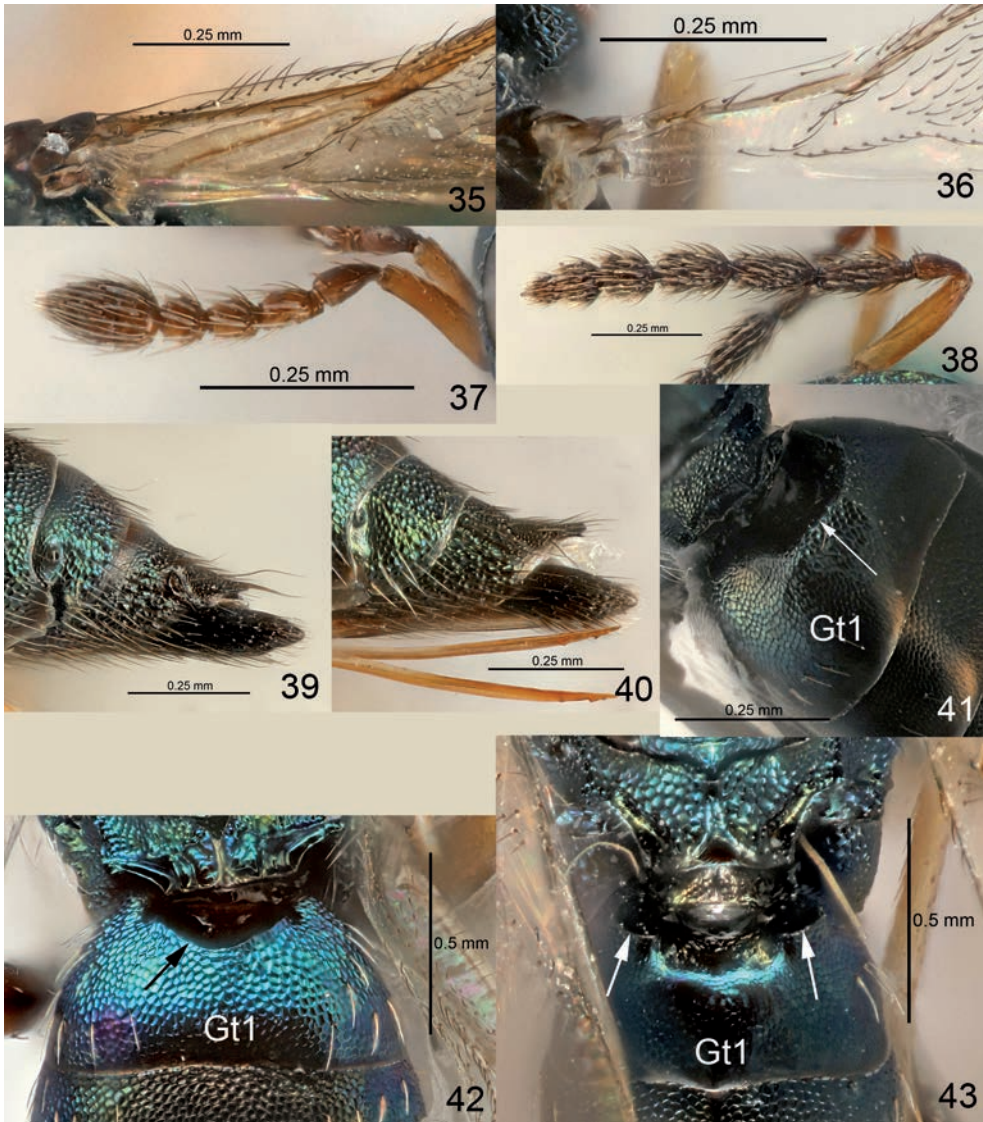
Figs 15–22. *Galeopsomyia* spp., ♀. 15–17. Head lateral view – (15) *G. seminarum*; (16) *G. noyesi* (arrow pointing at short genal carina); (17) *G. graciliclava* (arrow pointing at long genal carina). 18–19. Fore coxa lateral view – (18) *G. myrsineae* (arrow pointing at carina along anterior margin); (19) *G. alas* (arrow pointing at carina along posterior margin). 20–21. Hind coxa lateral view – (20) *G. noyesi*; (21) *G. aliosa* (arrow pointing at carina along posterior margin). 22. *G. carinifer*, dorsellum (arrow pointing at median carina).



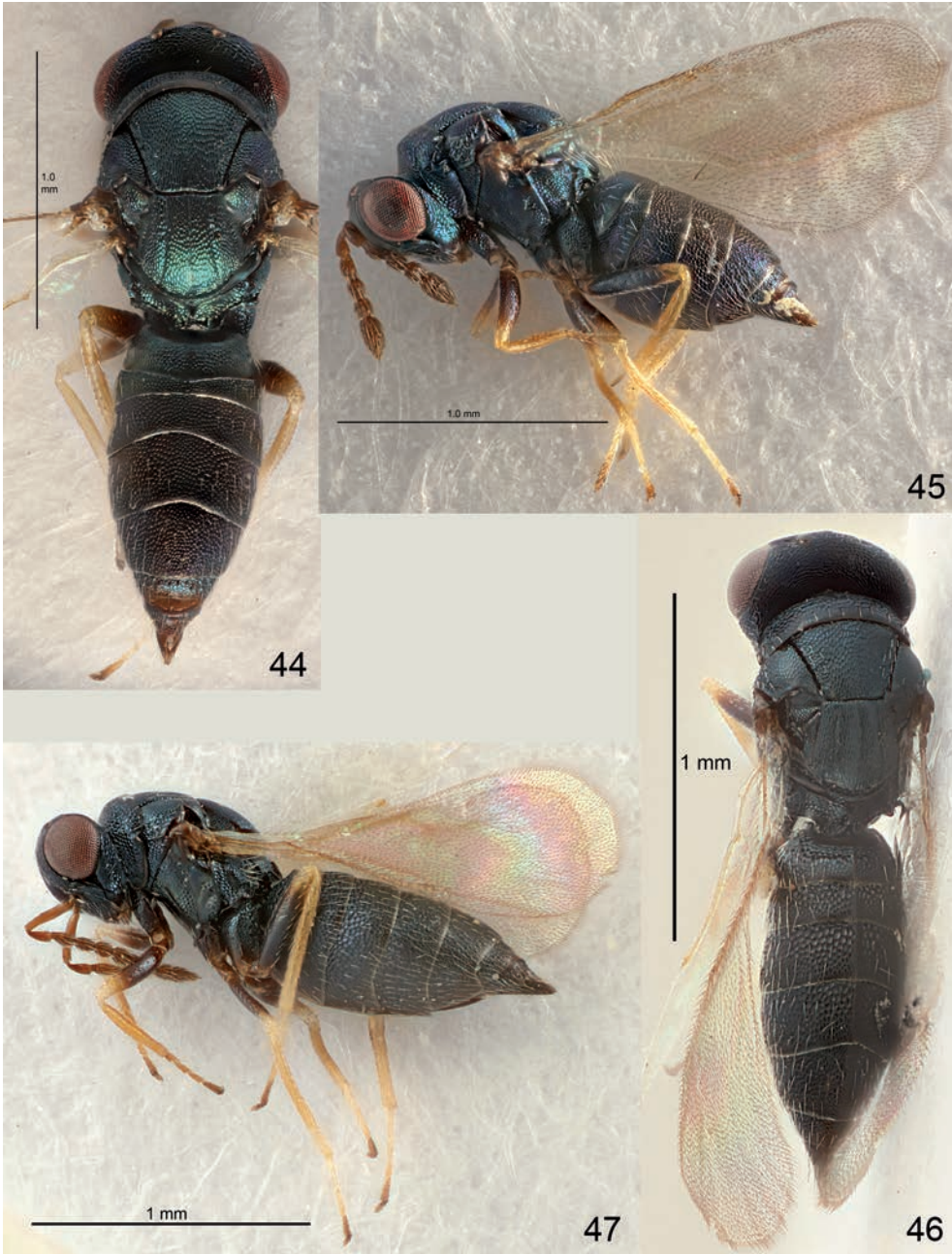
Figs 23–28. *Galeopsomyia* spp., ♀, first gastral tergite (Gt₁) dorsal view – (23) *G. epidius*; (24) *G. osaensis*; (25) *G. fausta*; (26) *G. blakeae*; (27) *G. illydris*; (28) *G. devania*.



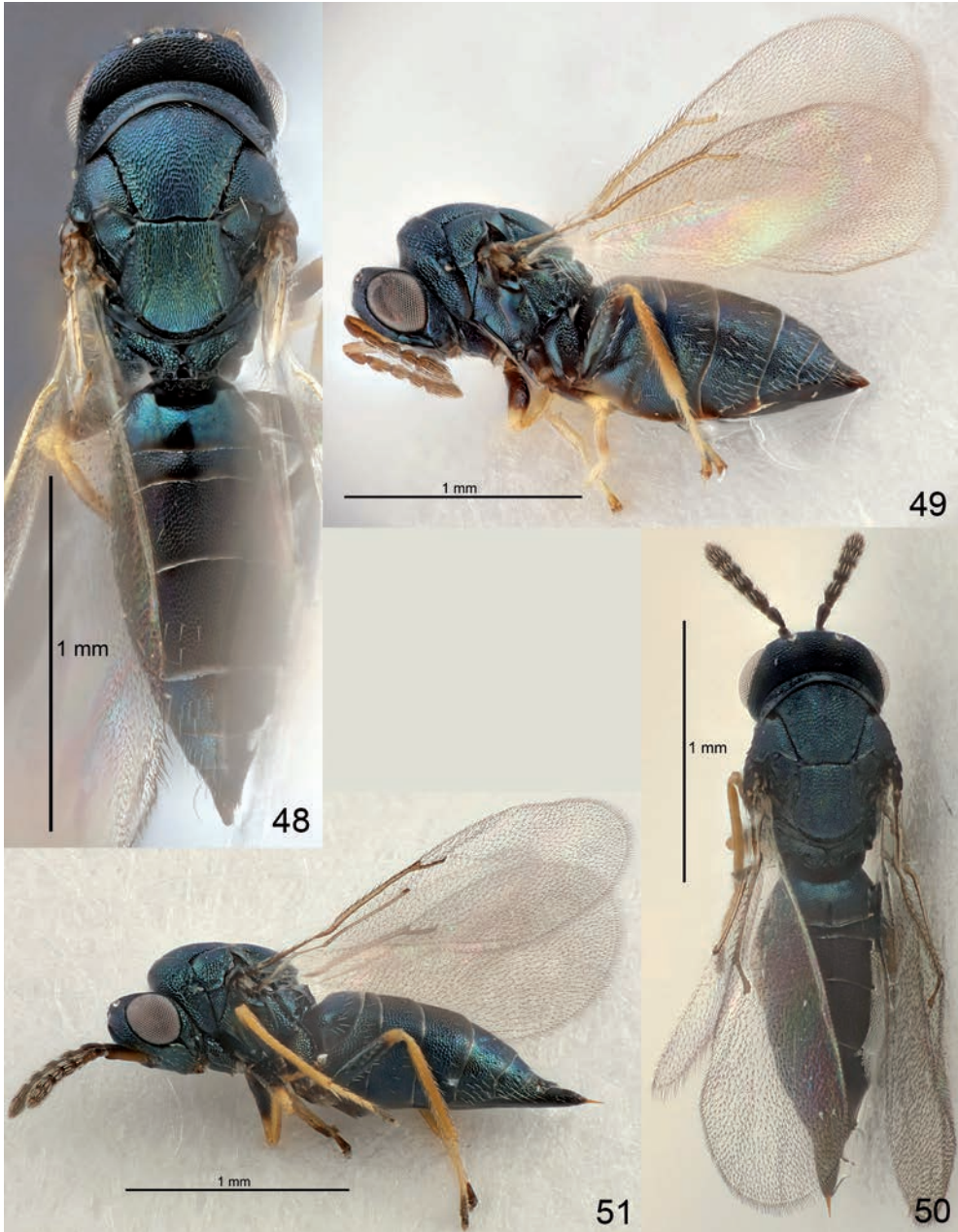
Figs 29–34. *Galeopsomyia multisulcata* ♀, head with white areas (1–3) and swelling below eye (4) indicated – (29–30) frontal view; (31–32) fronto-lateral view; (33) head treated with KOH frontal view; (34) close-up of part with white areas and swelling.



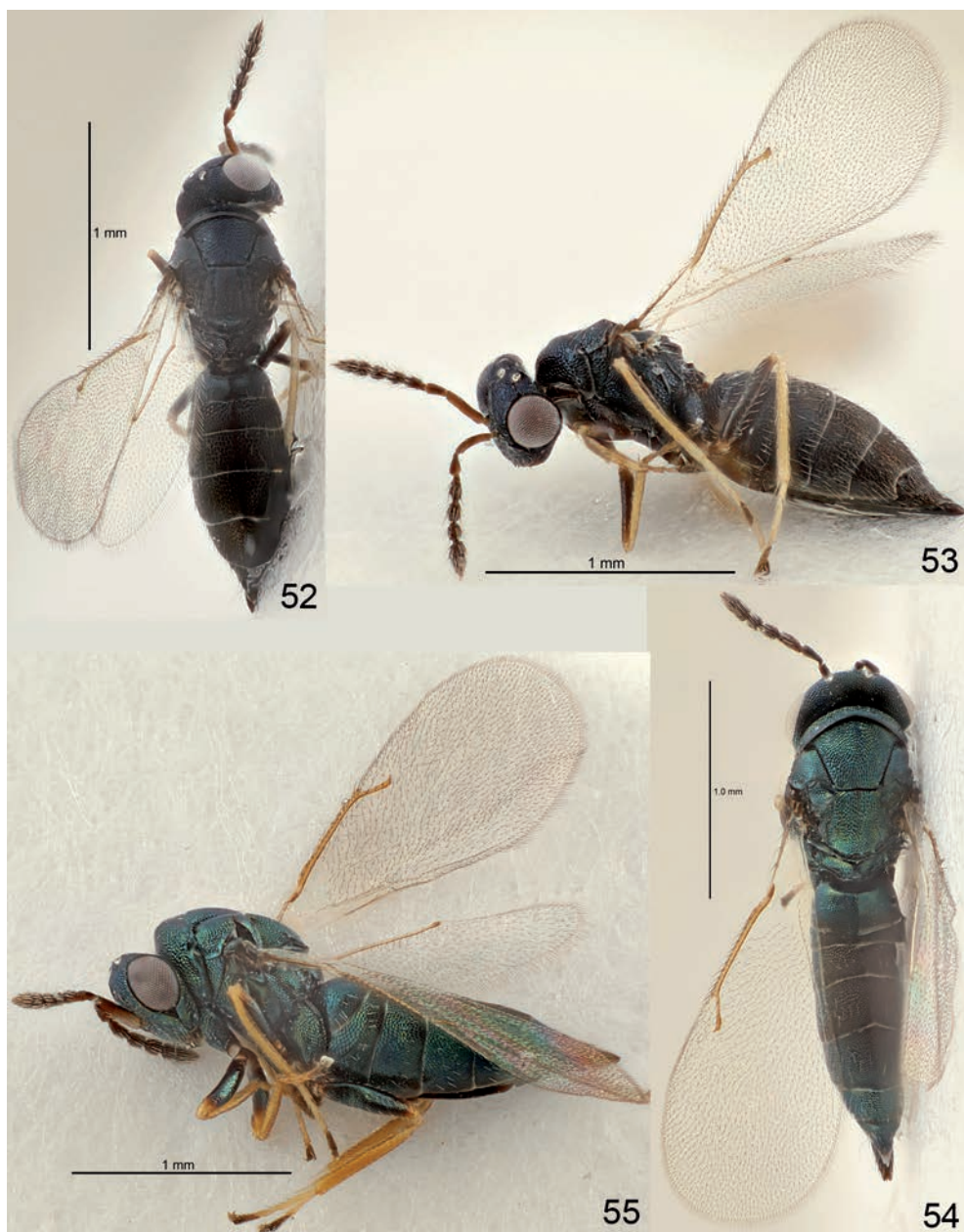
Figs 35–43. *Galeopsomyia* spp., ♀. 35–36. Base of fore wing with ventral setal row in costal cell – (35) *G. illydris*, row unbroken; (36) *G. osaensis*, row broken. 37–38. Antenna lateral view – (37) *G. noyesi*, solid antennal clava; (38) *G. illydris*, with distinct constriction between C1 and C2. 39–40. Apex of gaster lateral view – (39) *G. illydris*; (40) *G. flora*. 41–43. First gastral tergite (Gt₁) dorsal view – (41) *G. saga*, arrow pointing at medio-basal carina; (42) *G. pagana*, arrow pointing at medio-basal sharp edge; (43) *G. druparum*, arrows pointing at ovate flat areas.



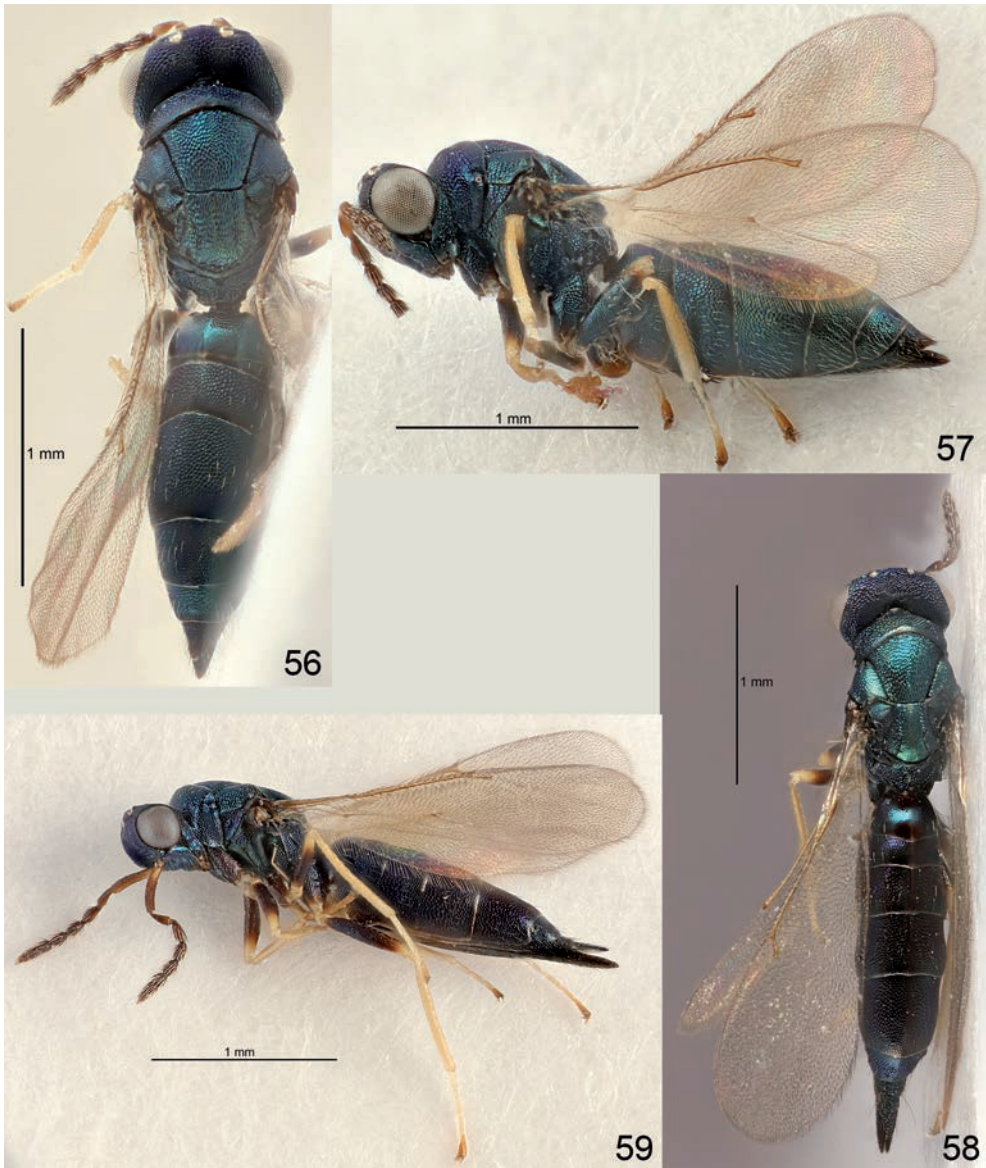
Figs 44–47. *Galeopsomyia abatis* ♀ – (44) habitus dorsal view, paratype; (45) habitus lateral view, holotype. *Galeopsomyia aciana*, holotype ♀ – (46) habitus dorsal view; (47) habitus lateral view.



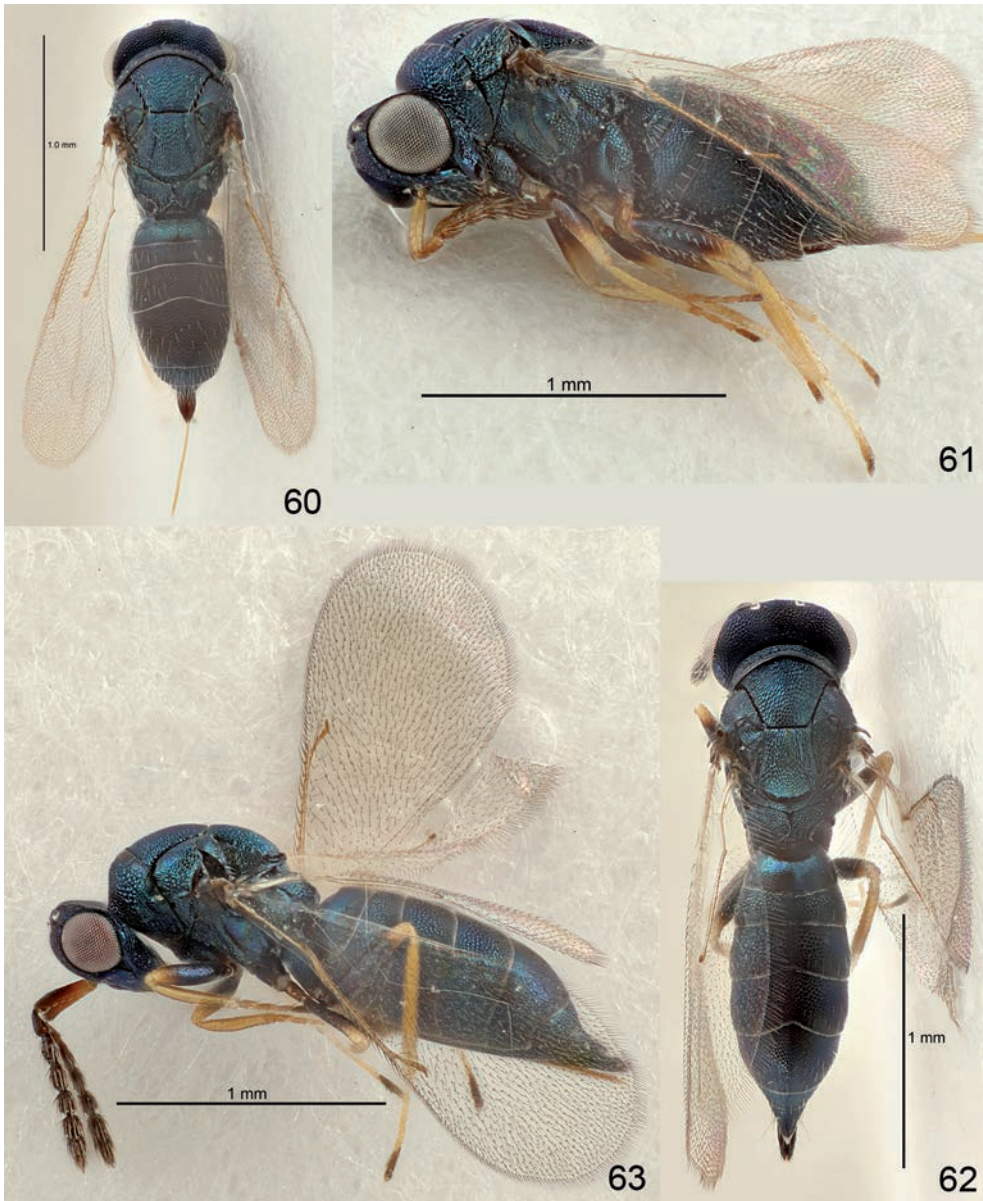
Figs 48–51. *Galeopsomyia alas*, holotype ♀ – (48) habitus dorsal view; (49) habitus lateral view. *Galeopsomyia aliosa*, holotype ♀ – (50) habitus dorsal view; (51) habitus lateral view.



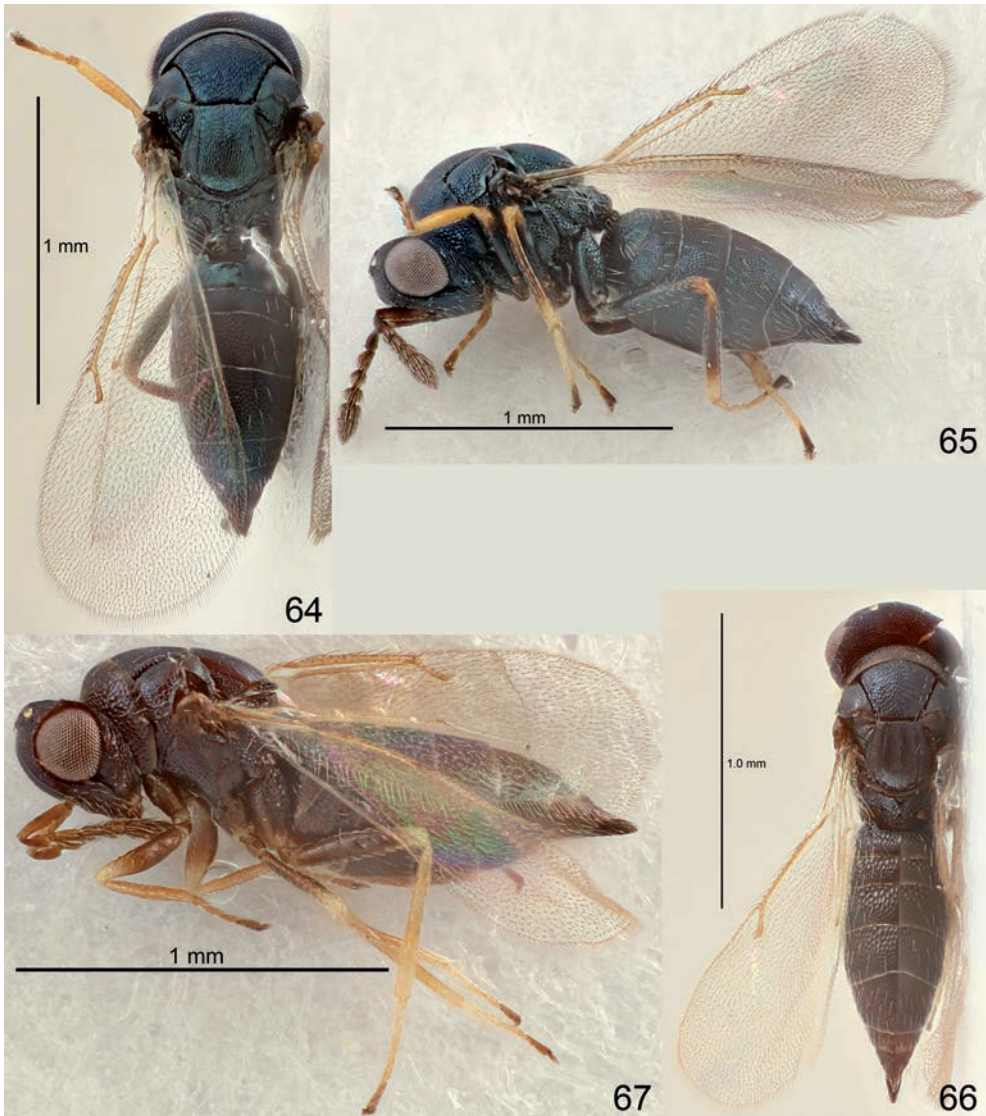
Figs 52–55. *Galeopsomyia altamiraensis*, holotype ♀ – (52) habitus dorsal view; (53) habitus lateral view. *Galeopsomyia aronia*, holotype ♀ – (54) habitus dorsal view; (55) habitus lateral view.



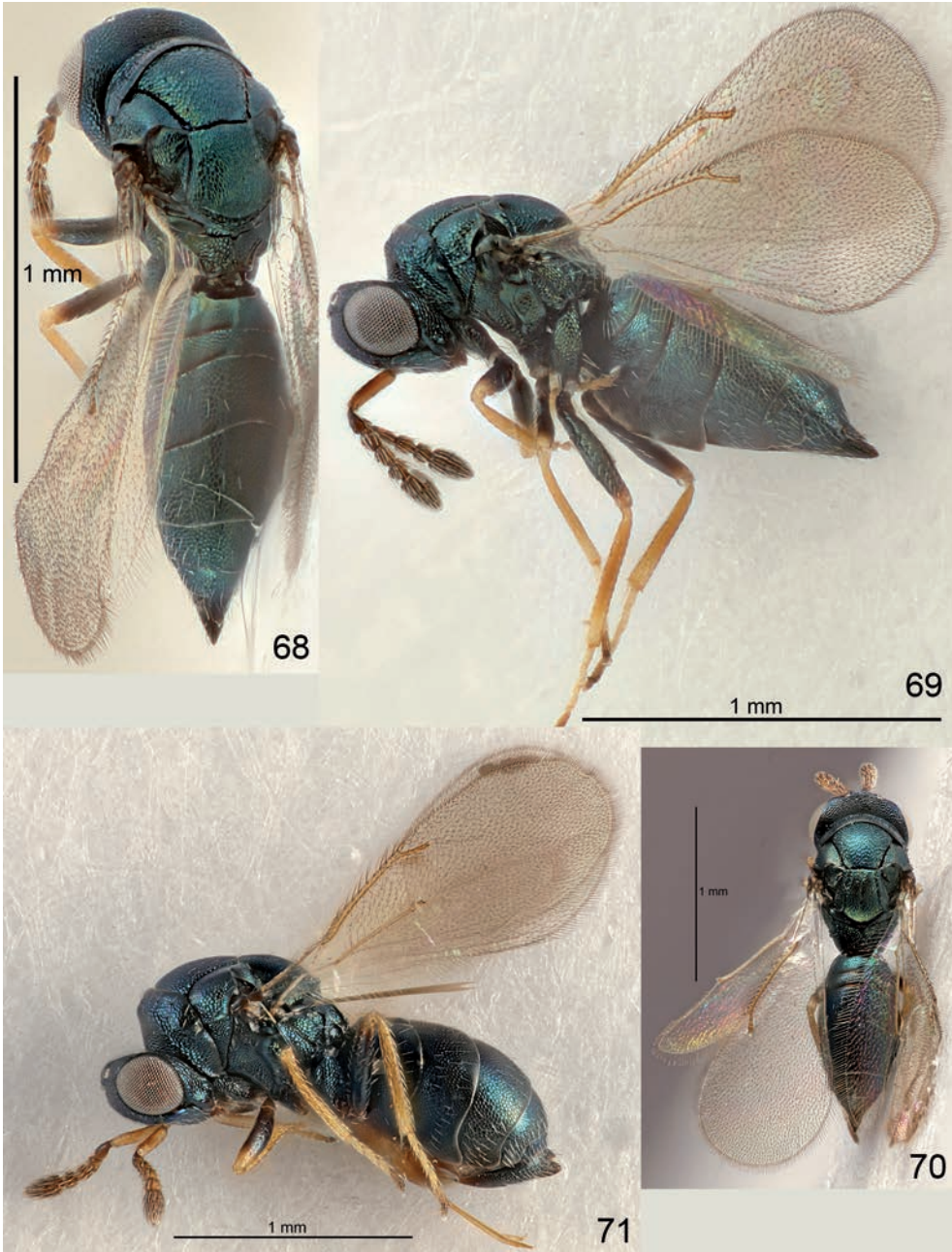
Figs 56–59. *Galeopsomyia azofeifai*, holotype ♀ – (56) habitus dorsal view; (57) habitus lateral view. *Galeopsomyia beltairis*, holotype ♀ – (58) habitus dorsal view; (59) habitus lateral view.



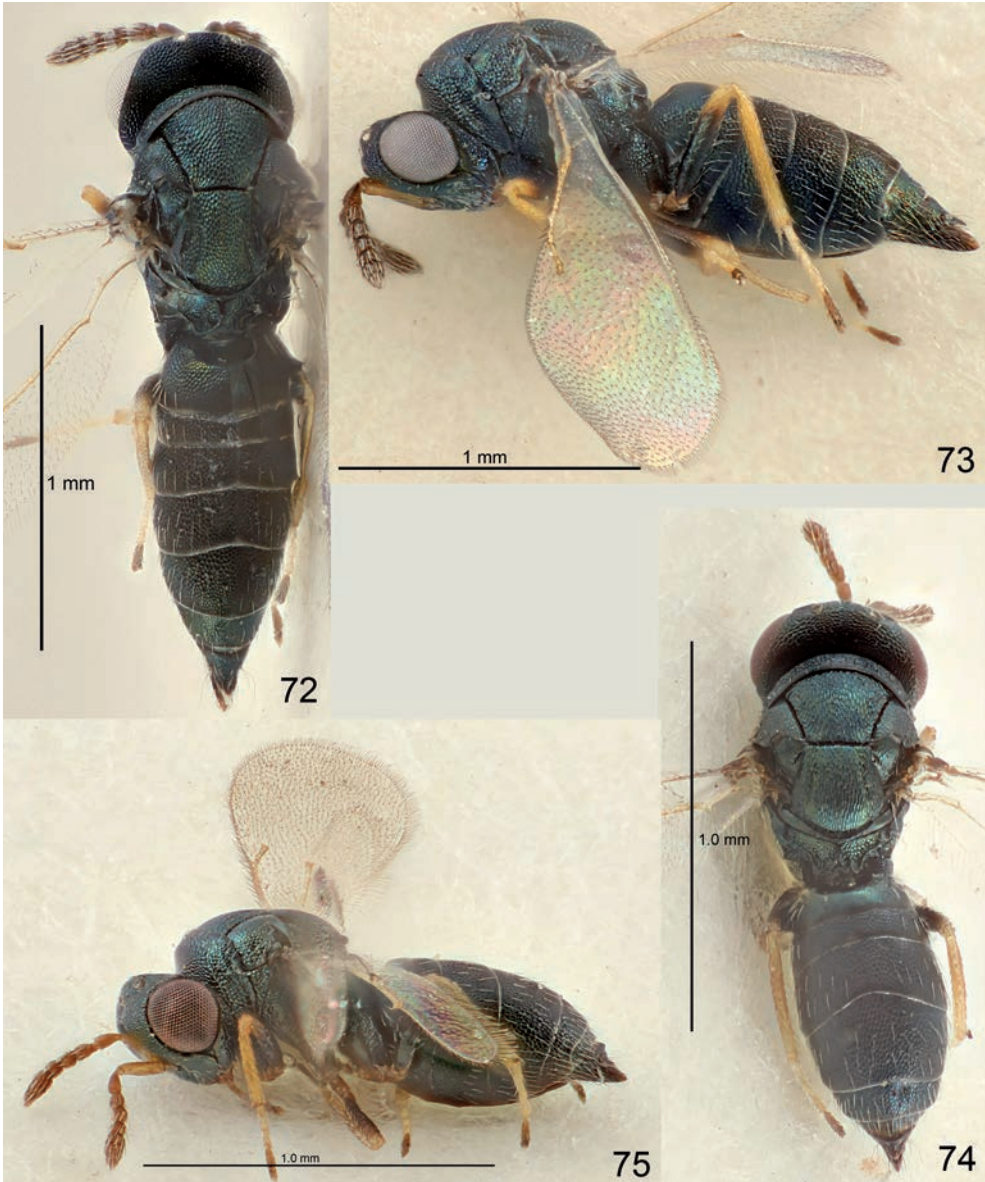
Figs 60–63. *Galeopsomyia bentoni*, holotype ♀ – (60) habitus dorsal view; (61) habitus lateral view. *Galeopsomyia bidensiae*, holotype ♀ – (62) habitus dorsal view; (63) habitus lateral view.



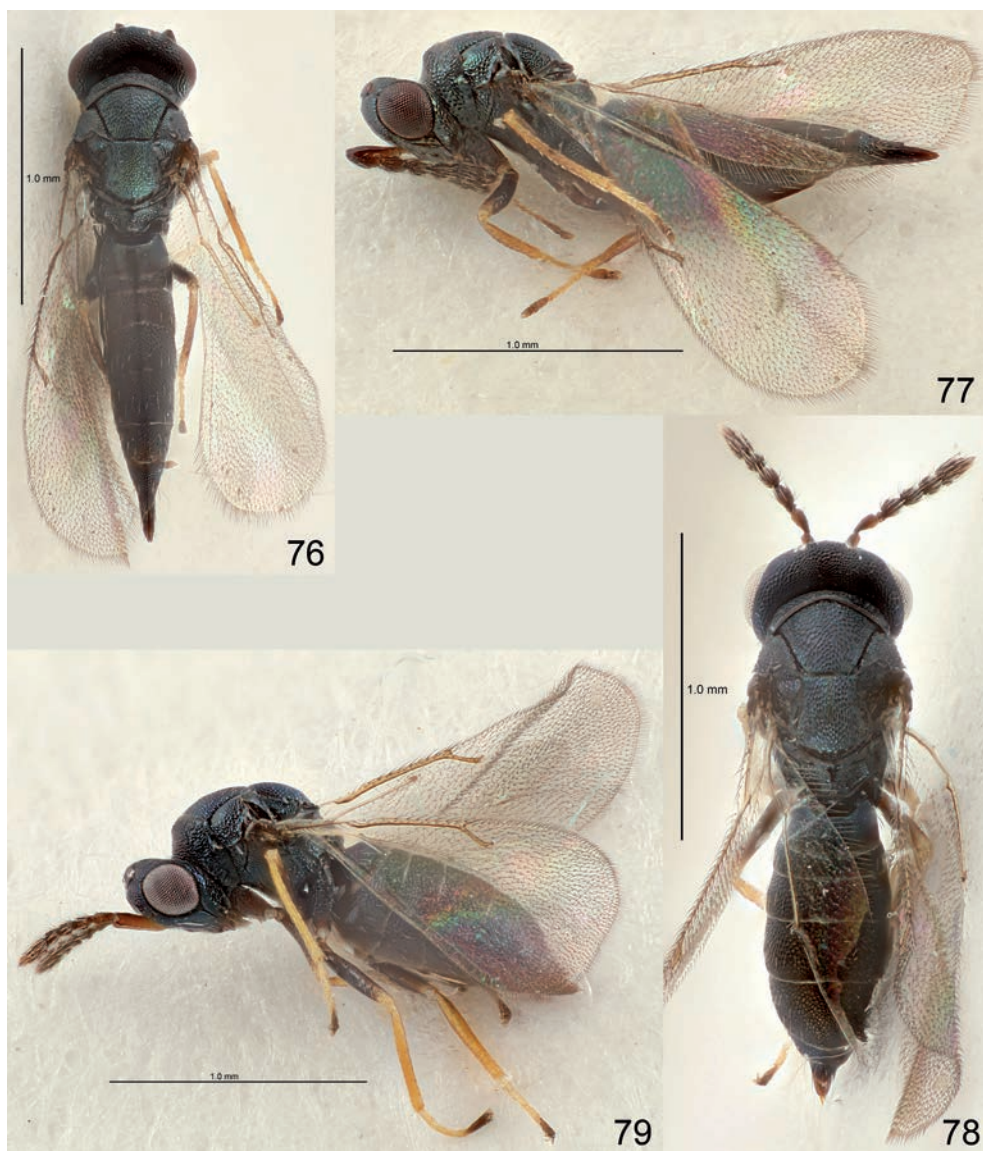
Figs 64–67. *Galeopsomyia blancaensis*, holotype ♀ – (64) habitus dorsal view; (65) habitus lateral view. *Galeopsomyia brasiliensis*, holotype ♀ – (66) habitus dorsal view; (67) habitus lateral view.



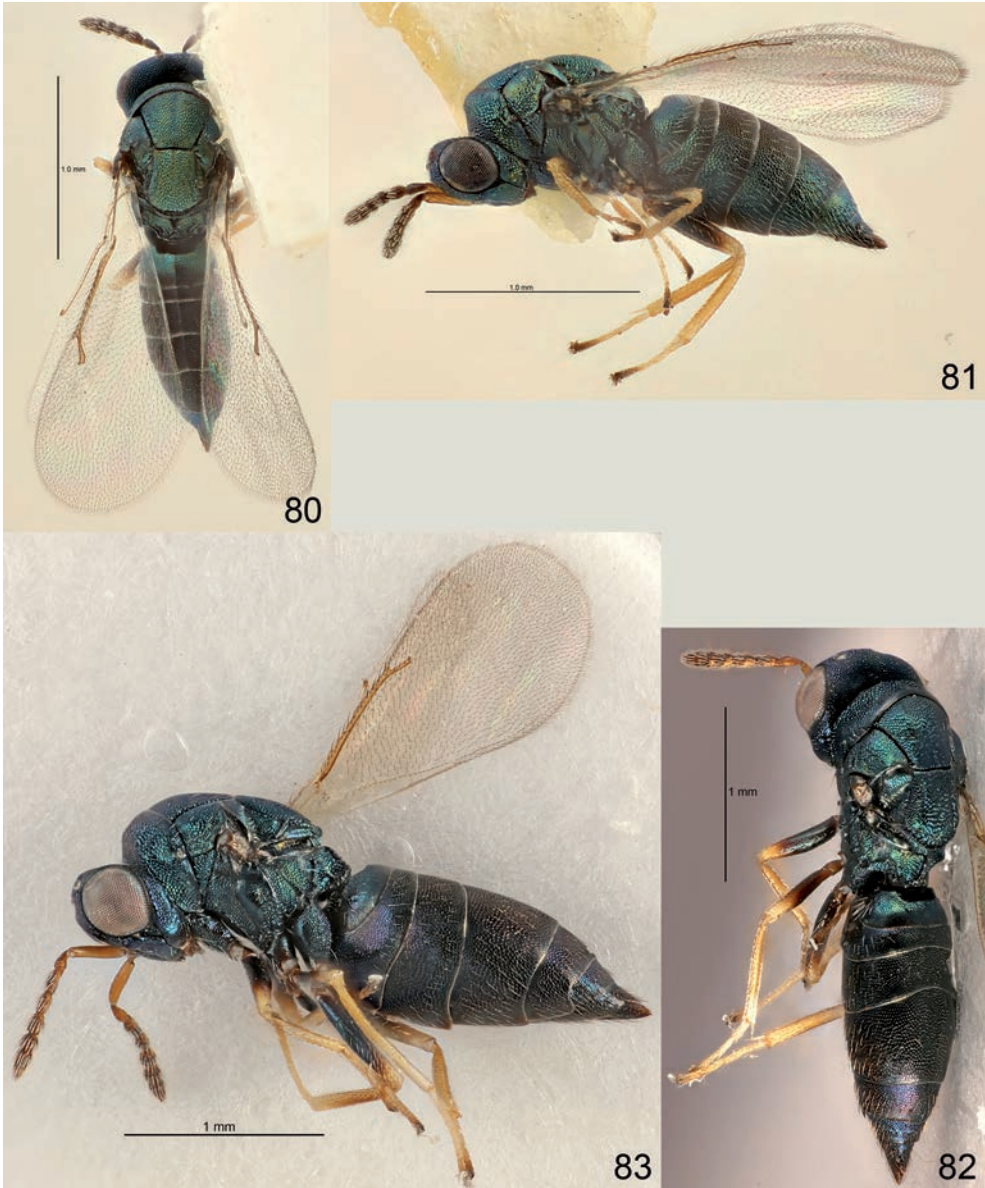
Figs 68–71. *Galeopsomyia cabroensis*, holotype ♀ – (68) habitus dorsal view; (69) habitus lateral view. *Galeopsomyia camachoii* – (70) habitus dorsal view, paratype; (71) habitus lateral view, holotype.



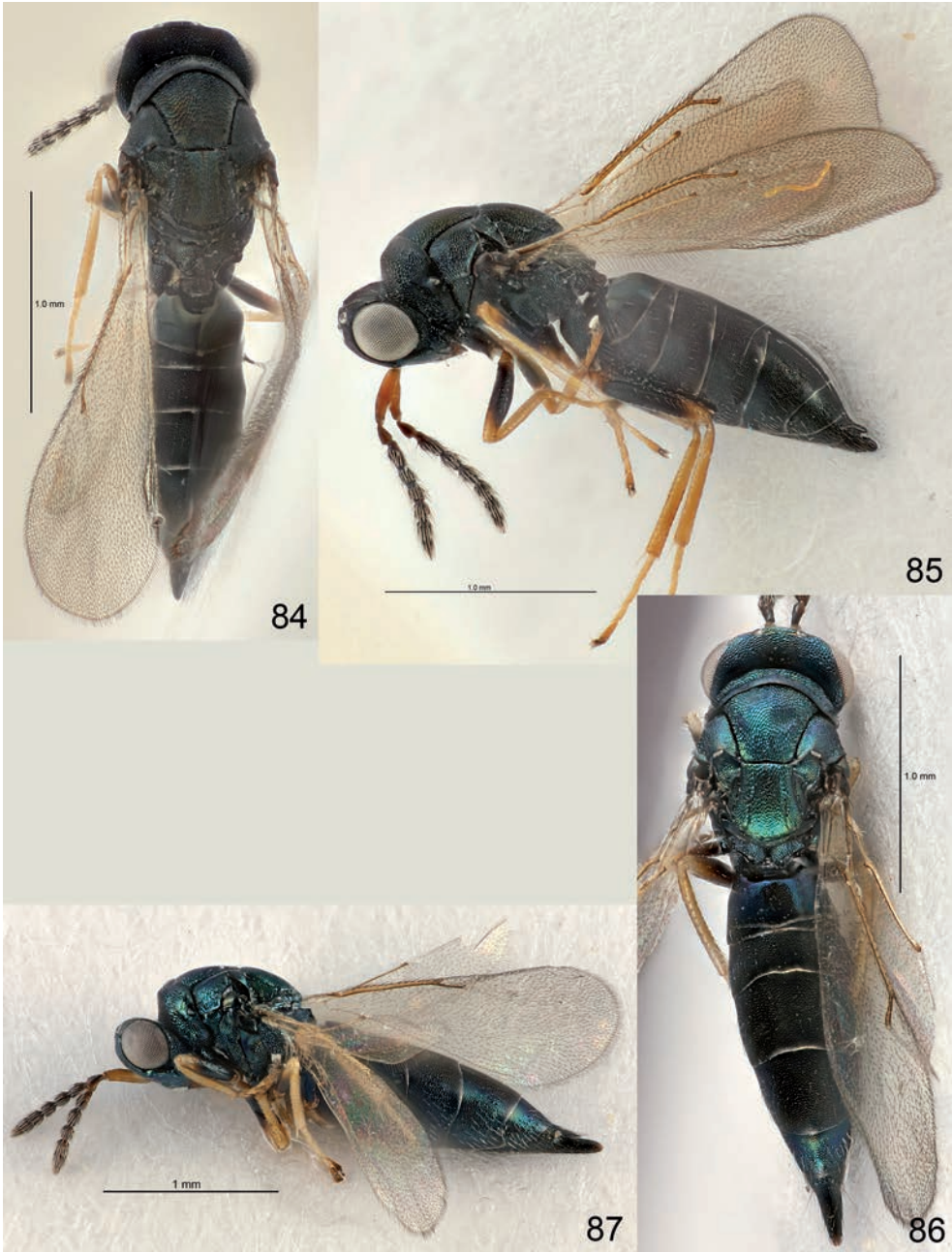
Figs 72–75. *Galeopsomyia candica*, holotype ♀ – (72) habitus dorsal view; (73) habitus lateral view. *Galeopsomyia caribeeae*, holotype ♀ – (74) habitus dorsal view; (75) habitus lateral view.



Figs 76–79. *Galeopsomyia carinata*, holotype ♀ – (76) habitus dorsal view; (77) habitus lateral view. *Galeopsomyia casacocaensis*, holotype ♀ – (78) habitus dorsal view; (79) habitus lateral view.



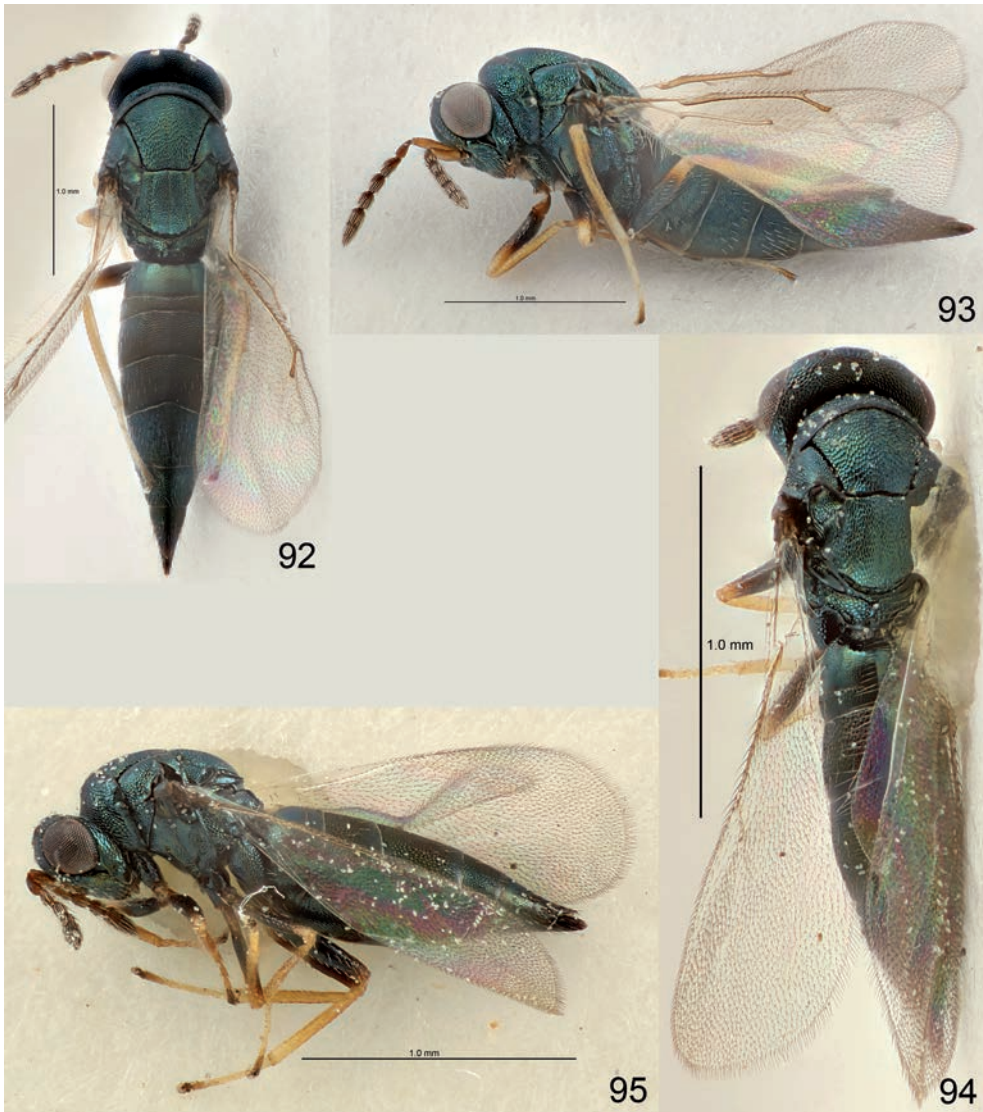
Figs 80–83. *Galeopsomyia cissusae*, holotype ♀ – (80) habitus dorsal view; (81) habitus lateral view. *Galeopsomyia collina*, holotype ♀ – (82) habitus dorsal view; (83) habitus lateral view.



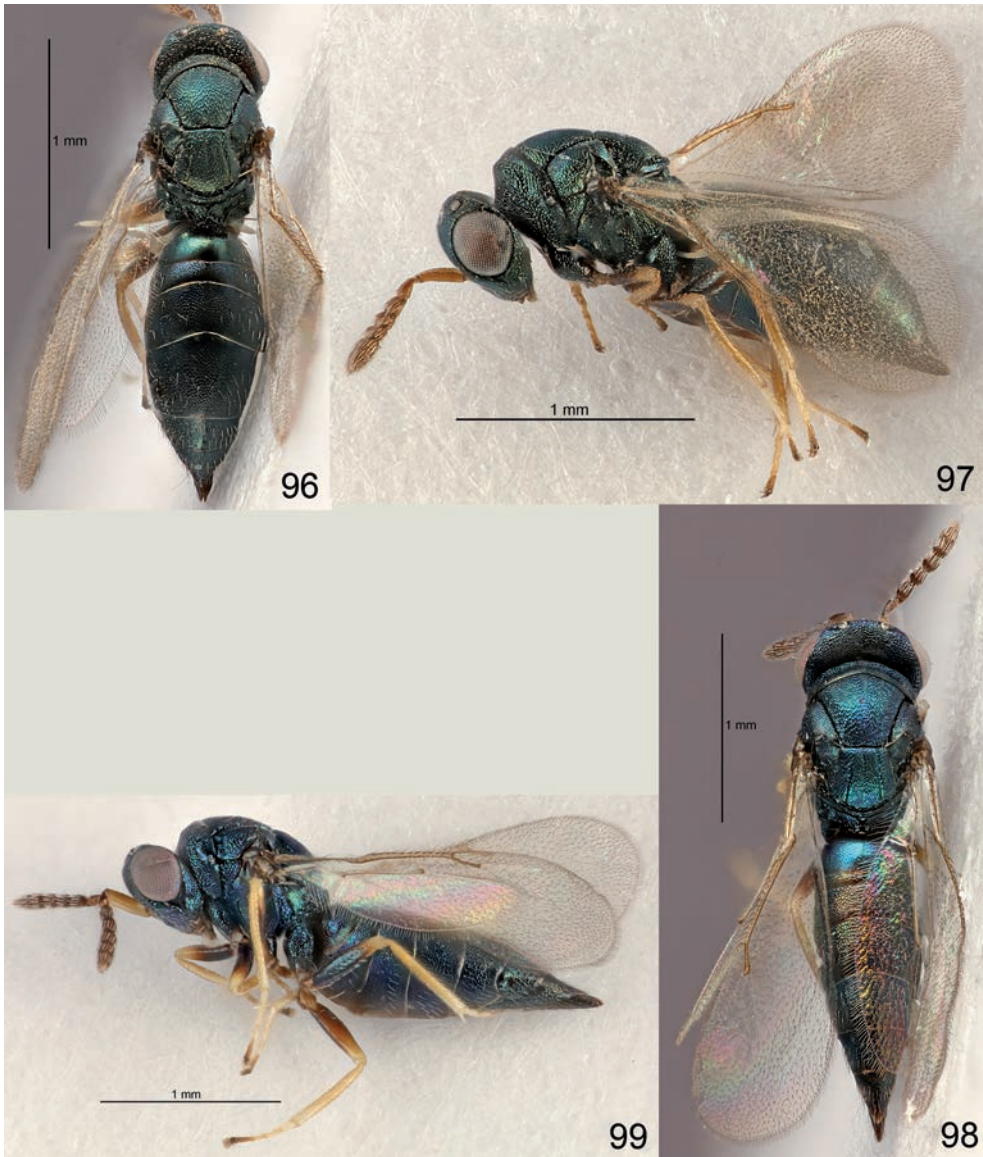
Figs 84–87. *Galeopsomyia copalensis*, holotype ♀ – (84) habitus dorsal view; (85) habitus lateral view. *Galeopsomyia cresta*, holotype ♀ – (86) habitus dorsal view; (87) habitus lateral view.



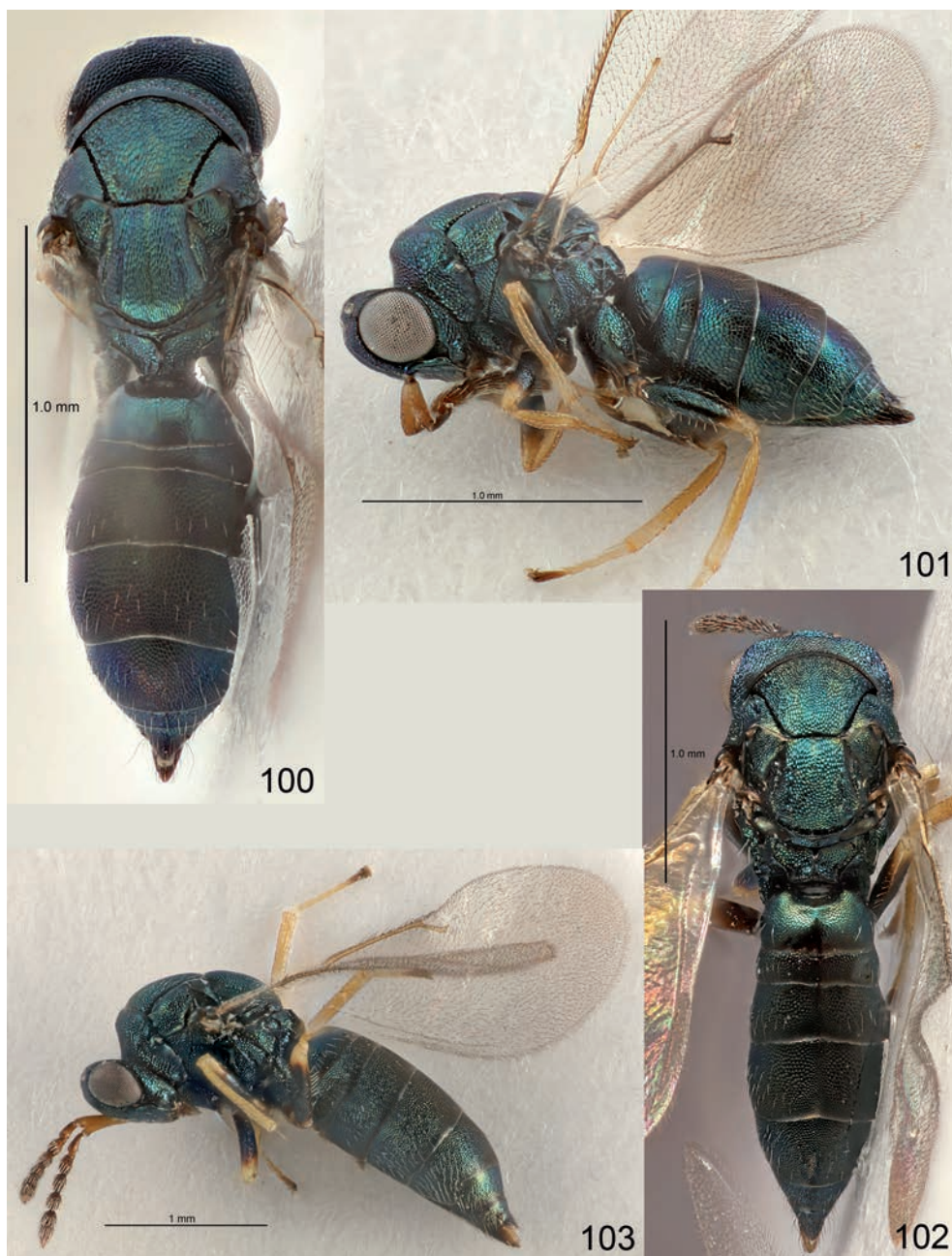
Figs 88–91. *Galeopsomyia crucensis*, holotype ♀ – (88) habitus dorsal view; (89) habitus lateral view. *Galeopsomyia domingoensis*, holotype ♀ – (90) habitus dorsal view; (91) habitus lateral view.



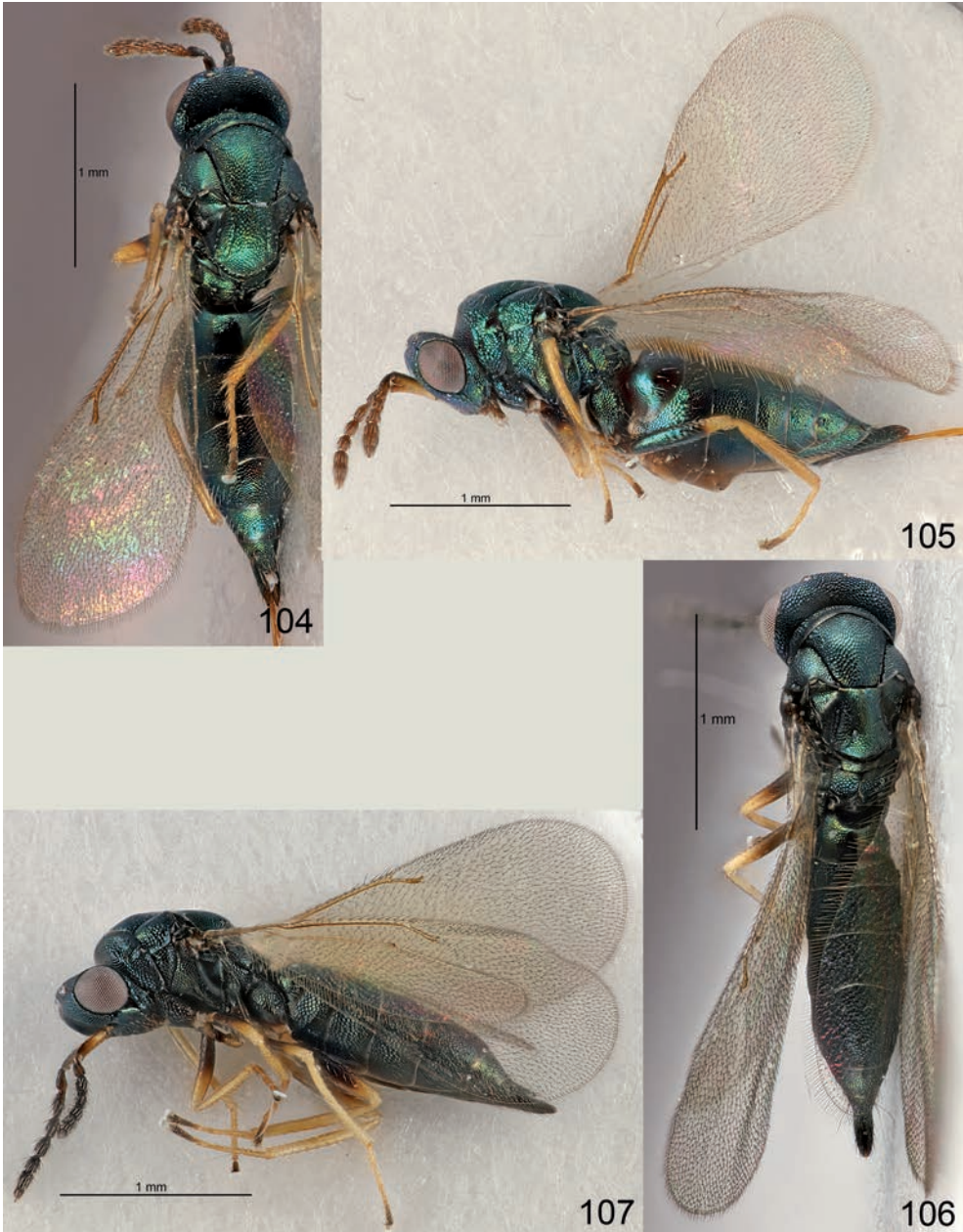
Figs 92–95. *Galeopsomyia doradis*, holotype ♀ – (92) habitus dorsal view; (93) habitus lateral view. *Galeopsomyia druparum*, holotype ♀ – (94) habitus dorsal view; (95) habitus lateral view.



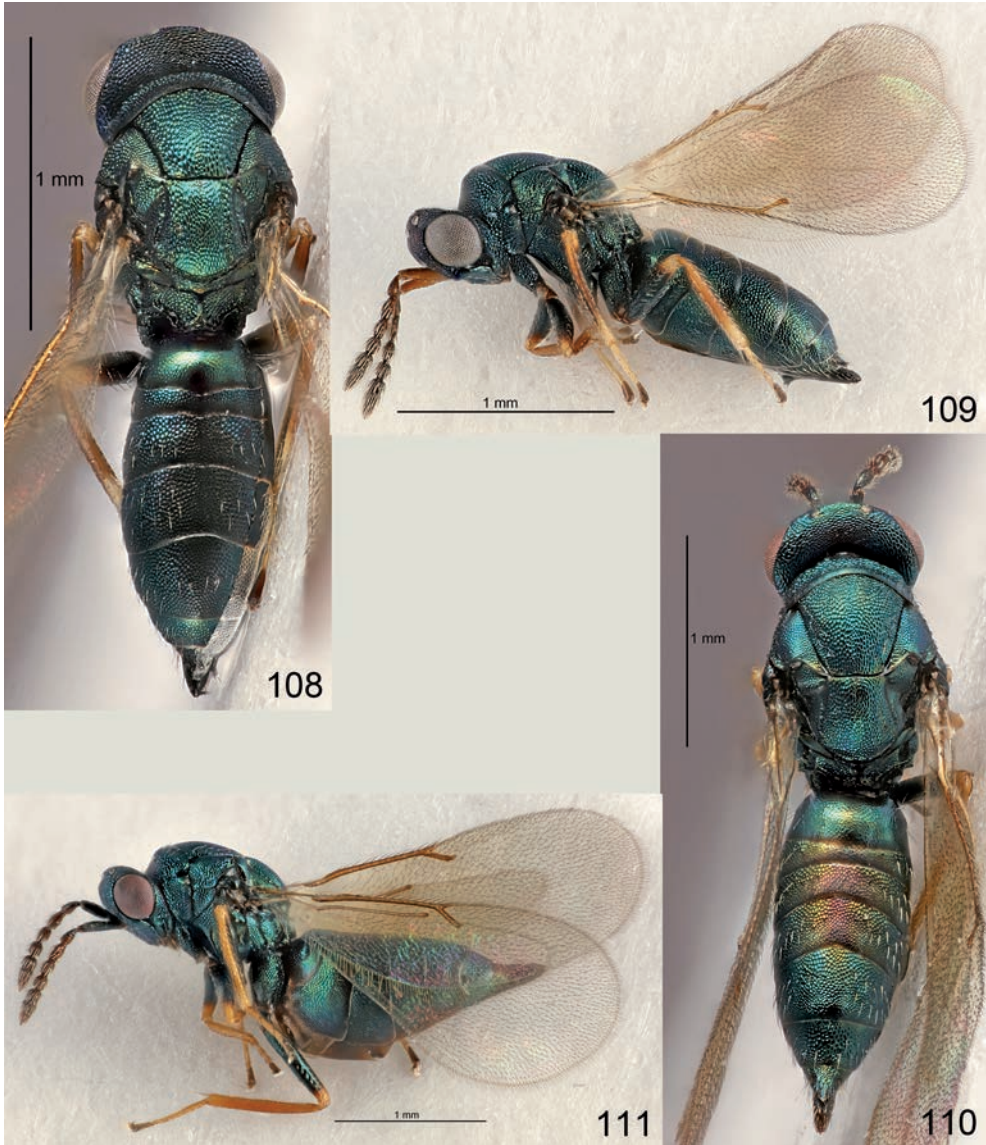
Figs 96–99. *Galeopsomyia duniagarciae*, holotype ♀ – (96) habitus dorsal view; (97) habitus lateral view. *Galeopsomyia eberhardi*, holotype ♀ – (98) habitus dorsal view; (99) habitus lateral view.



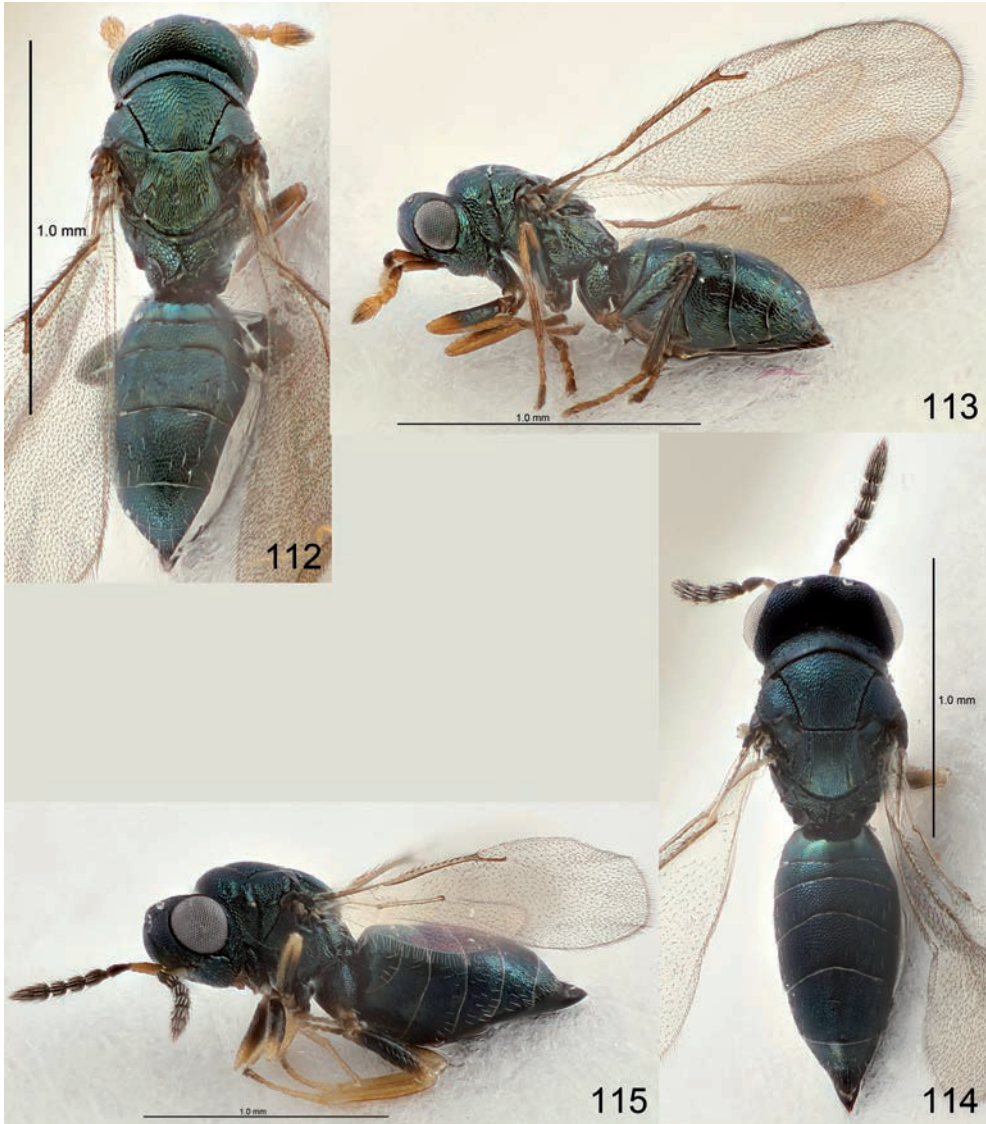
Figs 100–103. *Galeopsomyia estera*, holotype ♀ – (100) habitus dorsal view; (101) habitus lateral view. *Galeopsomyia fernandezae*, holotype ♀ – (102) habitus dorsal view; (103) habitus lateral view.



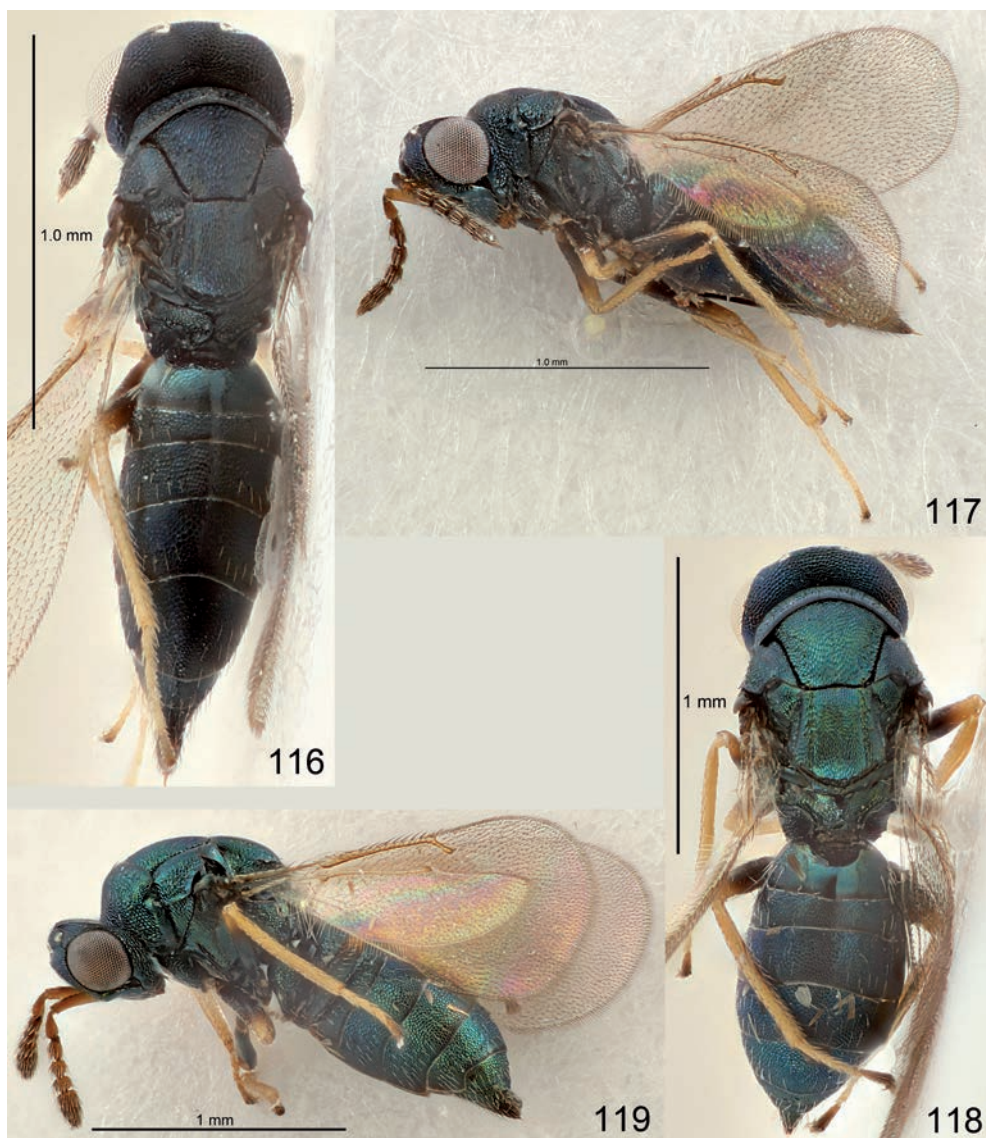
Figs 104–107. *Galeopsomyia ferula*, holotype ♀ – (104) habitus dorsal view; (105) habitus lateral view. *Galeopsomyia fresa*, holotype ♀ – (106) habitus dorsal view; (107) habitus lateral view.



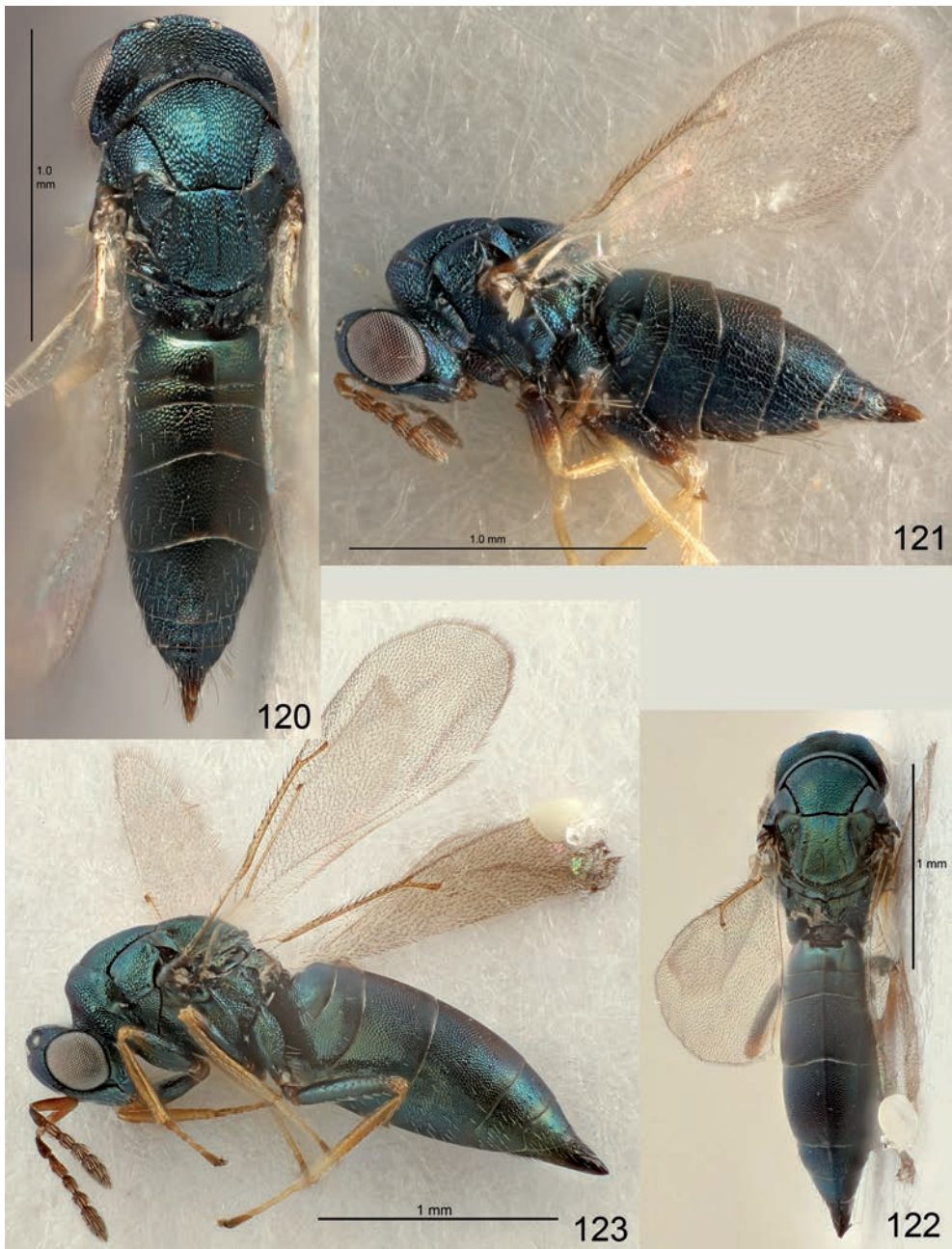
Figs 108–111. *Galeopsomyia fucata*, holotype ♀ – (108) habitus dorsal view; (109) habitus lateral view. *Galeopsomyia gabela*, holotype ♀ – (110) habitus dorsal view; (111) habitus lateral view.



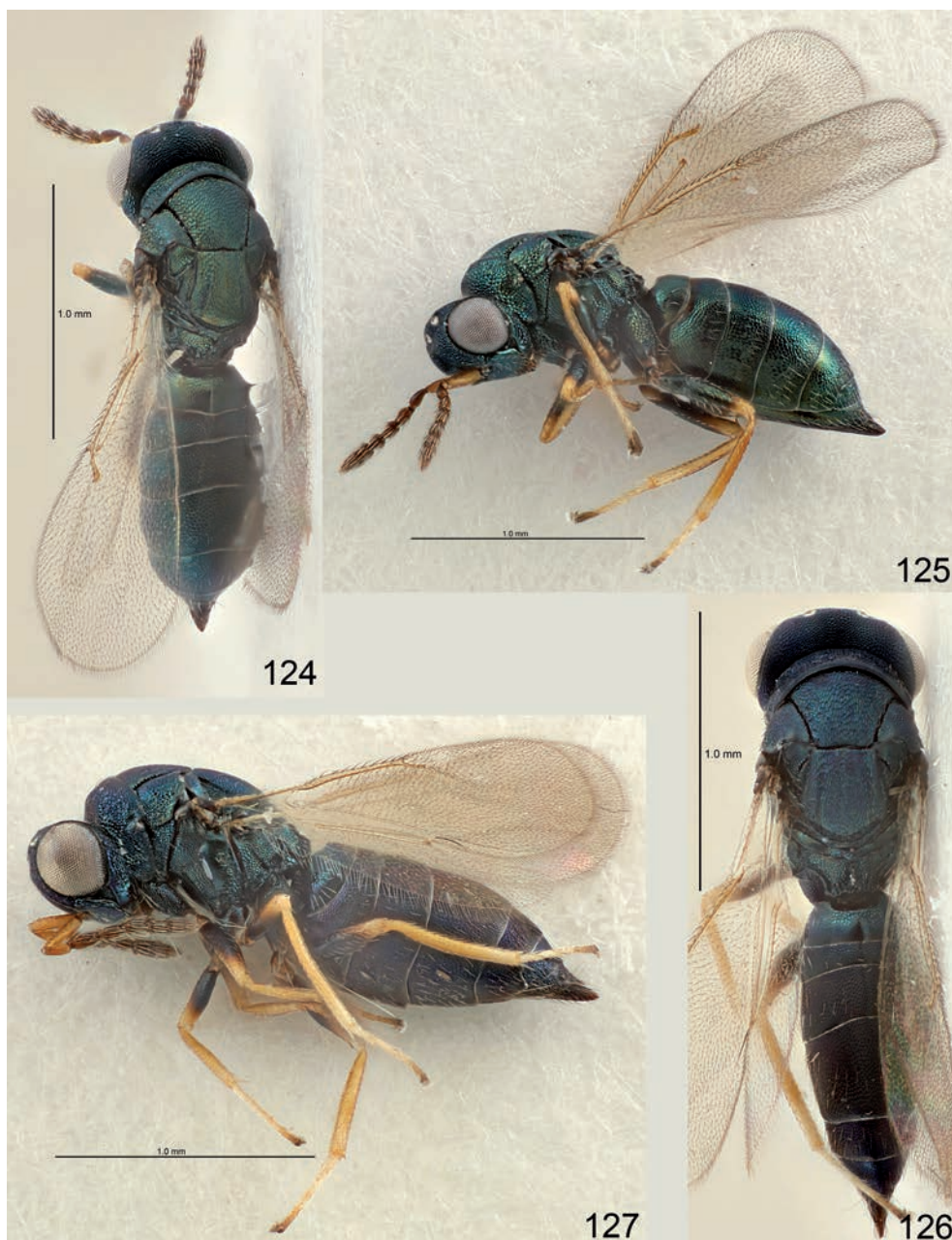
Figs 112–115. *Galeopsomyia gala*, holotype ♀ – (112) habitus dorsal view; (113) habitus lateral view. *Galeopsomyia gallarum*, holotype ♀ – (114) habitus dorsal view; (115) habitus lateral view.



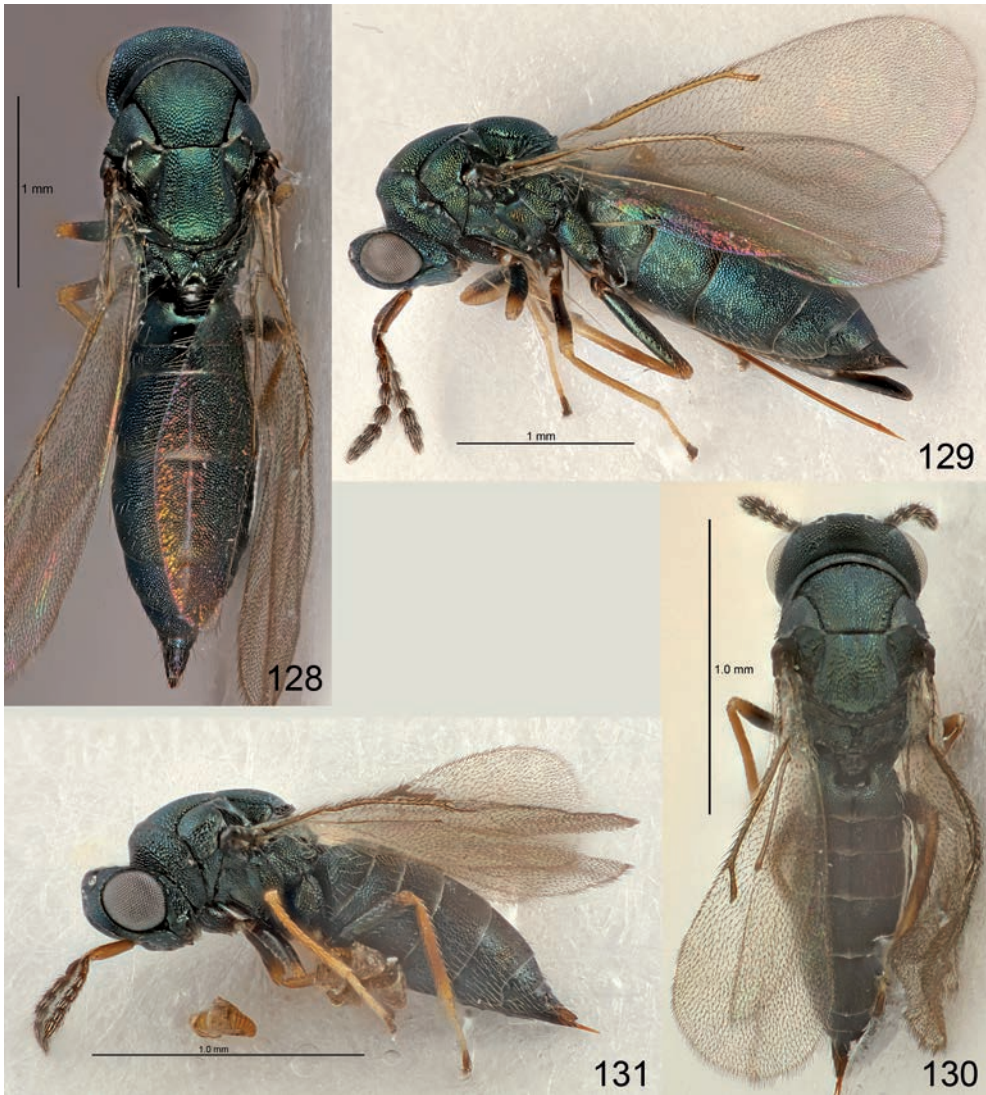
Figs 116–119. *Galeopsomyia guanacastensis*, holotype ♀ – (116) habitus dorsal view; (117) habitus lateral view. *Galeopsomyia guillermopereirai*, holotype ♀ – (118) habitus dorsal view; (119) habitus lateral view.



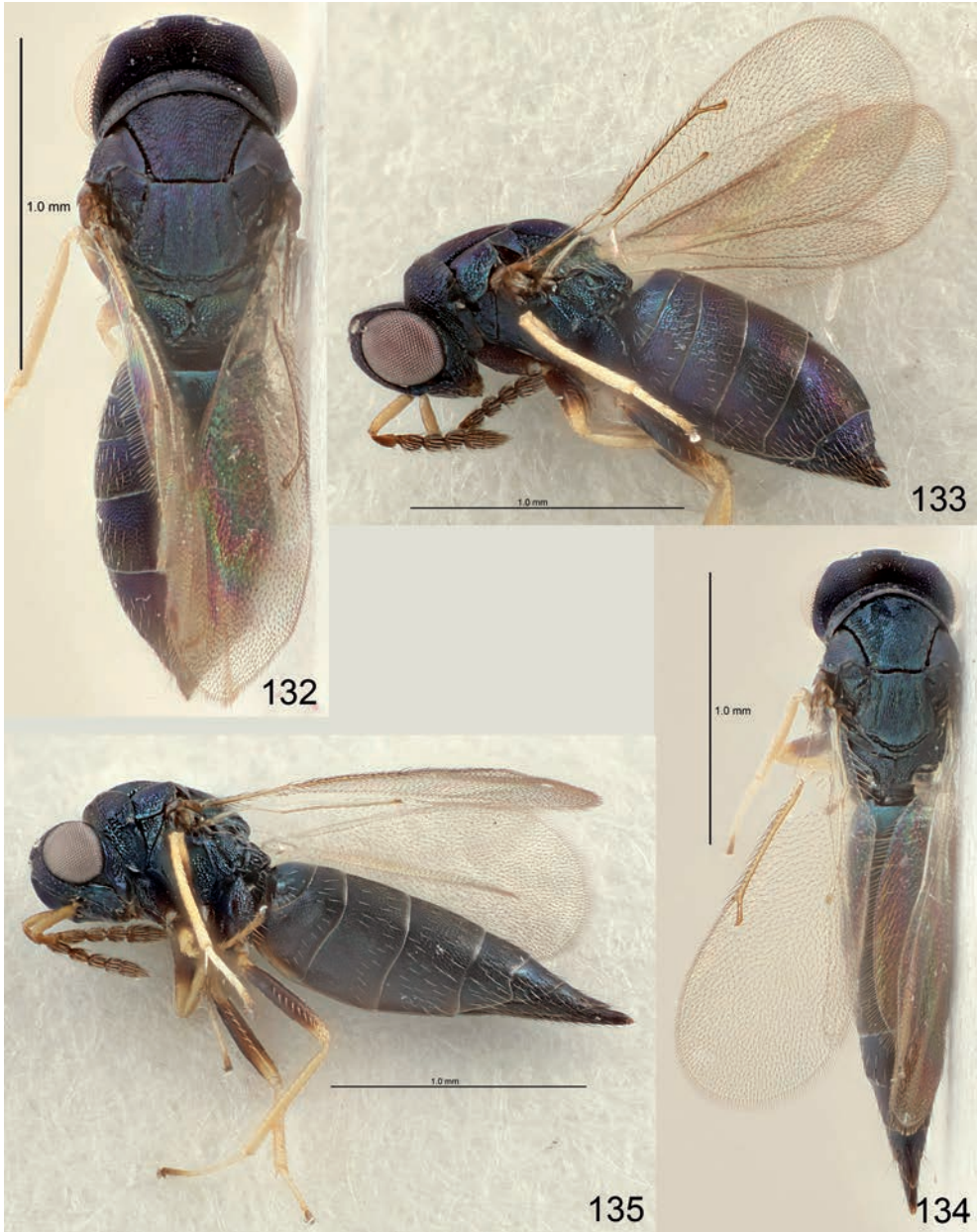
Figs 120–123. *Galeopsomyia hallwachsae*, holotype ♀ – (120) habitus dorsal view; (121) habitus lateral view. *Galeopsomyia harryramirezi*, holotype ♀ – (122) habitus dorsal view; (123) habitus lateral view.



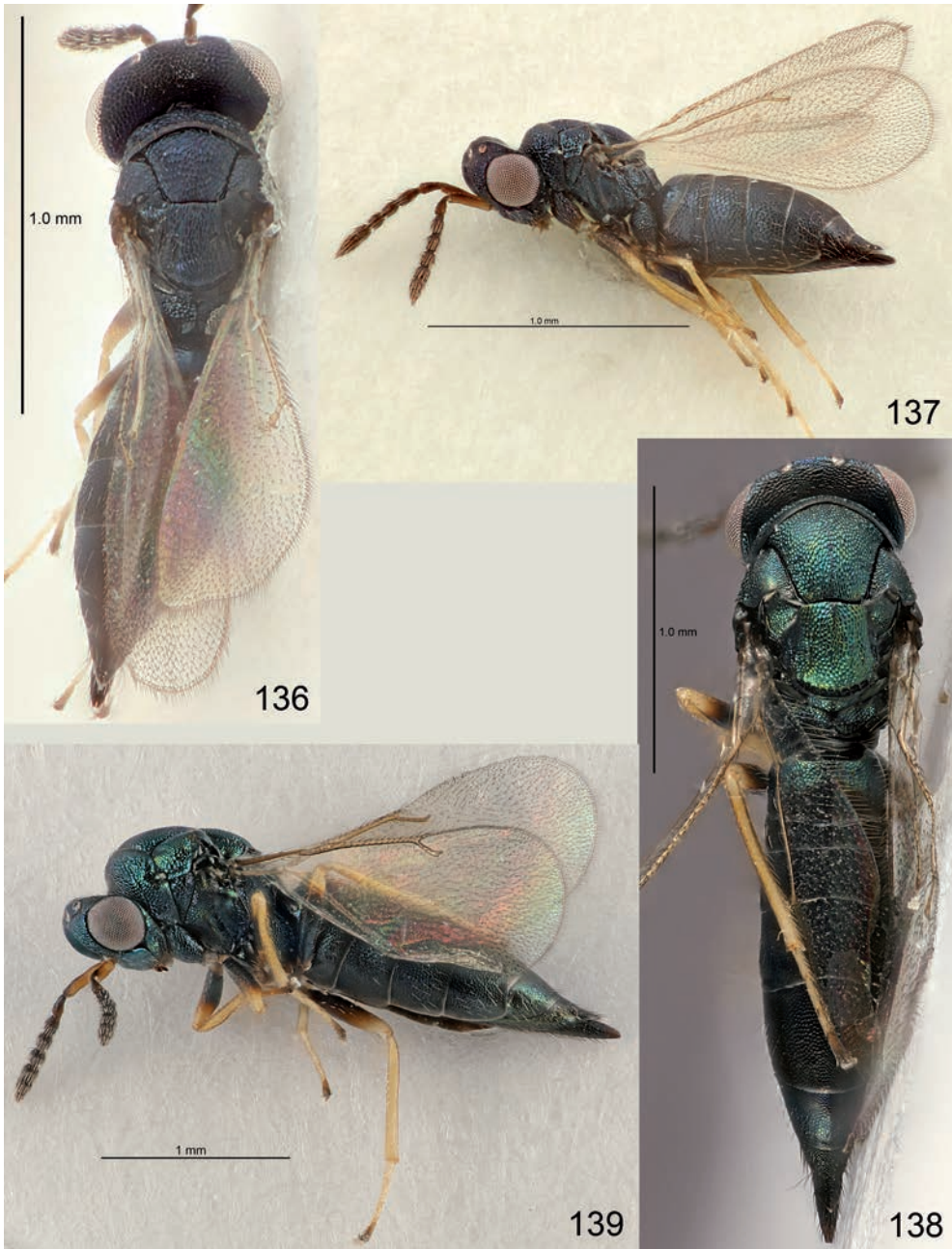
Figs 124–127. *Galeopsomyia herediensis*, holotype ♀ – (124) habitus dorsal view; (125) habitus lateral view. *Galeopsomyia iangauldi*, holotype ♀ – (126) habitus dorsal view; (127) habitus lateral view.



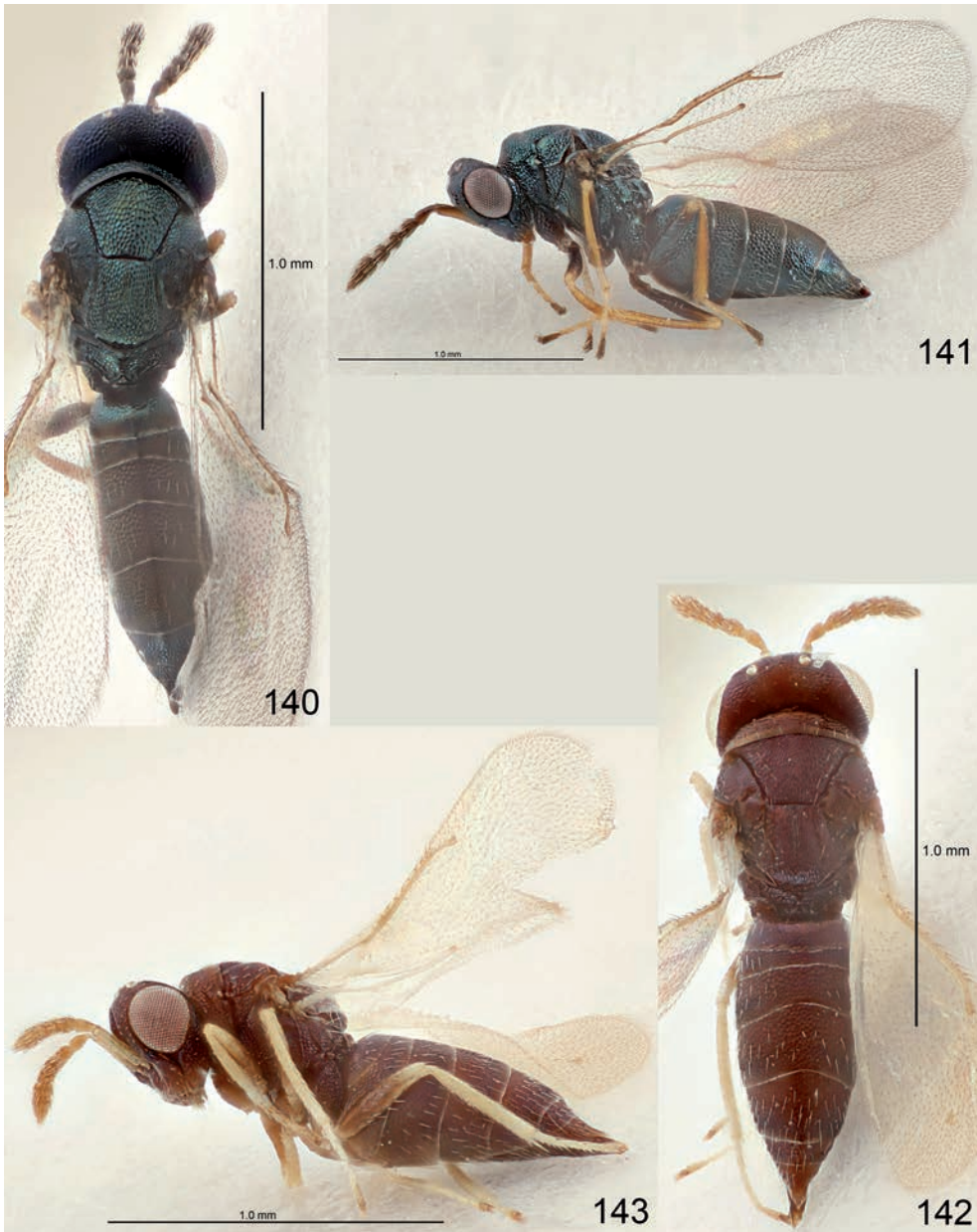
Figs 128–131. *Galeopsomyia ibis*, holotype ♀ – (128) habitus dorsal view; (129) habitus lateral view. *Galeopsomyia incisa*, holotype ♀ – (130) habitus dorsal view; (131) habitus lateral view.



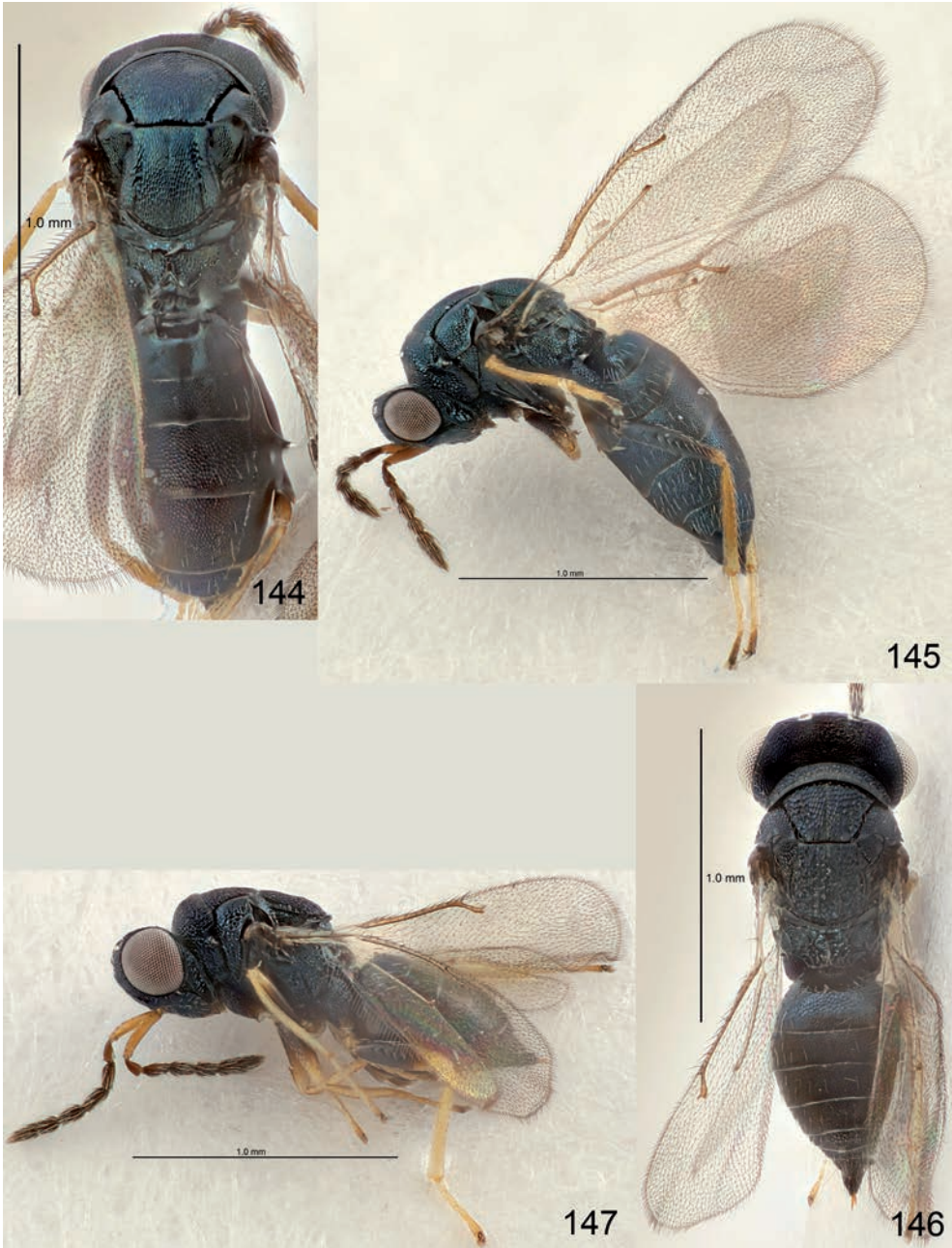
Figs 132–135. *Galeopsomyia itabunaensis*, holotype ♀ – (132) habitus dorsal view; (133) habitus lateral view. *Galeopsomyia janzeni*, holotype ♀ – (134) habitus dorsal view; (135) habitus lateral view.



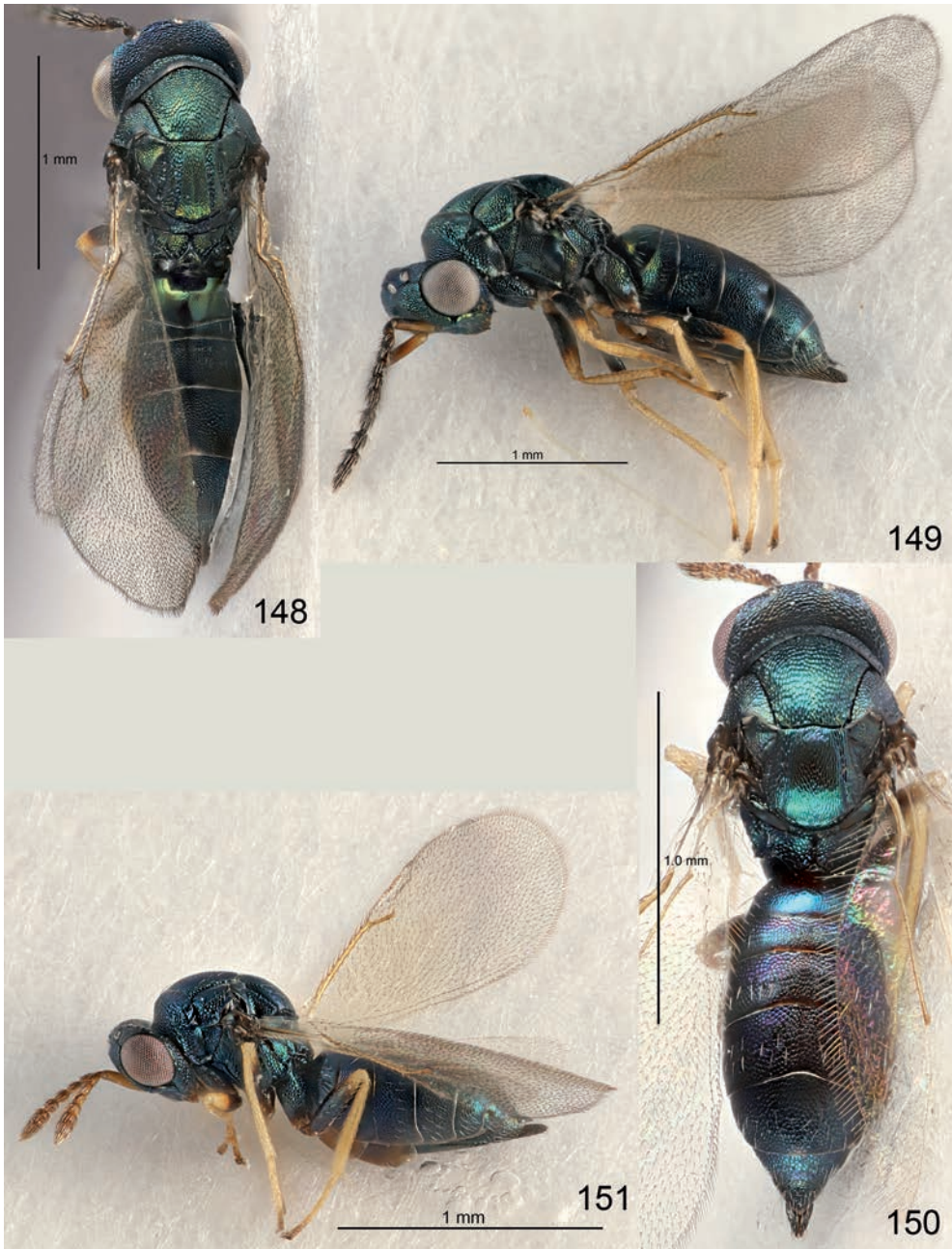
Figs 136–139. *Galeopsomyia jimenezi*, holotype ♀ – (136) habitus dorsal view; (137) habitus lateral view. *Galeopsomyia labilis*, holotype ♀ – (138) habitus dorsal view; (139) habitus lateral view.



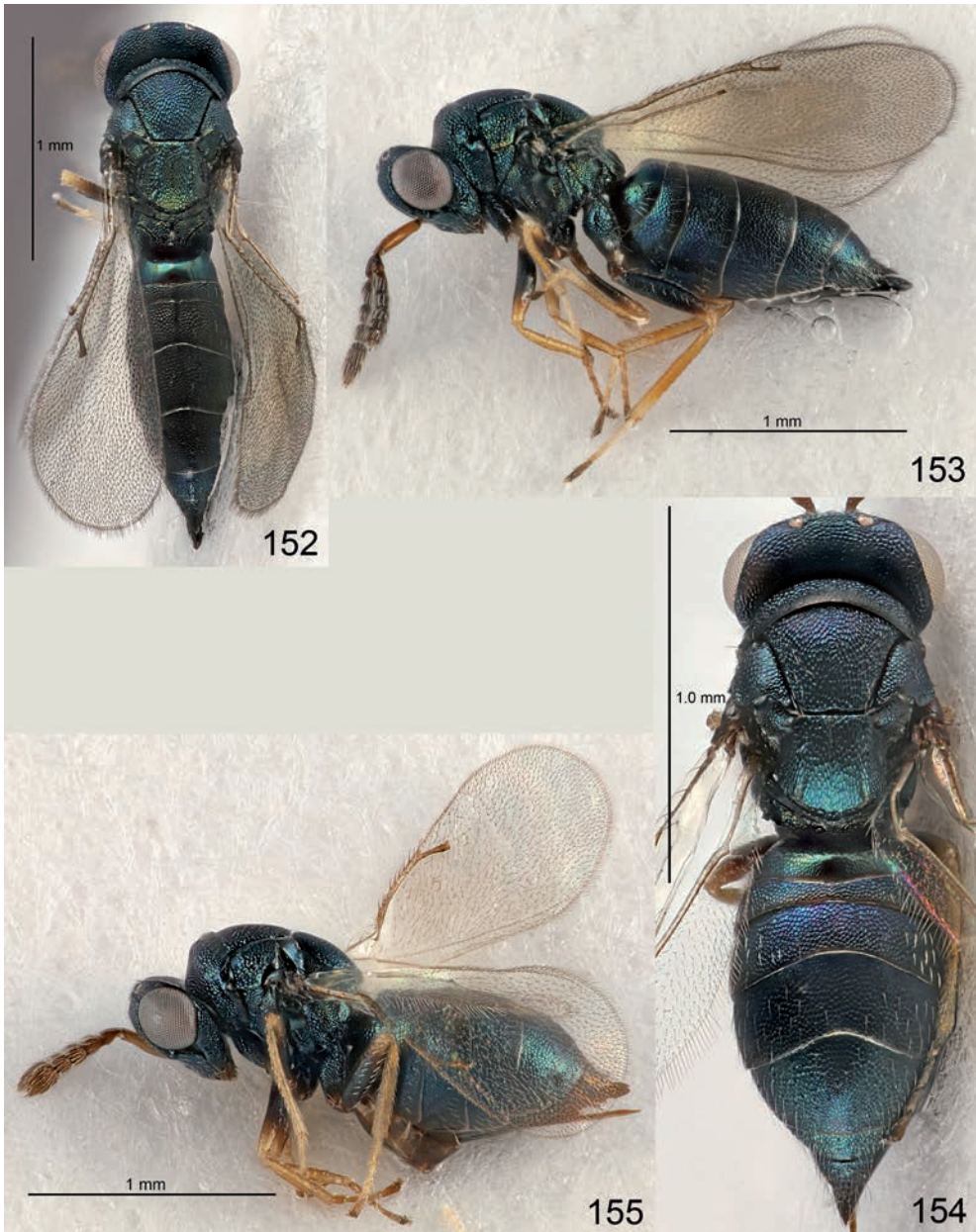
Figs 140–143. *Galeopsomyia lapra*, holotype ♀ – (140) habitus dorsal view; (141) habitus lateral view. *Galeopsomyia larshuggerti*, holotype ♀ – (142) habitus dorsal view; (143) habitus lateral view.



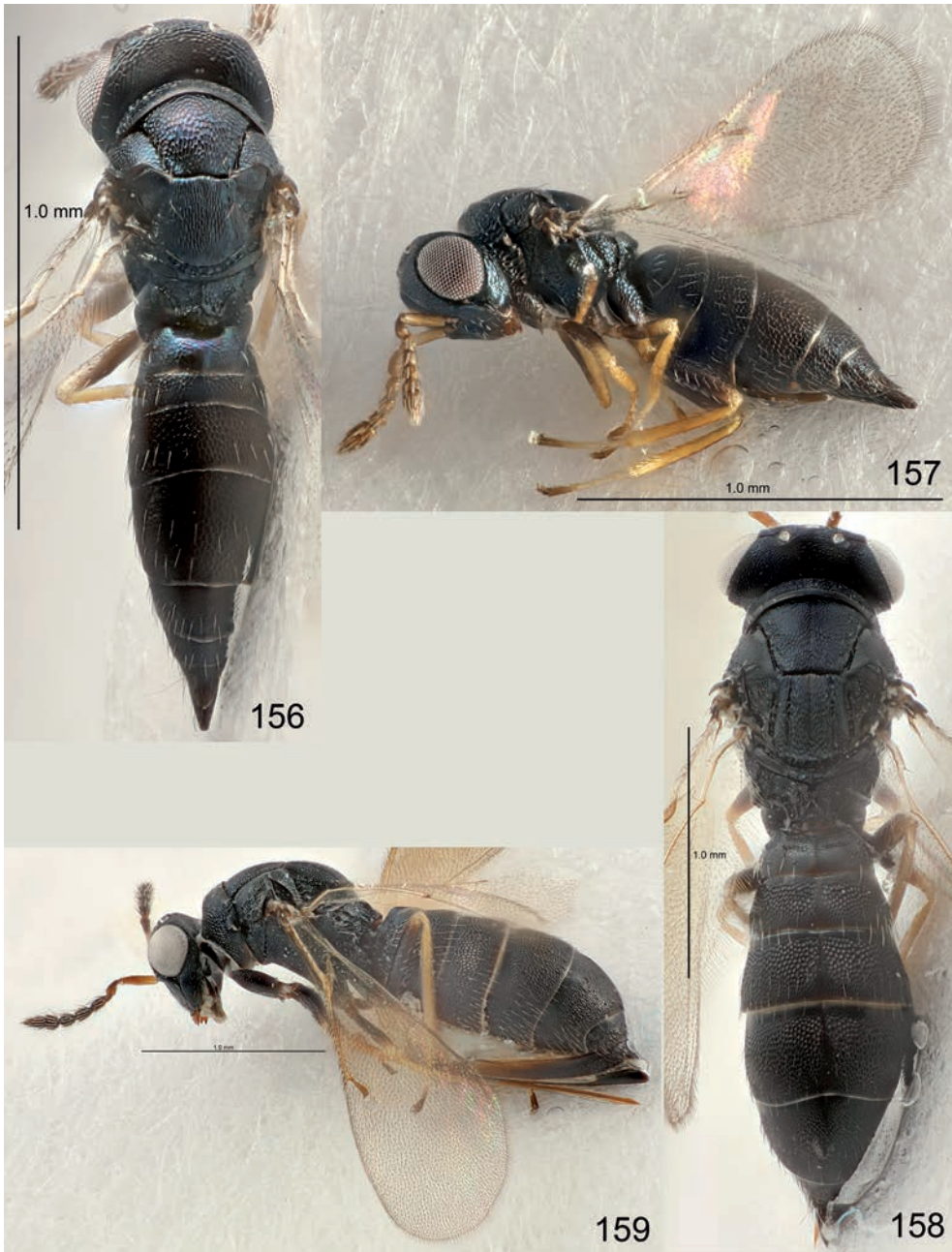
Figs 144–147. *Galeopsomyia liosa*, holotype ♀ – (144) habitus dorsal view; (145) habitus lateral view. *Galeopsomyia loboii*, holotype ♀ – (146) habitus dorsal view; (147) habitus lateral view.



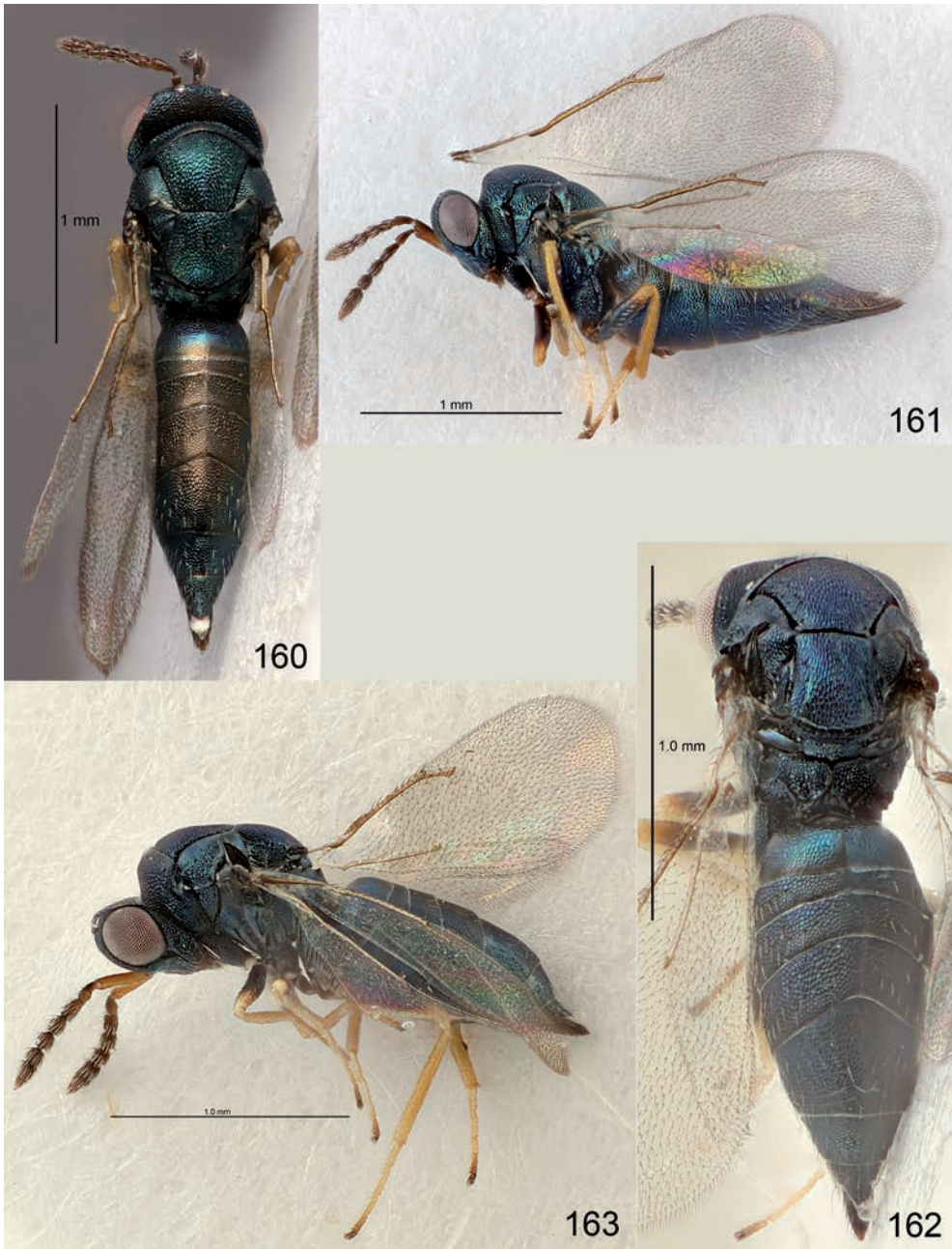
Figs 148–151. *Galeopsomyia malia*, holotype ♀ – (148) habitus dorsal view; (149) habitus lateral view. *Galeopsomyia mandria*, holotype ♀ – (150) habitus dorsal view; (151) habitus lateral view.



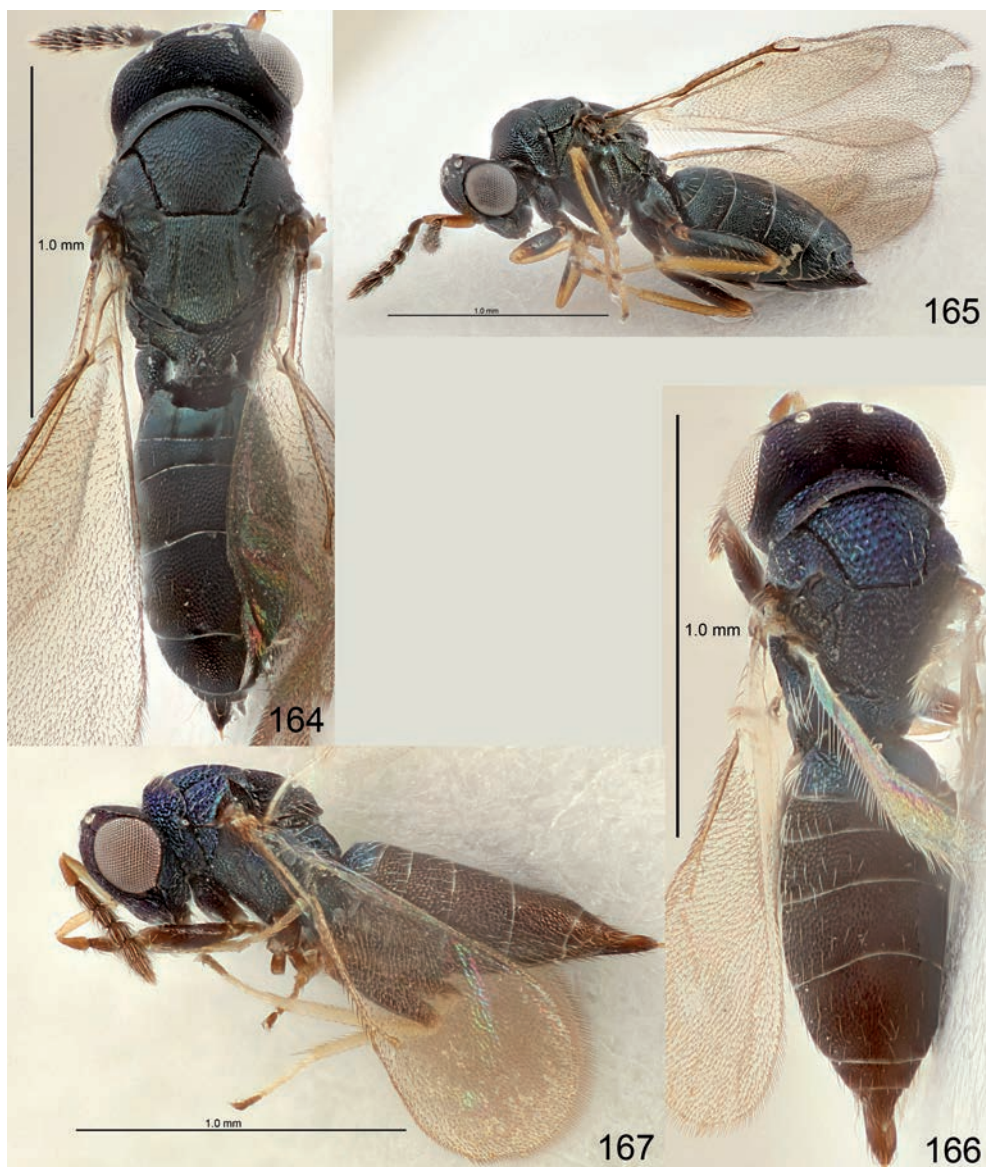
Figs 152–155. *Galeopsomyia maniata*, holotype ♀ – (152) habitus dorsal view; (153) habitus lateral view. *Galeopsomyia manuelypereirai*, holotype ♀ – (154) habitus dorsal view; (155) habitus lateral view.



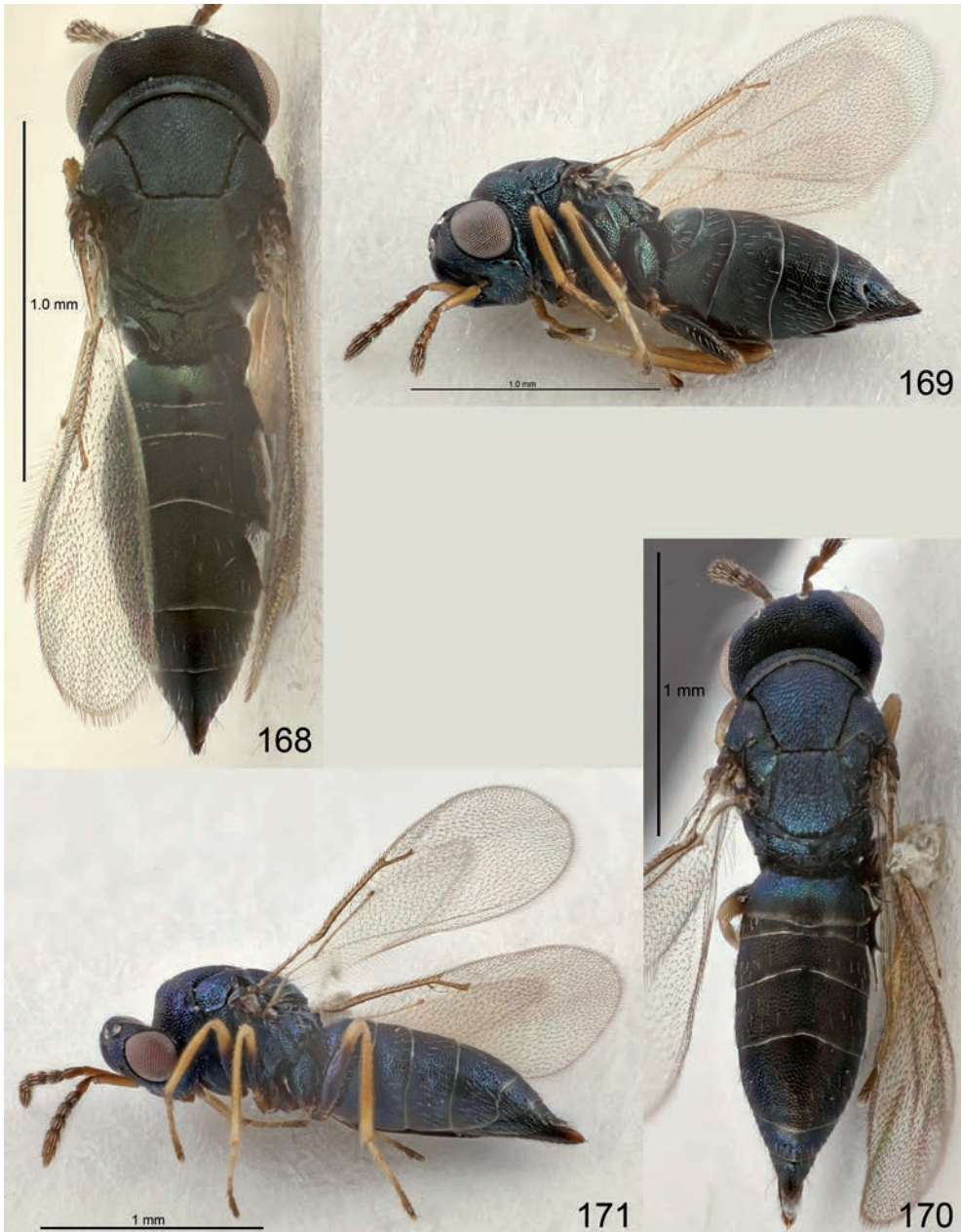
Figs 156–159. *Galeopsomyia marea*, holotype ♀ – (156) habitus dorsal view; (157) habitus lateral view. *Galeopsomyia mimosa*, holotype ♀ – (158) habitus dorsal view; (159) habitus lateral view.



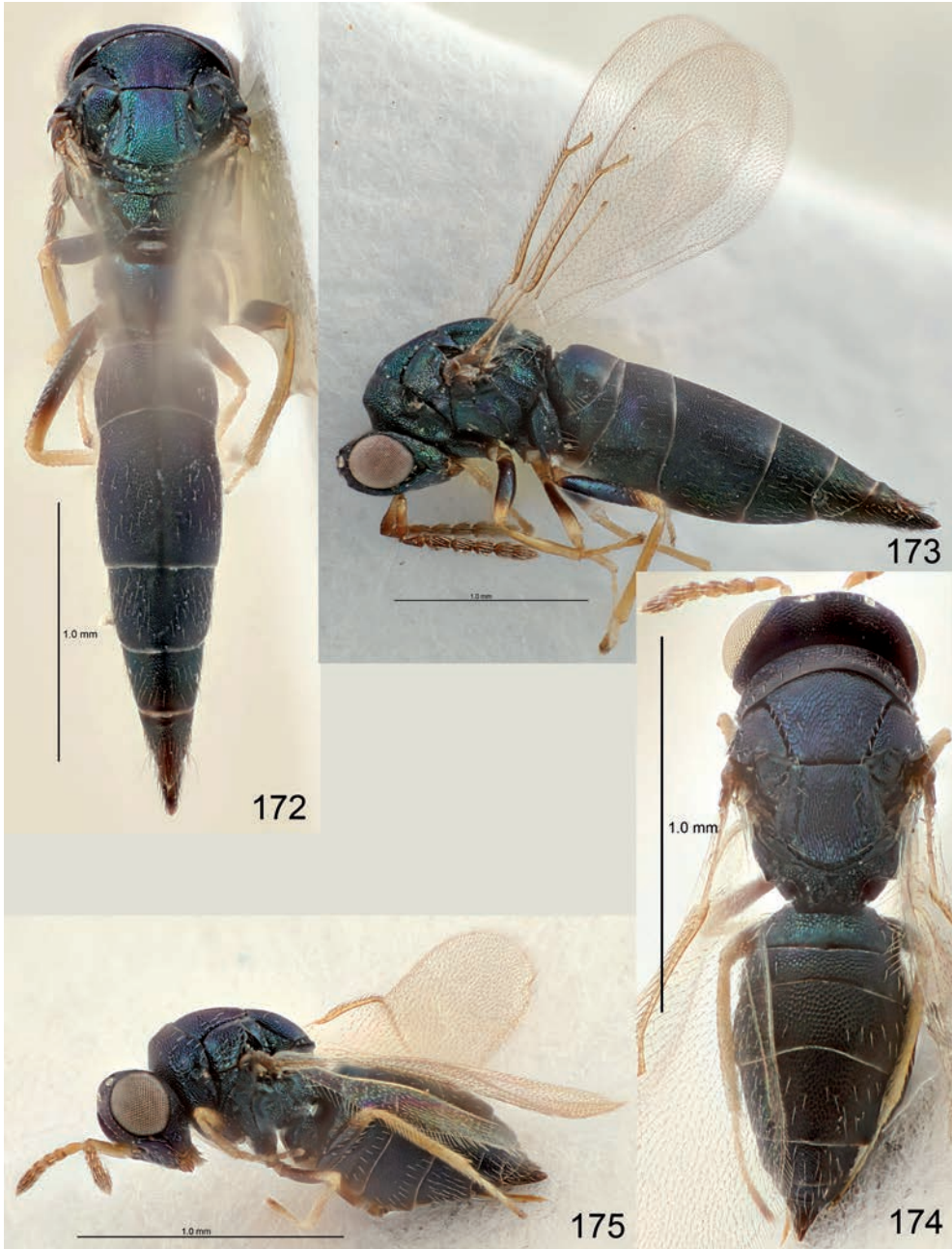
Figs 160–163. *Galeopsomyia miopis*, holotype ♀ – (160) habitus dorsal view; (161) habitus lateral view. *Galeopsomyia mogensenae*, holotype ♀ – (162) habitus dorsal view; (163) habitus lateral view.



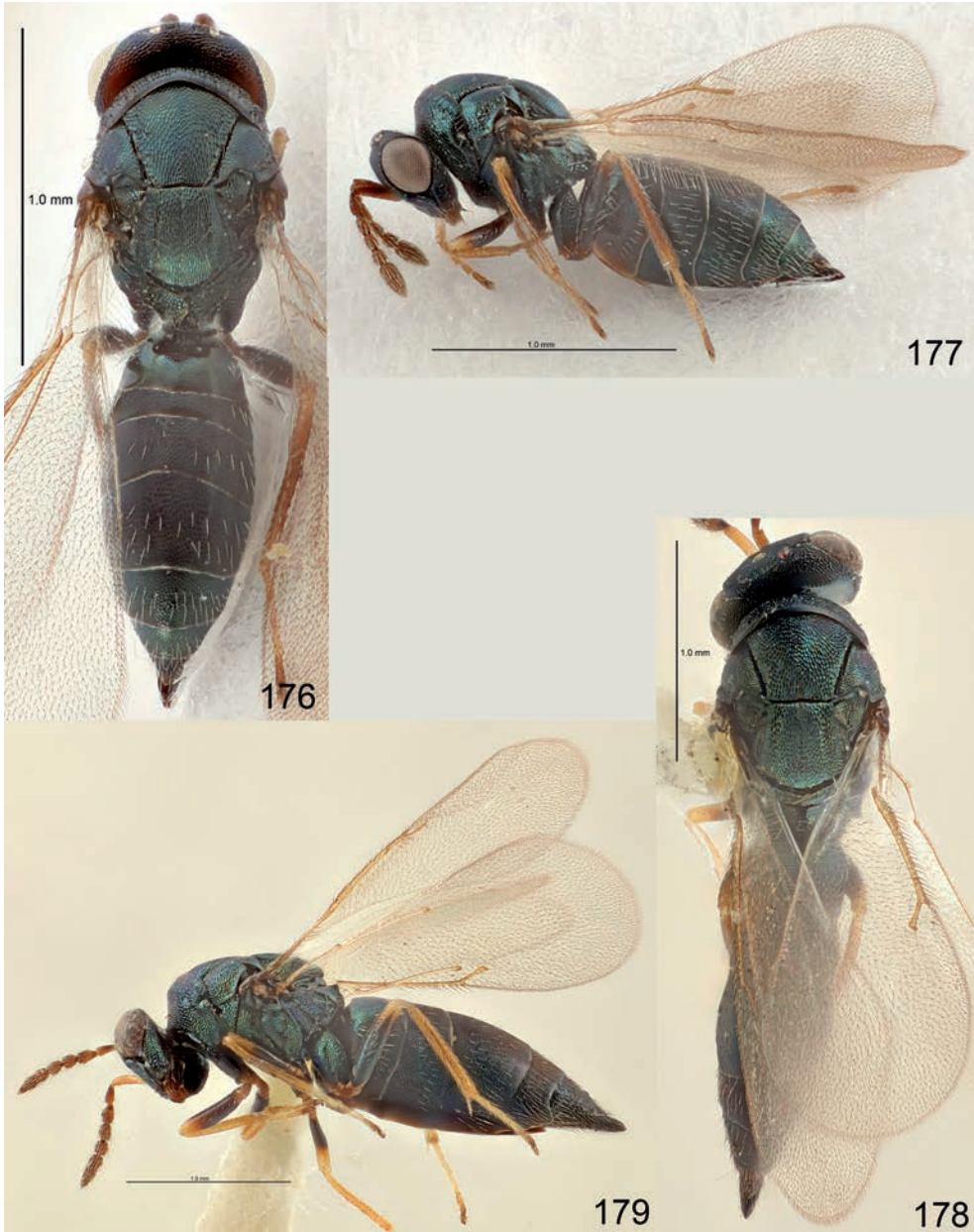
Figs 164–167. *Galeopsomyia monteverdensis*, holotype ♀ – (164) habitus dorsal view; (165) habitus lateral view. *Galeopsomyia mucuriensis*, holotype ♀ – (166) habitus dorsal view; (167) habitus lateral view.



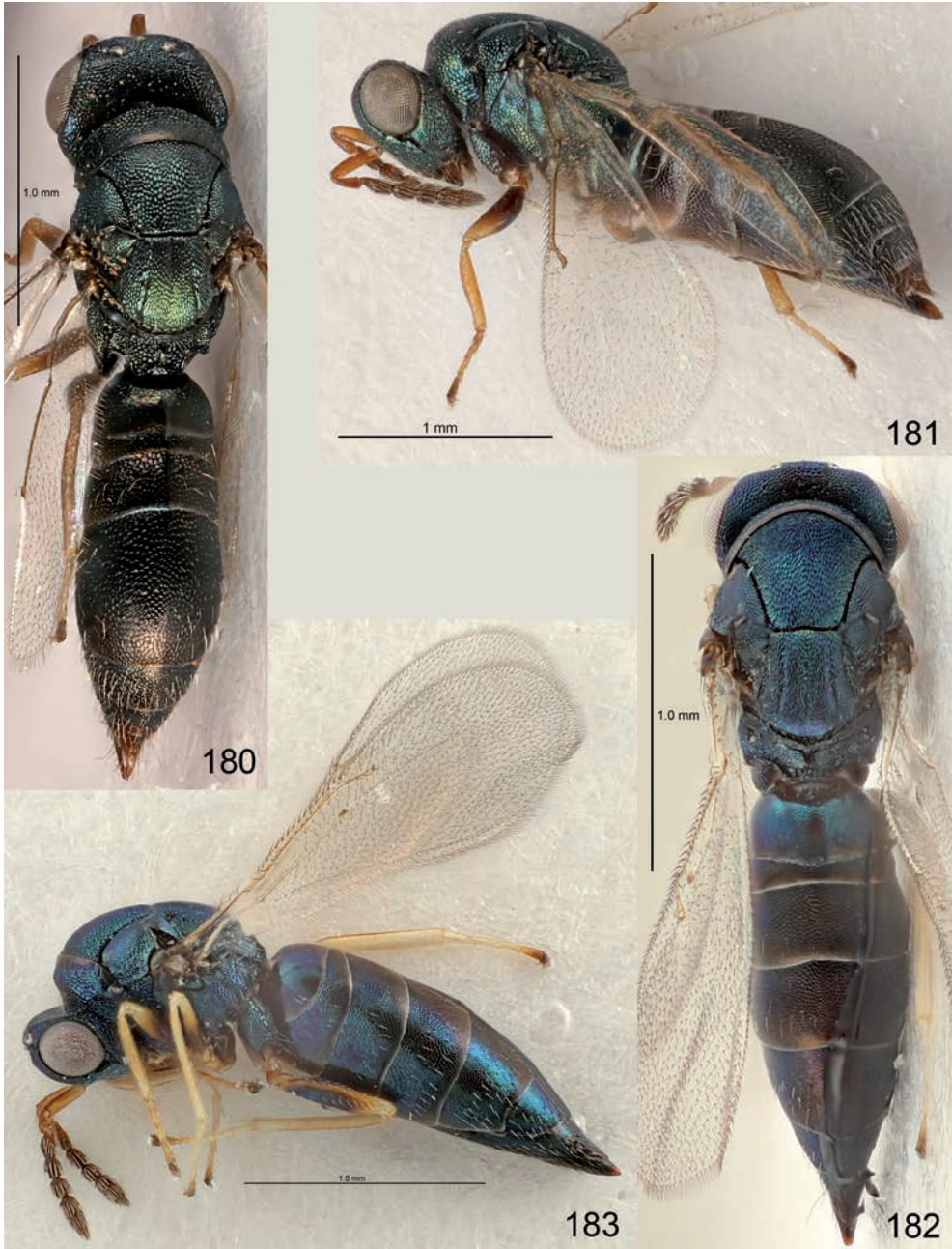
Figs 168–171. *Galeopsomyia noyesi*, holotype ♀ – (168) habitus dorsal view; (169) habitus lateral view. *Galeopsomyia pelora*, holotype ♀ – (170) habitus dorsal view; (171) habitus lateral view.



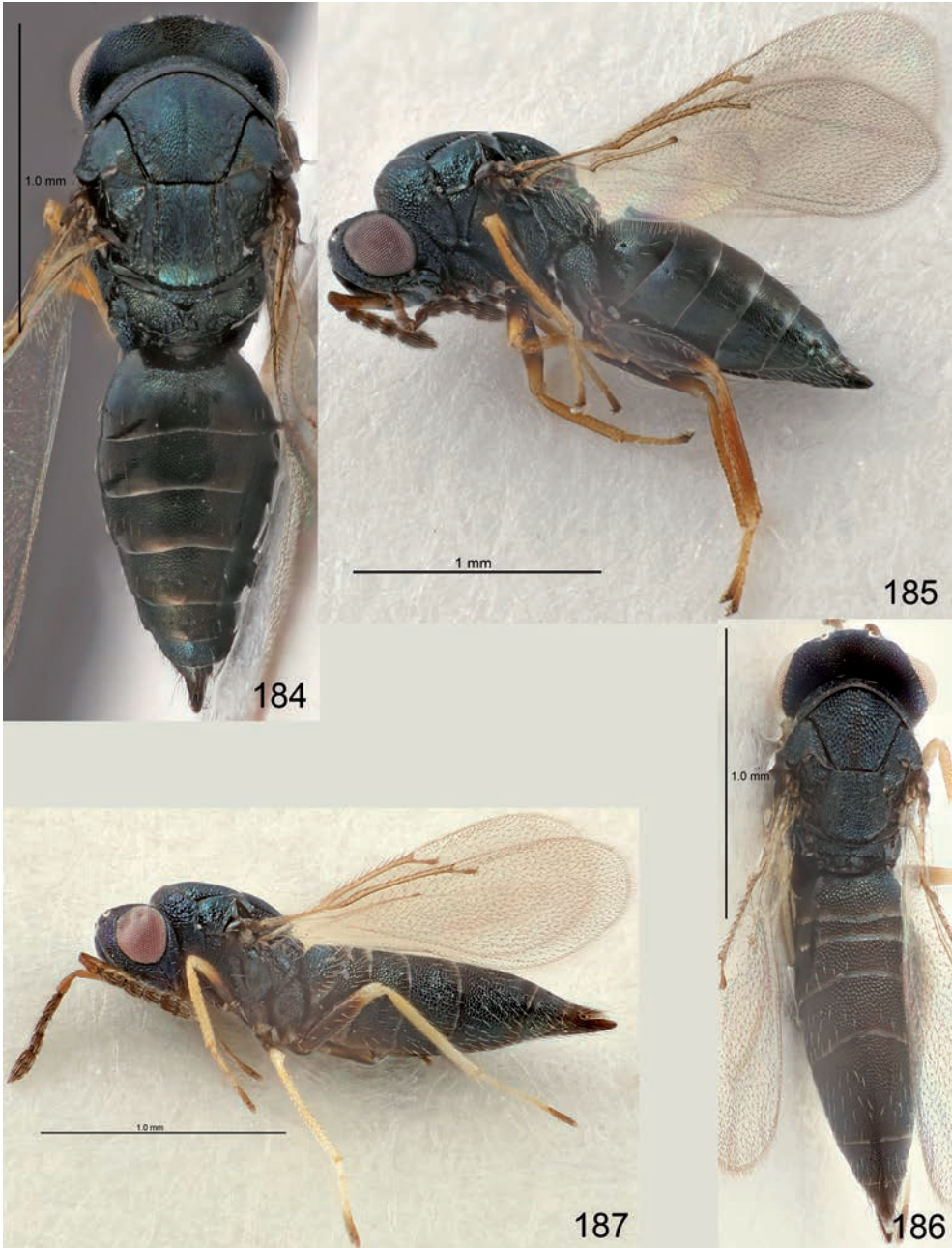
Figs 172–175. *Galeopsomyia perseae*, holotype ♀ – (172) habitus dorsal view; (173) habitus lateral view. *Galeopsomyia peruviansis*, holotype ♀ – (174) habitus dorsal view; (175) habitus lateral view.



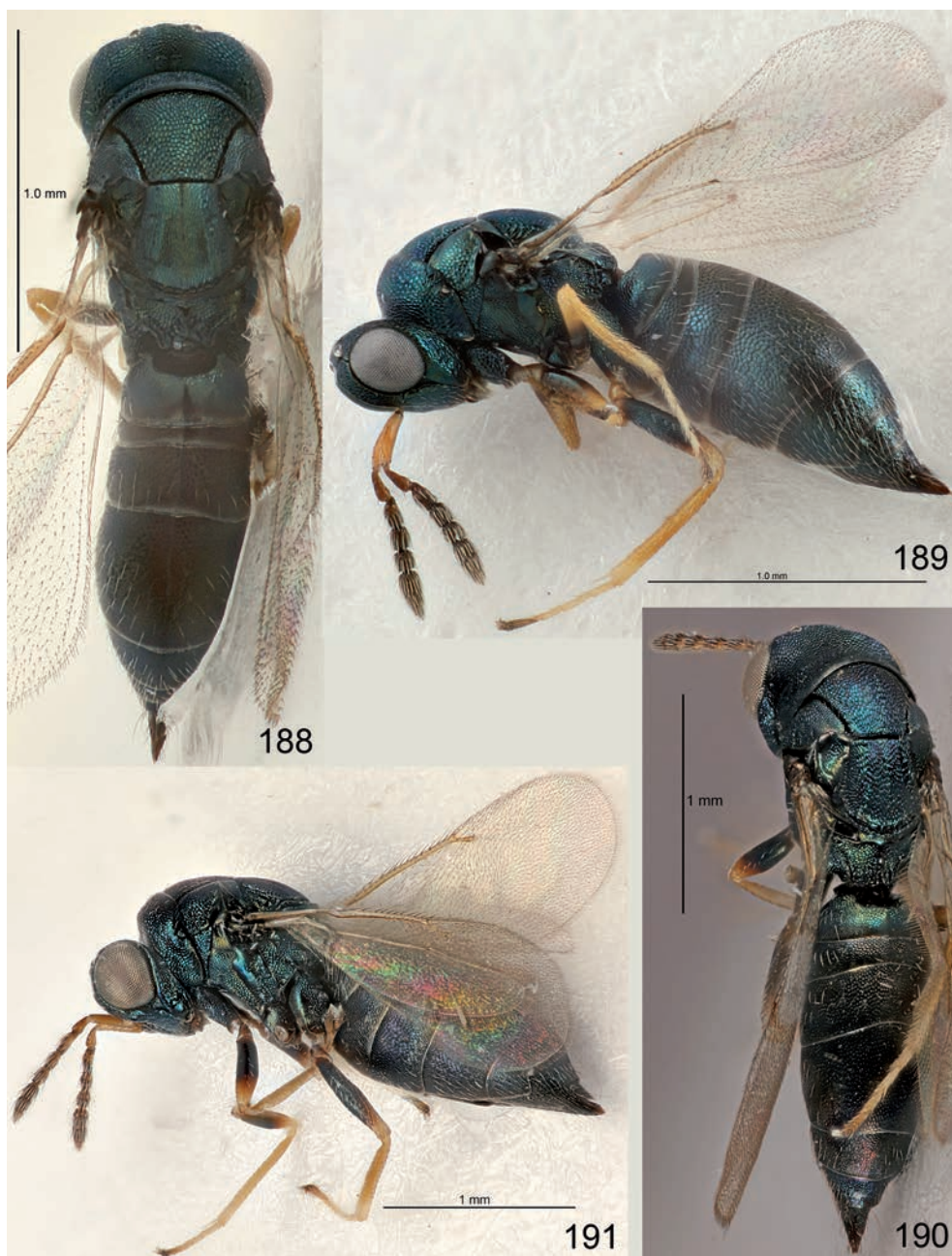
Figs 176–179. *Galeopsomyia philyra*, holotype ♀ – (176) habitus dorsal view; (177) habitus lateral view. *Galeopsomyia plaumanni*, holotype ♀ – (178) habitus dorsal view; (179) habitus lateral view.



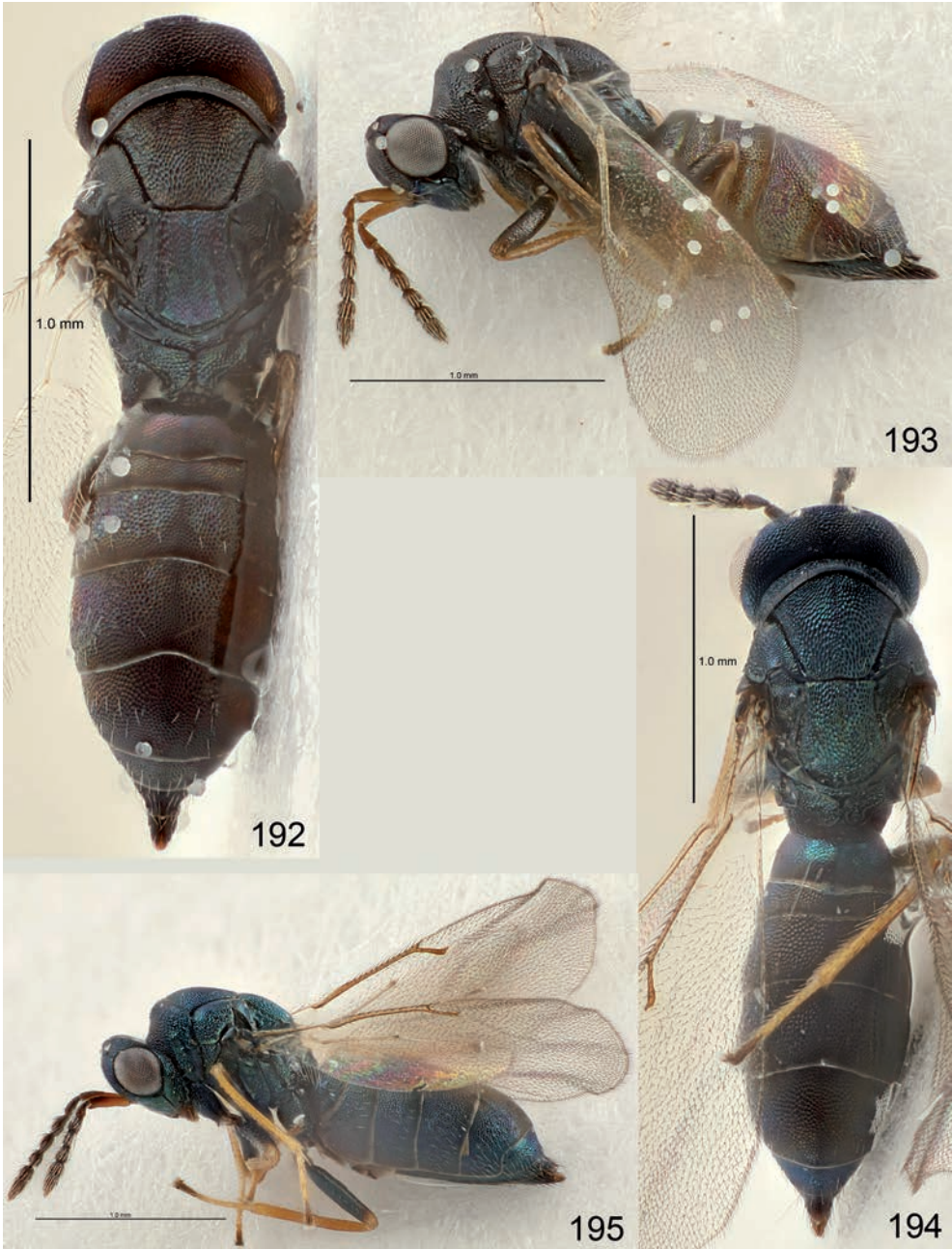
Figs 180–183. *Galeopsomyia ramyamanjunathae*, holotype ♀ – (180) habitus dorsal view; (181) habitus lateral view. *Galeopsomyia rubii*, holotype ♀ – (182) habitus dorsal view; (183) habitus lateral view.



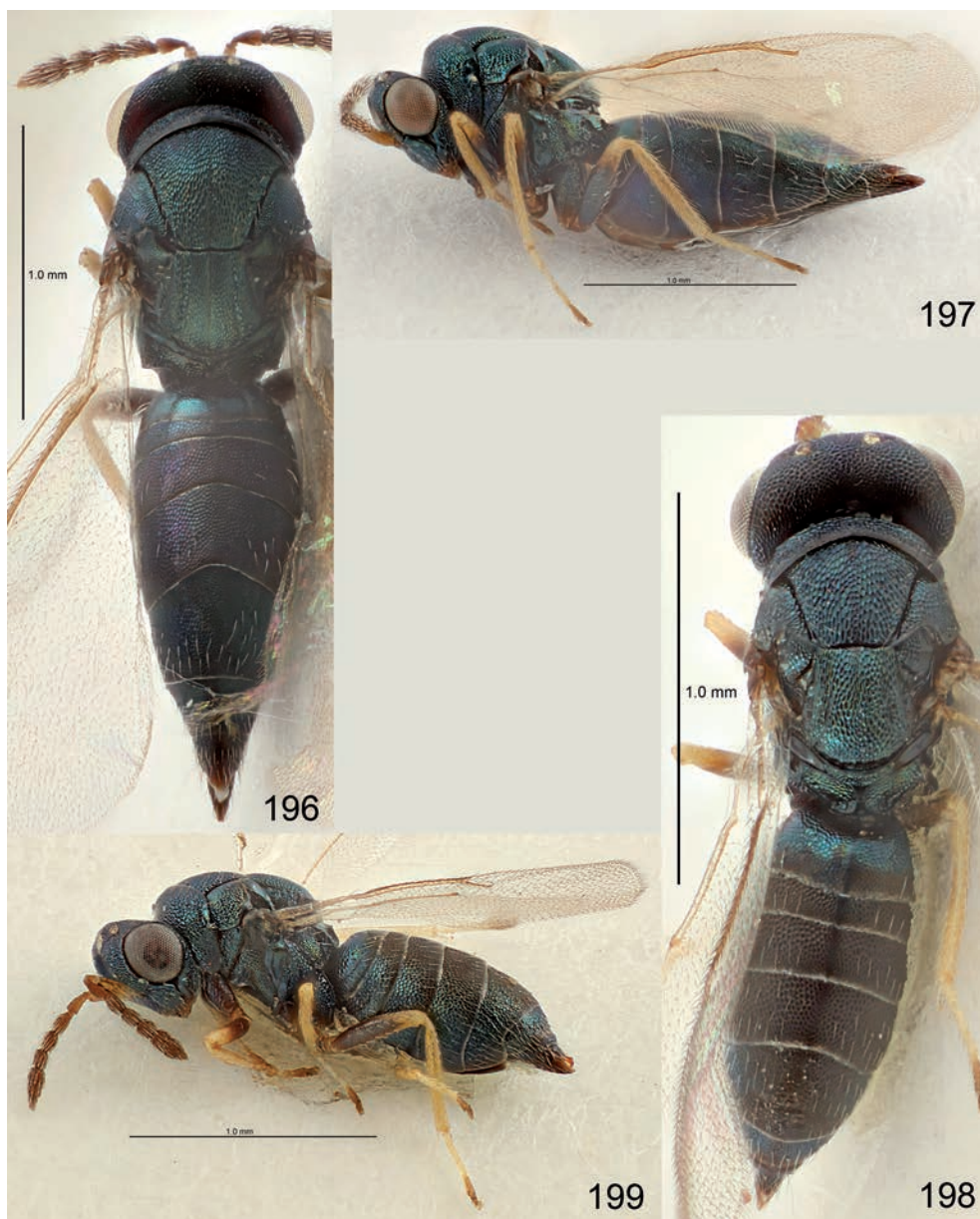
Figs 184–187. *Galeopsomyia saga*, holotype ♀ – (184) habitus dorsal view; (185) habitus lateral view. *Galeopsomyia santarosensis*, holotype ♀ – (186) habitus dorsal view; (187) habitus lateral view.



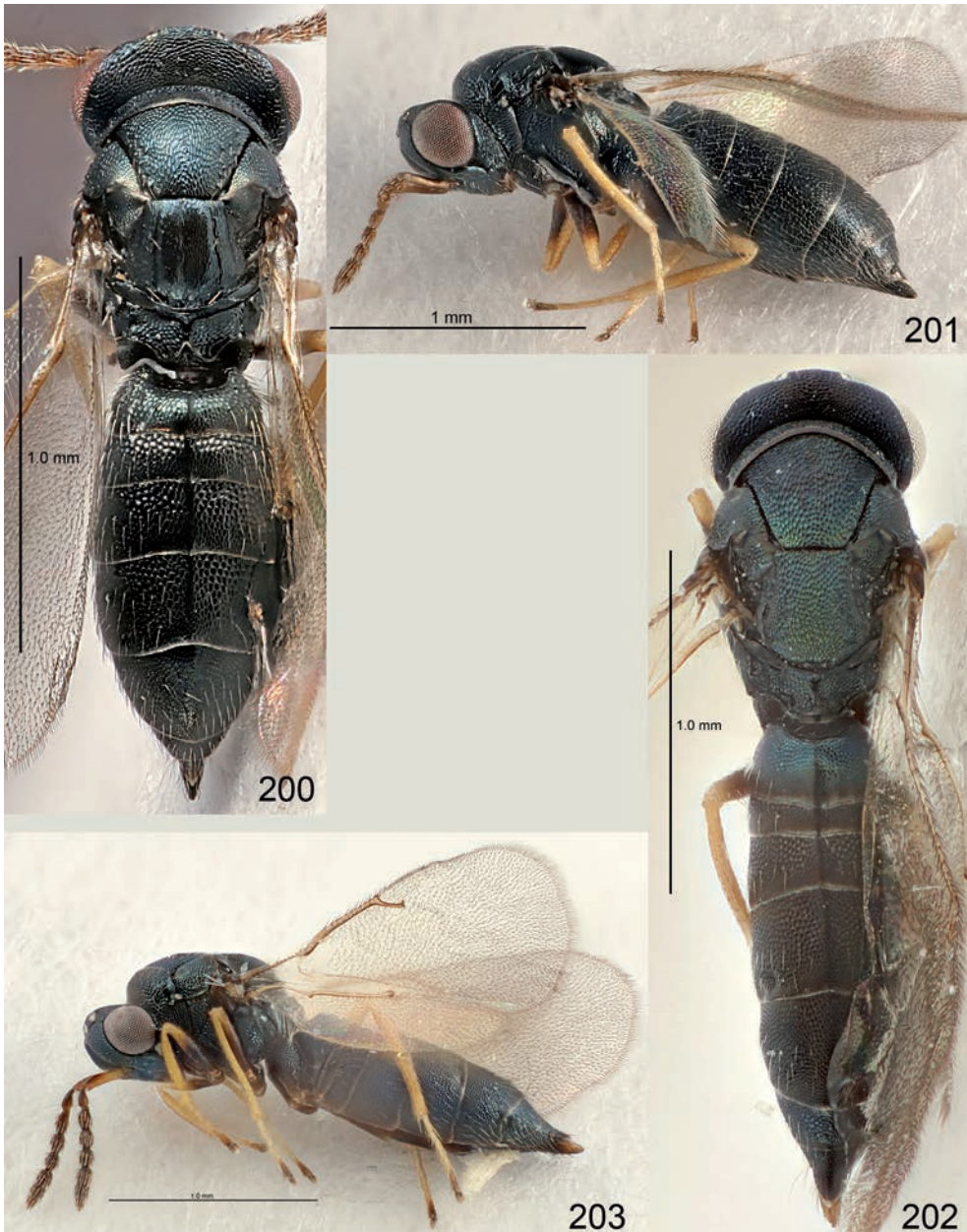
Figs 188–191. *Galeopsomyia seminarum*, holotype ♀ – (188) habitus dorsal view; (189) habitus lateral view. *Galeopsomyia springerae*, holotype ♀ – (190) habitus dorsal view; (191) habitus lateral view.



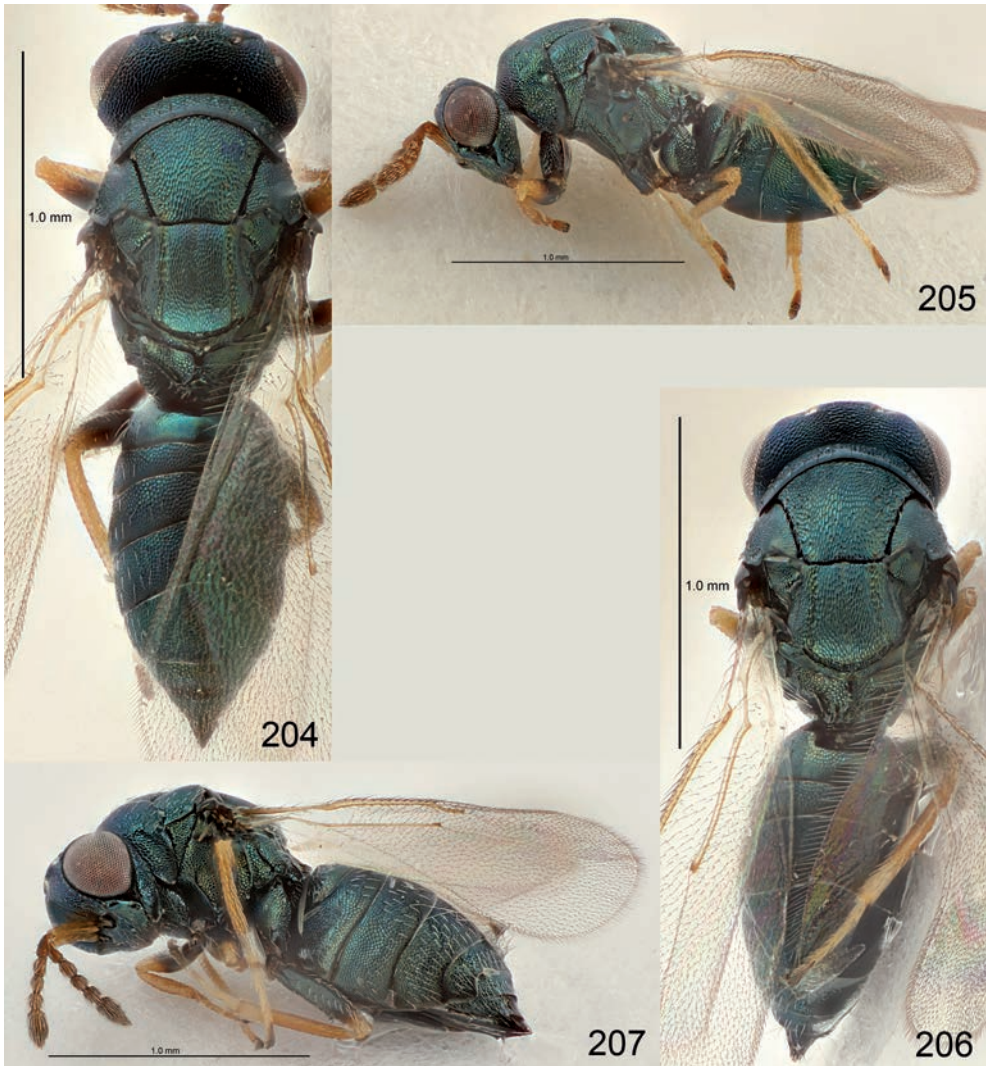
Figs 192–195. *Galeopsomyia sureshnaiki*, holotype ♀ – (192) habitus dorsal view; (193) habitus lateral view. *Galeopsomyia talamancaensis*, holotype ♀ – (194) habitus dorsal view; (195) habitus lateral view.



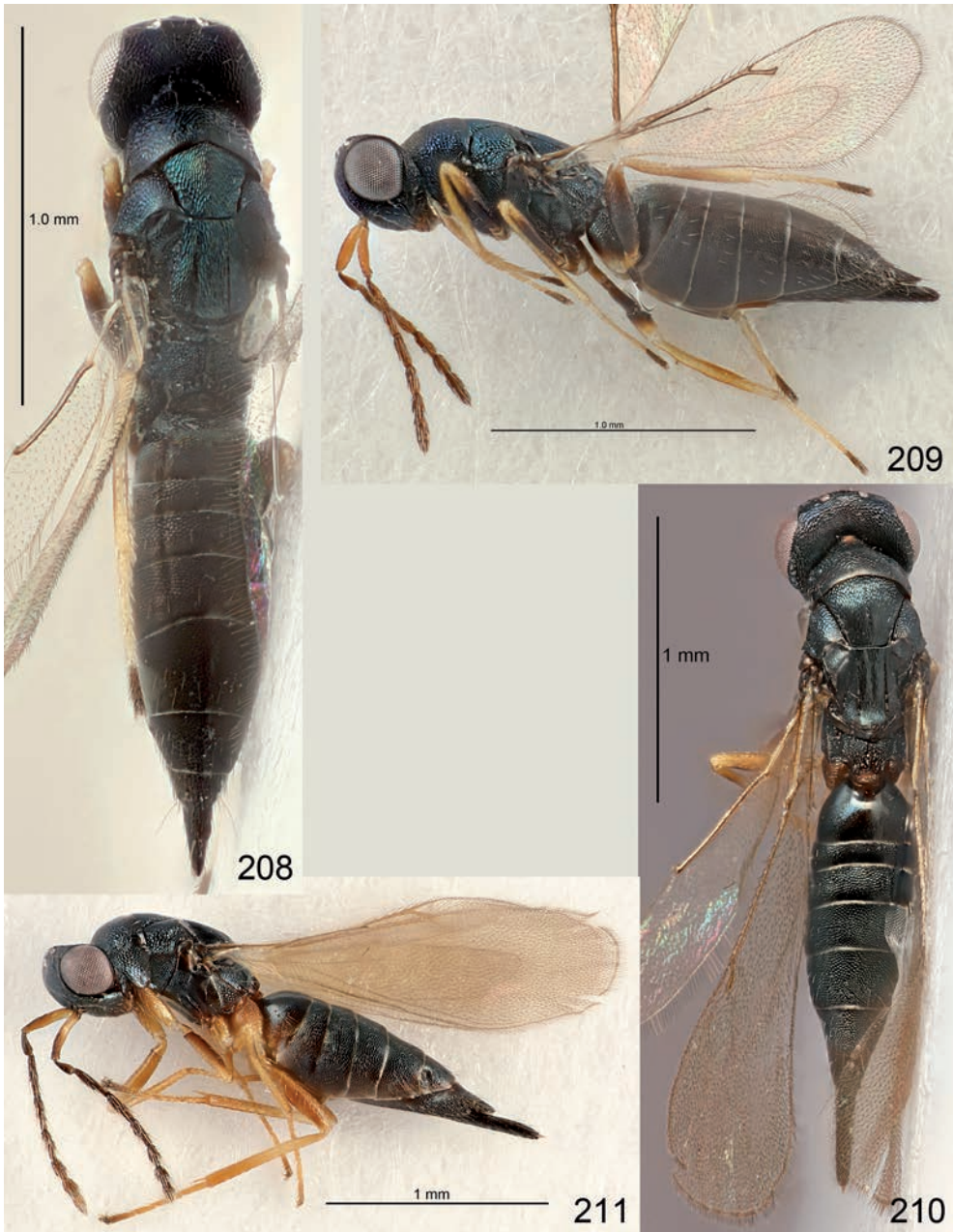
Figs 196–199. *Galeopsomyia tandayapaensis*, holotype ♀ – (196) habitus dorsal view; (197) habitus lateral view. *Galeopsomyia trinidadensis*, holotype ♀ – (198) habitus dorsal view; (199) habitus lateral view.



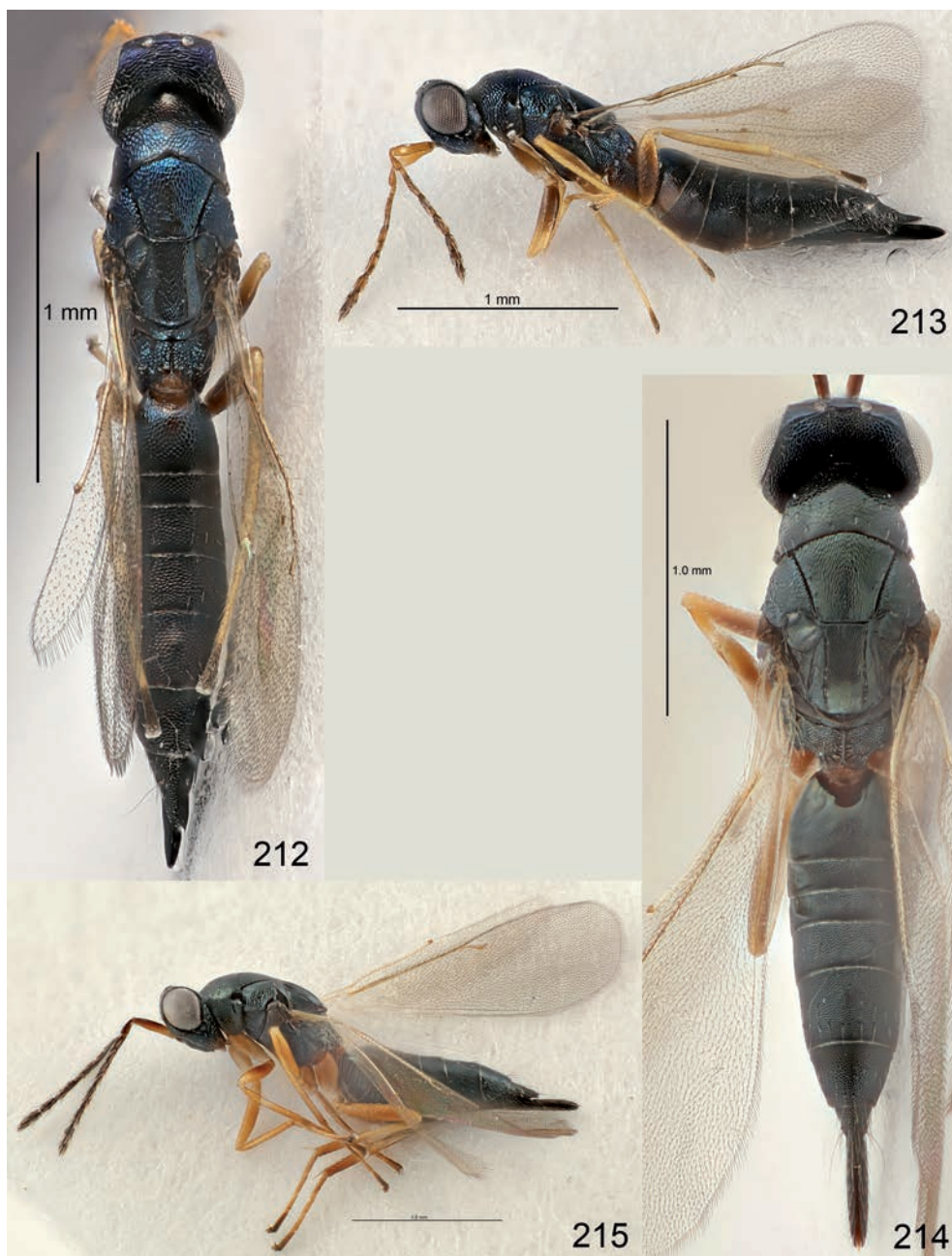
Figs 200–203. *Galeopsomyia valmiri*, holotype ♀ – (200) habitus dorsal view; (201) habitus lateral view. *Galeopsomyia verdensis*, holotype ♀ – (202) habitus dorsal view; (203) habitus lateral view.



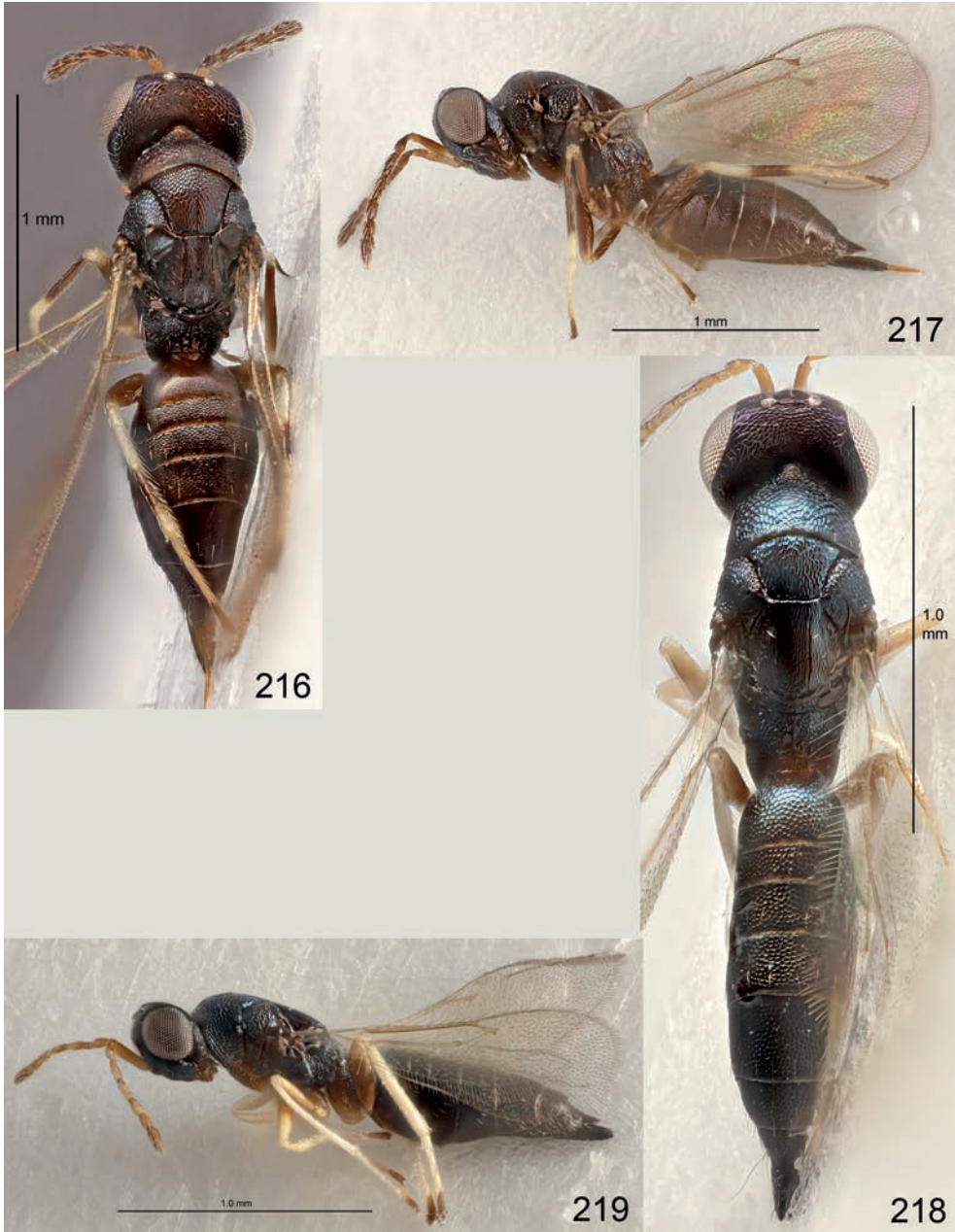
Figs 204–207. *Galeopsomyia volcanensis*, holotype ♀ – (204) habitus dorsal view; (205) habitus lateral view. *Galeopsomyia zunigai*, holotype ♀ – (206) habitus dorsal view; (207) habitus lateral view.



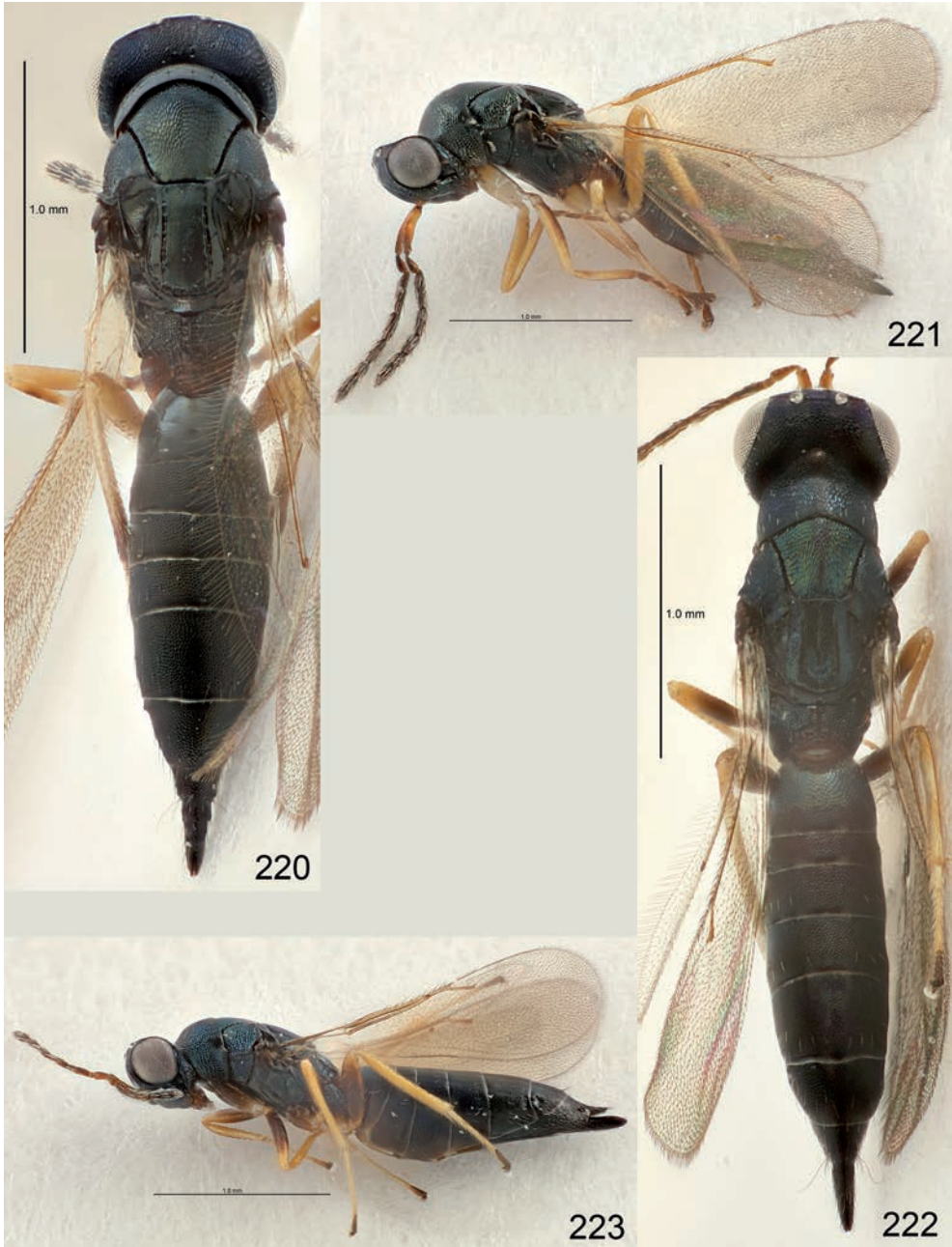
Figs 208–211. *Galeopsomyia amadea*, holotype ♀ – (208) habitus dorsal view; (209) habitus lateral view. *Galeopsomyia coralis*, holotype ♀ – (210) habitus dorsal view; (211) habitus lateral view.



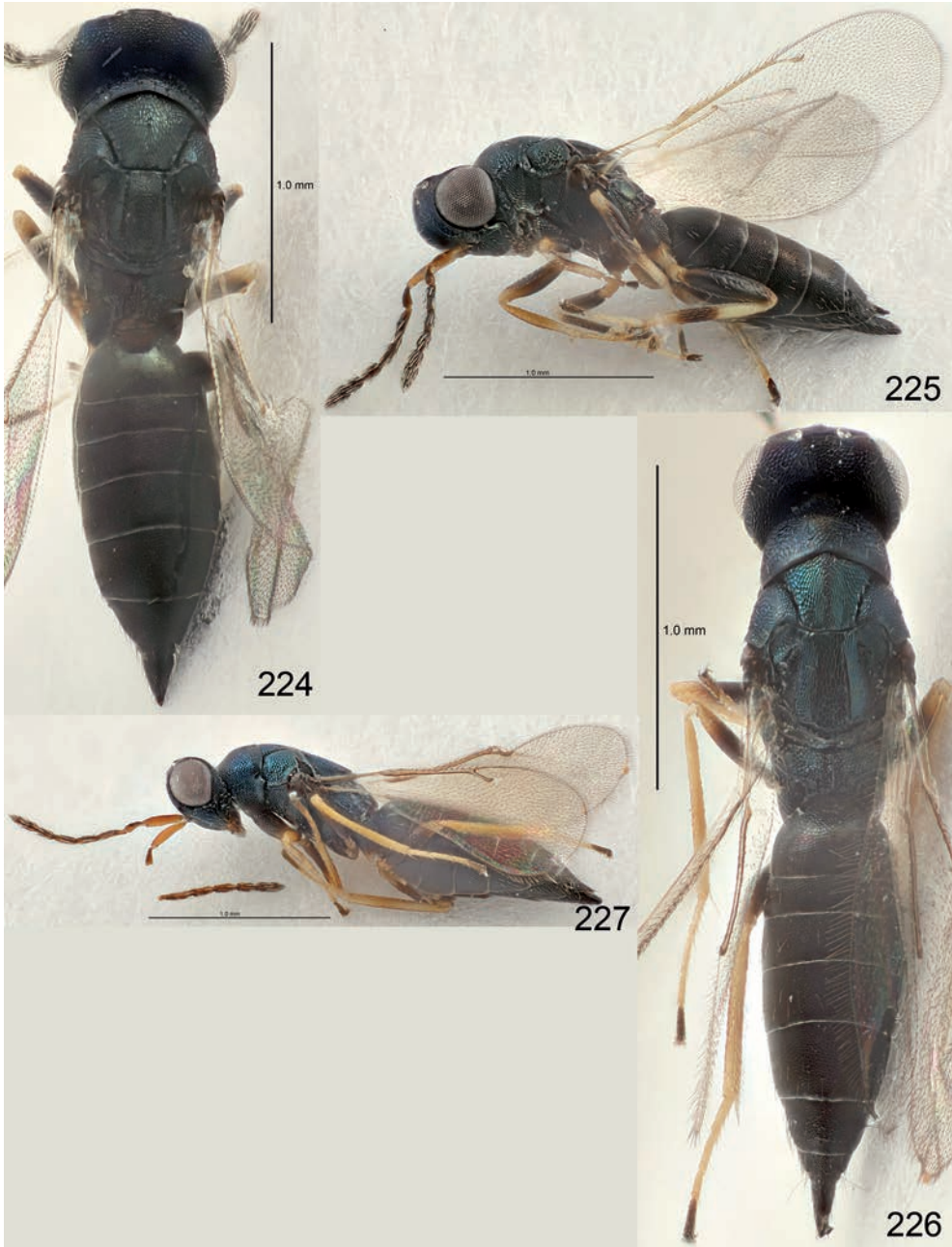
Figs 212–215. *Galeopsomyia corista*, holotype ♀ – (212) habitus dorsal view; (213) habitus lateral view. *Galeopsomyia elegans*, holotype ♀ – (214) habitus dorsal view; (215) habitus lateral view.



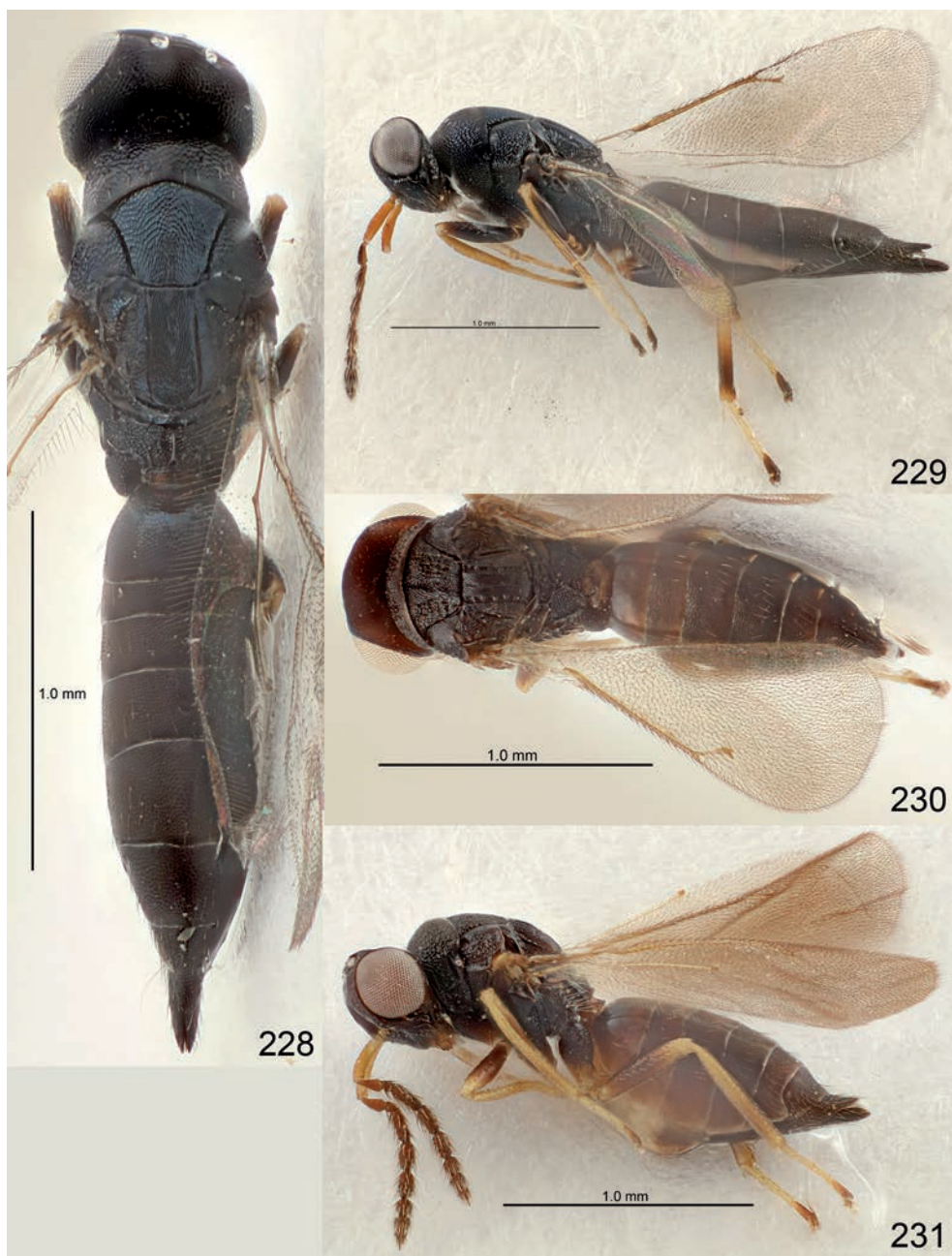
Figs 216–219. *Galeopsomyia eroica*, holotype ♀ – (216) habitus dorsal view; (217) habitus lateral view. *Galeopsomyia fabia*, holotype ♀ – (218) habitus dorsal view; (219) habitus lateral view.



Figs 220–223. *Galeopsomyia fuga*, holotype ♀ – (220) habitus dorsal view; (221) habitus lateral view. *Galeopsomyia lama*, holotype ♀ – (222) habitus dorsal view; (223) habitus lateral view.



Figs 224–227. *Galeopsomyia lasallei*, holotype ♀ – (224) habitus dorsal view; (225) habitus lateral view. *Galeopsomyia mynta*, holotype ♀ – (226) habitus dorsal view; (227) habitus lateral view.



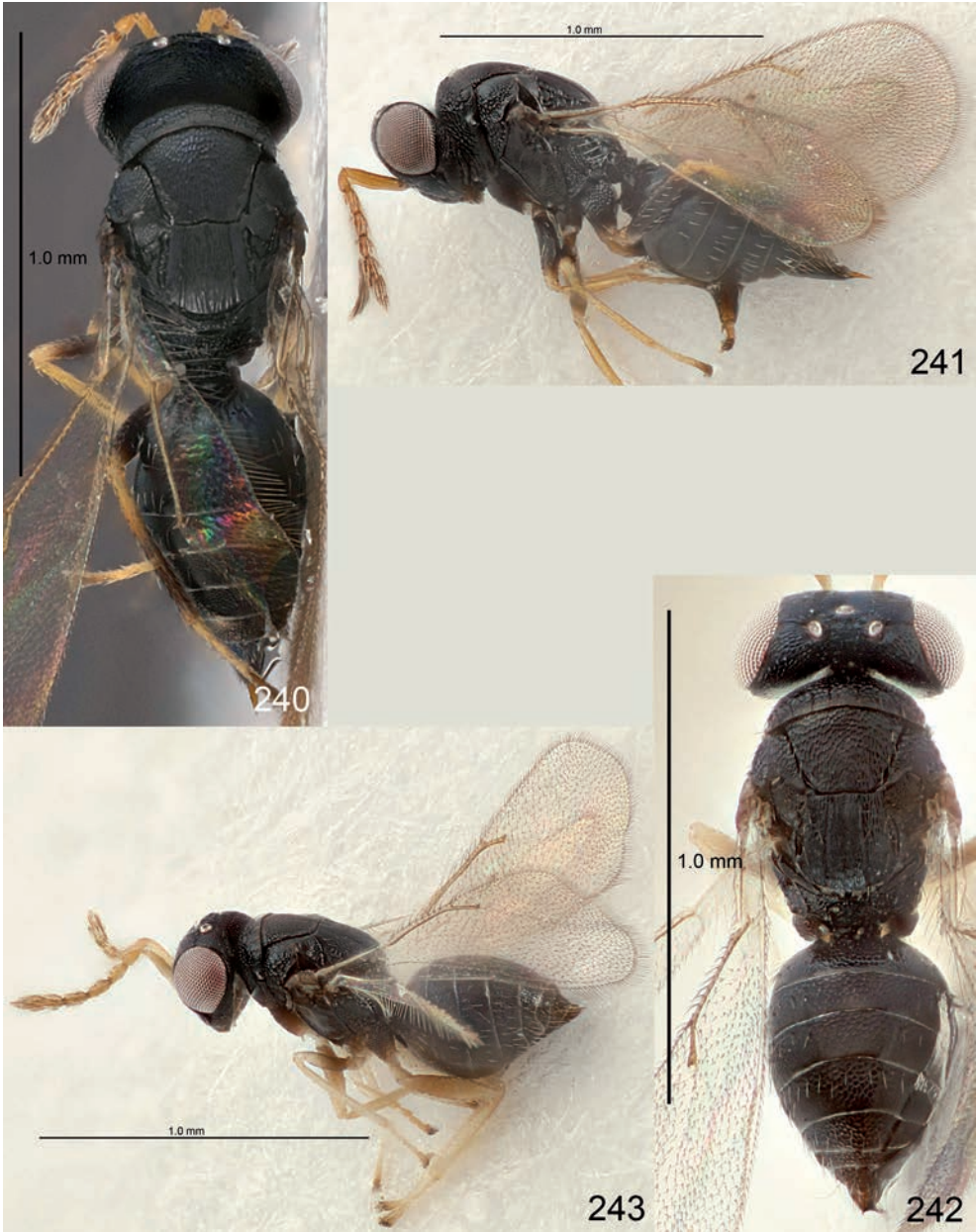
Figs 228–231. *Galeopsomyia rosea*, holotype ♀ – (228) habitus dorsal view; (229) habitus lateral view. *Galeopsomyia anomala*, holotype ♀ – (230) habitus dorsal view; (231) habitus lateral view.



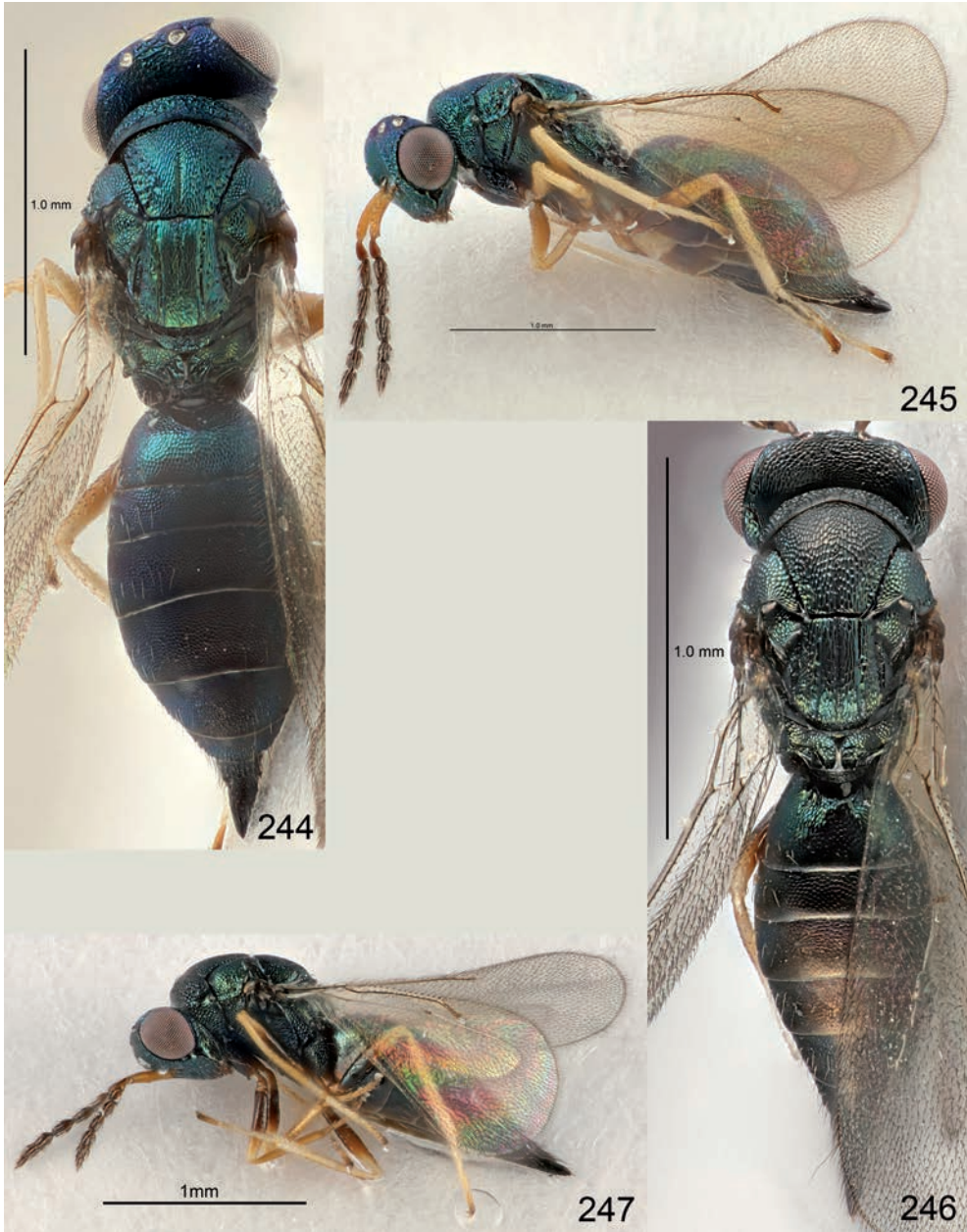
Figs 232–235. *Galeopsomyia admirabilis*, holotype ♀ – (232) habitus dorsal view; (233) habitus lateral view. *Galeopsomyia insignis*, holotype ♀ – (234) habitus dorsal view; (235) habitus lateral view.



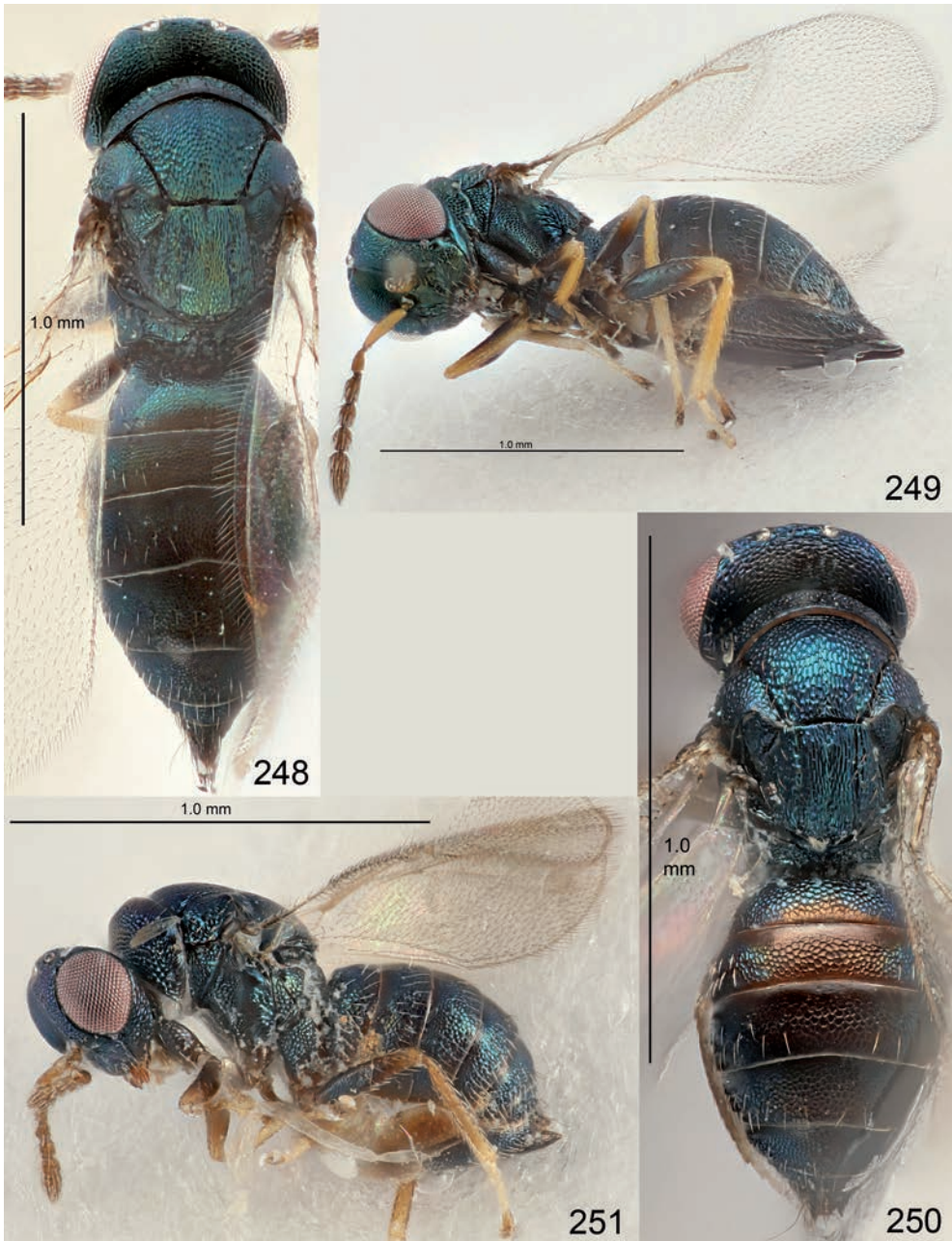
Figs 236–239. *Galeopsomyia blendis*, holotype ♀ – (236) habitus dorsal view; (237) habitus lateral view. *Galeopsomyia maura*, holotype ♀ – (238) habitus dorsal view; (239) habitus lateral view.



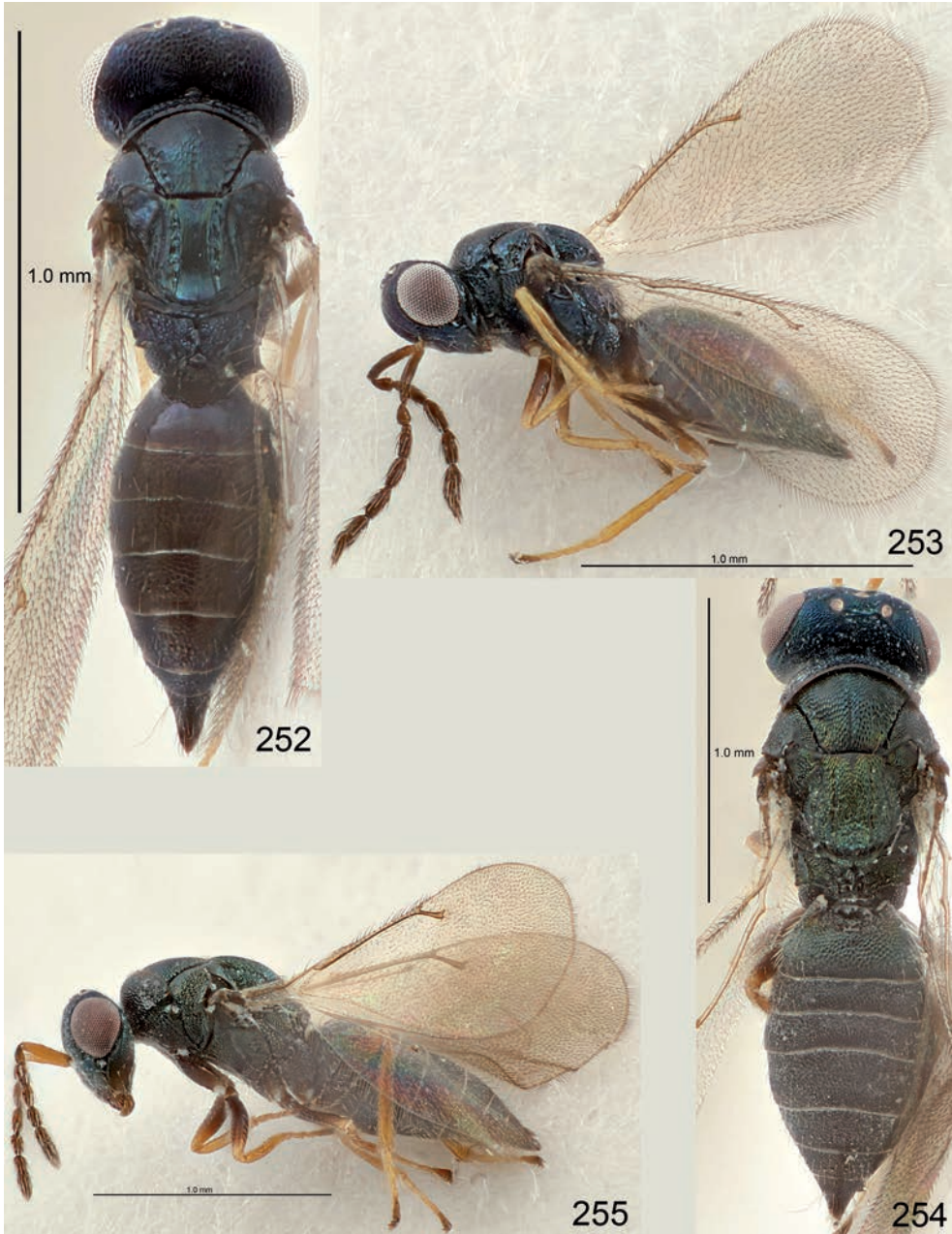
Figs 240–243. *Galeopsomyia morula*, holotype ♀ – (240) habitus dorsal view; (241) habitus lateral view. *Galeopsomyia abra*, holotype ♀ – (242) habitus dorsal view; (243) habitus lateral view.



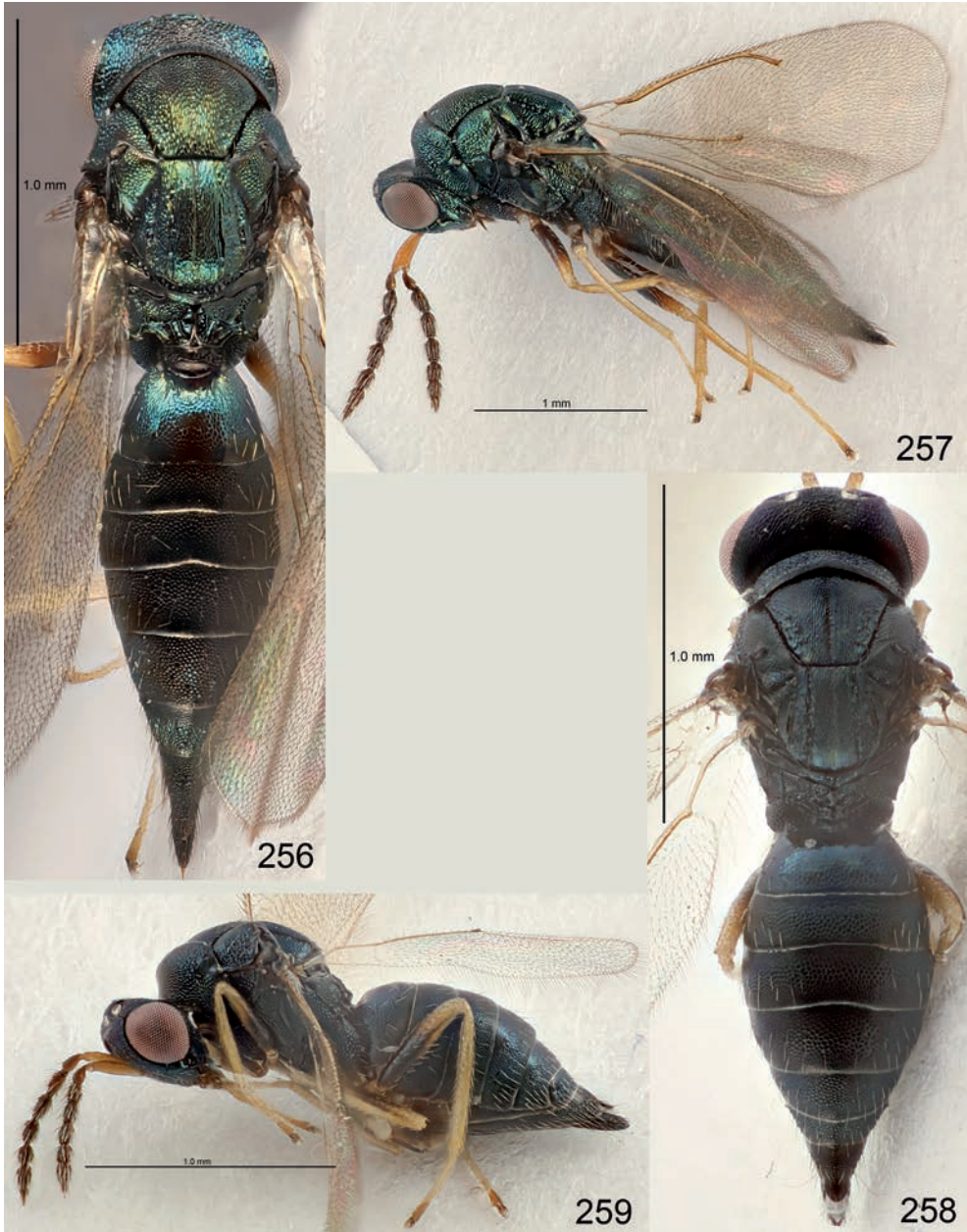
Figs 244–247. *Galeopsomyia abraxas*, holotype ♀ – (244) habitus dorsal view; (245) habitus lateral view. *Galeopsomyia actis*, holotype ♀ – (246) habitus dorsal view; (247) habitus lateral view.



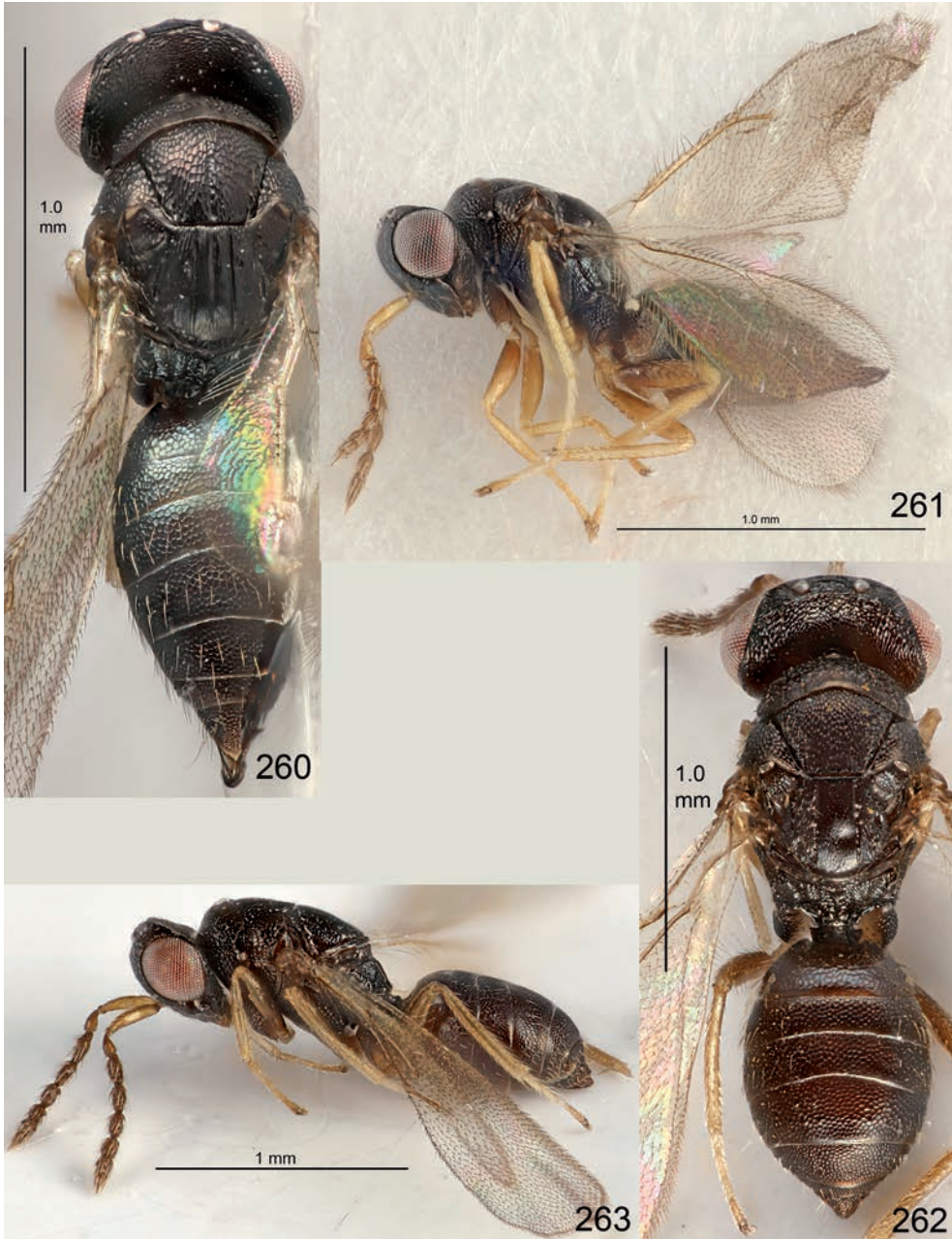
Figs 248–251. *Galeopsomyia adobia*, holotype ♀ – (248) habitus dorsal view; (249) habitus lateral view. *Galeopsomyia agonis*, holotype ♀ – (250) habitus dorsal view; (251) habitus lateral view.



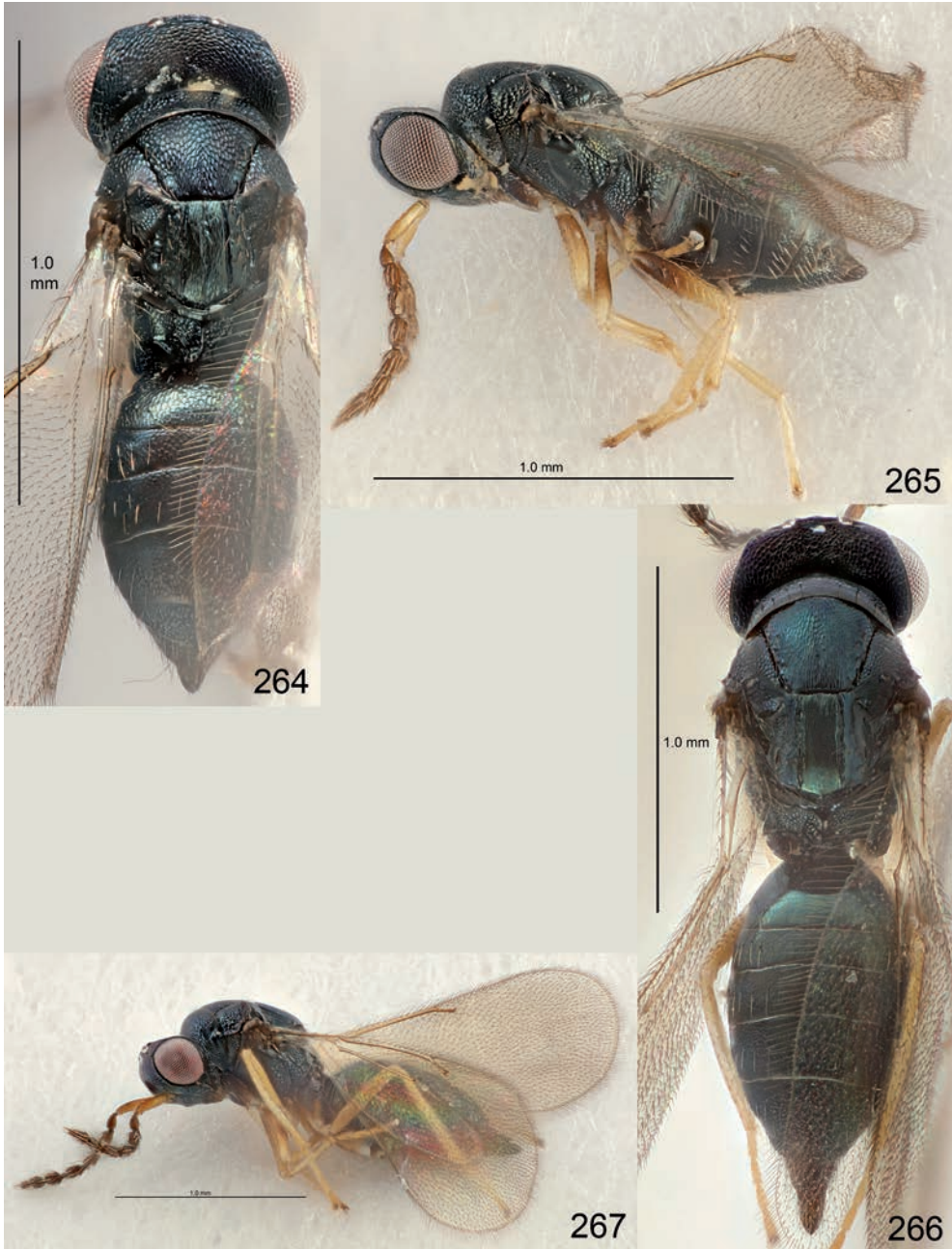
Figs 252–255. *Galeopsomyia ajax*, holotype ♀ – (252) habitus dorsal view; (253) habitus lateral view. *Galeopsomyia alambra*, holotype ♀ – (254) habitus dorsal view; (255) habitus lateral view.



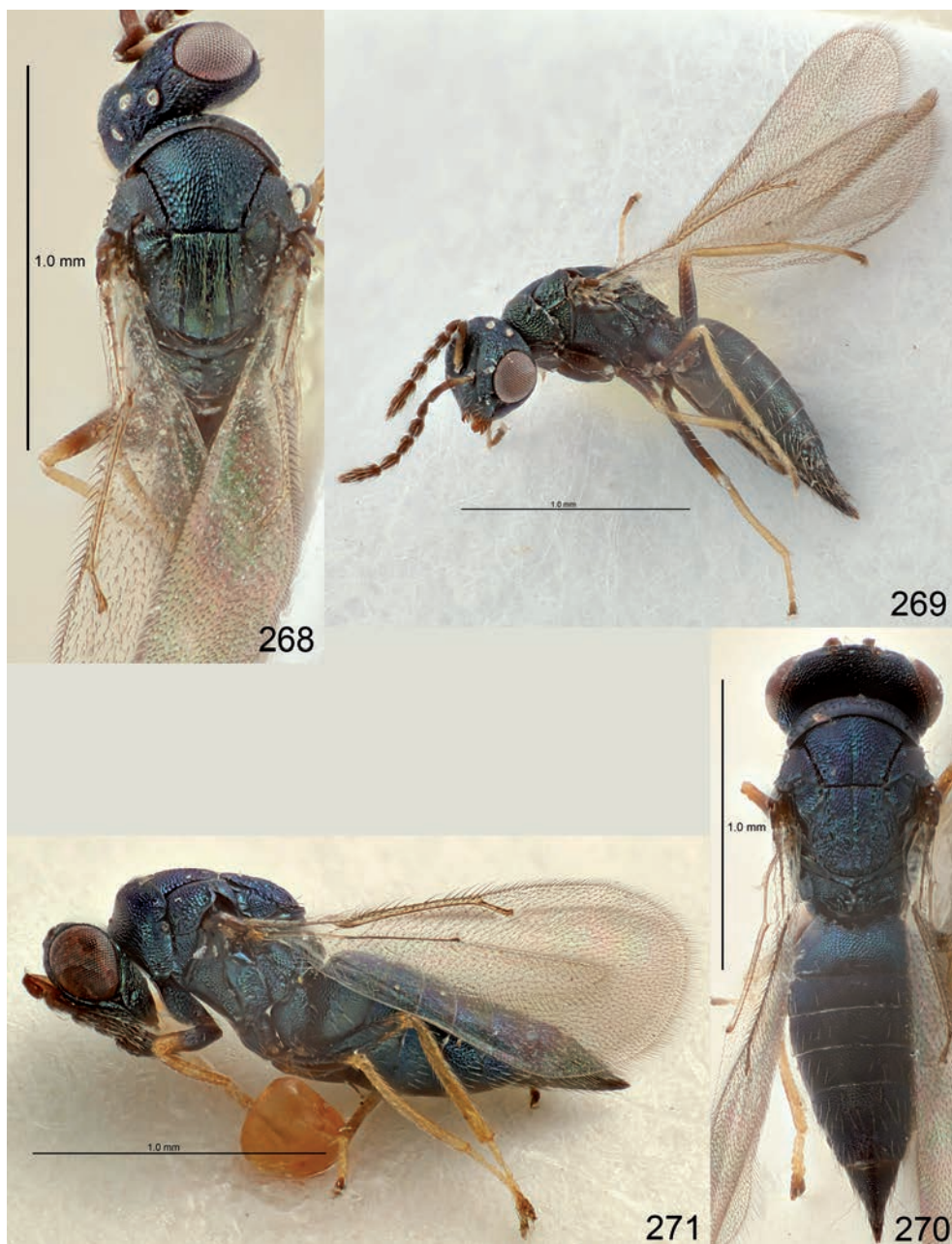
Figs 256–259. *Galeopsomyia alanis*, holotype ♀ – (256) habitus dorsal view; (257) habitus lateral view. *Galeopsomyia alegra*, holotype ♀ – (258) habitus dorsal view; (259) habitus lateral view.



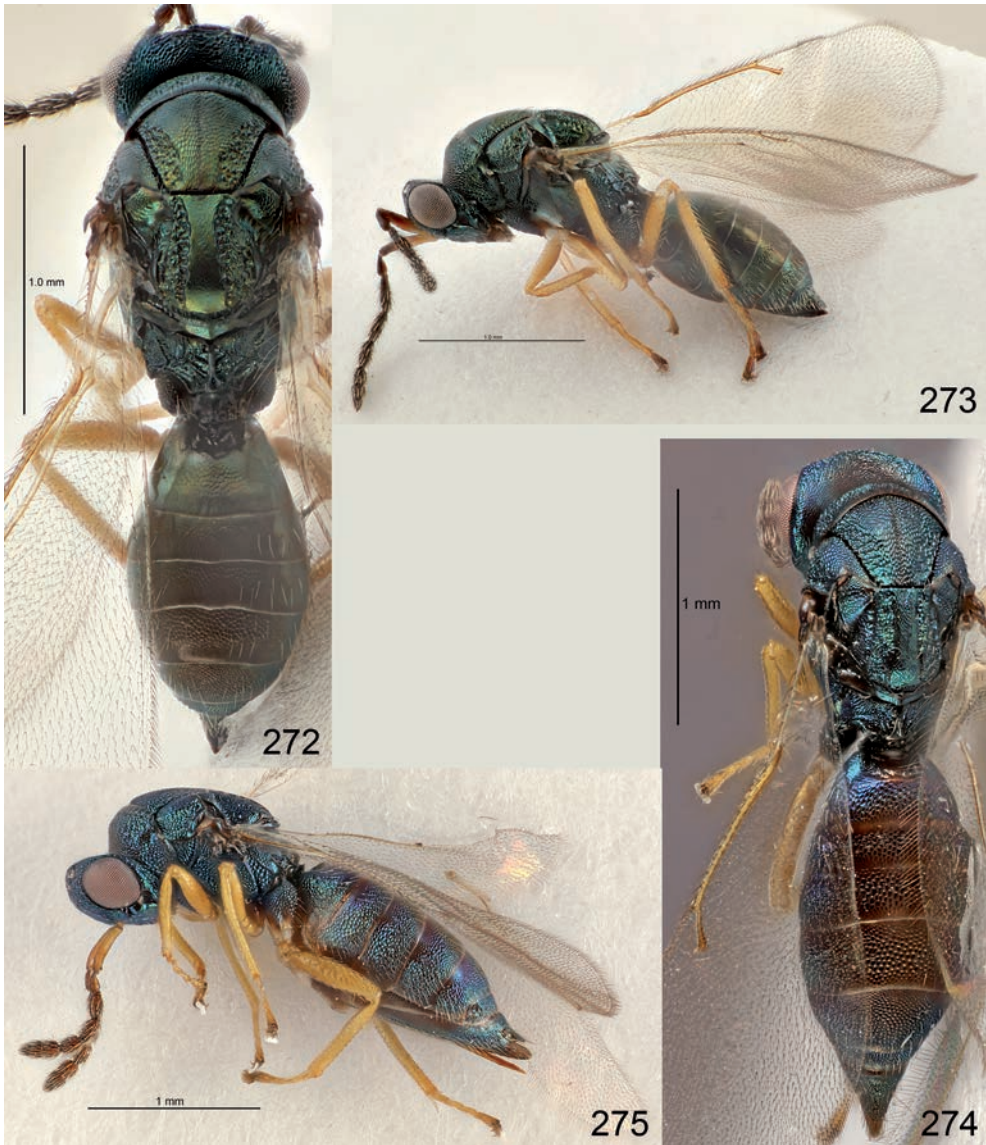
Figs 260–263. *Galeopsomyia aliante*, holotype ♀ – (260) habitus dorsal view; (261) habitus lateral view. *Galeopsomyia allisonbrownae*, holotype ♀ – (262) habitus dorsal view; (263) habitus lateral view.



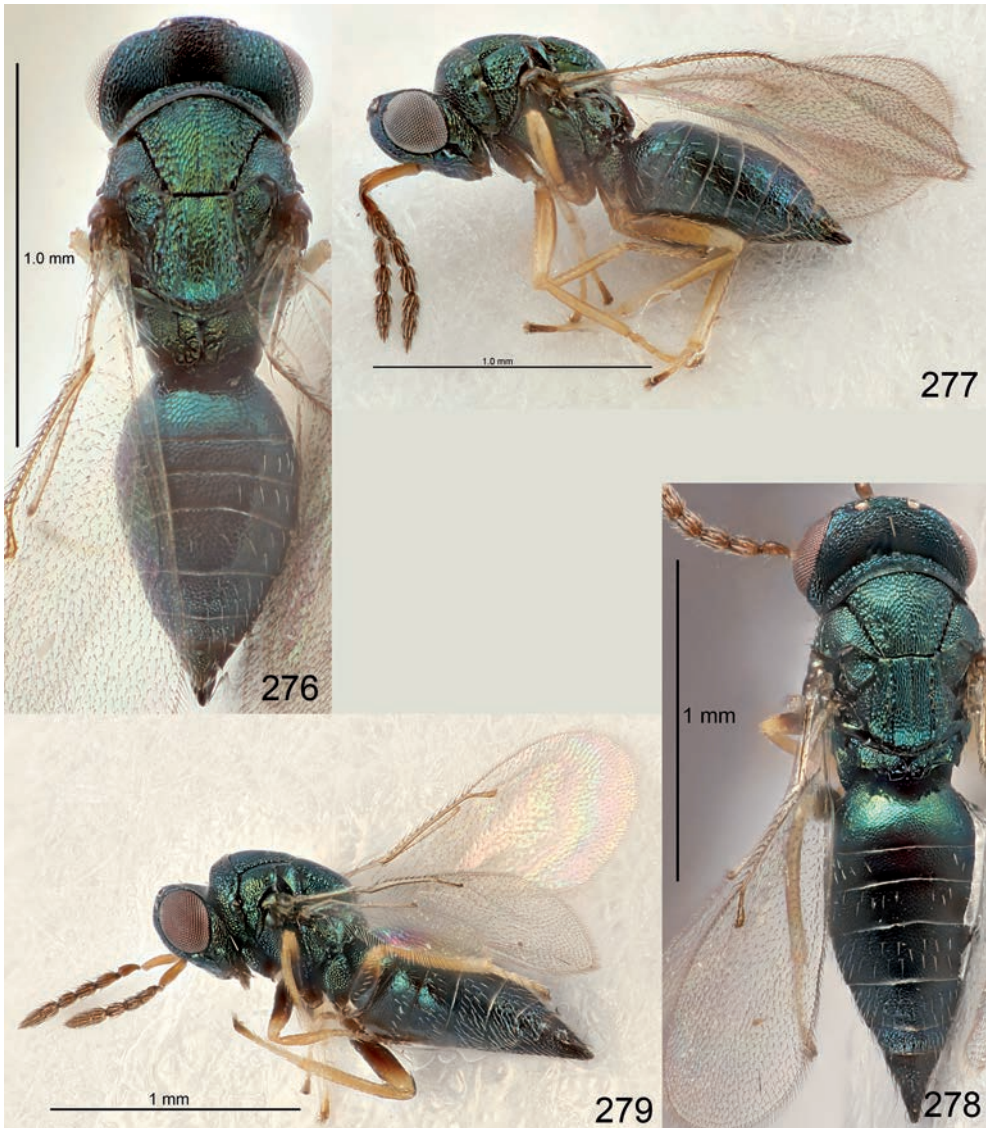
Figs 264–267. *Galeopsomyia alloris*, holotype ♀ – (264) habitus dorsal view; (265) habitus lateral view. *Galeopsomyia altura*, holotype ♀ – (266) habitus dorsal view; (267) habitus lateral view.



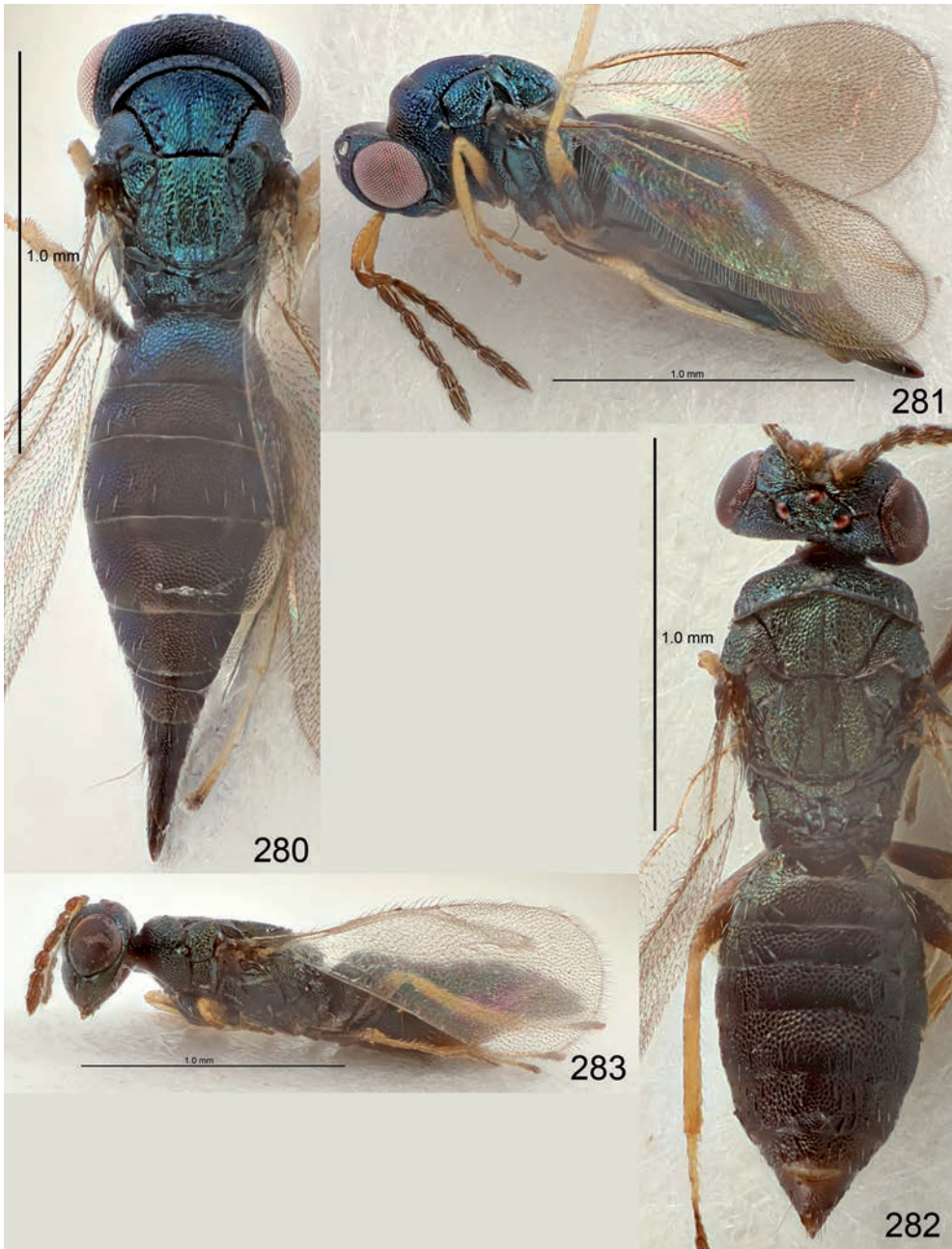
Figs 268–271. *Galeopsomyia ambigua*, holotype ♀ – (268) habitus dorsal view; (269) habitus lateral view. *Galeopsomyia amphis*, holotype ♀ – (270) habitus dorsal view; (271) habitus lateral view.



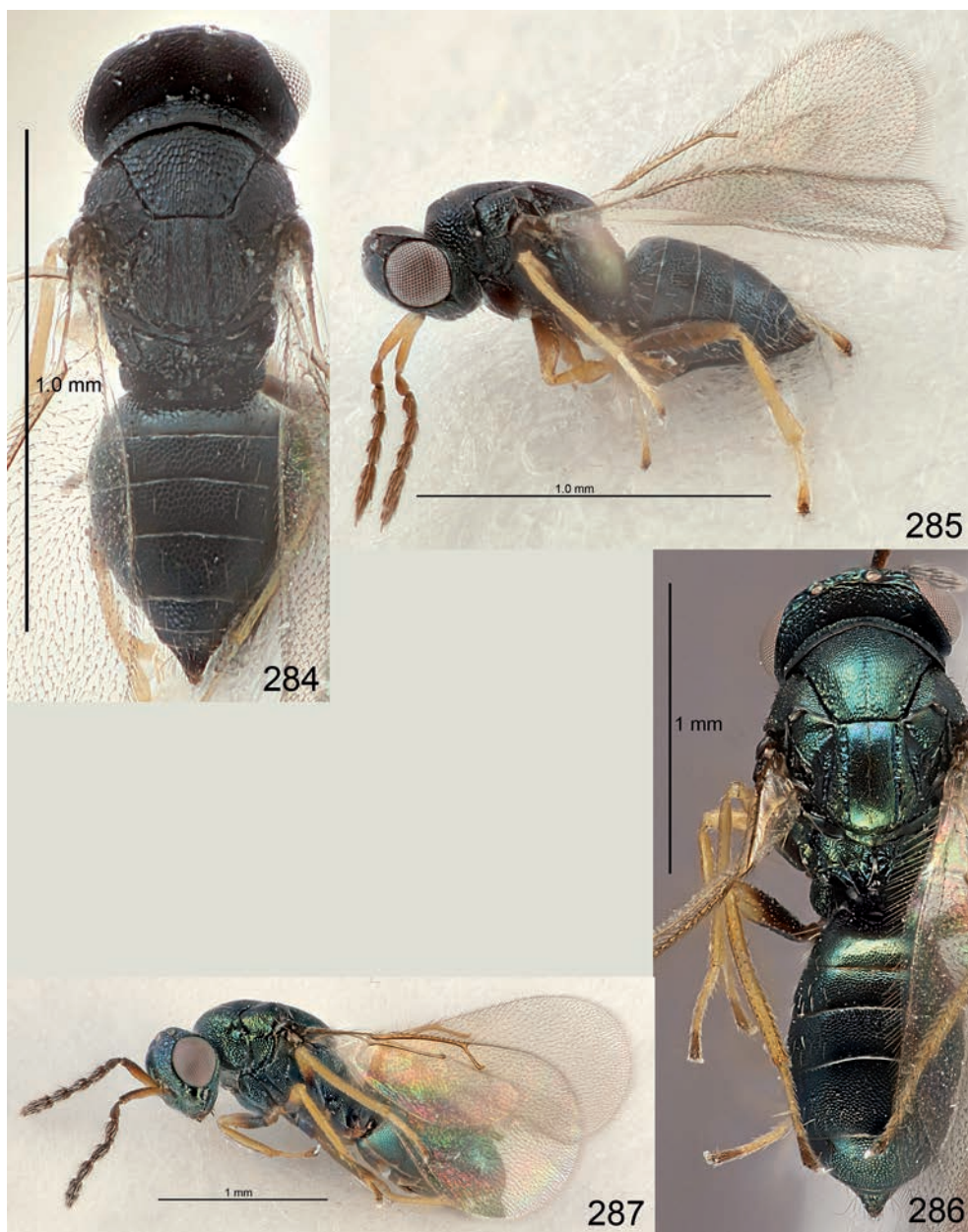
Figs 272–275. *Galeopsomyia amyra*, holotype ♀ – (272) habitus dorsal view; (273) habitus lateral view. *Galeopsomyia anis*, holotype ♀ – (274) habitus dorsal view; (275) habitus lateral view.



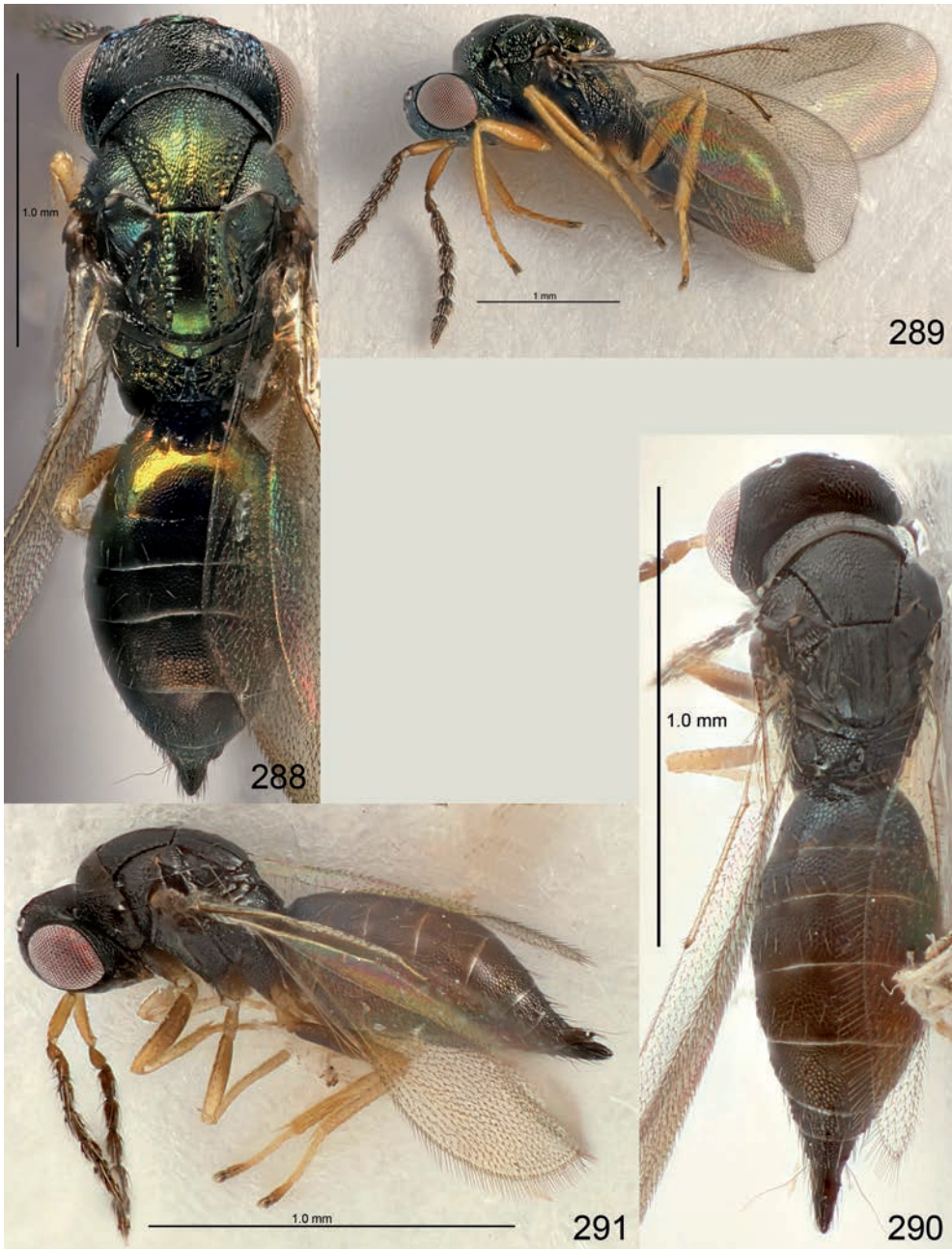
Figs 276–279. *Galeopsomyia anysia*, holotype ♀ – (276) habitus dorsal view; (277) habitus lateral view. *Galeopsomyia apicis*, holotype ♀ – (278) habitus dorsal view; (279) habitus lateral view.



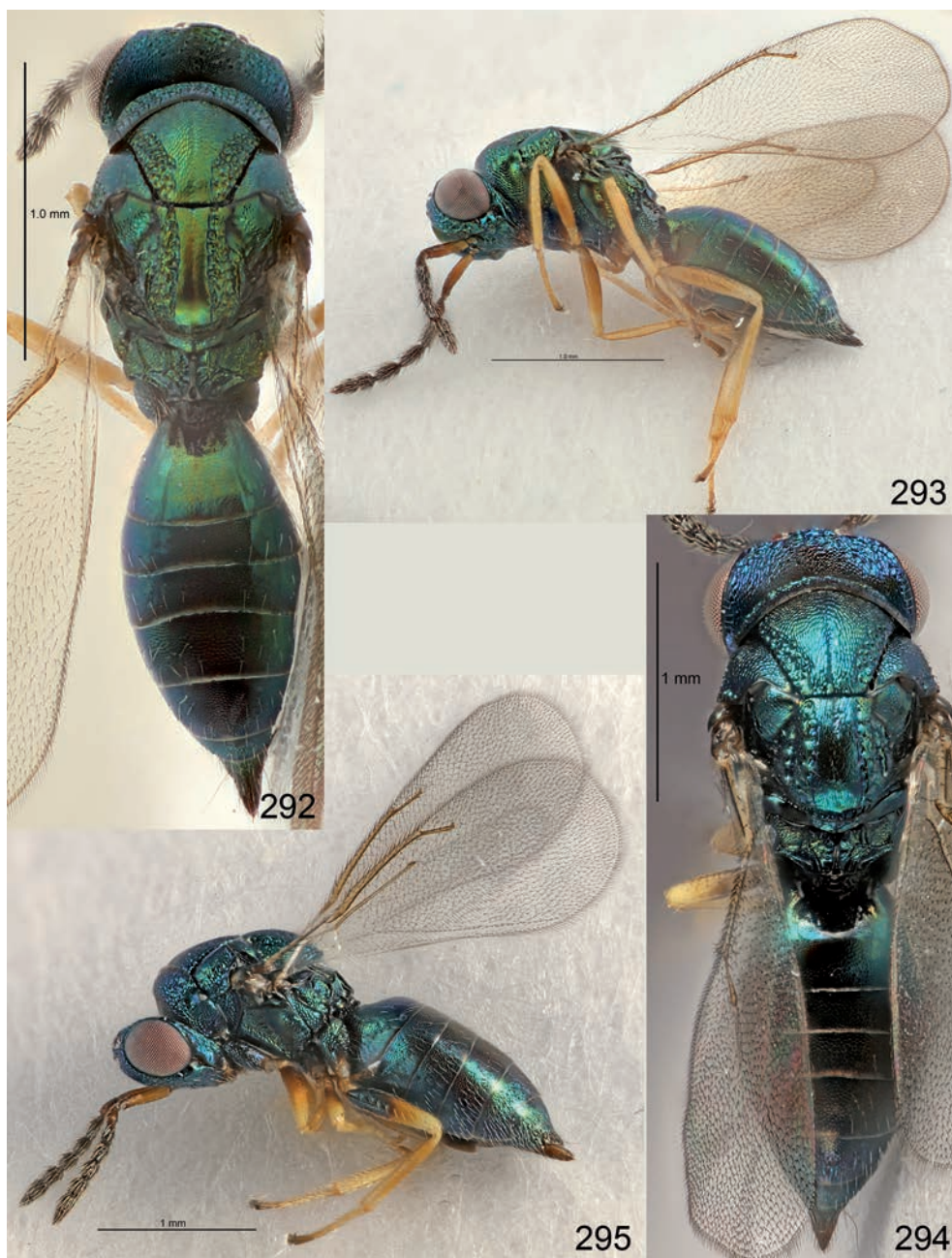
Figs 280–283. *Galeopsomyia arada*, holotype ♀ – (280) habitus dorsal view; (281) habitus lateral view. *Galeopsomyia aramis*, holotype ♀ – (282) habitus dorsal view; (283) habitus lateral view.



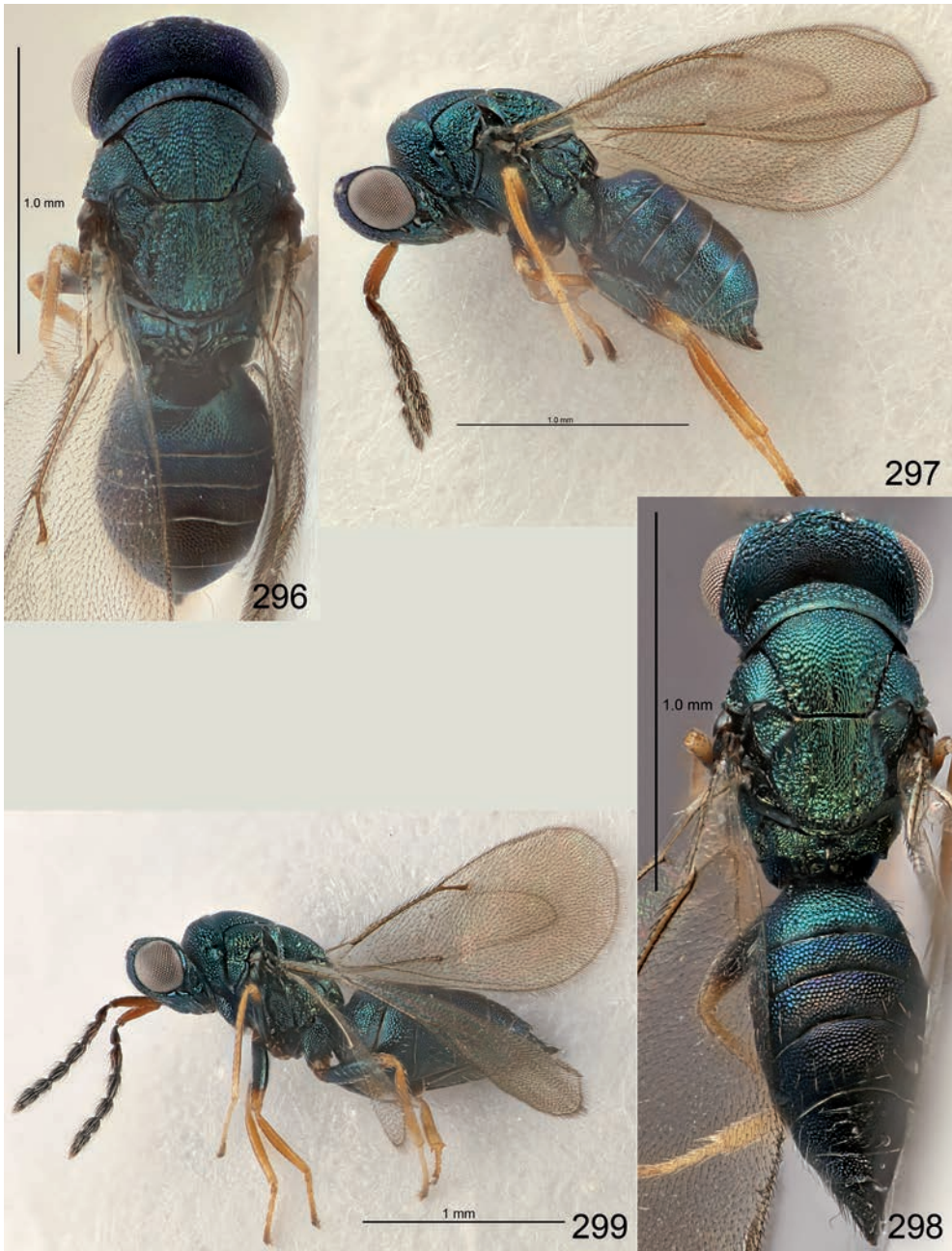
Figs 284–287. *Galeopsomyia arenalicola*, holotype ♀ – (284) habitus dorsal view; (285) habitus lateral view. *Galeopsomyia artis*, holotype ♀ – (286) habitus dorsal view; (287) habitus lateral view.



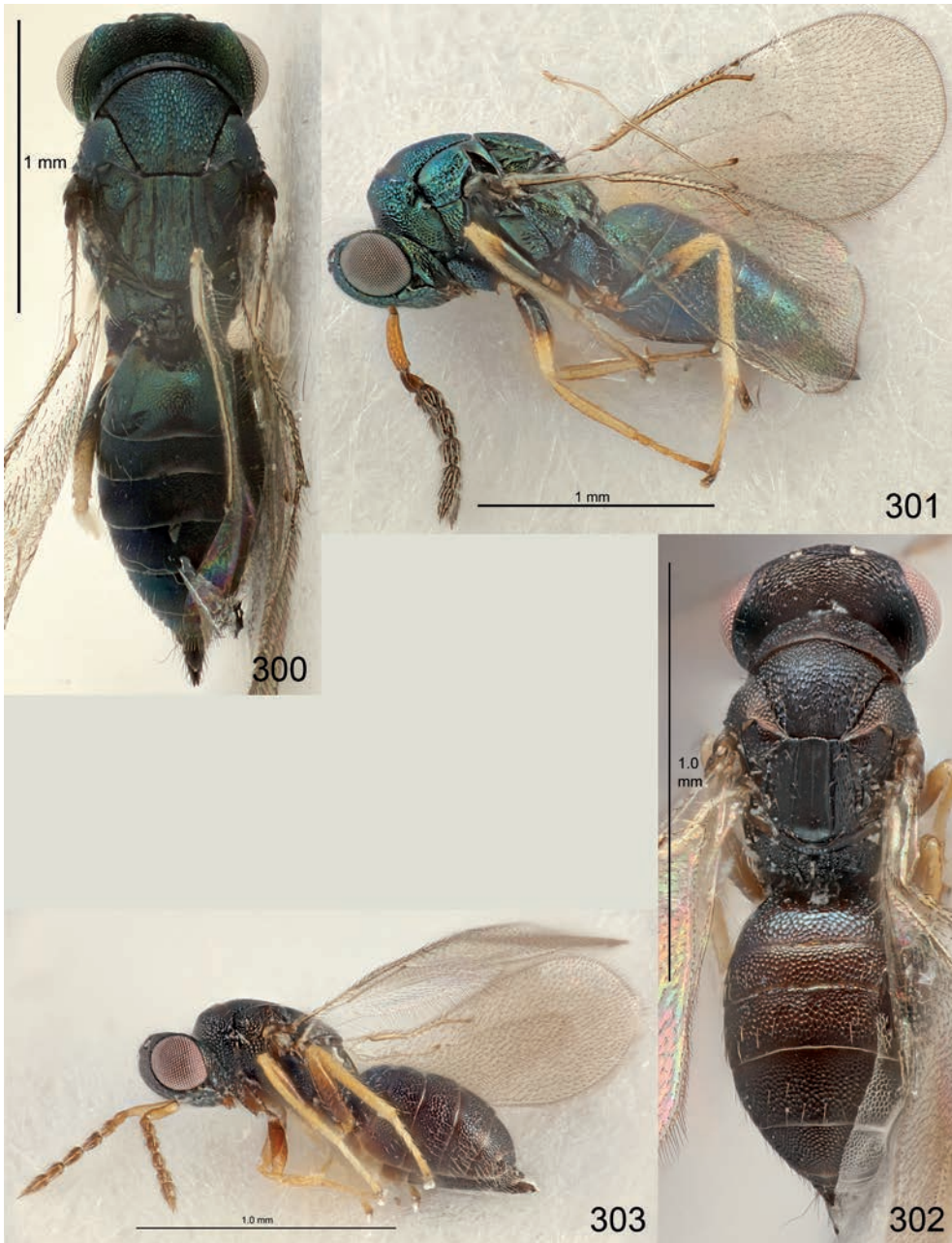
Figs 288–291. *Galeopsomyia assai*, holotype ♀ – (288) habitus dorsal view; (289) habitus lateral view. *Galeopsomyia atrata*, holotype ♀ – (290) habitus dorsal view; (291) habitus lateral view.



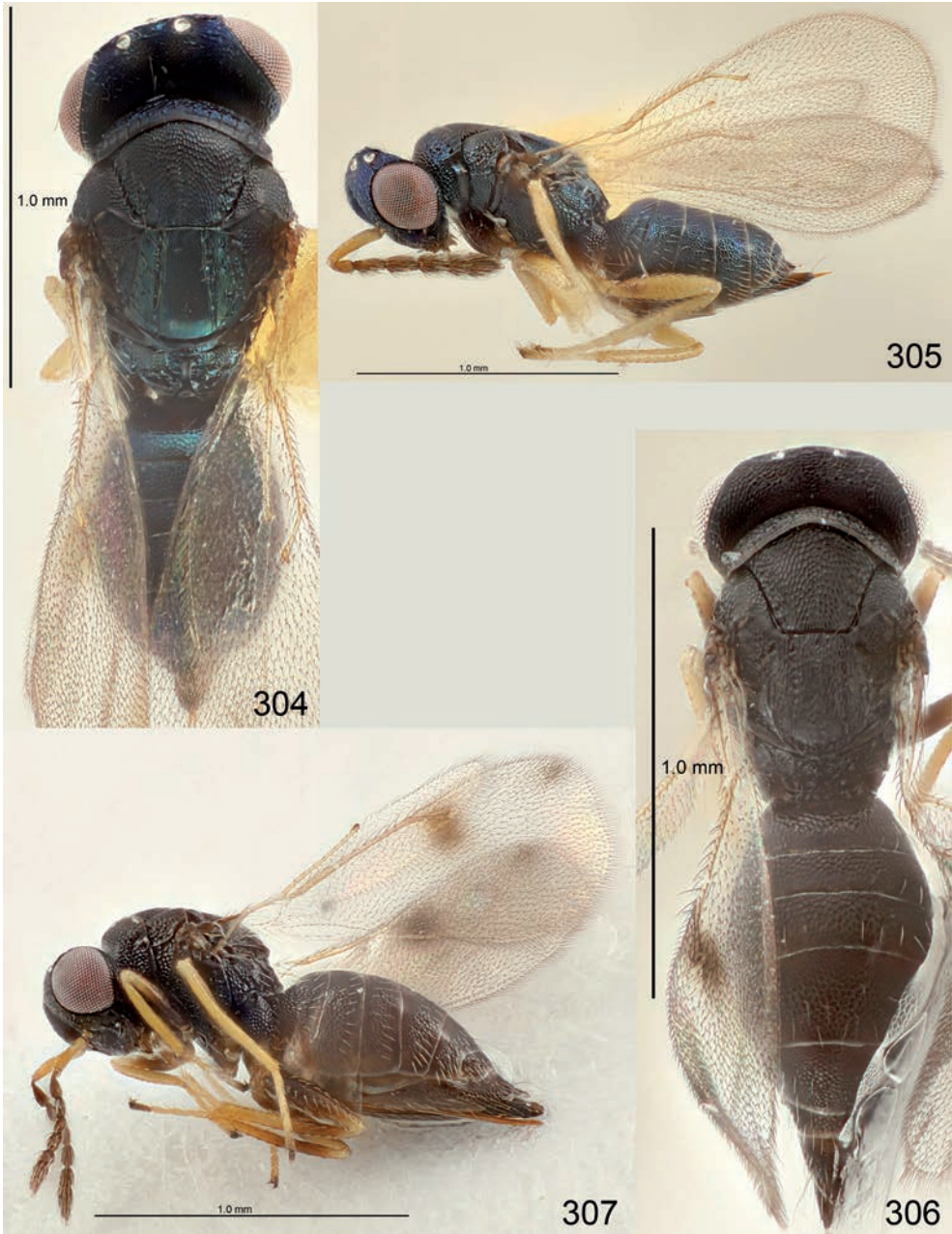
Figs 292–295. *Galeopsomyia aureoviridis*, holotype ♀ – (292) habitus dorsal view; (293) habitus lateral view. *Galeopsomyia avis*, holotype ♀ – (294) habitus dorsal view; (295) habitus lateral view.



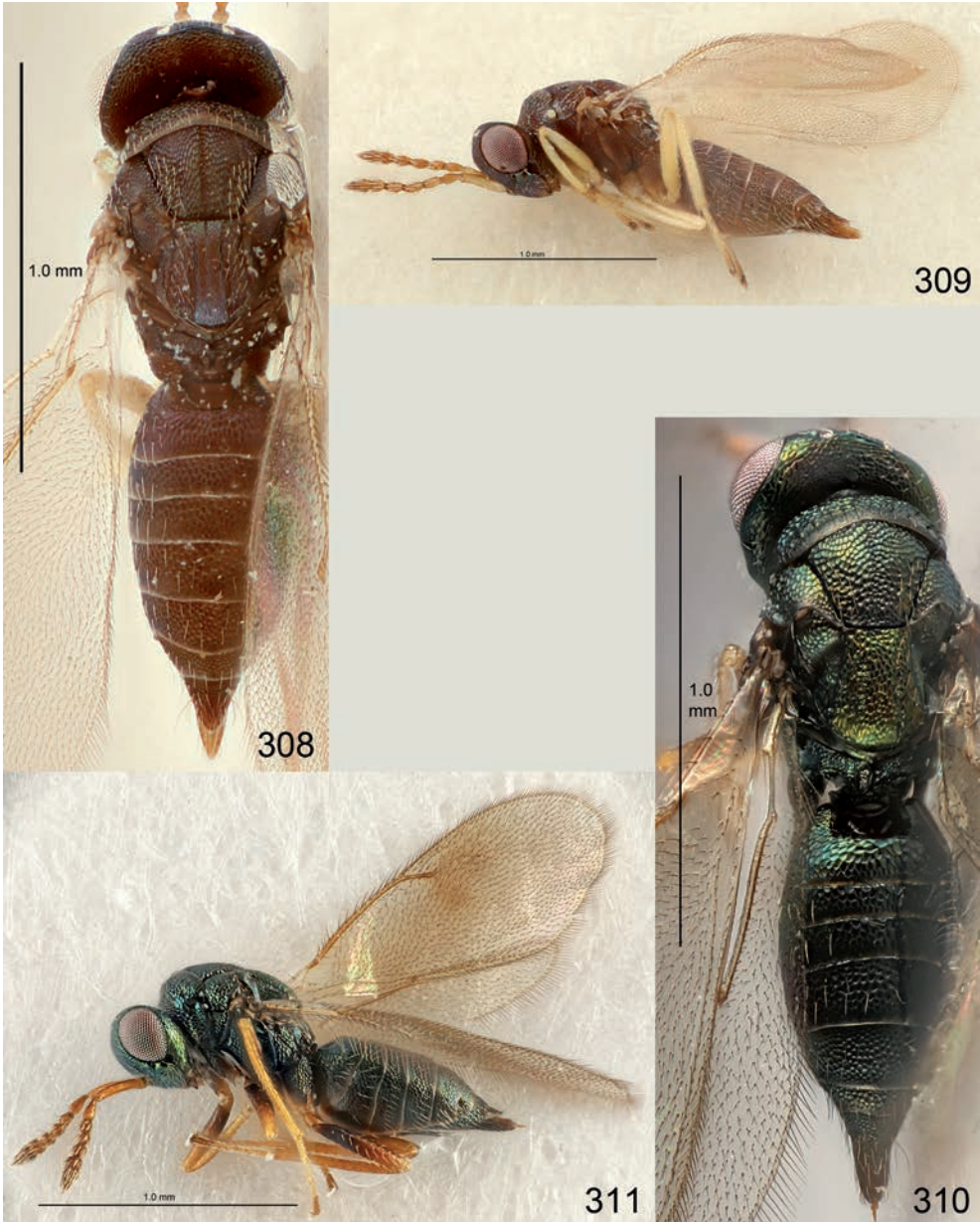
Figs 296–299. *Galeopsomyia baldosa*, holotype ♀ – (296) habitus dorsal view; (297) habitus lateral view. *Galeopsomyia bariolis*, holotype ♀ – (298) habitus dorsal view; (299) habitus lateral view.



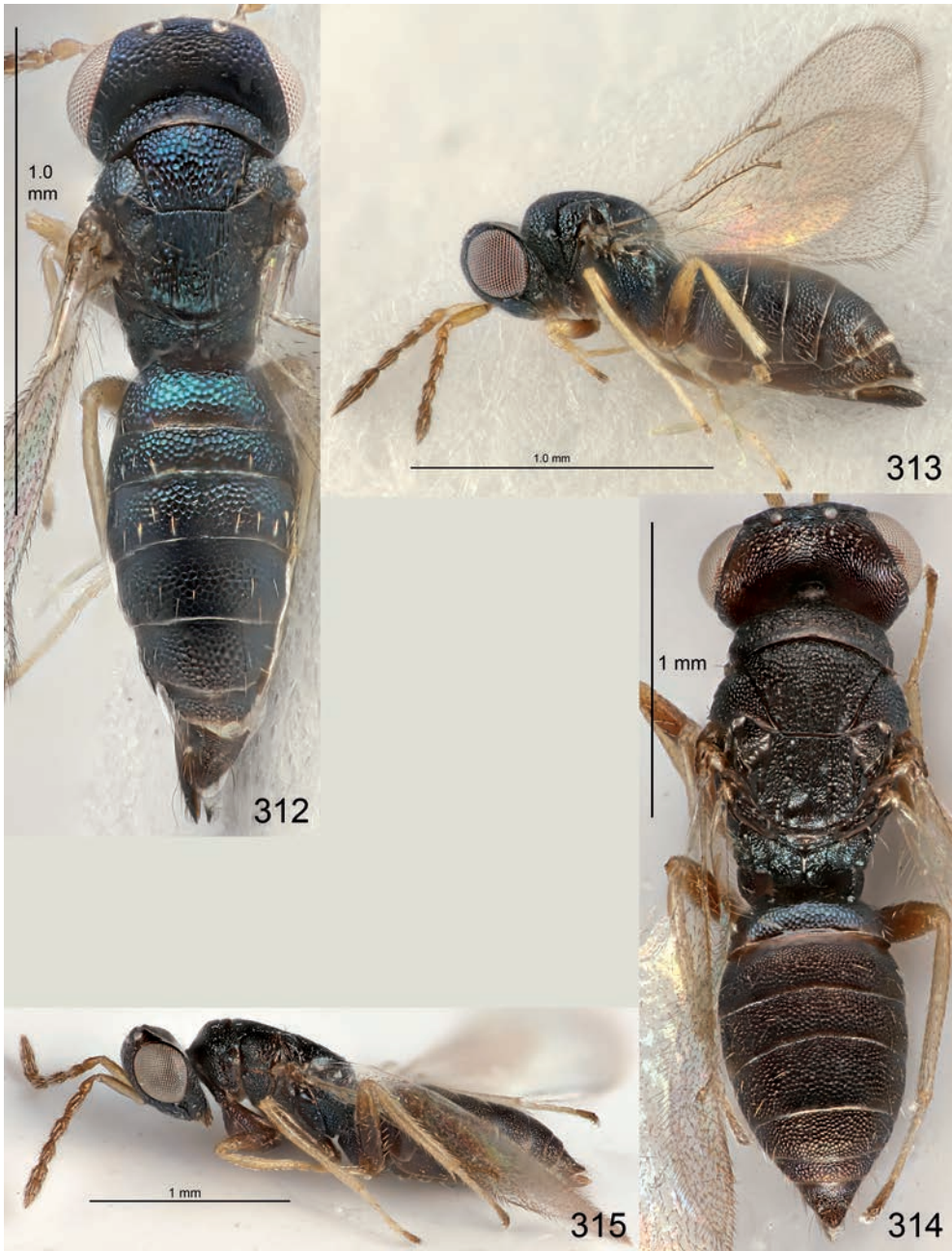
Figs 300–303. *Galeopsomyia beltanis*, holotype ♀ – (300) habitus dorsal view; (301) habitus lateral view. *Galeopsomyia bestis*, holotype ♀ – (302) habitus dorsal view; (303) habitus lateral view.



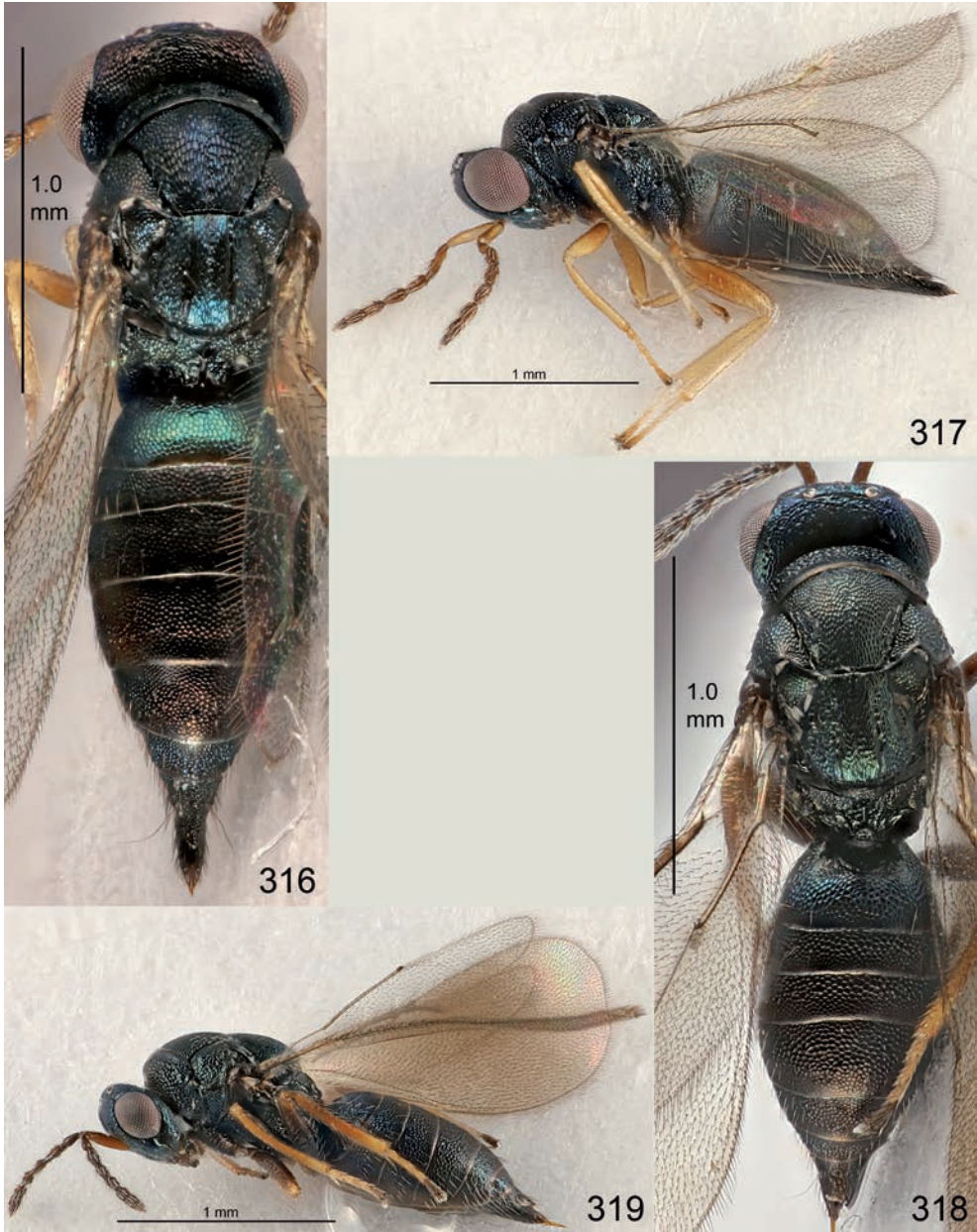
Figs 304–307. *Galeopsomyia bicolor*, holotype ♀ – (304) habitus dorsal view; (305) habitus lateral view. *Galeopsomyia bimaculata*, holotype ♀ – (306) habitus dorsal view; (307) habitus lateral view.



Figs 308–311. *Galeopsomyia blakeae*, holotype ♀ – (308) habitus dorsal view; (309) habitus lateral view. *Galeopsomyia boria*, holotype ♀ – (310) habitus dorsal view; (311) habitus lateral view.



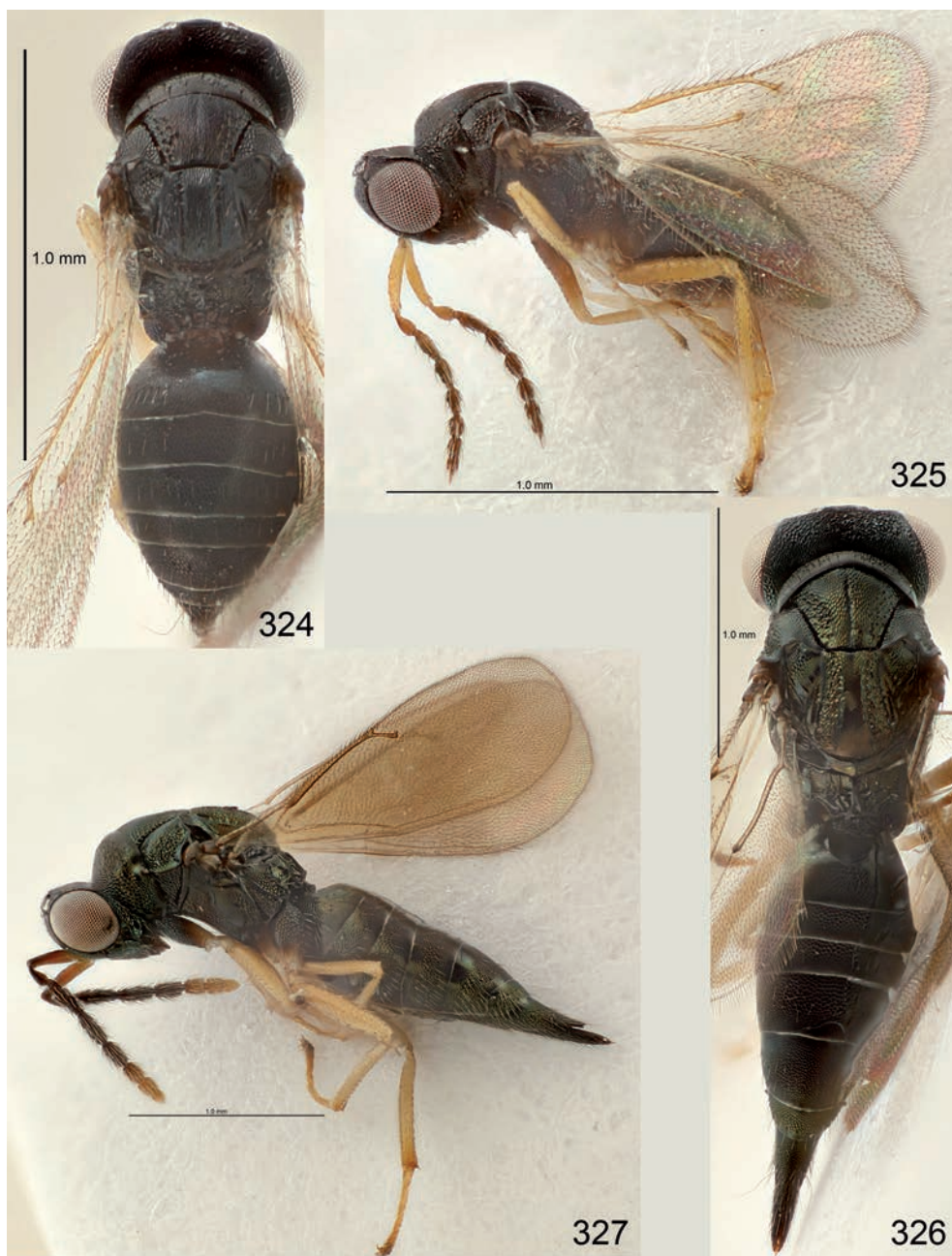
Figs 312–315. *Galeopsomyia bravis*, holotype ♀ – (312) habitus dorsal view; (313) habitus lateral view. *Galeopsomyia briannestjacesae*, holotype ♀ – (314) habitus dorsal view; (315) habitus lateral view.



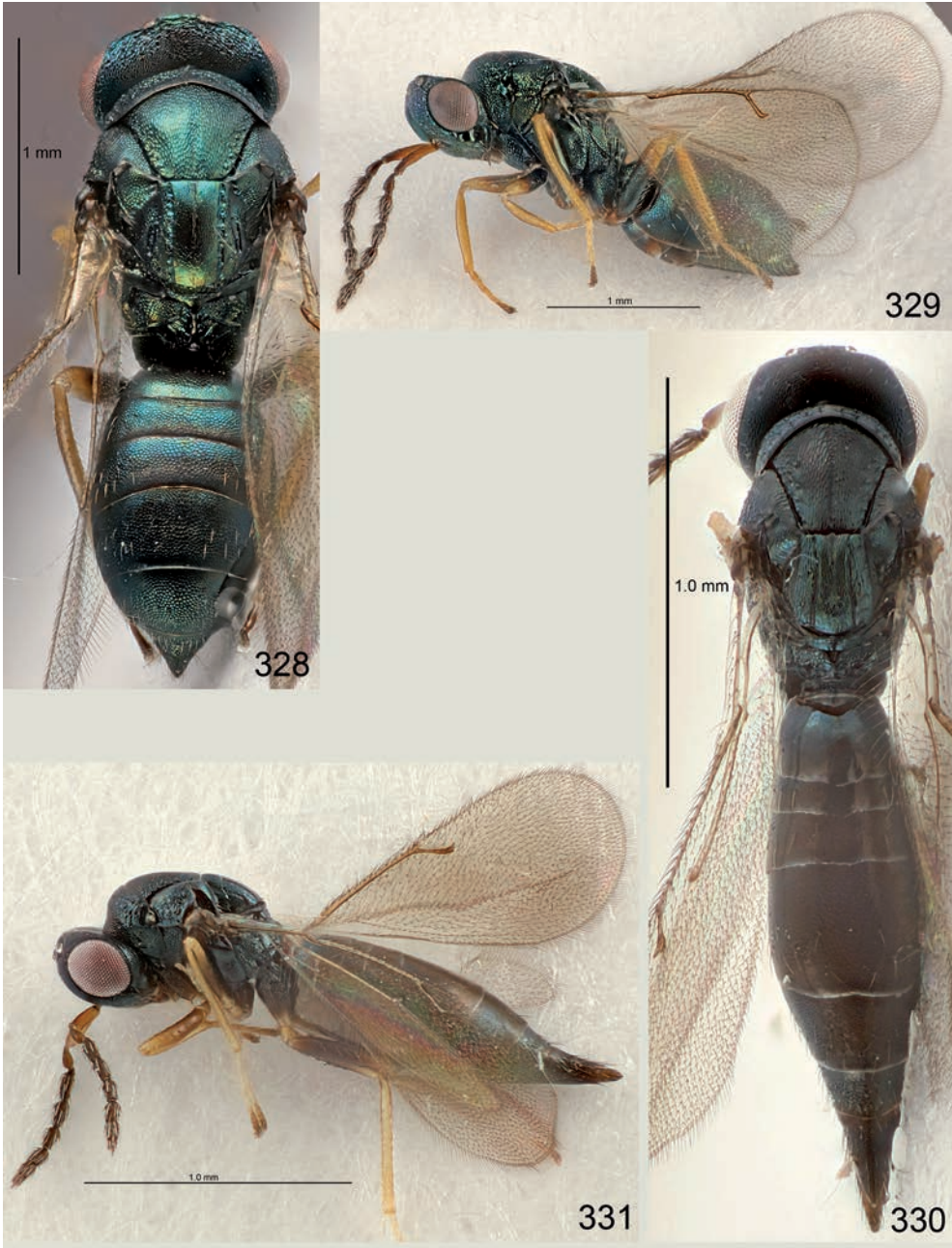
Figs 316–319. *Galeopsomyia bricenoi*, holotype ♀ – (316) habitus dorsal view; (317) habitus lateral view. *Galeopsomyia brinaris*, holotype ♀ – (318) habitus dorsal view; (319) habitus lateral view.



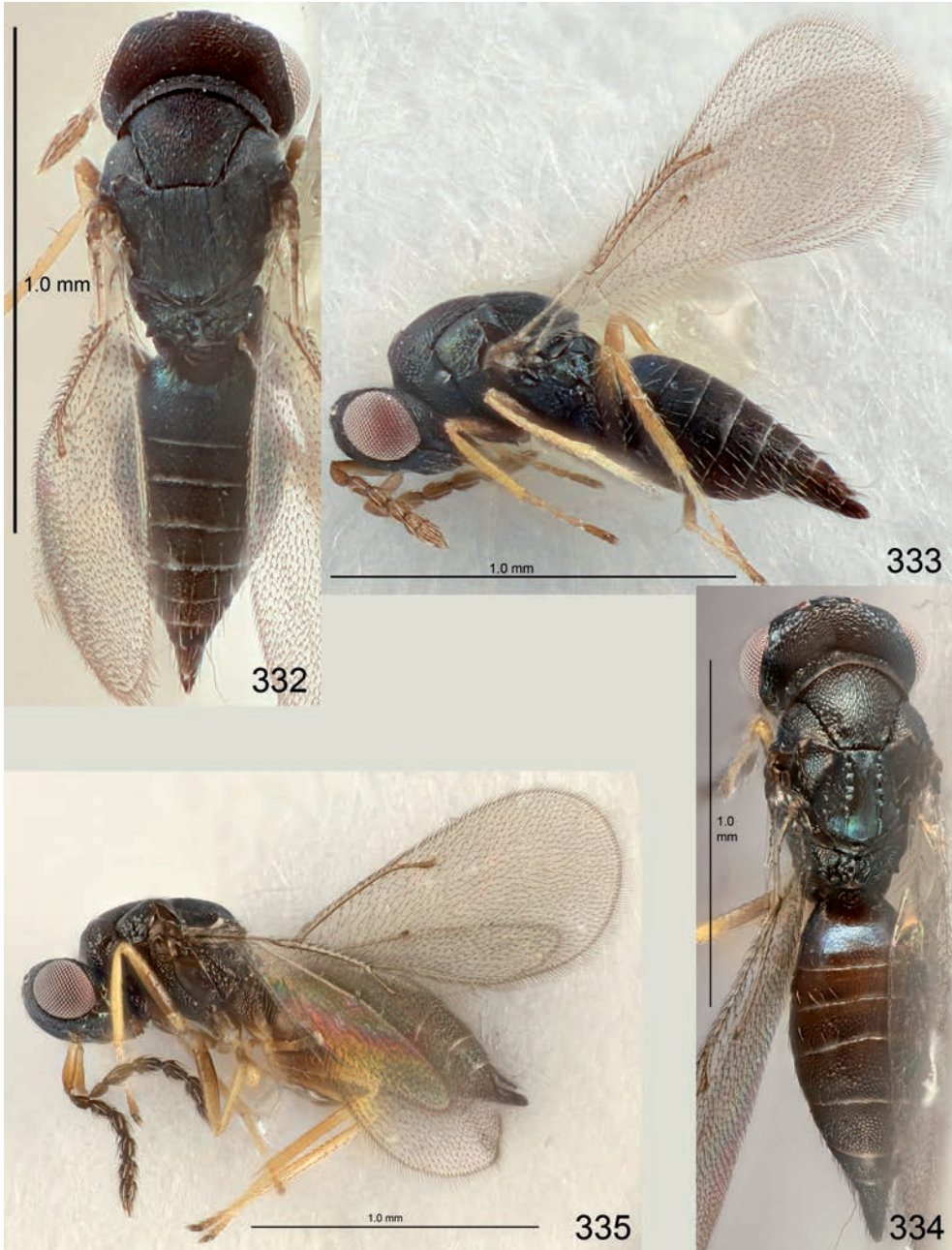
Figs 320–323. *Galeopsomyia burra*, holotype ♀ – (320) habitus dorsal view; (321) habitus lateral view. *Galeopsomyia burreadis*, holotype ♀ – (322) habitus dorsal view; (323) habitus lateral view.



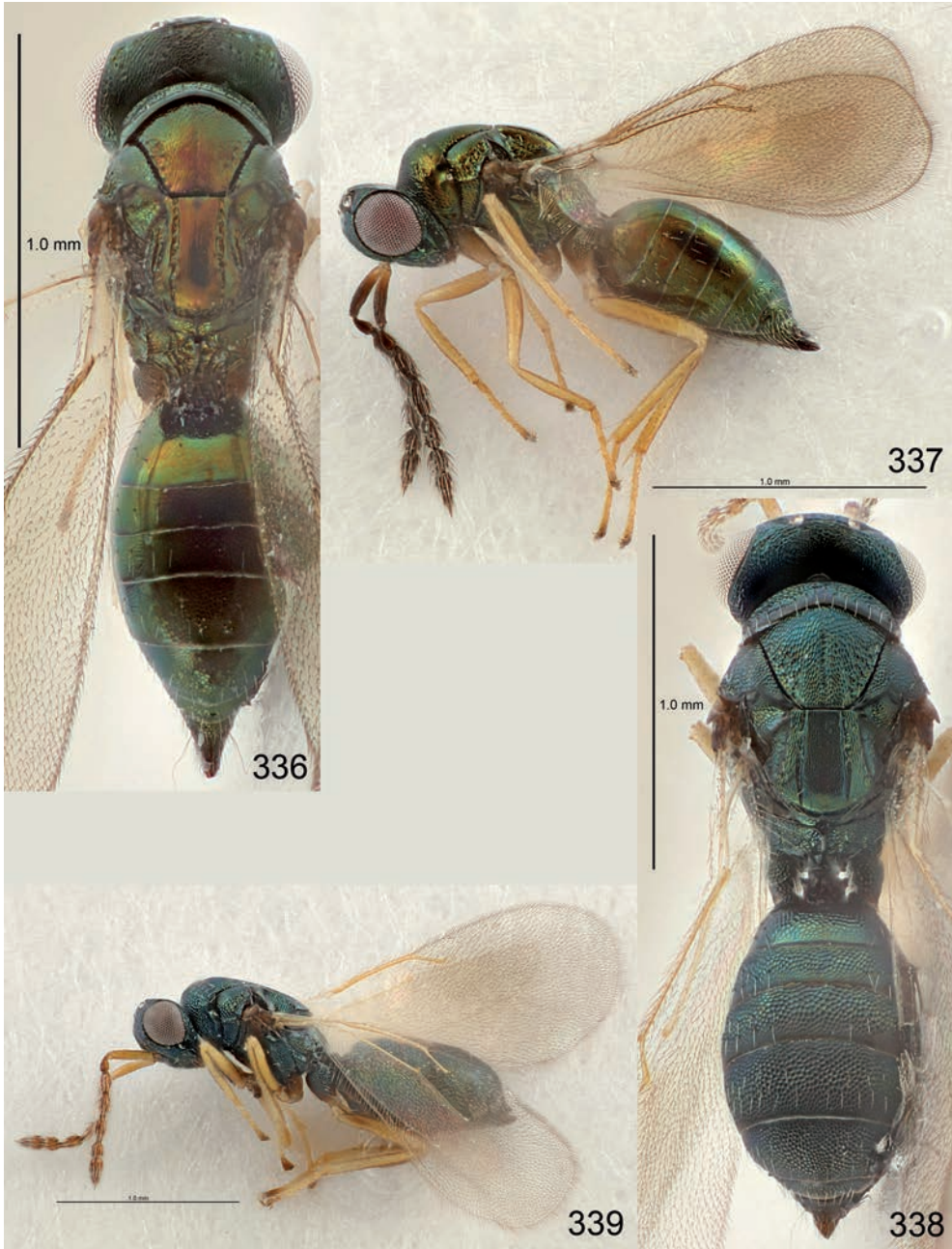
Figs 324–327. *Galeopsomyia cararaensis*, holotype ♀ – (324) habitus dorsal view; (325) habitus lateral view. *Galeopsomyia carballoi*, holotype ♀ – (326) habitus dorsal view; (327) habitus lateral view.



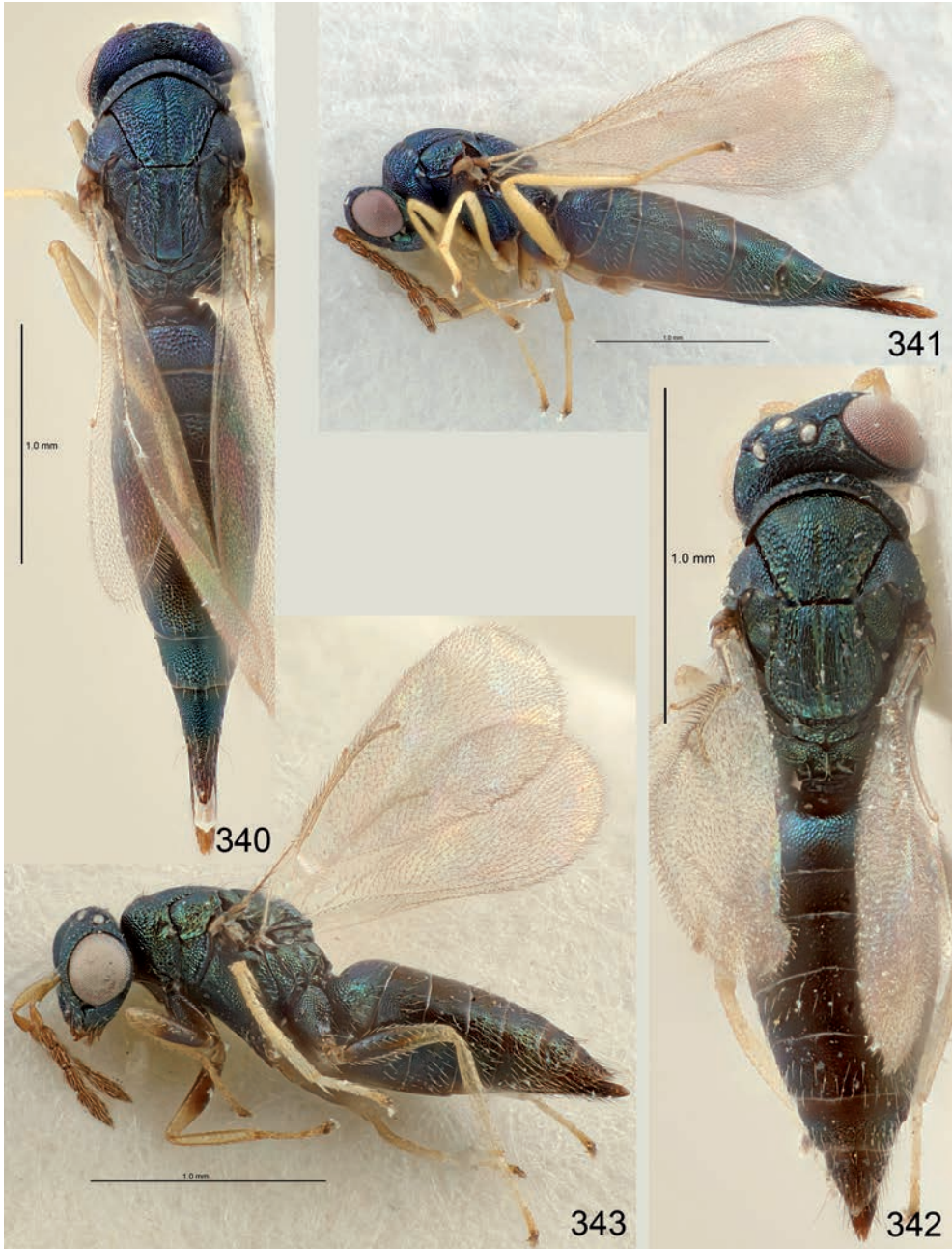
Figs 328–331. *Galeopsomyia carbonis*, holotype ♀ – (328) habitus dorsal view; (329) habitus lateral view. *Galeopsomyia carinifer*, holotype ♀ – (330) habitus dorsal view; (331) habitus lateral view.



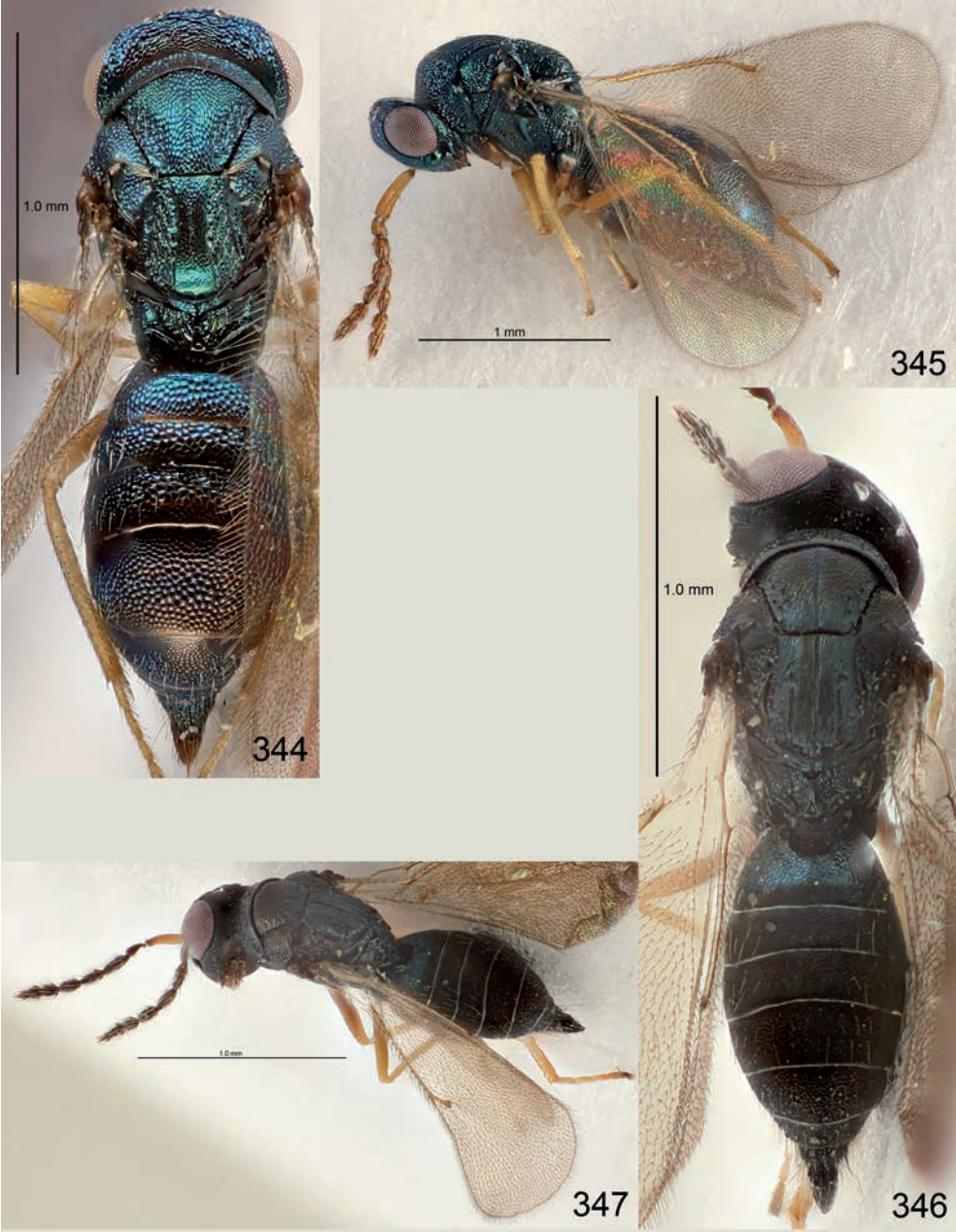
Figs 332–335. *Galeopsomyia cecropiae*, holotype ♀ – (332) habitus dorsal view; (333) habitus lateral view. *Galeopsomyia cernia*, holotype ♀ – (334) habitus dorsal view; (335) habitus lateral view.



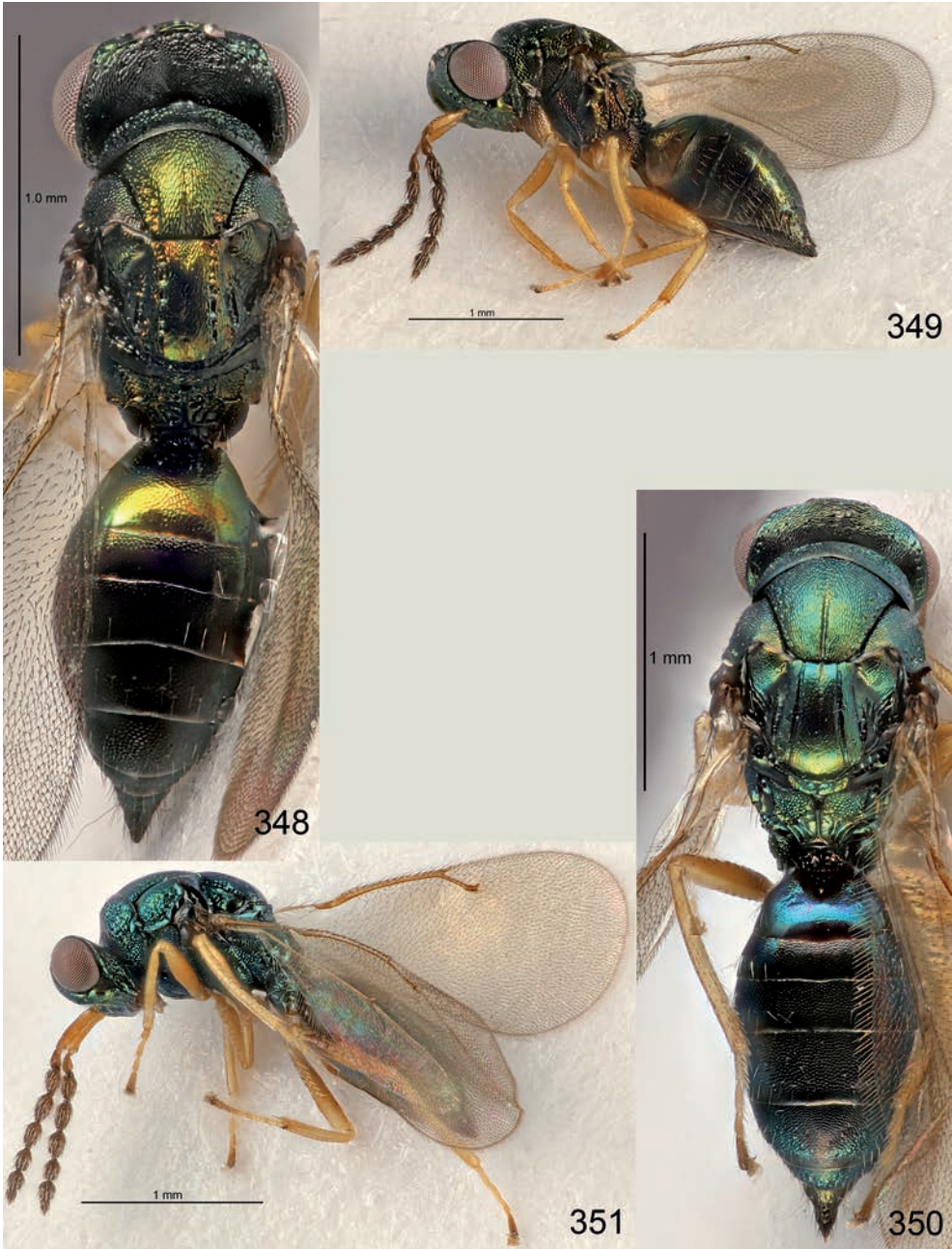
Figs 336–339. *Galeopsomyia chrysops*, holotype ♀ – (336) habitus dorsal view; (337) habitus lateral view. *Galeopsomyia clavata*, holotype ♀ – (338) habitus dorsal view; (339) habitus lateral view.



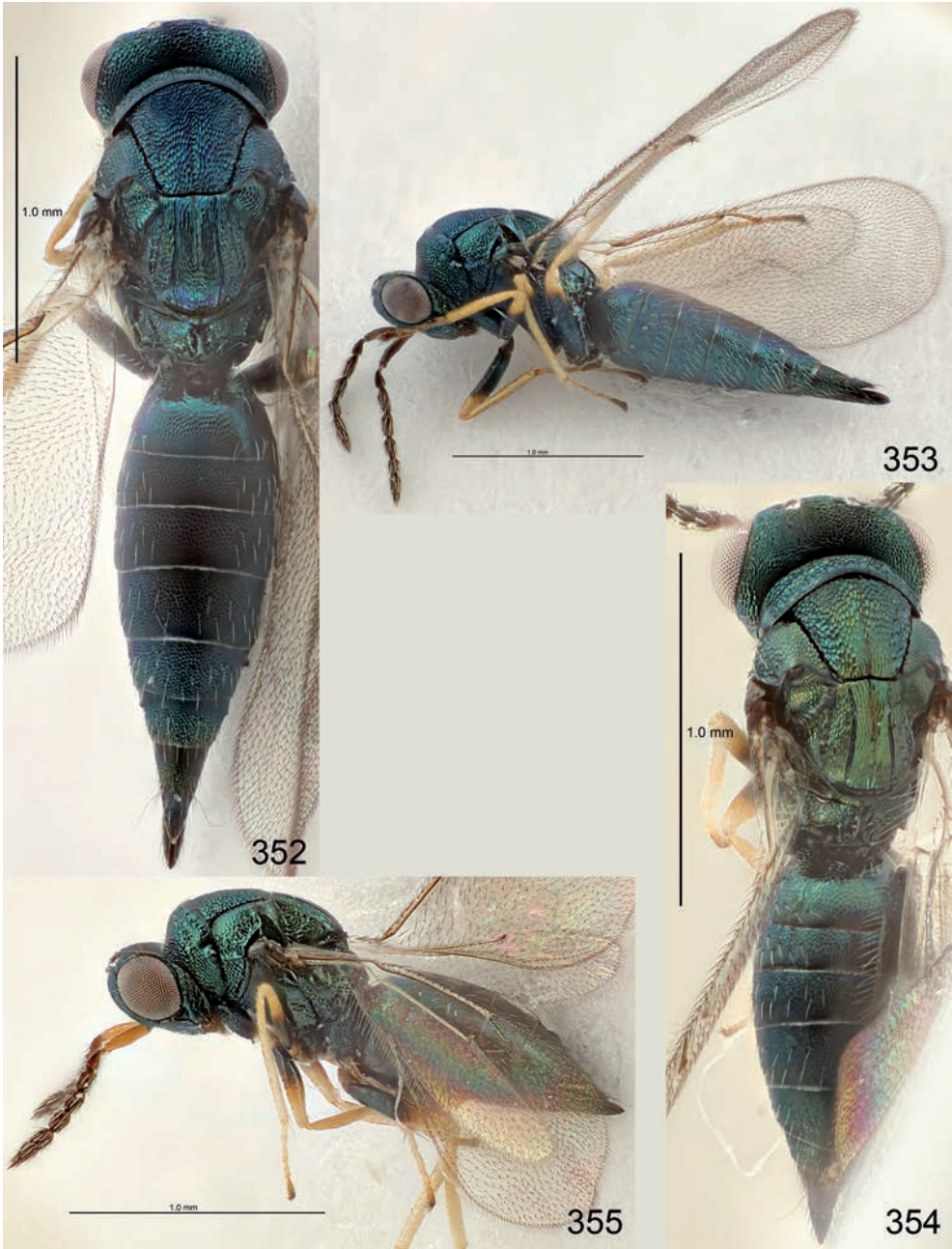
Figs 340–343. *Galeopsomyia clematisae*, holotype ♀ – (340) habitus dorsal view; (341) habitus lateral view. *Galeopsomyia coccolobae*, holotype ♀ – (342) habitus dorsal view; (343) habitus lateral view.



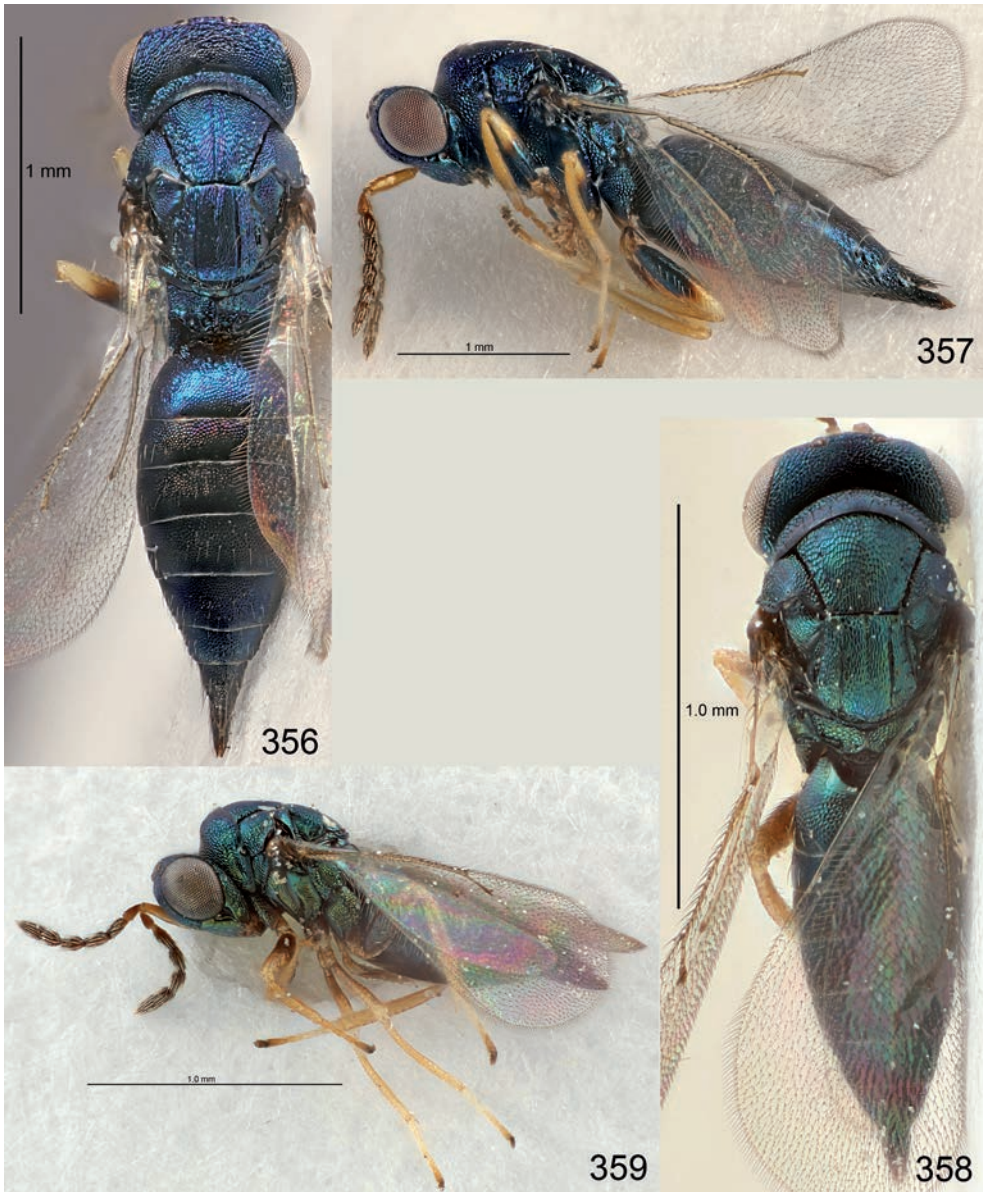
Figs 344–347. *Galeopsomyia codata*, holotype ♀ – (344) habitus dorsal view; (345) habitus lateral view. *Galeopsomyia copala*, holotype ♀ – (346) habitus dorsal view; (347) habitus lateral view.



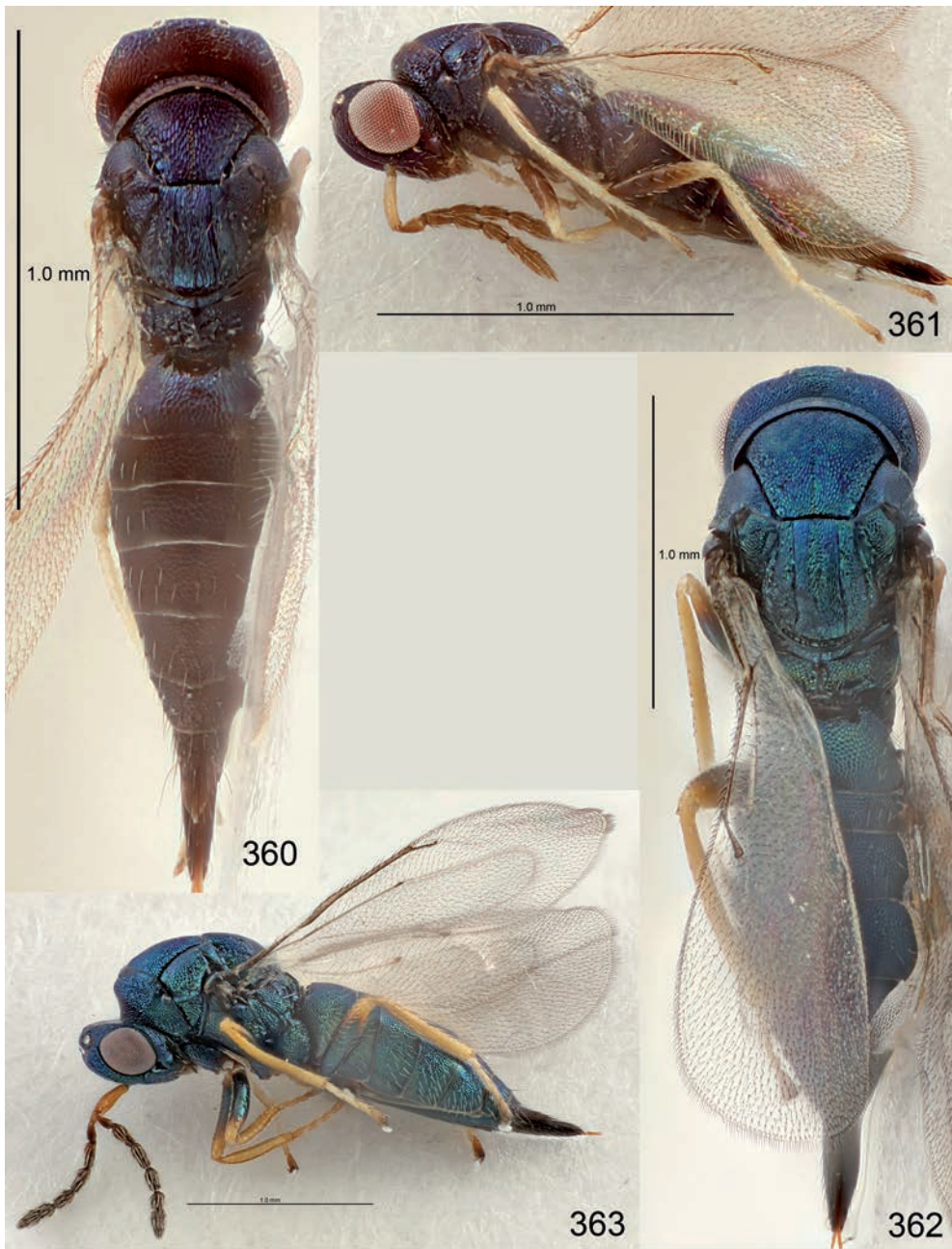
Figs 348–351. *Galeopsomyia coriolis*, holotype ♀ – (348) habitus dorsal view; (349) habitus lateral view. *Galeopsomyia cortina*, holotype ♀ – (350) habitus dorsal view; (351) habitus lateral view.



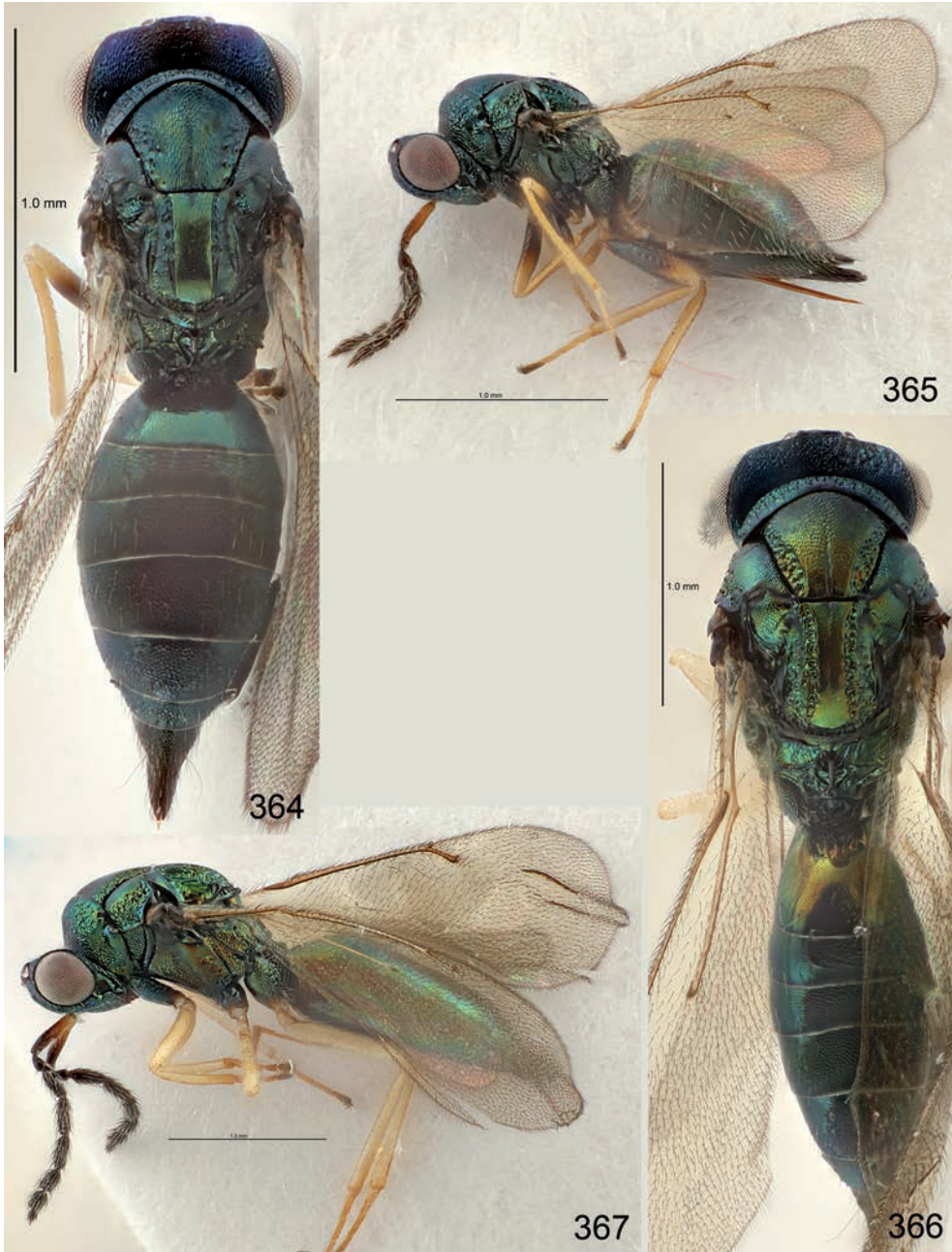
Figs 352–355. *Galeopsomyia cosidis*, holotype ♀ – (352) habitus dorsal view; (353) habitus lateral view. *Galeopsomyia crabra*, holotype ♀ – (354) habitus dorsal view; (355) habitus lateral view.



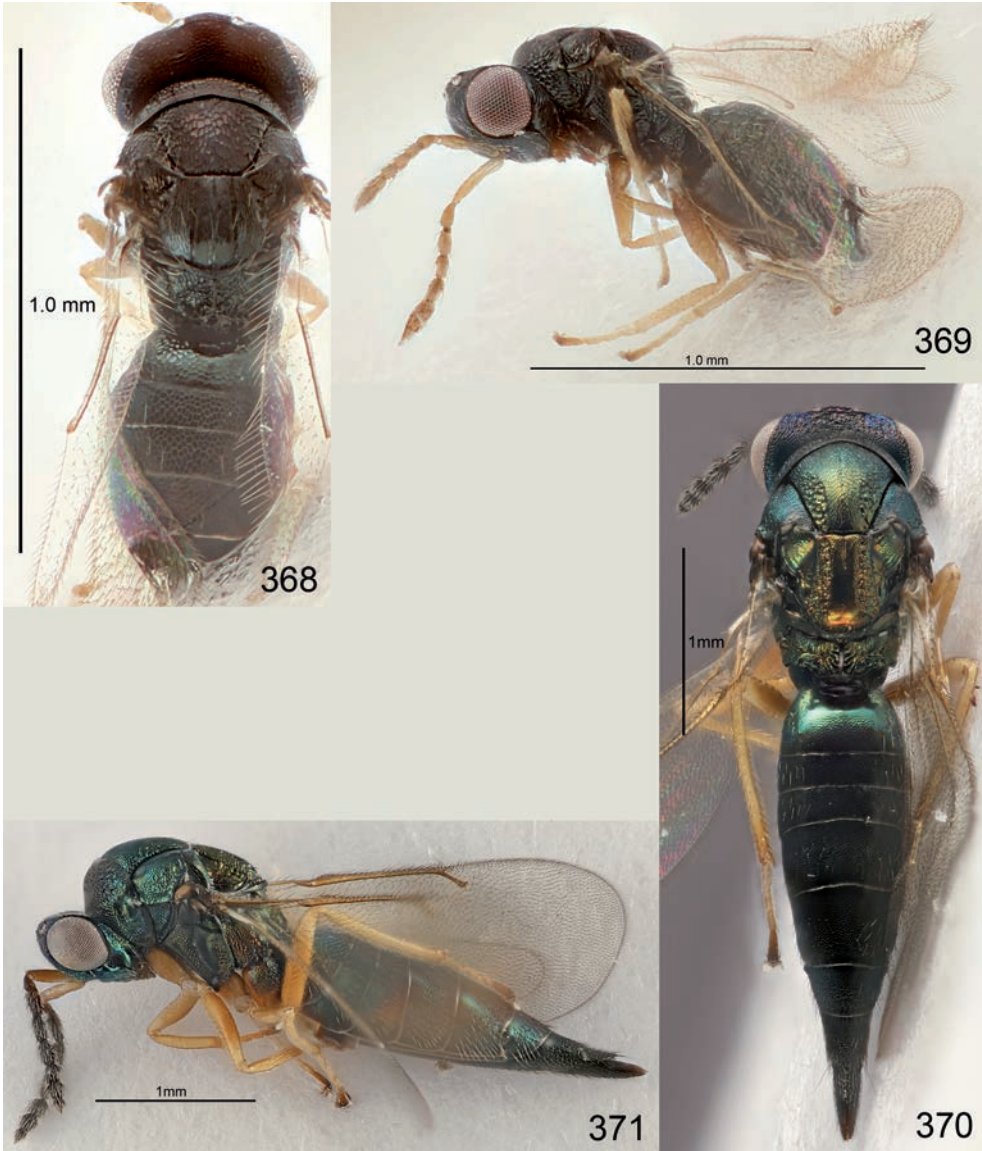
Figs 356–359. *Galeopsomyia criniera*, holotype ♀ – (356) habitus dorsal view; (357) habitus lateral view. *Galeopsomyia crotonae*, holotype ♀ – (358) habitus dorsal view; (359) habitus lateral view.



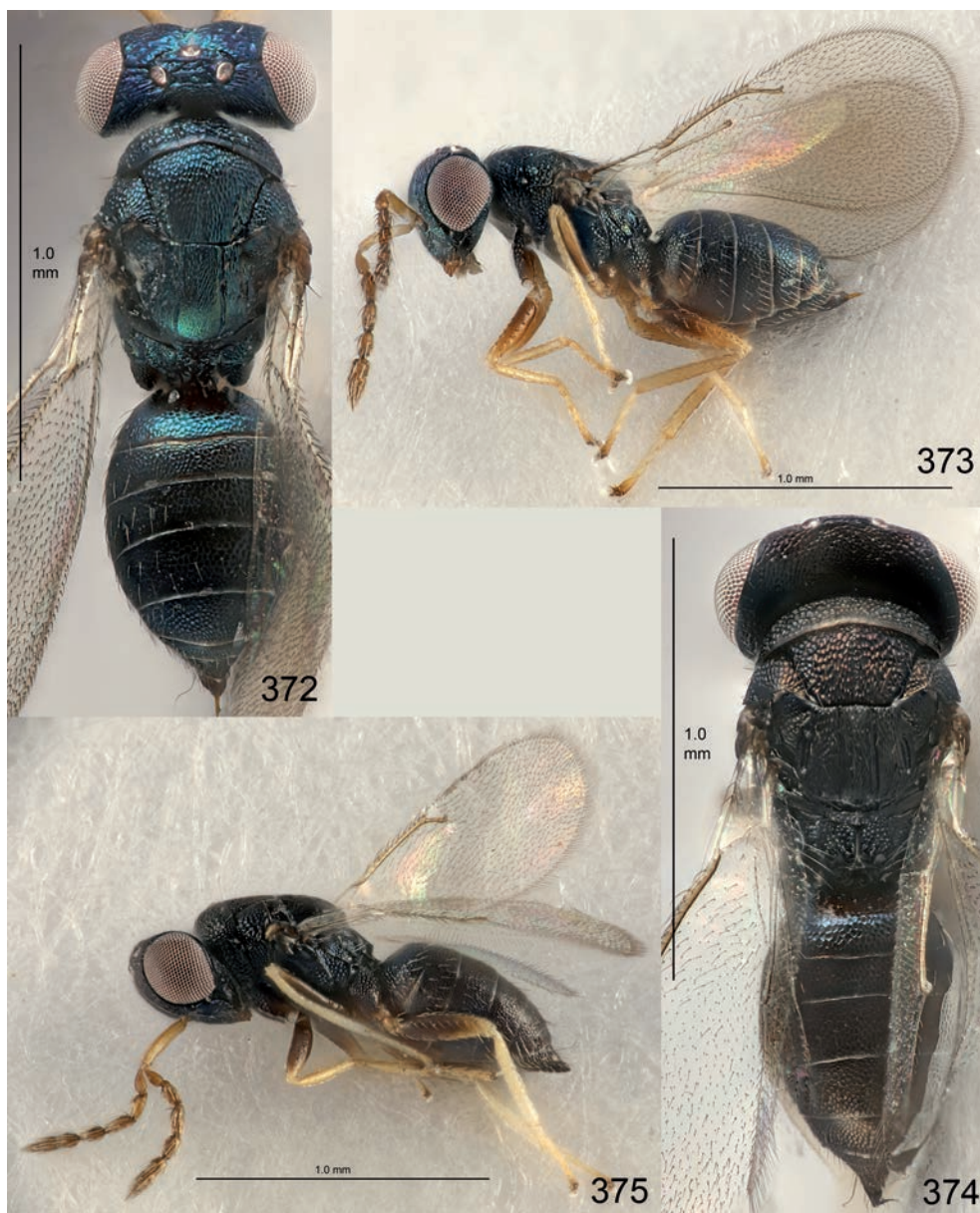
Figs 360–363. *Galeopsomyia cuscoensis*, holotype ♀ – (360) habitus dorsal view; (361) habitus lateral view. *Galeopsomyia cyaneoviridis*, holotype ♀ – (362) habitus dorsal view; (363) habitus lateral view.



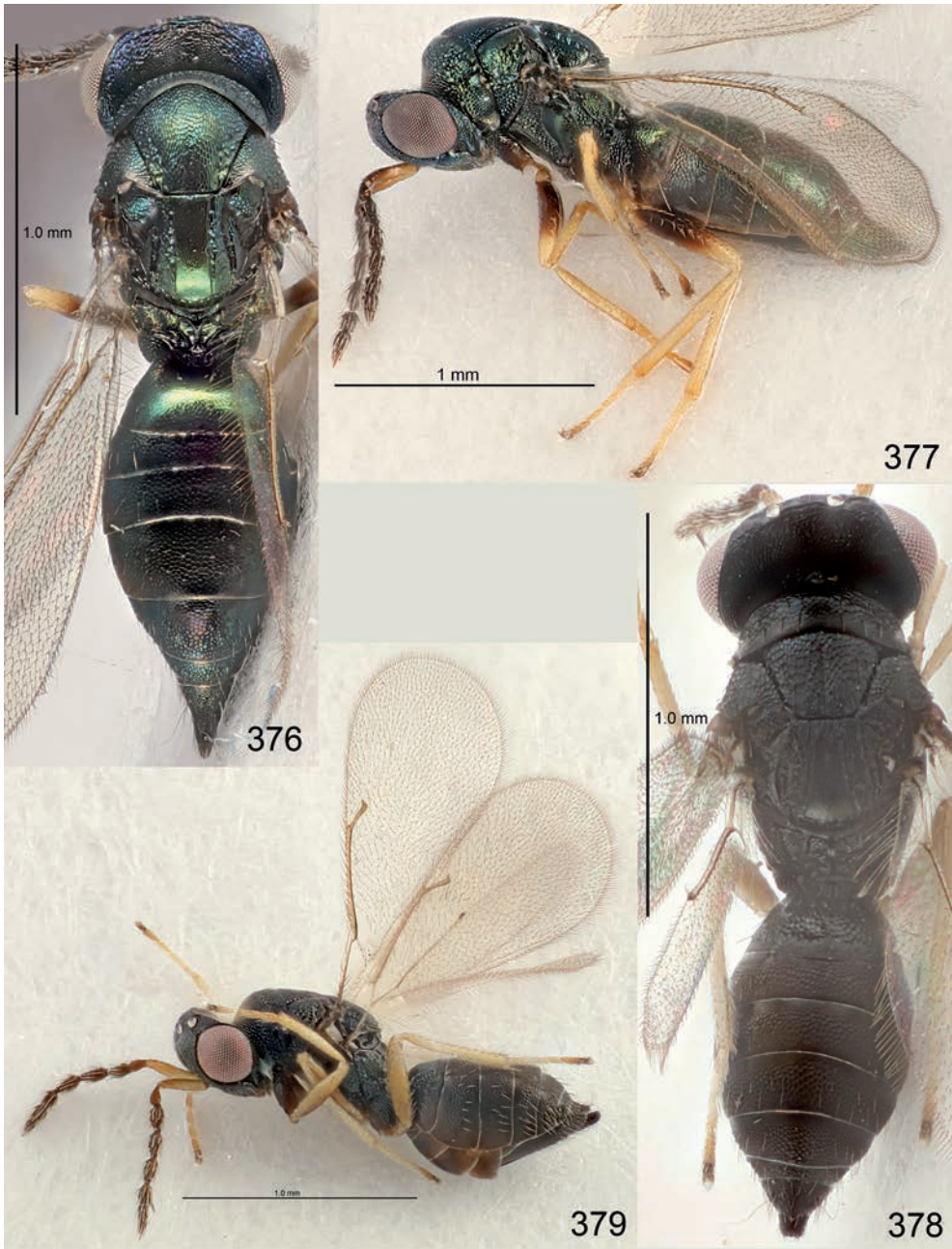
Figs 364–367. *Galeopsomyia daleskeyae*, holotype ♀ – (364) habitus dorsal view; (365) habitus lateral view. *Galeopsomyia devania*, holotype ♀ – (366) habitus dorsal view; (367) habitus lateral view.



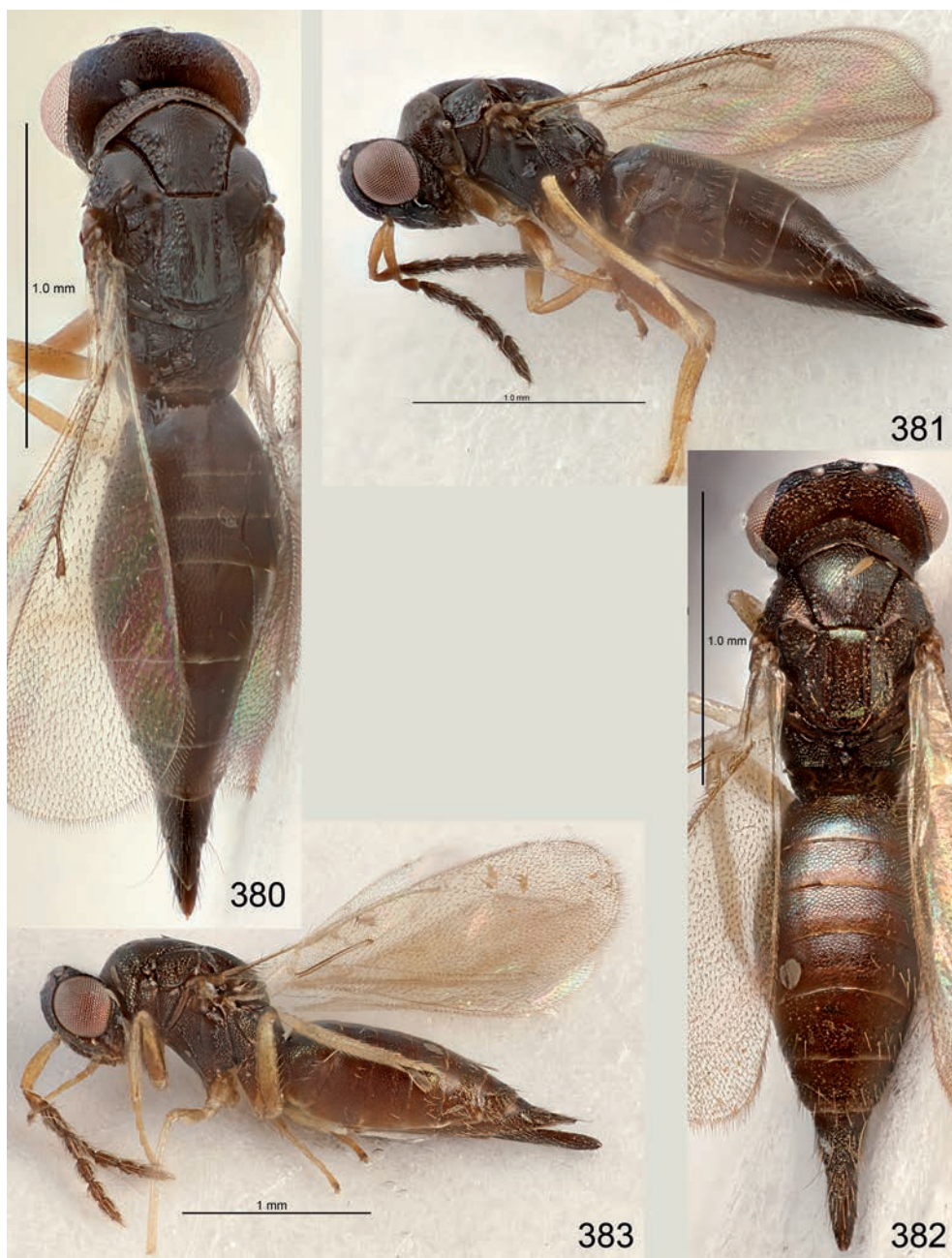
Figs 368–371. *Galeopsomyia diriaensis*, holotype ♀ – (368) habitus dorsal view; (369) habitus lateral view. *Galeopsomyia dolosa*, holotype ♀ – (370) habitus dorsal view; (371) habitus lateral view.



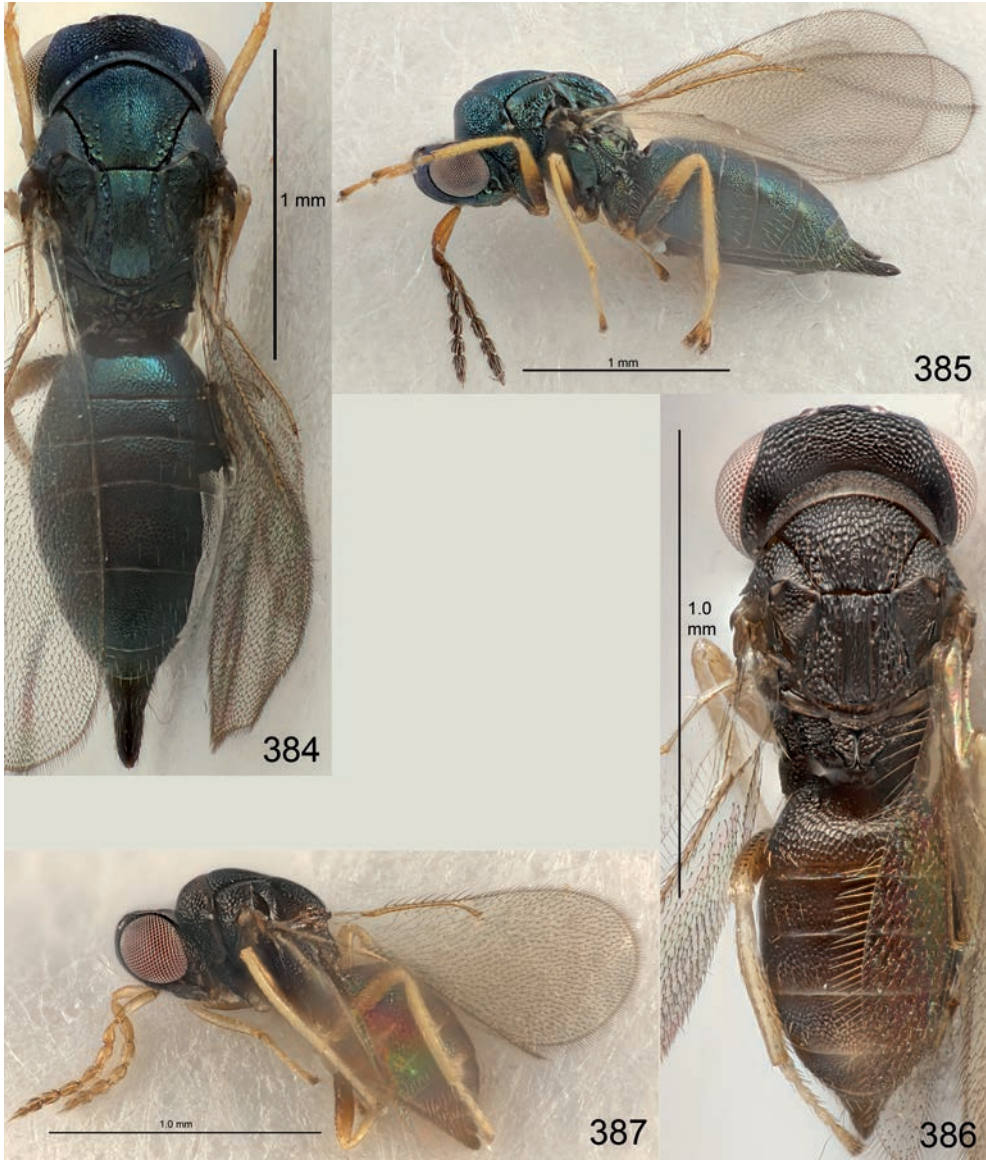
Figs 372–375. *Galeopsomyia edera*, holotype ♀ – (372) habitus dorsal view; (373) habitus lateral view. *Galeopsomyia elisia*, holotype ♀ – (374) habitus dorsal view; (375) habitus lateral view.



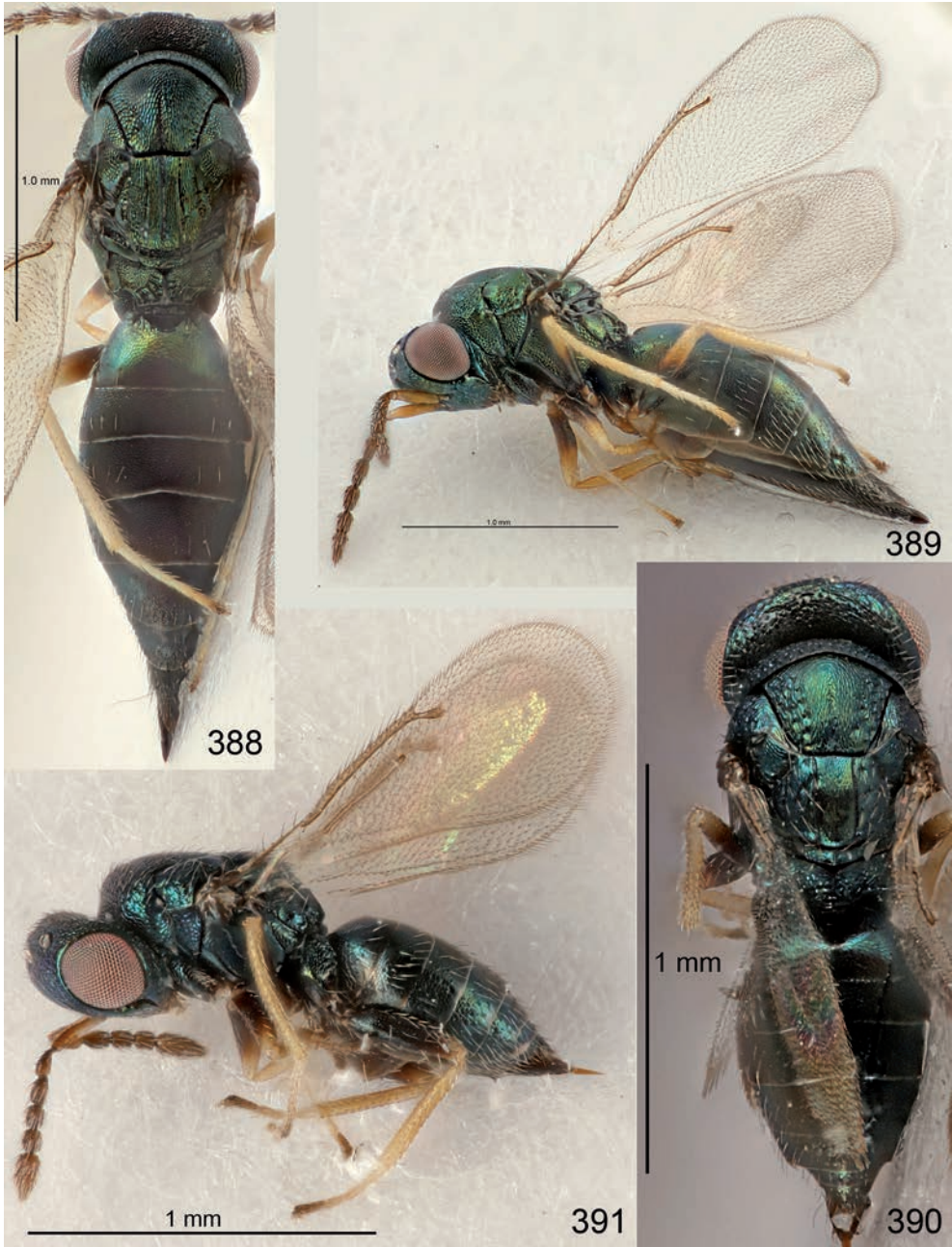
Figs 376–379. *Galeopsomyia eolio*, holotype ♀ – (376) habitus dorsal view; (377) habitus lateral view. *Galeopsomyia eridana*, holotype ♀ – (378) habitus dorsal view; (379) habitus lateral view.



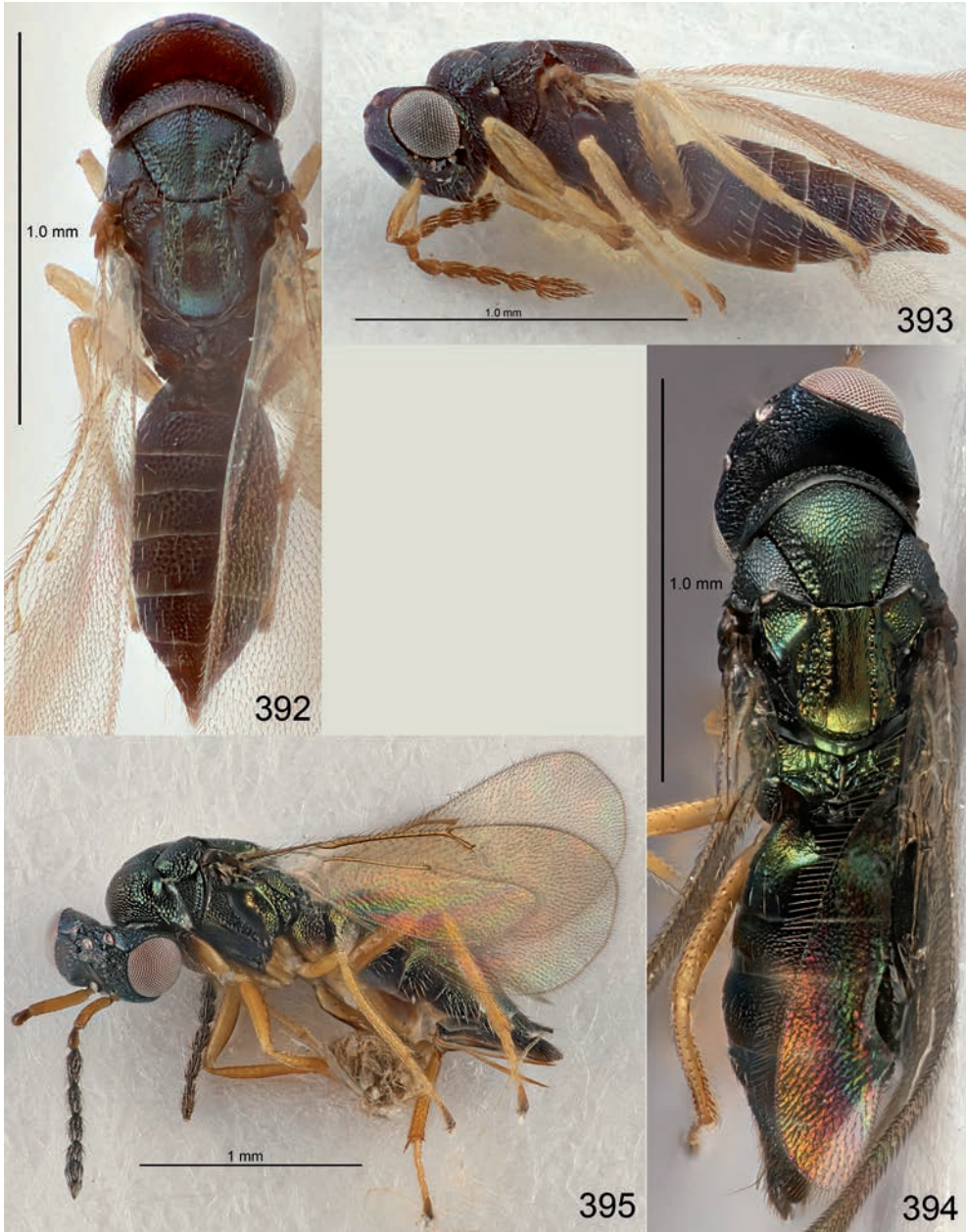
Figs 380–383. *Galeopsomyia estrella*, holotype ♀ – (380) habitus dorsal view; (381) habitus lateral view. *Galeopsomyia evgenyzakharovi*, holotype ♀ – (382) habitus dorsal view; (383) habitus lateral view.



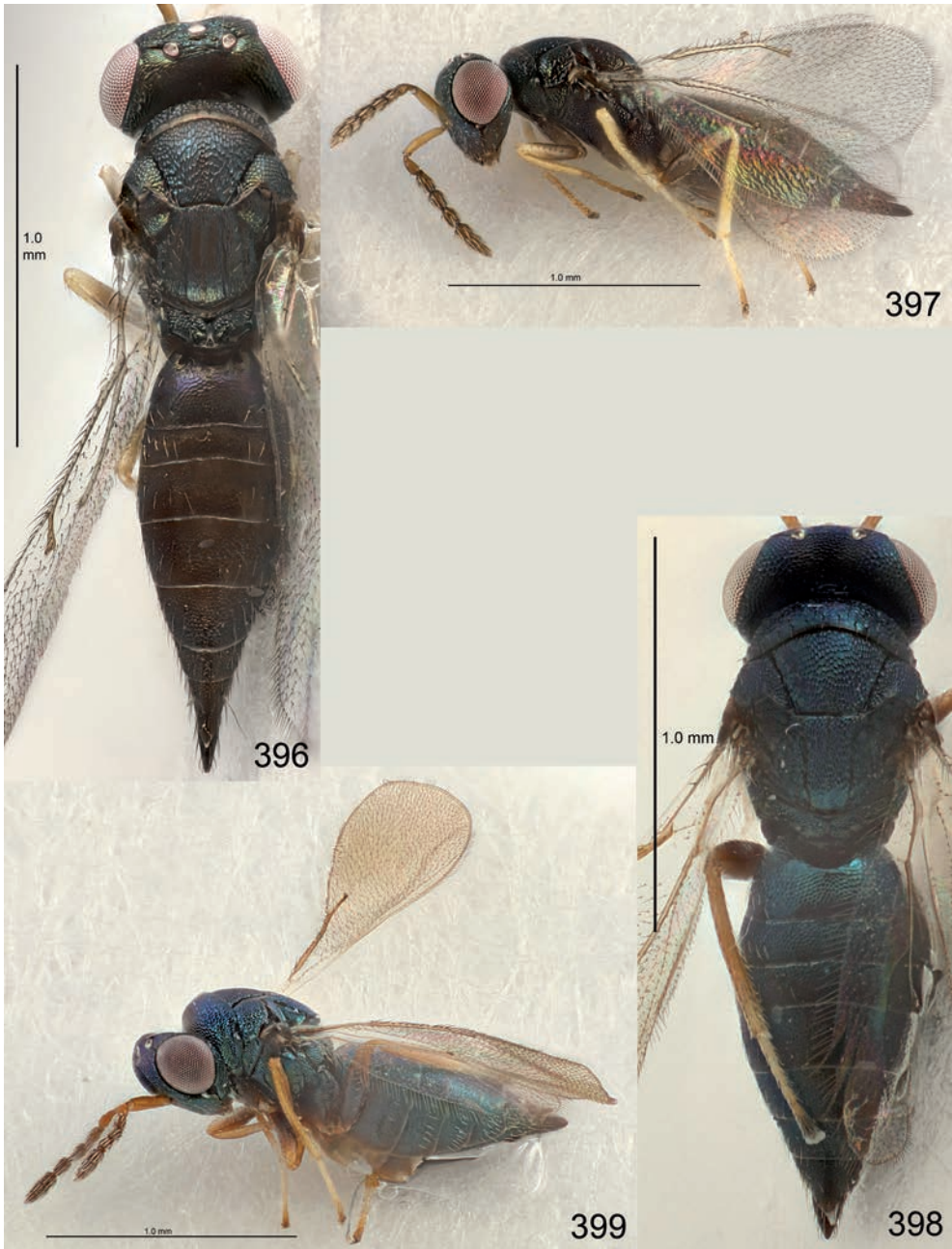
Figs 384–387. *Galeopsomyia eximia*, holotype ♀ – (384) habitus dorsal view; (385) habitus lateral view. *Galeopsomyia faina*, holotype ♀ – (386) habitus dorsal view; (387) habitus lateral view.



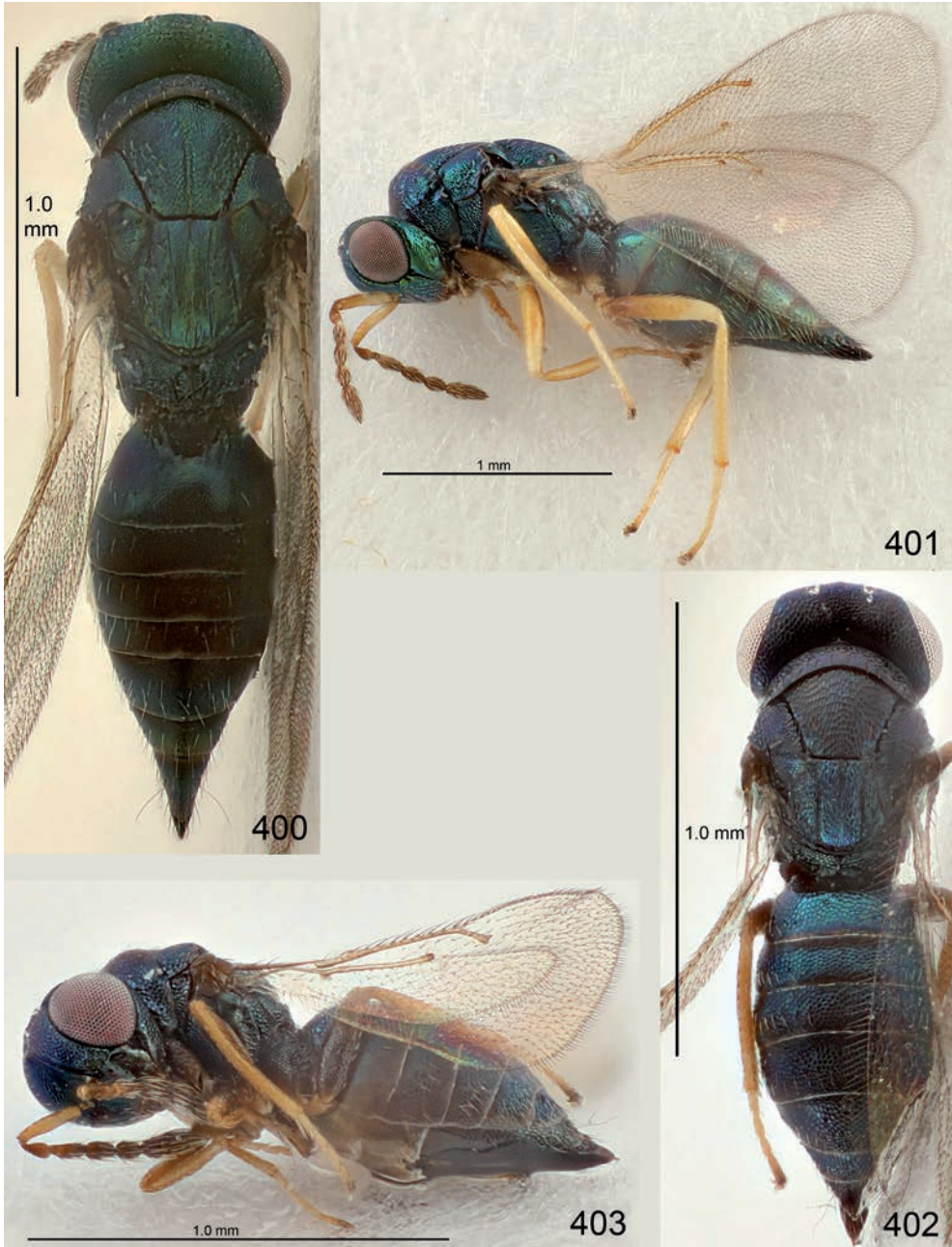
Figs 388–391. *Galeopsomyia falla*, holotype ♀ – (388) habitus dorsal view; (389) habitus lateral view. *Galeopsomyia fernandezii*, holotype ♀ – (390) habitus dorsal view; (391) habitus lateral view.



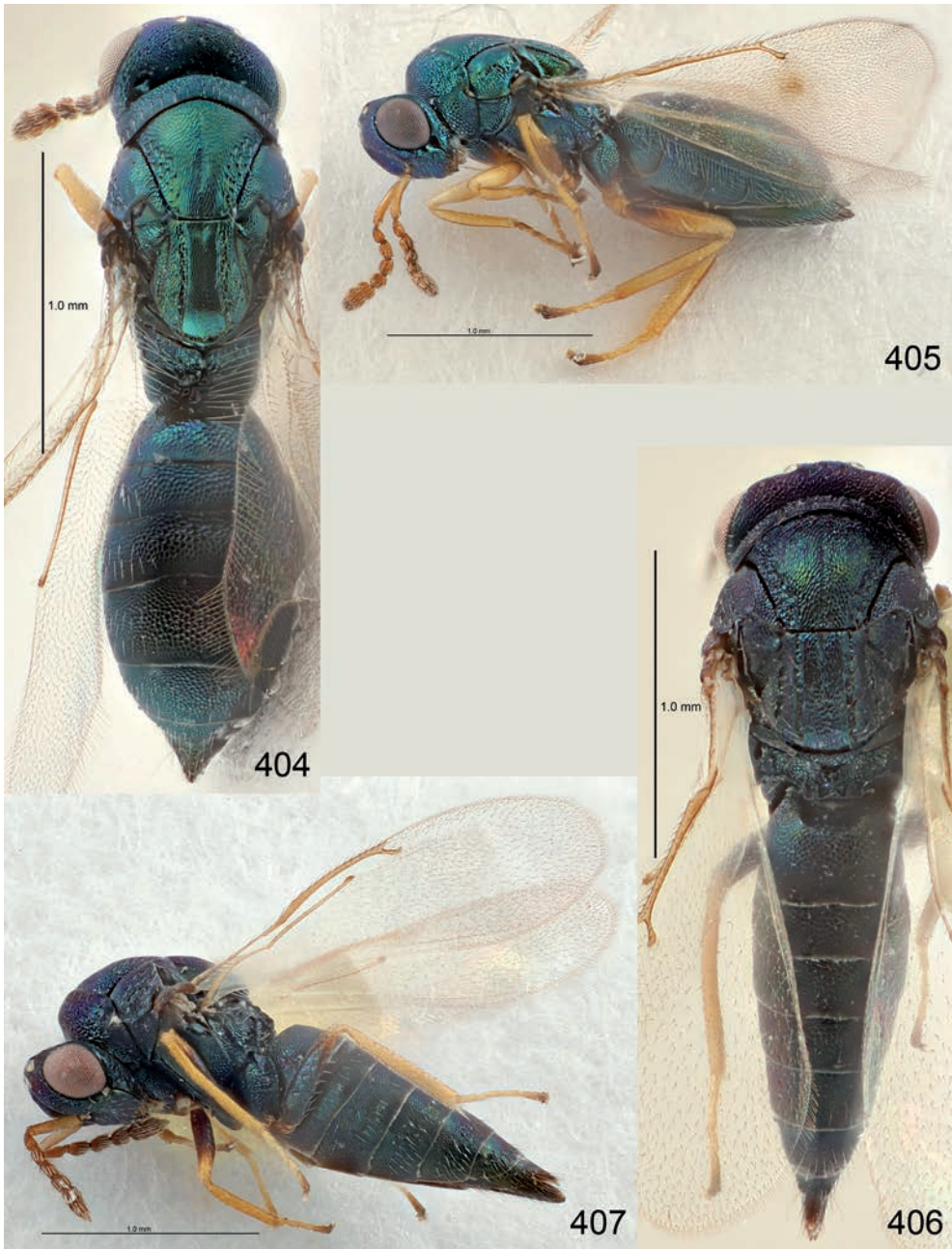
Figs 392–395. *Galeopsomyia fieris*, holotype ♀ – (392) habitus dorsal view; (393) habitus lateral view. *Galeopsomyia flora*, holotype ♀ – (394) habitus dorsal view; (395) habitus lateral view.



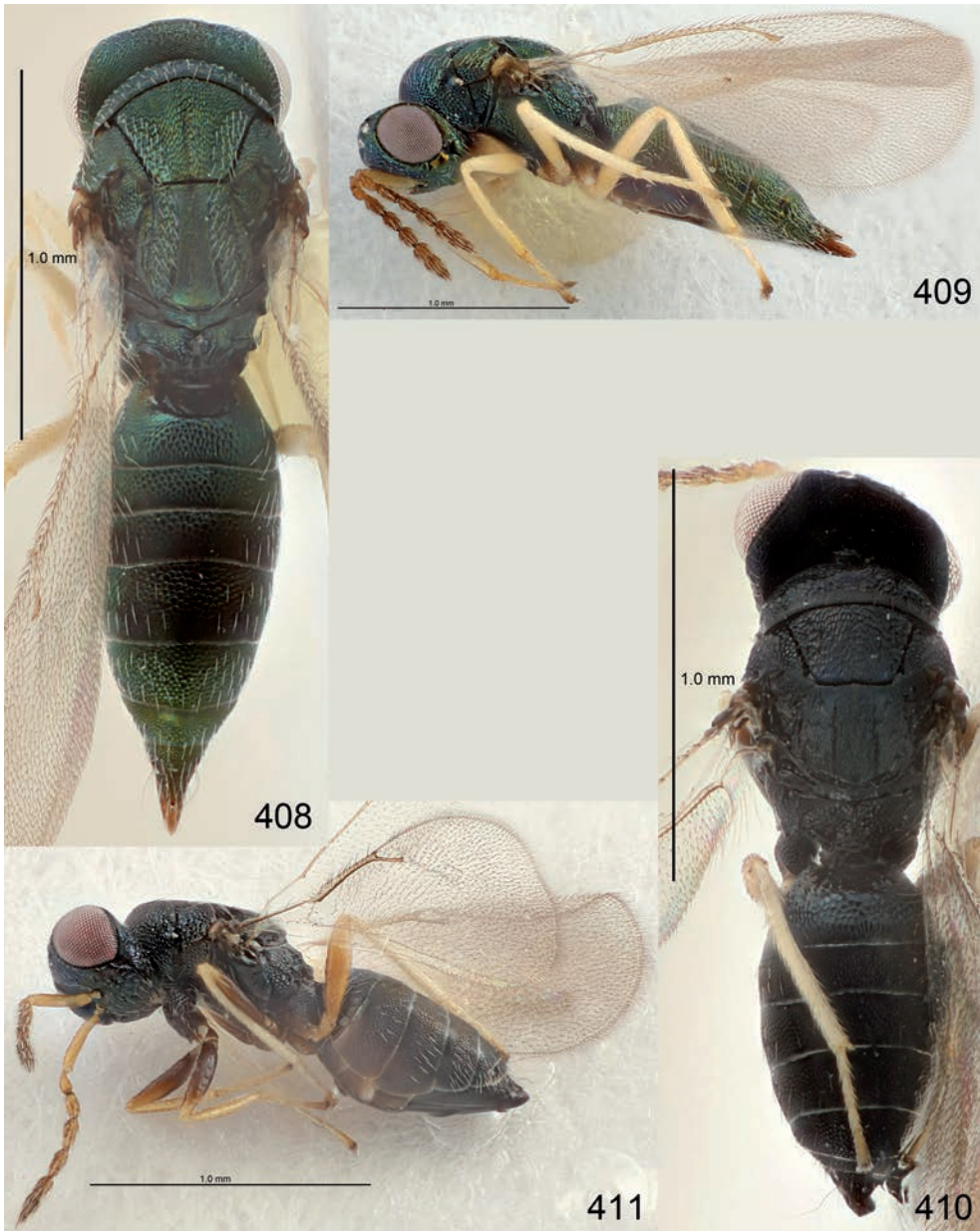
Figs 396–399. *Galeopsomyia folata*, holotype ♀ – (396) habitus dorsal view; (397) habitus lateral view. *Galeopsomyia gavia*, holotype ♀ – (398) habitus dorsal view; (399) habitus lateral view.



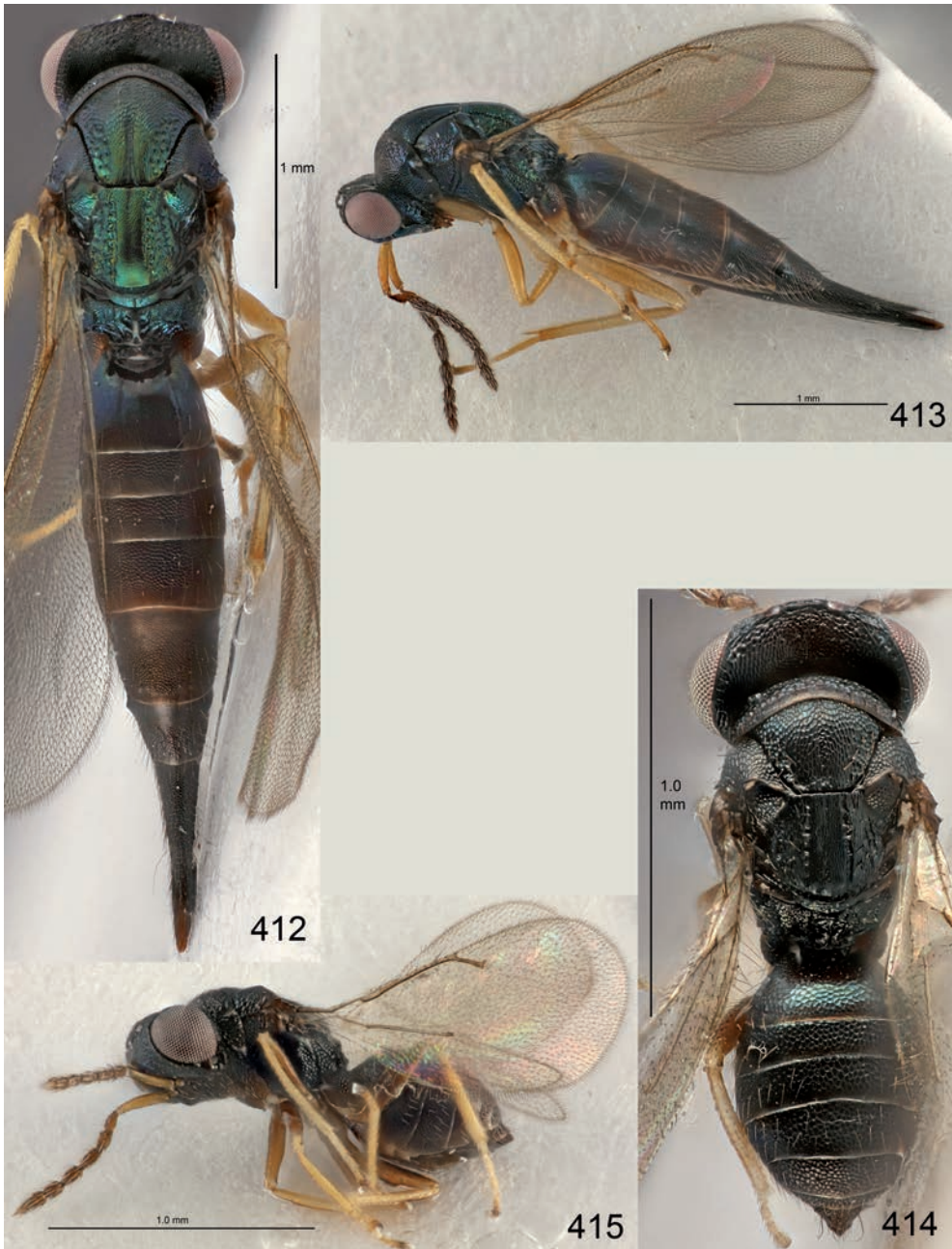
Figs 400–403. *Galeopsomyia gigantensis*, holotype ♀ – (400) habitus dorsal view; (401) habitus lateral view. *Galeopsomyia giria*, holotype ♀ – (402) habitus dorsal view; (403) habitus lateral view.



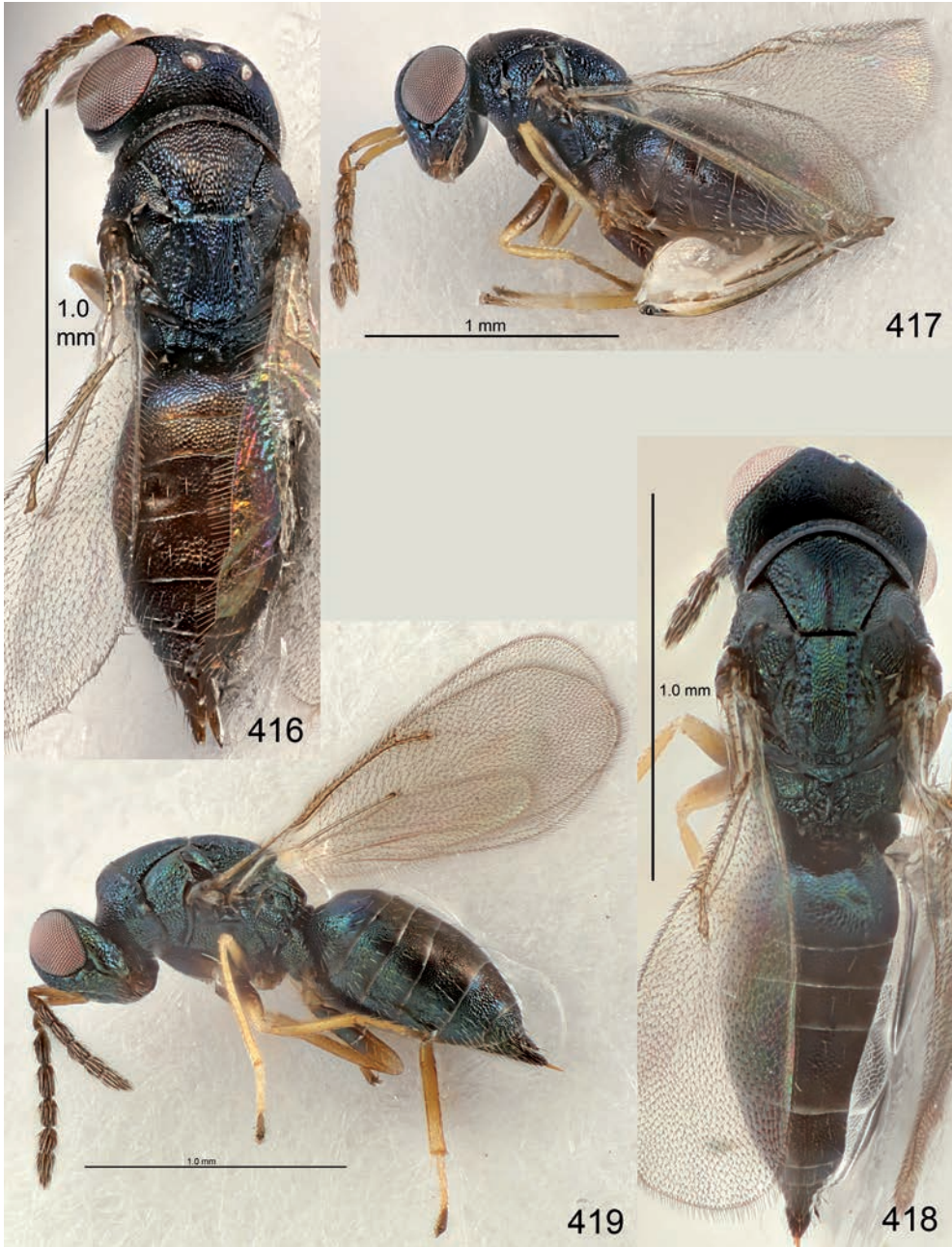
Figs 404–407. *Galeopsomyia globosa*, holotype ♀ – (404) habitus dorsal view; (405) habitus lateral view. *Galeopsomyia gonzalezi*, holotype ♀ – (406) habitus dorsal view; (407) habitus lateral view.



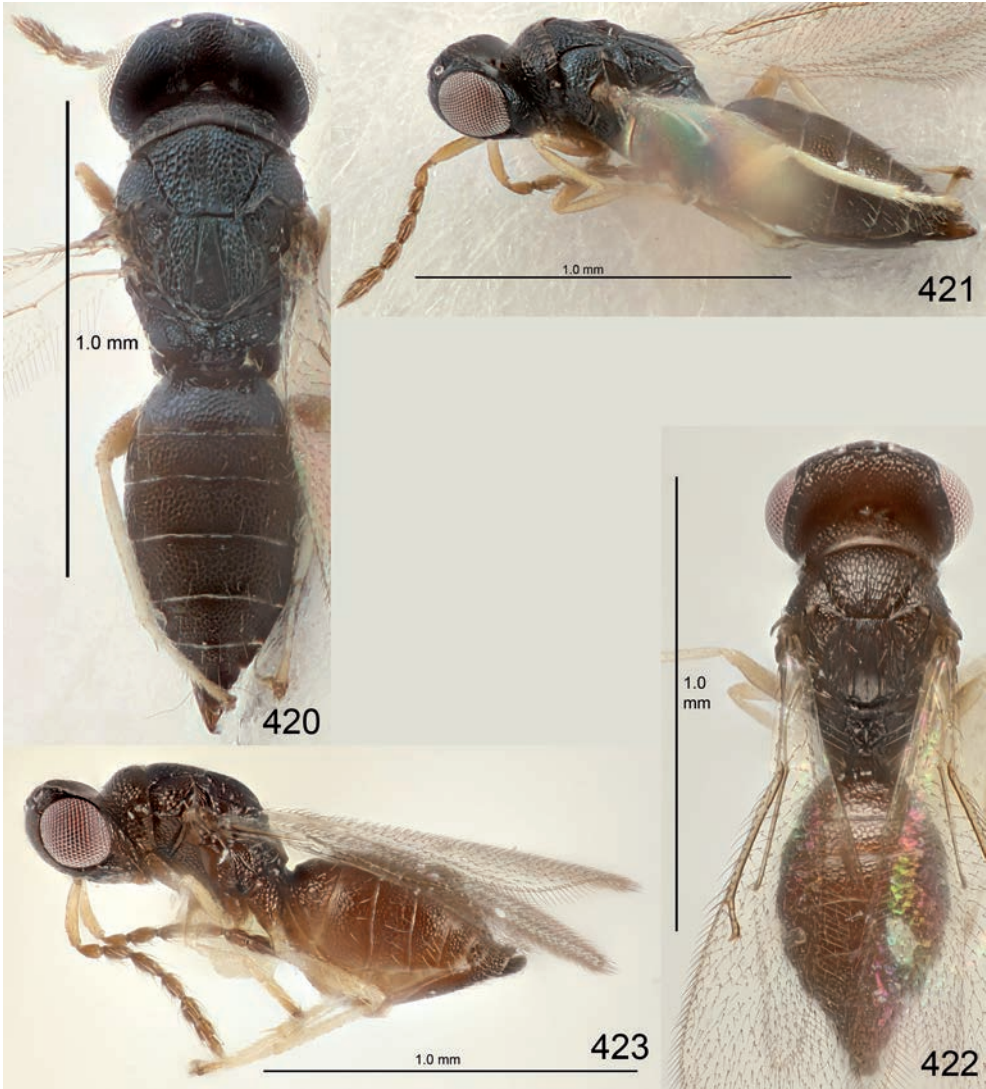
Figs 408–411. *Galeopsomyia gouaniae*, holotype ♀ – (408) habitus dorsal view; (409) habitus lateral view. *Galeopsomyia graciliclava*, holotype ♀ – (410) habitus dorsal view; (411) habitus lateral view.



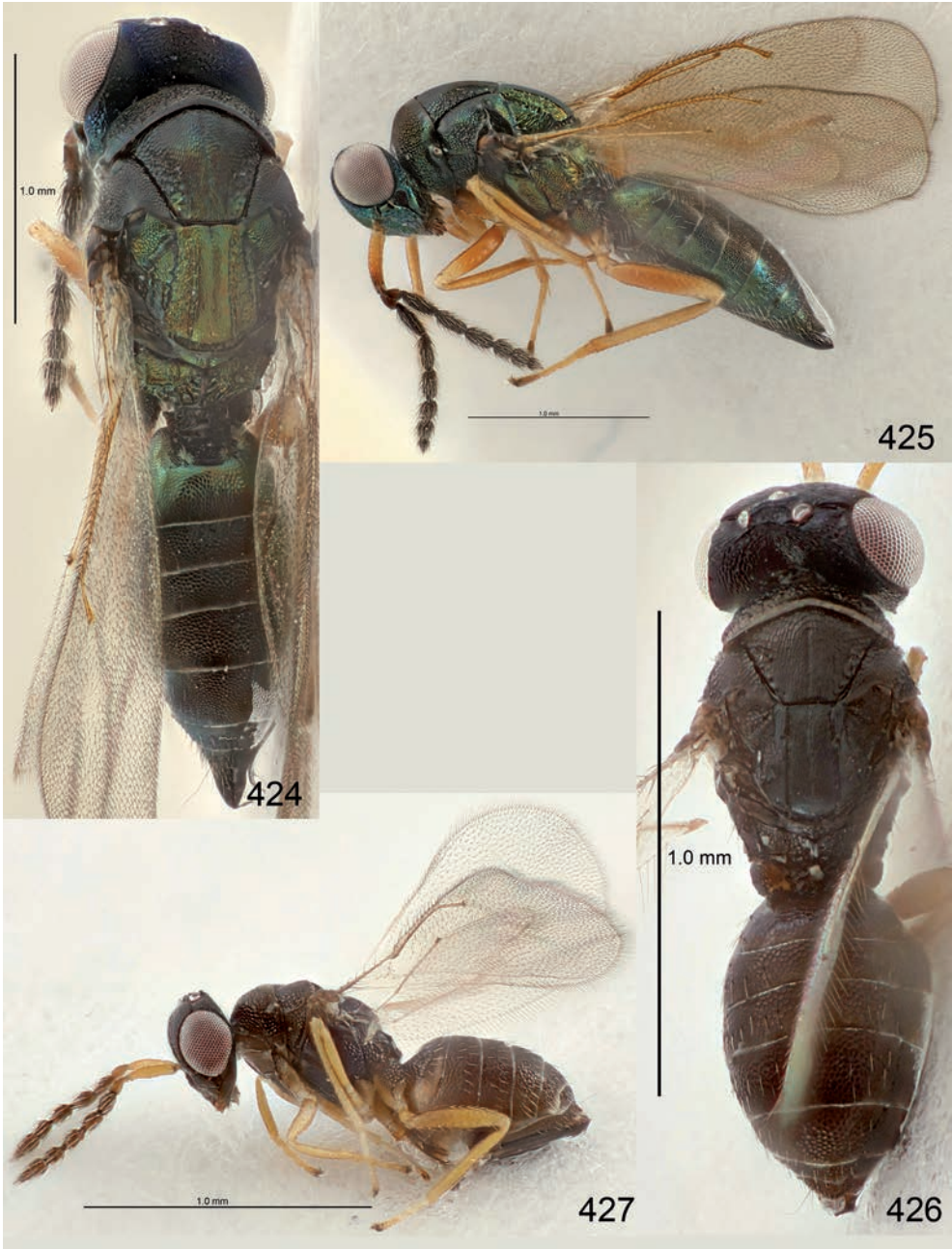
Figs 412–415. *Galeopsomyia grandis*, holotype ♀ – (412) habitus dorsal view; (413) habitus lateral view. *Galeopsomyia gridis*, holotype ♀ – (414) habitus dorsal view; (415) habitus lateral view.



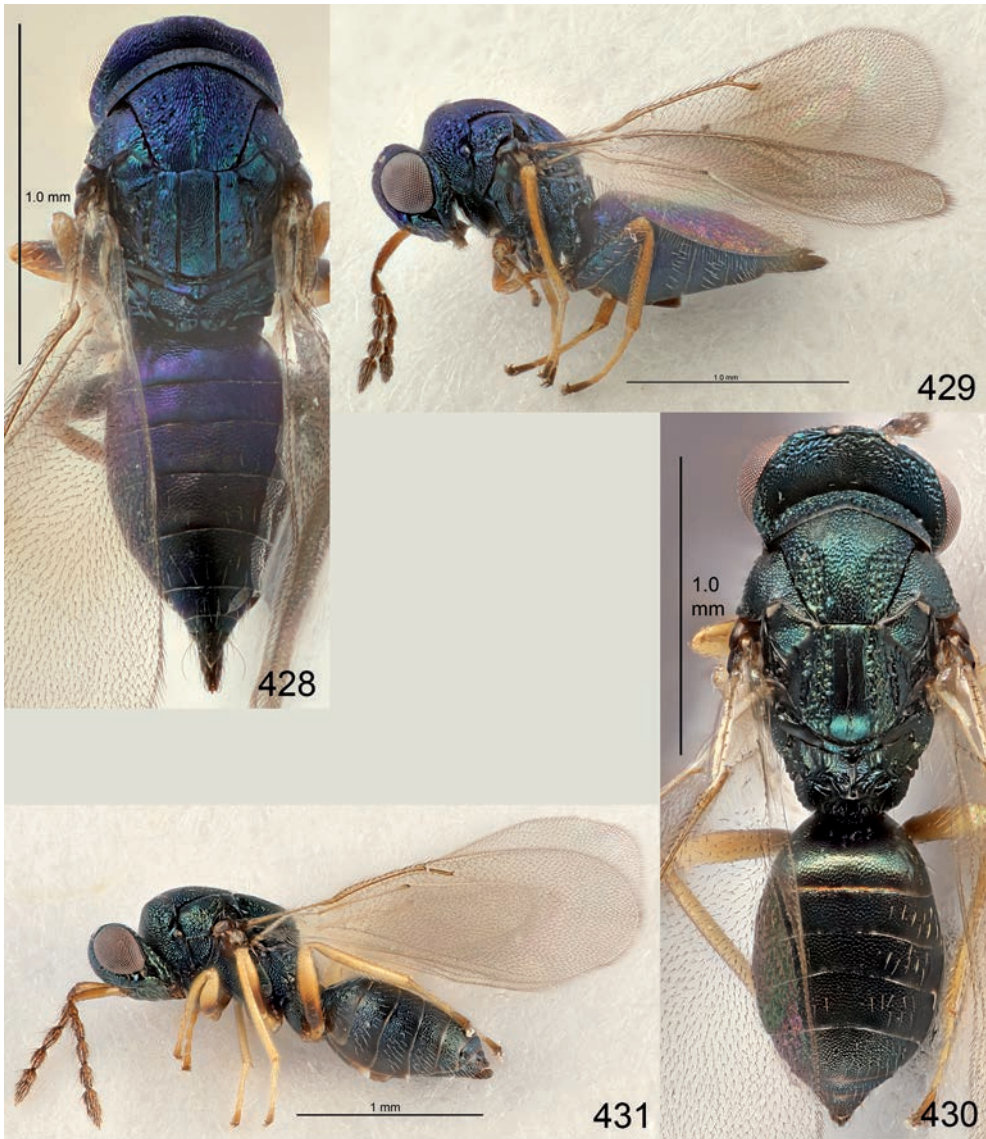
Figs 416–419. *Galeopsomyia gutierrezii*, holotype ♀ – (416) habitus dorsal view; (417) habitus lateral view. *Galeopsomyia hesperis*, holotype ♀ – (418) habitus dorsal view; (419) habitus lateral view.



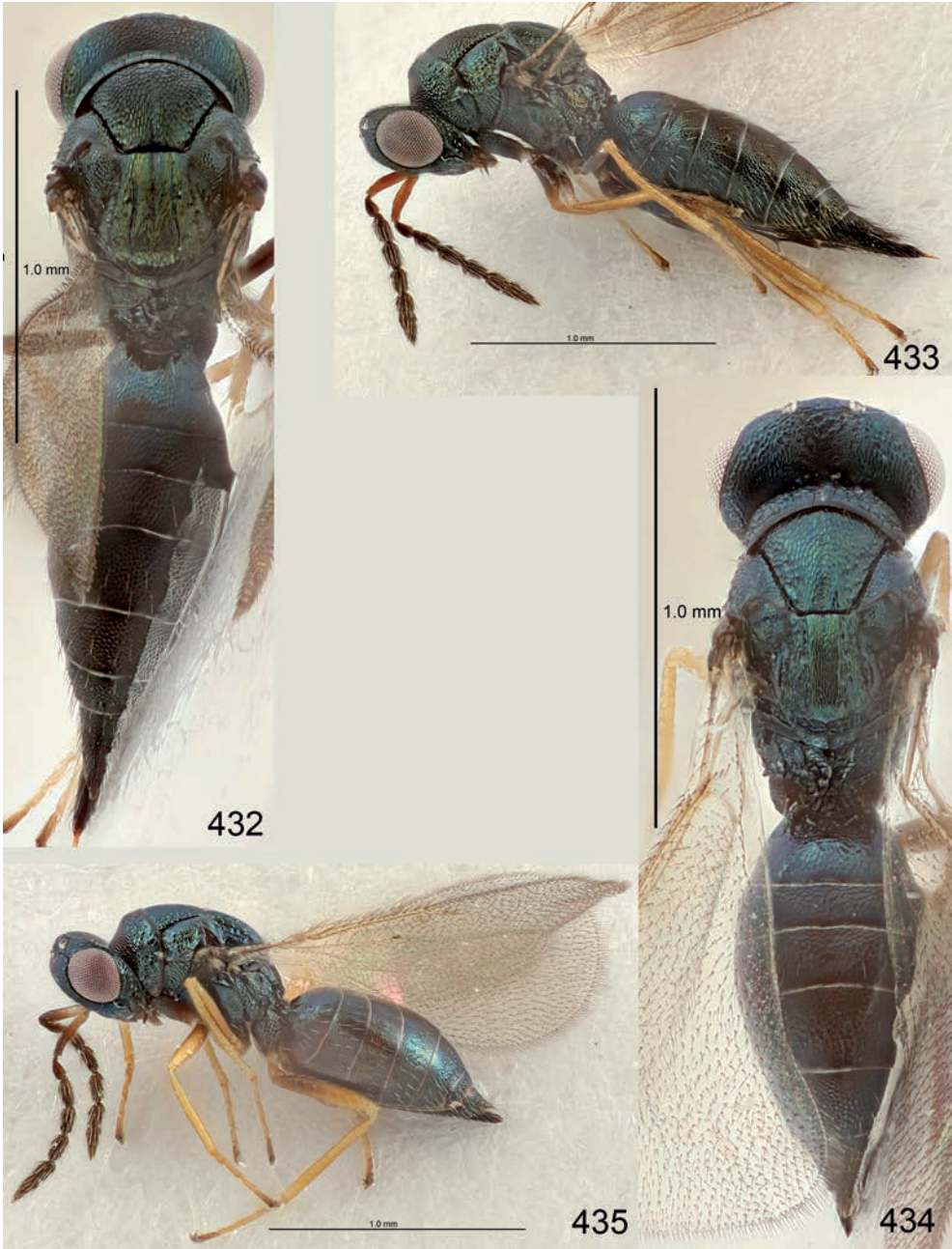
Figs 420–423. *Galeopsomyia hiata*, holotype ♀ – (420) habitus dorsal view; (421) habitus lateral view. *Galeopsomyia idris*, holotype ♀ – (422) habitus dorsal view; (423) habitus lateral view.



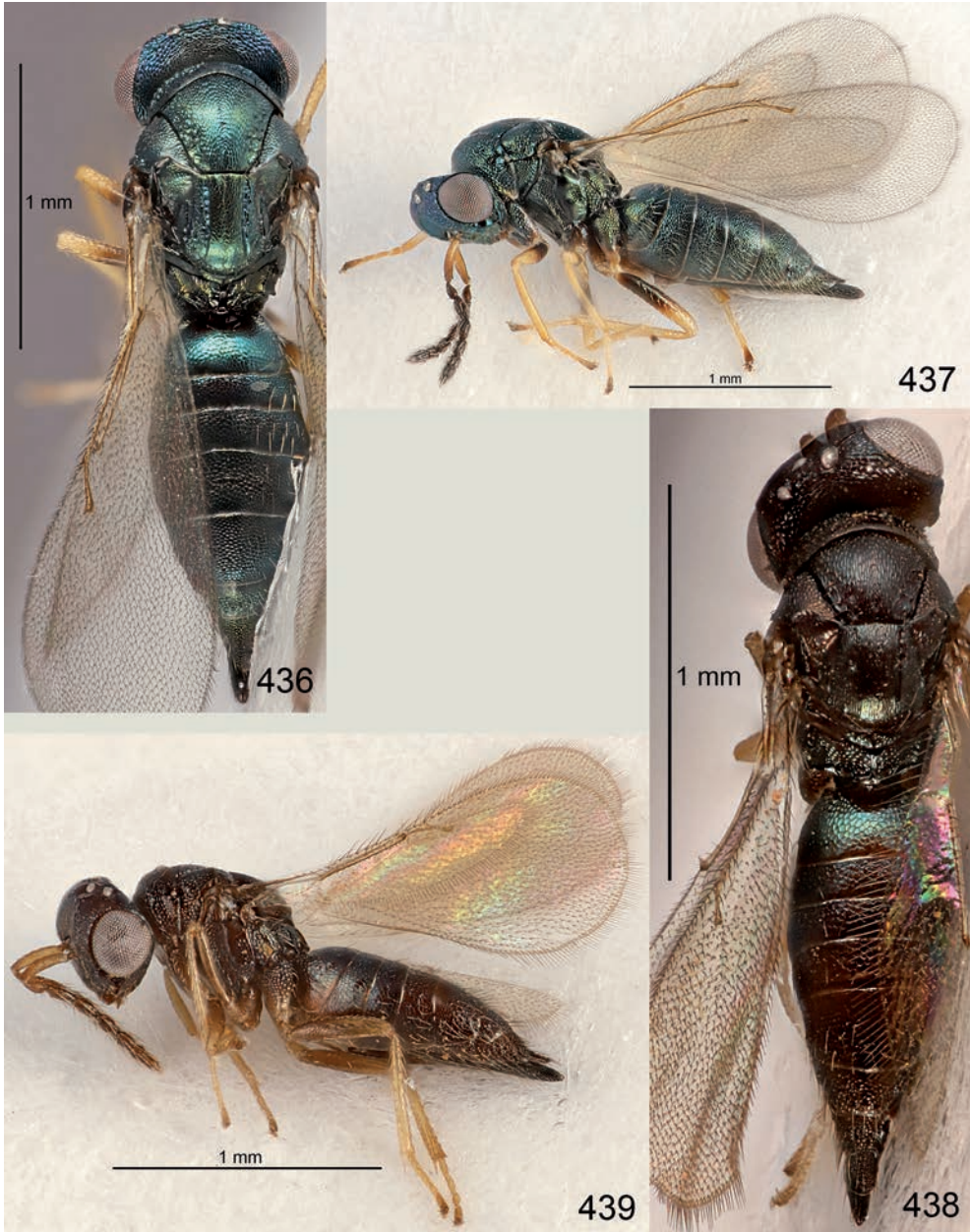
Figs 424–427. *Galeopsomyia illydris*, holotype ♀ – (424) habitus dorsal view; (425) habitus lateral view. *Galeopsomyia infusca*, holotype ♀ – (426) habitus dorsal view; (427) habitus lateral view.



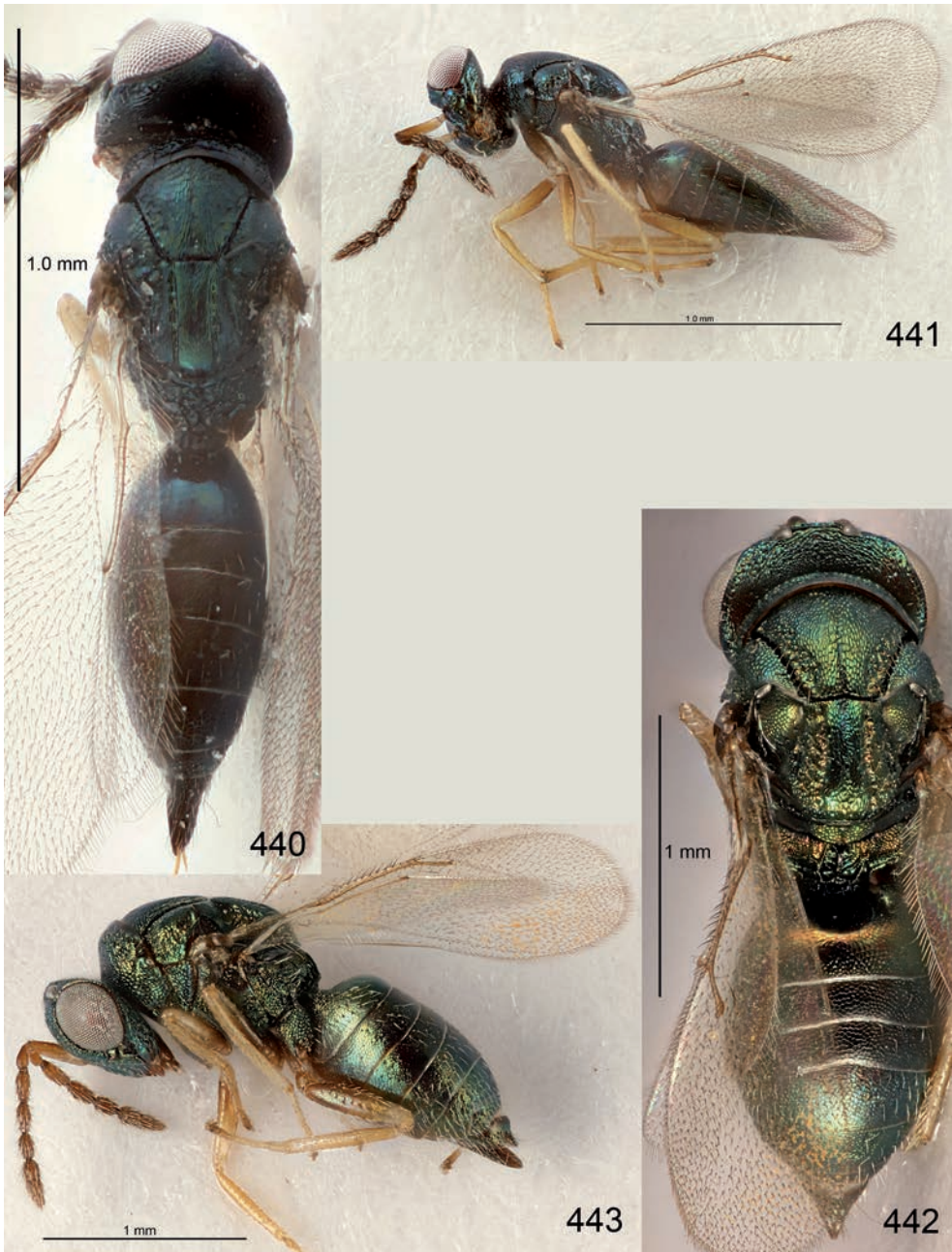
Figs 428–431. *Galeopsomyia ingae*, holotype ♀ – (428) habitus dorsal view; (429) habitus lateral view. *Galeopsomyia intesa*, holotype ♀ – (430) habitus dorsal view; (431) habitus lateral view.



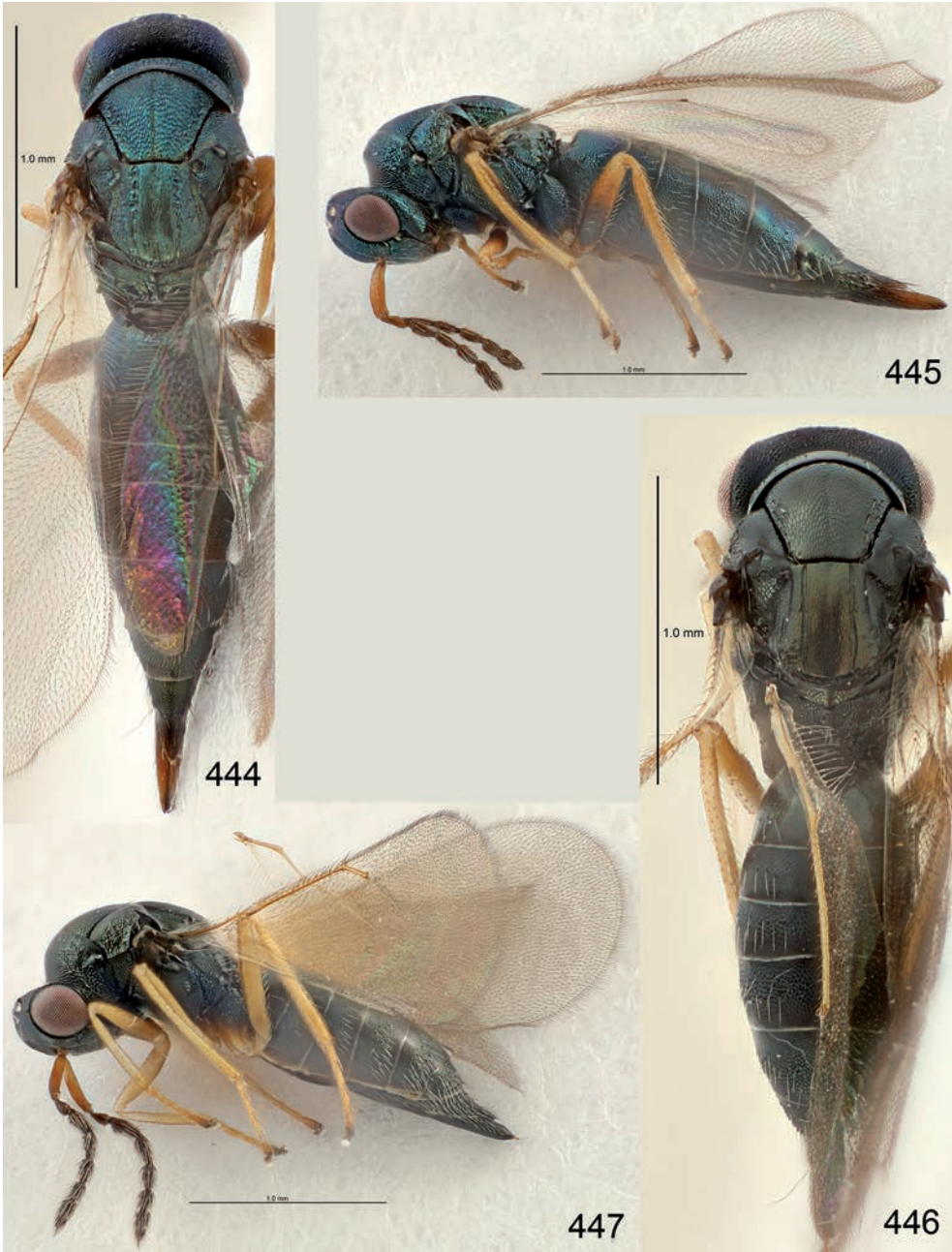
Figs 432–435. *Galeopsomyia intruita*, holotype ♀ – (432) habitus dorsal view; (433) habitus lateral view. *Galeopsomyia ira*, holotype ♀ – (434) habitus dorsal view; (435) habitus lateral view.



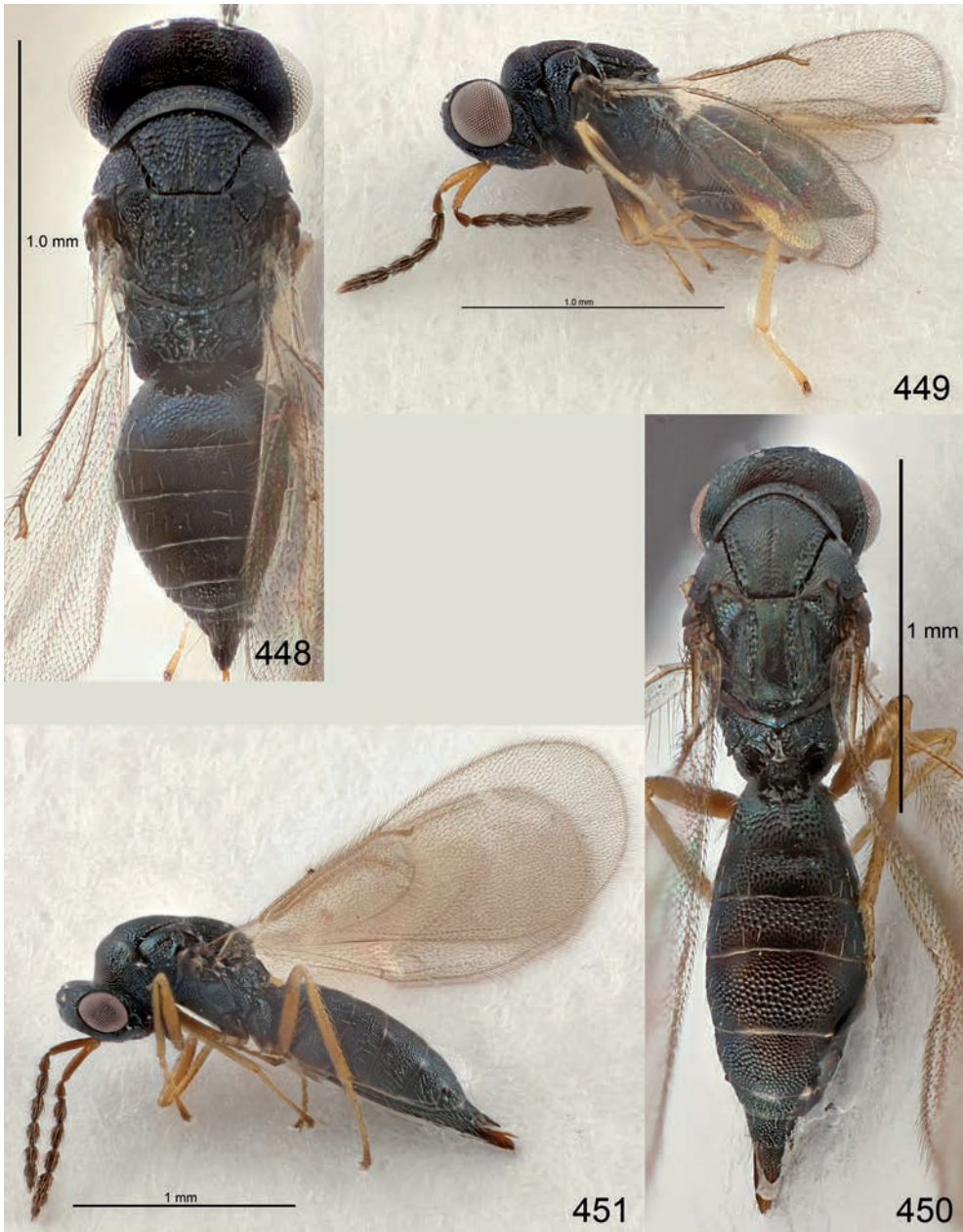
Figs 436–439. *Galeopsomyia isola*, holotype ♀ – (436) habitus dorsal view; (437) habitus lateral view. *Galeopsomyia jaymesonesae*, holotype ♀ – (438) habitus dorsal view; (439) habitus lateral view.



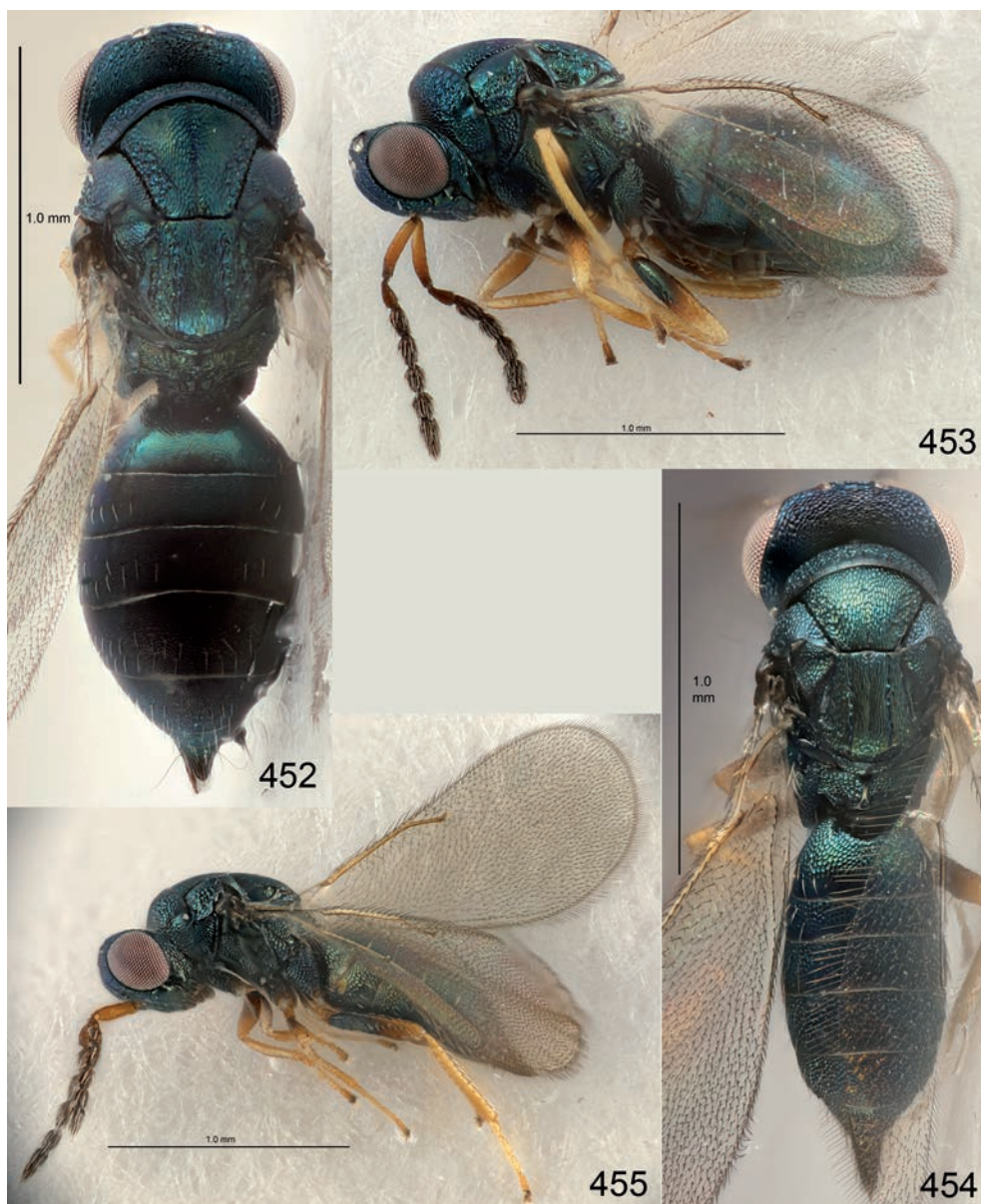
Figs 440–443. *Galeopsomyia juni*, holotype ♀ – (440) habitus dorsal view; (441) habitus lateral view. *Galeopsomyia kateperezae*, holotype ♀ – (442) habitus dorsal view; (443) habitus lateral view.



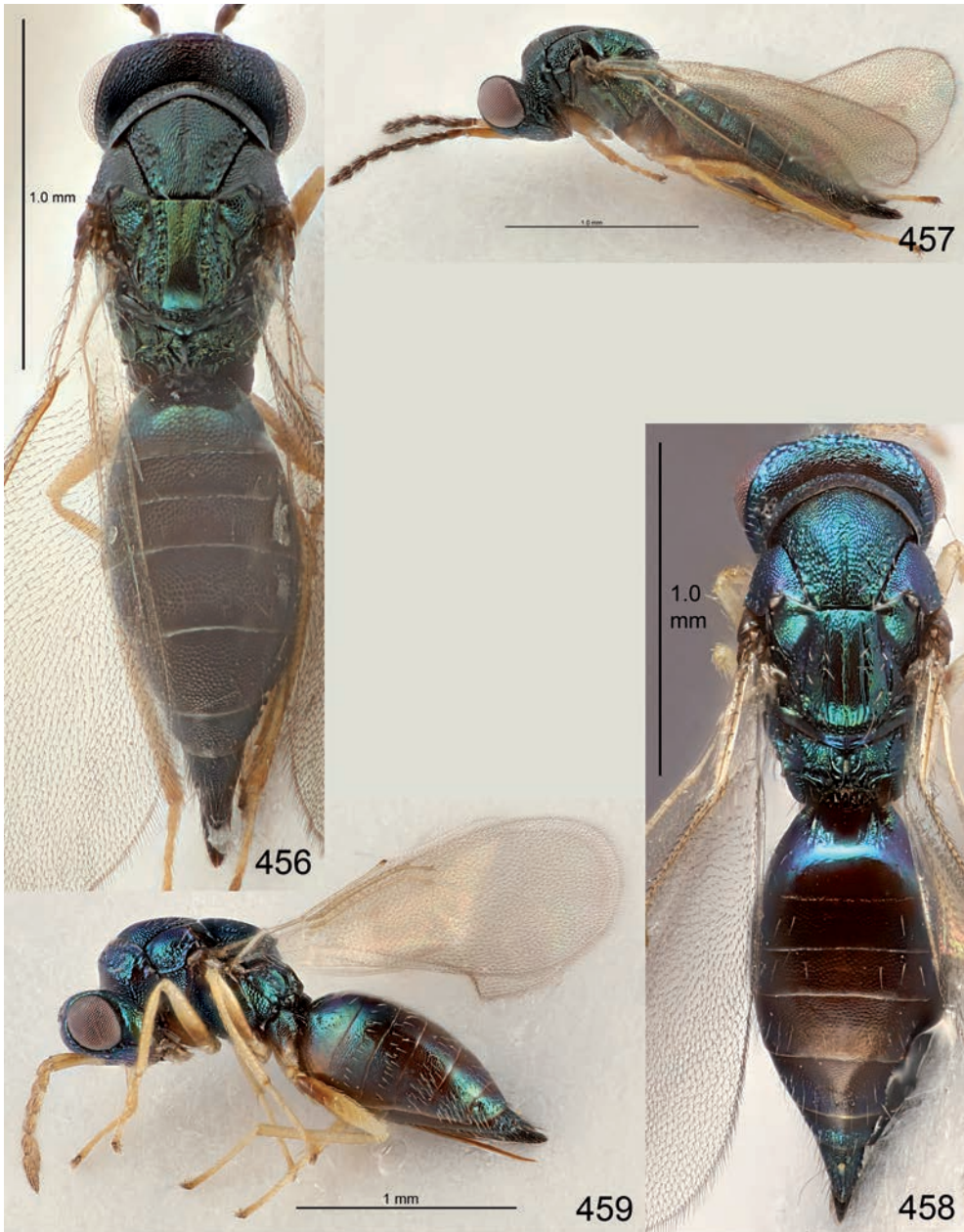
Figs 444–447. *Galeopsomyia labrada*, holotype ♀ – (444) habitus dorsal view; (445) habitus lateral view. *Galeopsomyia lacinia*, holotype ♀ – (446) habitus dorsal view; (447) habitus lateral view.



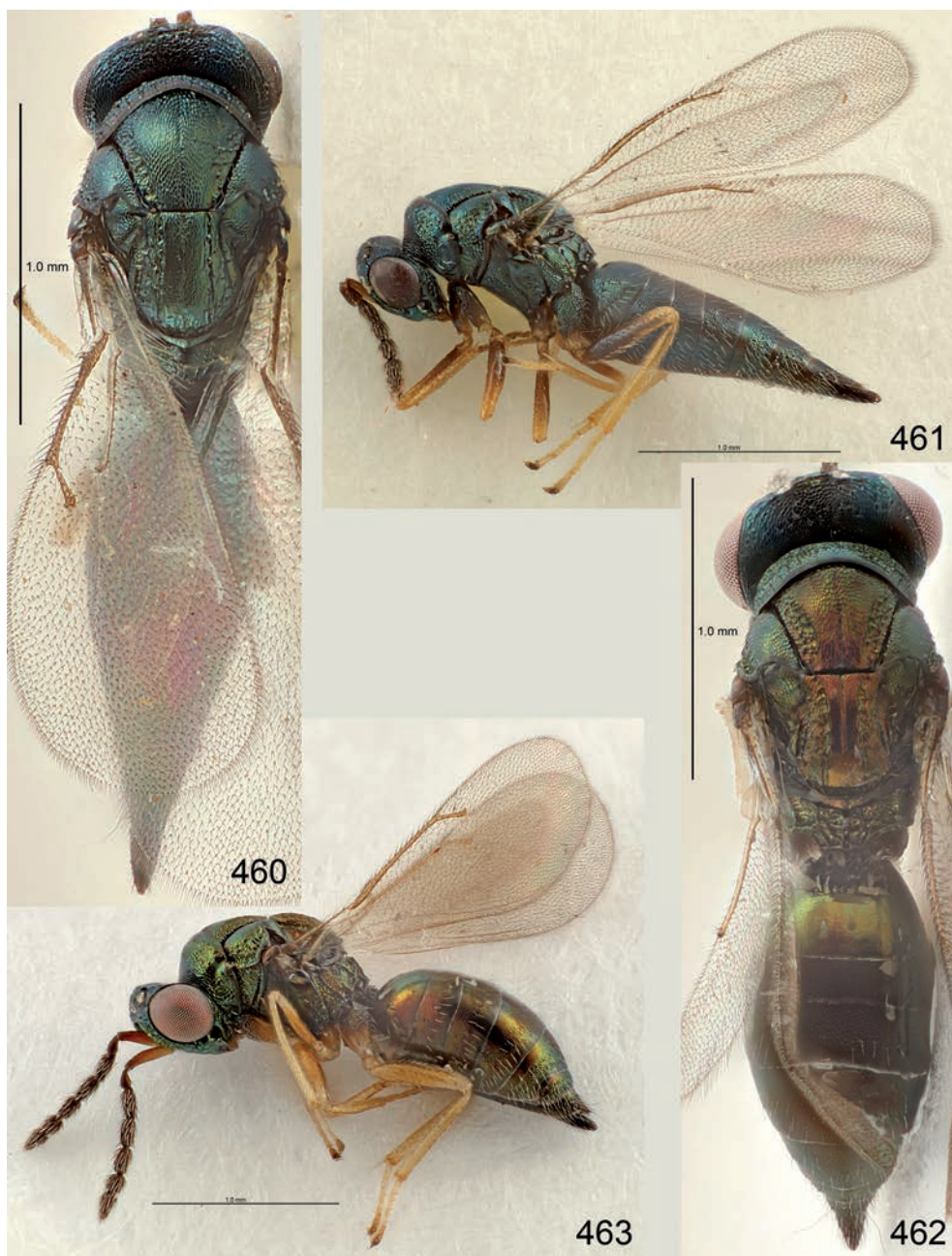
Figs 448–451. *Galeopsomyia ladrona*, holotype ♀ – (448) habitus dorsal view; (449) habitus lateral view. *Galeopsomyia lapsa*, holotype ♀ – (450) habitus dorsal view; (451) habitus lateral view.



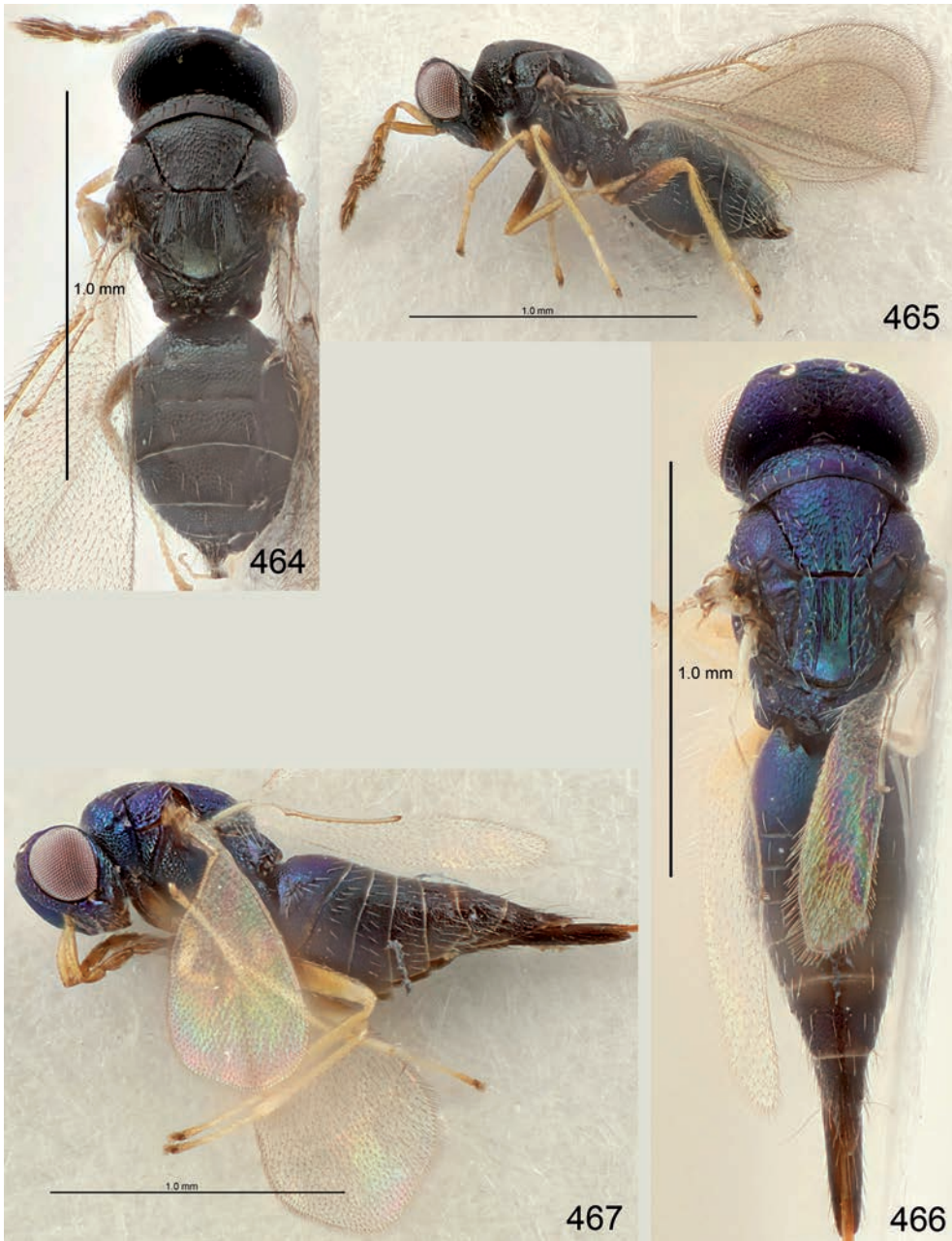
Figs 452–455. *Galeopsomyia latosa*, holotype ♀ – (452) habitus dorsal view; (453) habitus lateral view. *Galeopsomyia lealis*, holotype ♀ – (454) habitus dorsal view; (455) habitus lateral view.



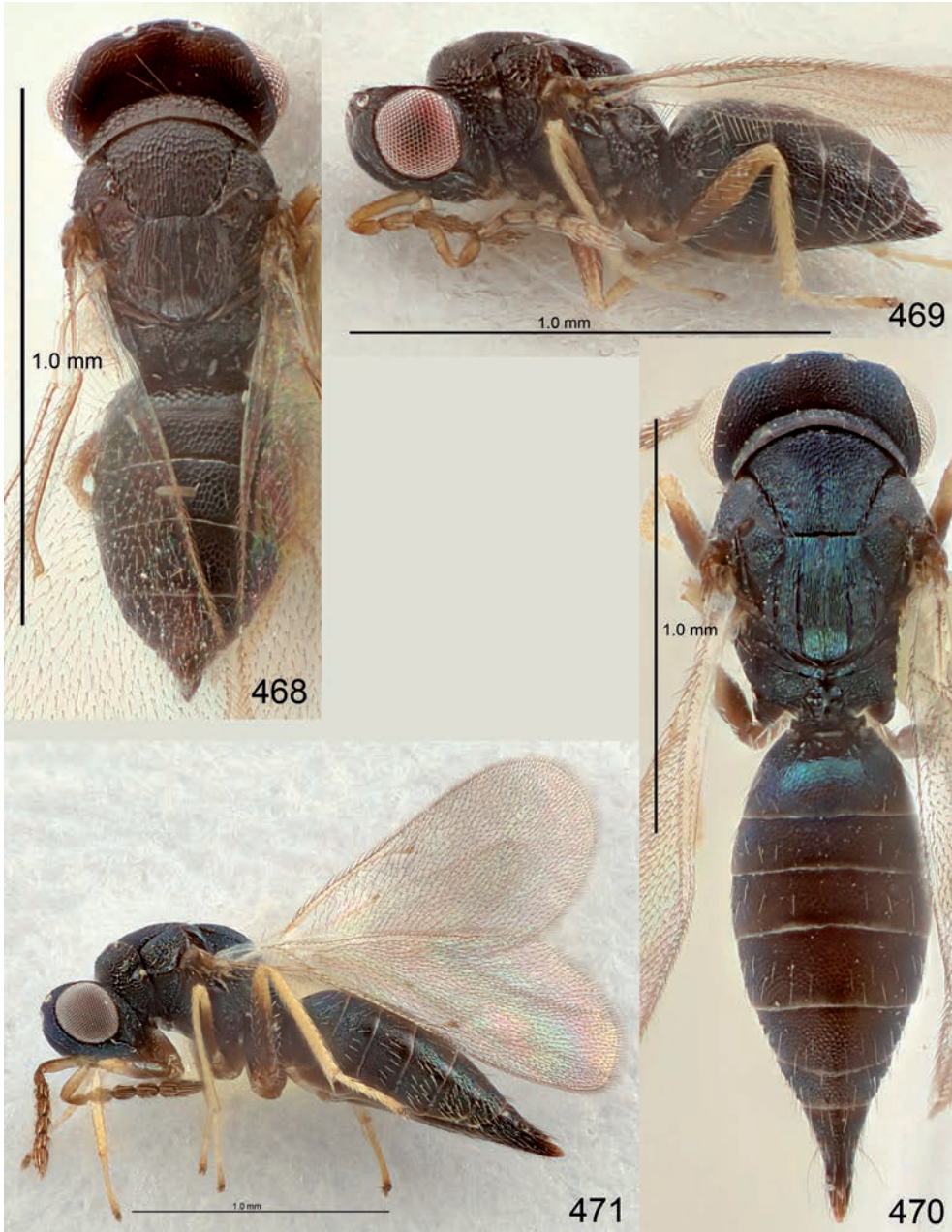
Figs 456–459. *Galeopsomyia lema*, holotype ♀ – (456) habitus dorsal view; (457) habitus lateral view. *Galeopsomyia lemuris*, holotype ♀ – (458) habitus dorsal view; (459) habitus lateral view.



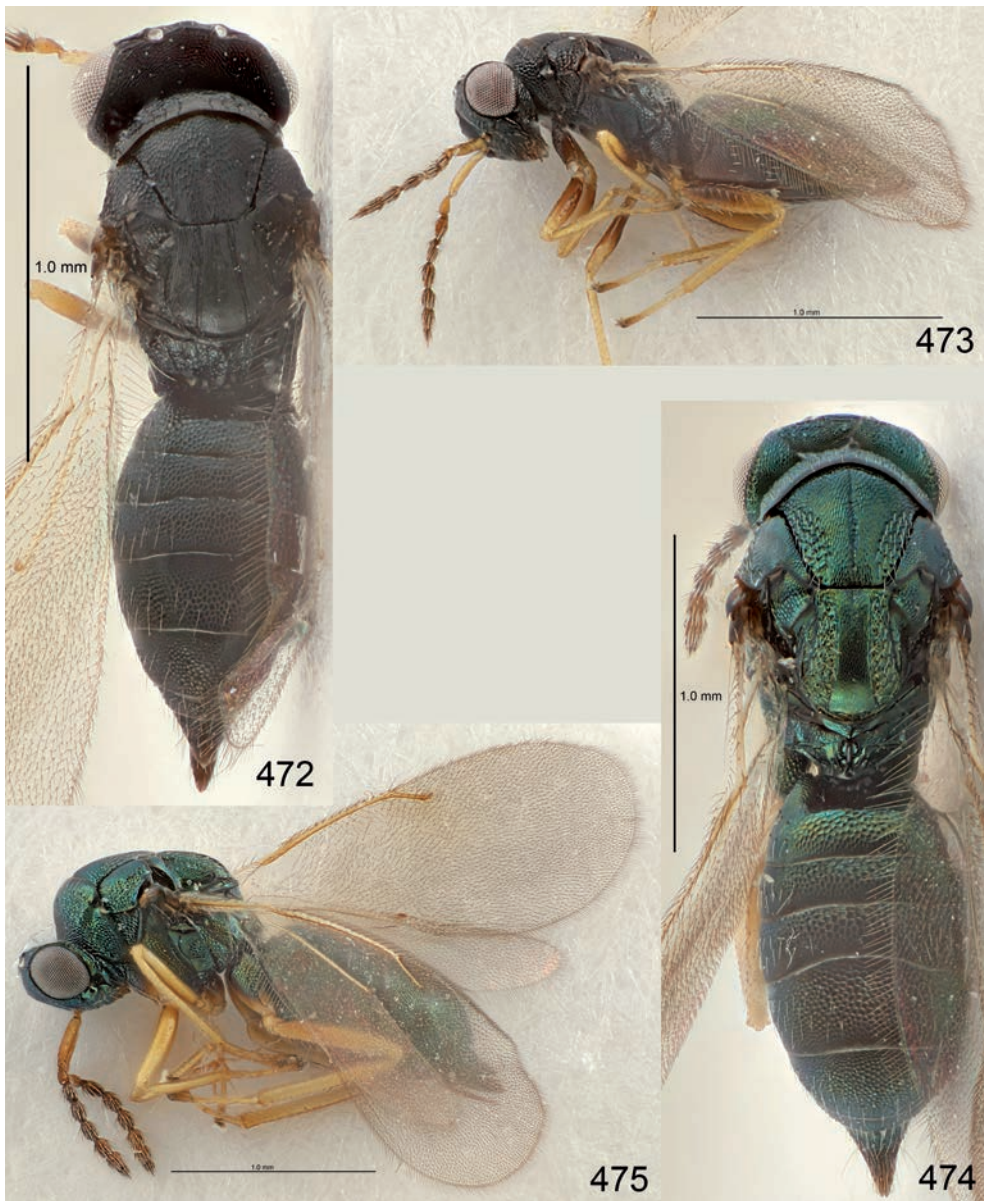
Figs 460–463. *Galeopsomyia leonae*, holotype ♀ – (460) habitus dorsal view; (461) habitus lateral view. *Galeopsomyia limonensis*, holotype ♀ – (462) habitus dorsal view; (463) habitus lateral view.



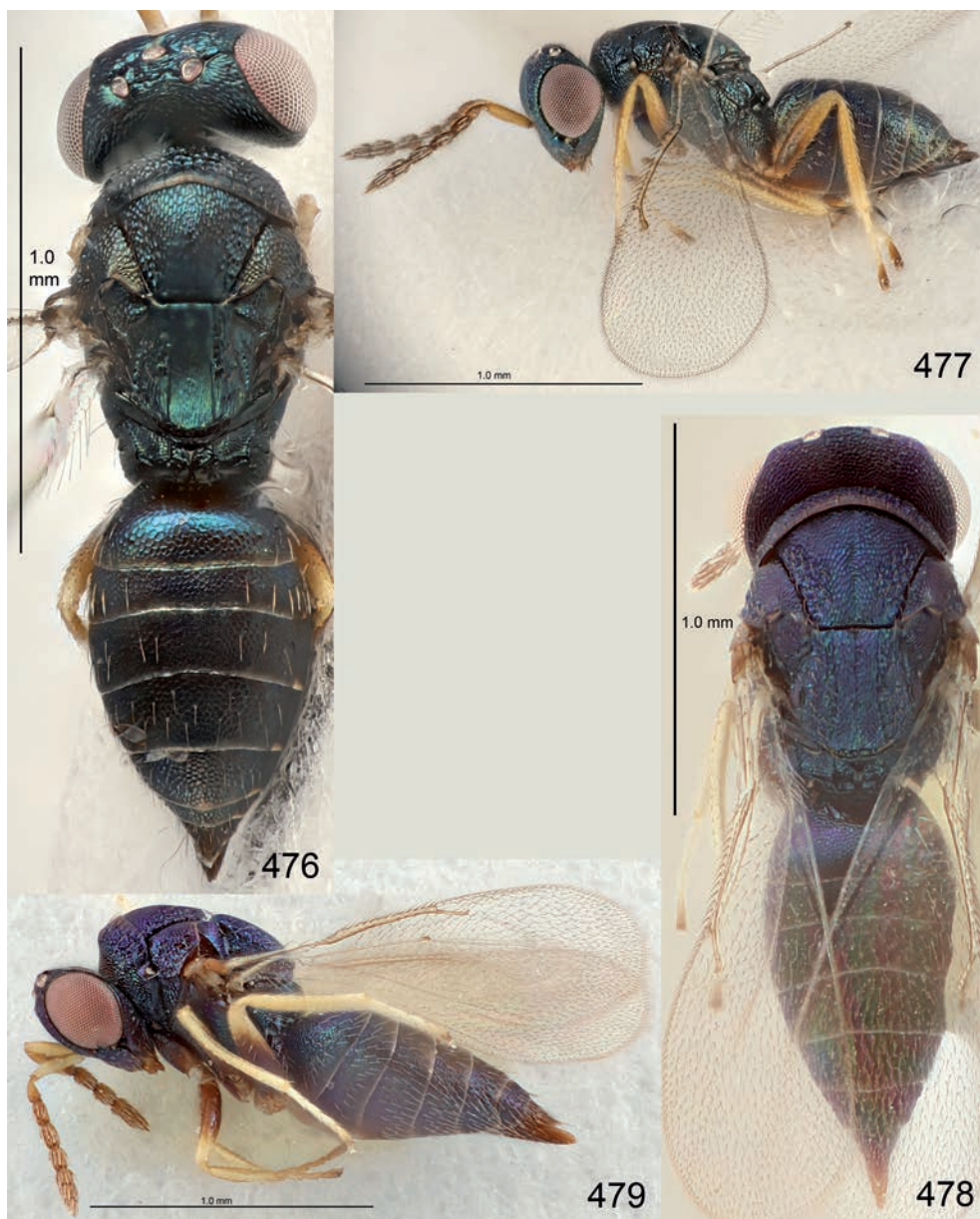
Figs 464–467. *Galeopsomyia liria*, holotype ♀ – (464) habitus dorsal view; (465) habitus lateral view. *Galeopsomyia longicauda*, holotype ♀ – (466) habitus dorsal view; (467) habitus lateral view.



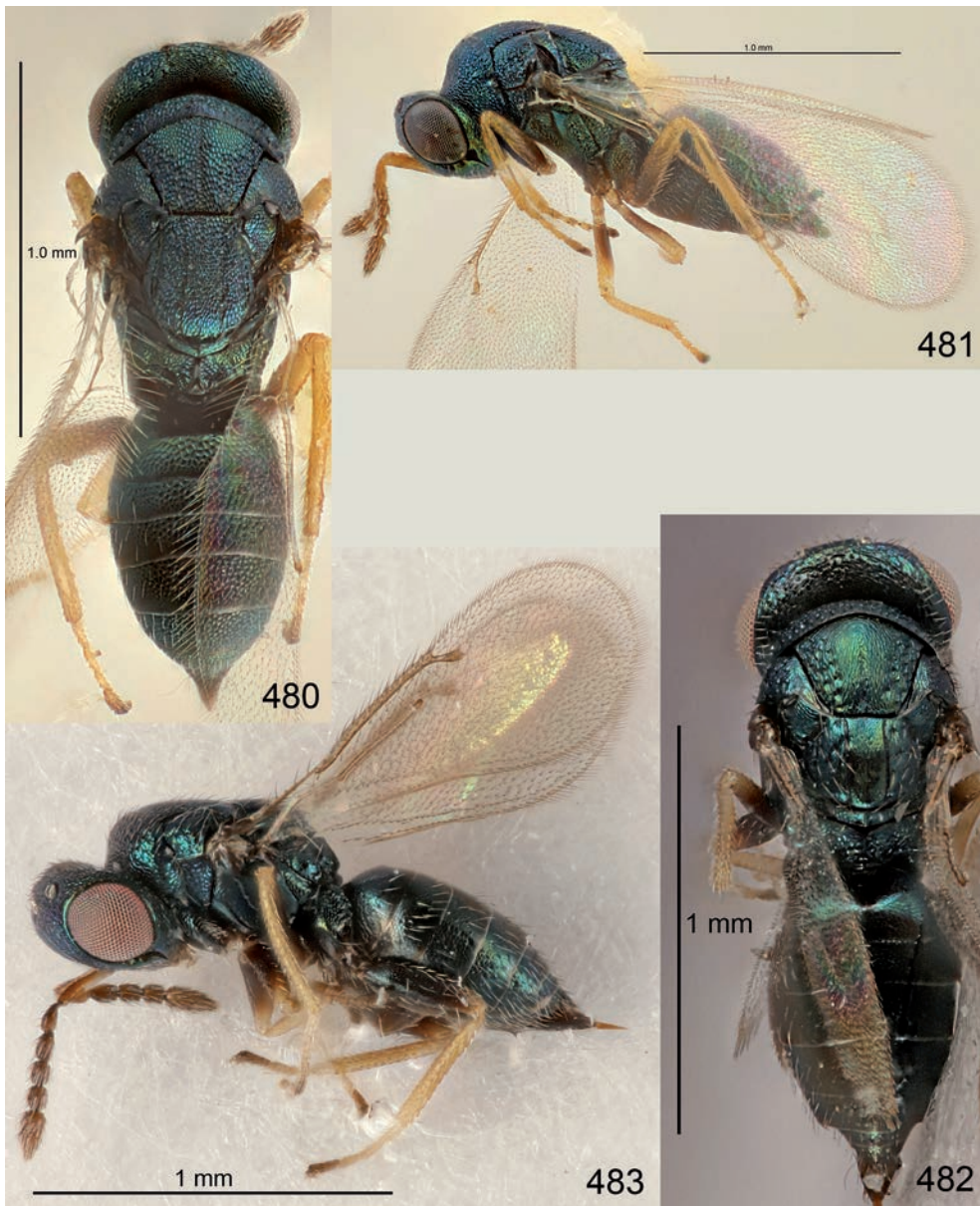
Figs 468–471. *Galeopsomyia lumbrada*, holotype ♀ – (468) habitus dorsal view; (469) habitus lateral view. *Galeopsomyia lunaniae*, holotype ♀ – (470) habitus dorsal view; (471) habitus lateral view.



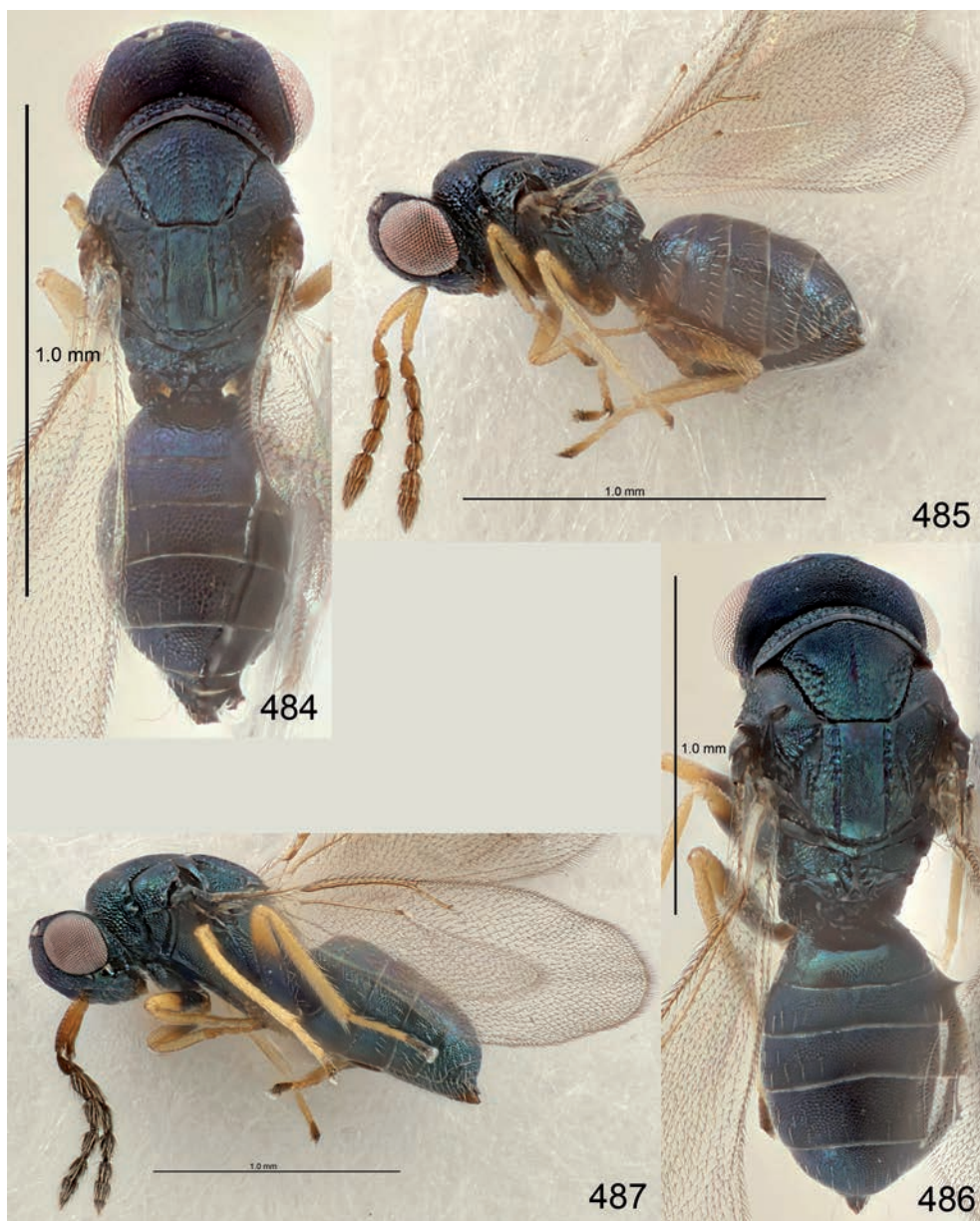
Figs 472–475. *Galeopsomyia macanis*, holotype ♀ – (472) habitus dorsal view; (473) habitus lateral view. *Galeopsomyia maculifer*, holotype ♀ – (474) habitus dorsal view; (475) habitus lateral view.



Figs 476–479. *Galeopsomyia magra*, holotype ♀ – (476) habitus dorsal view; (477) habitus lateral view. *Galeopsomyia majalis*, holotype ♀ – (478) habitus dorsal view; (479) habitus lateral view.



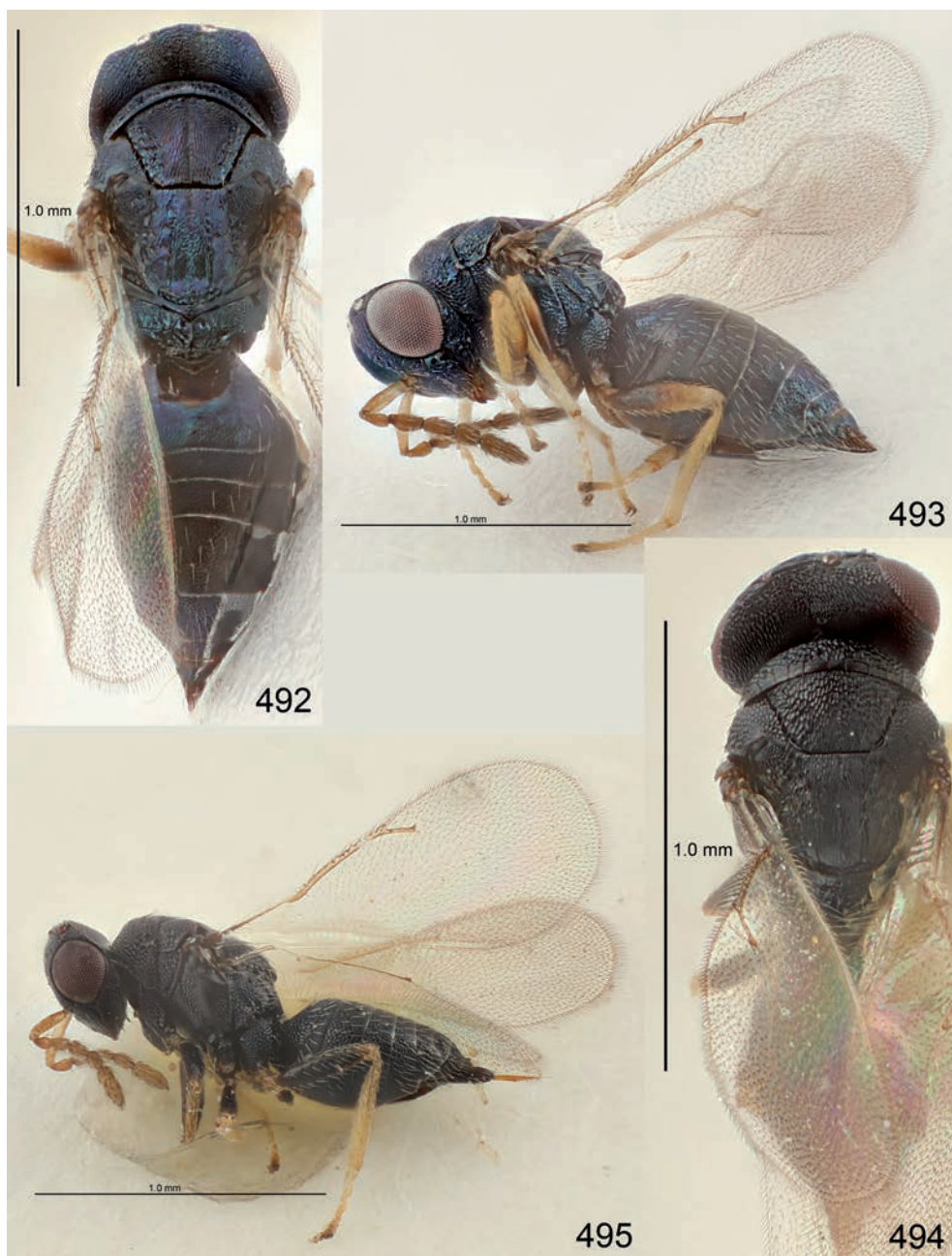
Figs 480–483. *Galeopsomyia malandrina*, holotype ♀ – (480) habitus dorsal view; (481) habitus lateral view. *Galeopsomyia manga*, holotype ♀ – (482) habitus dorsal view; (483) habitus lateral view.



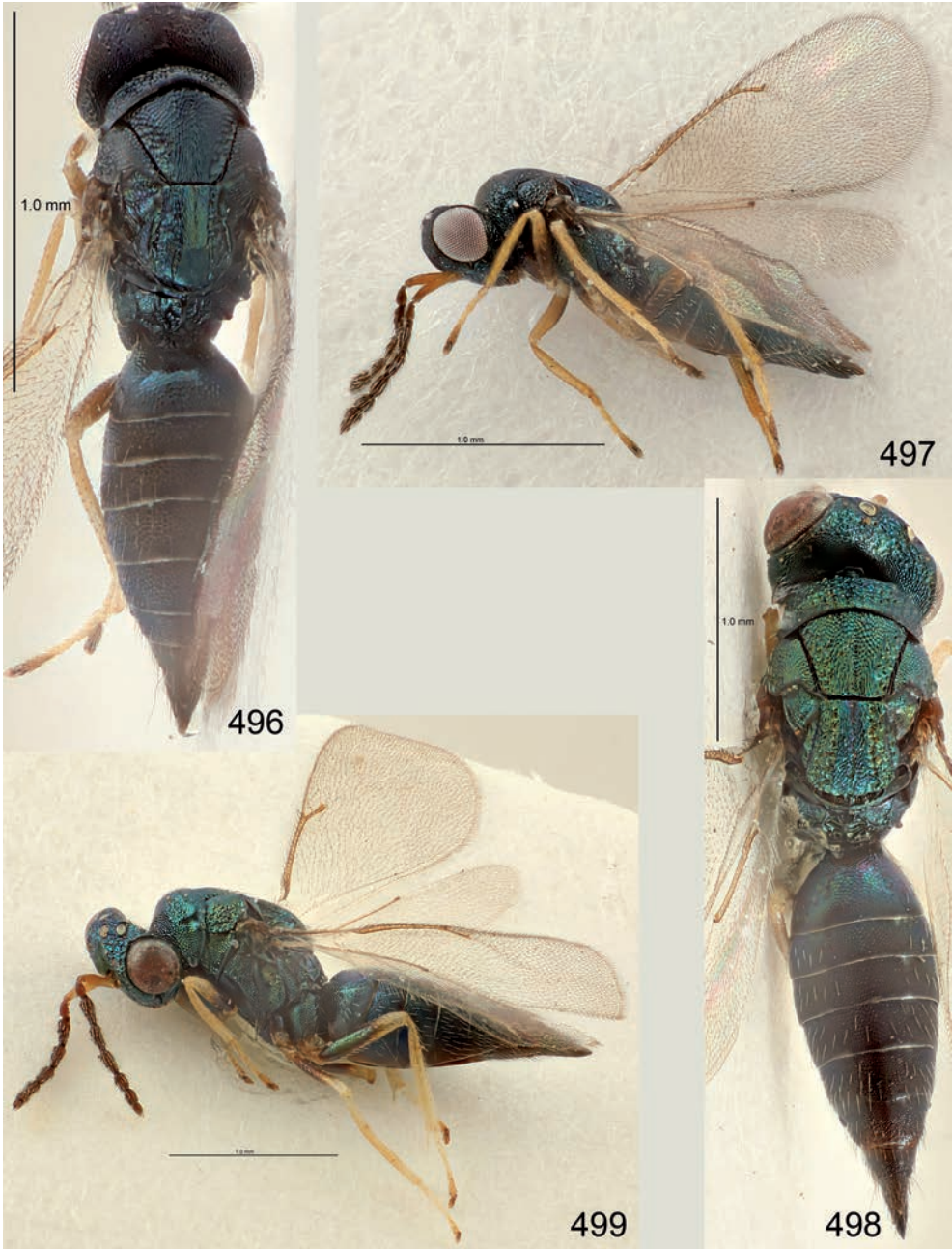
Figs 484–487. *Galeopsomyia manotris*, holotype ♀ – (484) habitus dorsal view; (485) habitus lateral view. *Galeopsomyia marbis*, holotype ♀ – (486) habitus dorsal view; (487) habitus lateral view.



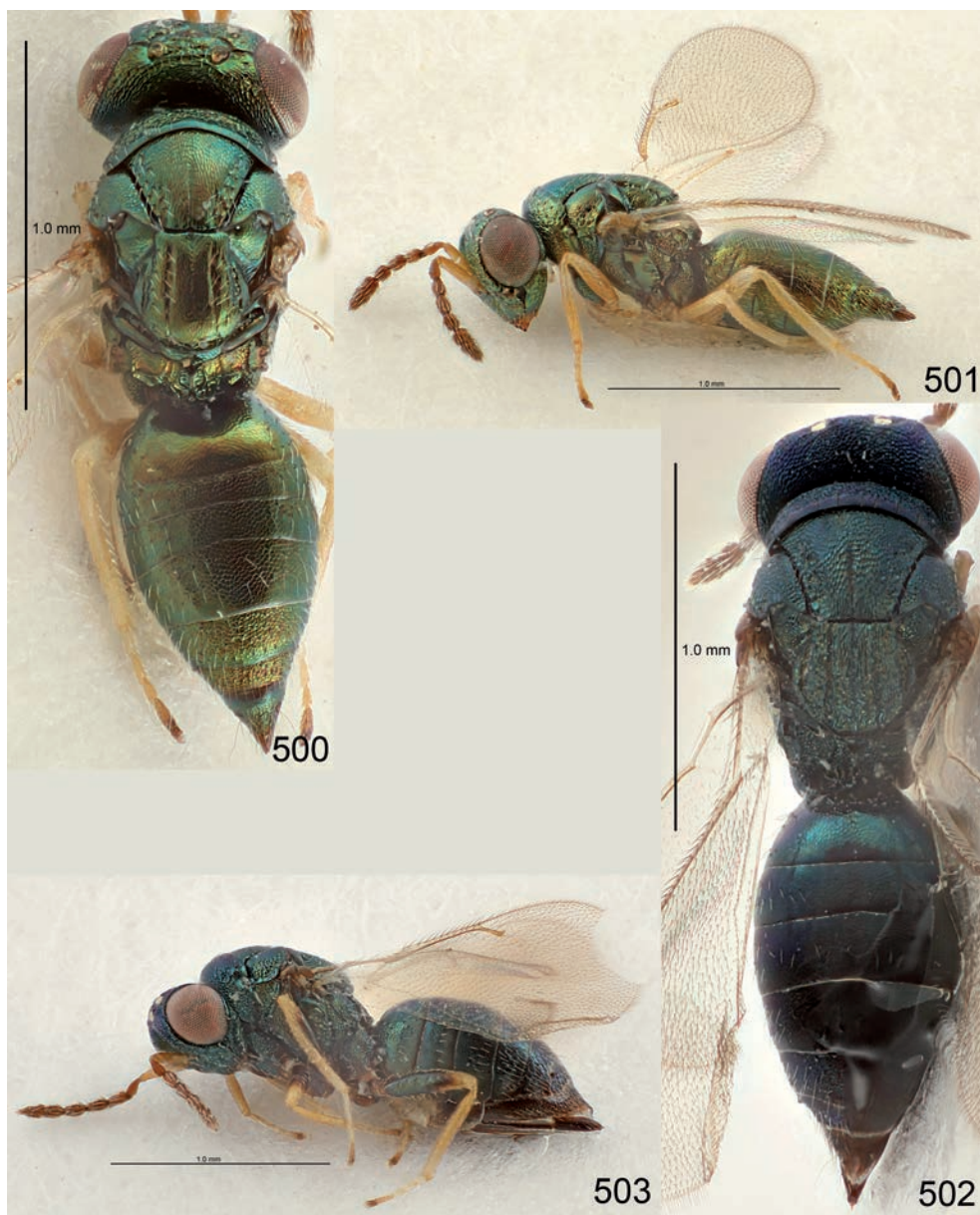
Figs 488–491. *Galeopsomyia matearis*, holotype ♀ – (488) habitus dorsal view; (489) habitus lateral view. *Galeopsomyia maya*, holotype ♀ – (490) habitus dorsal view; (491) habitus lateral view.



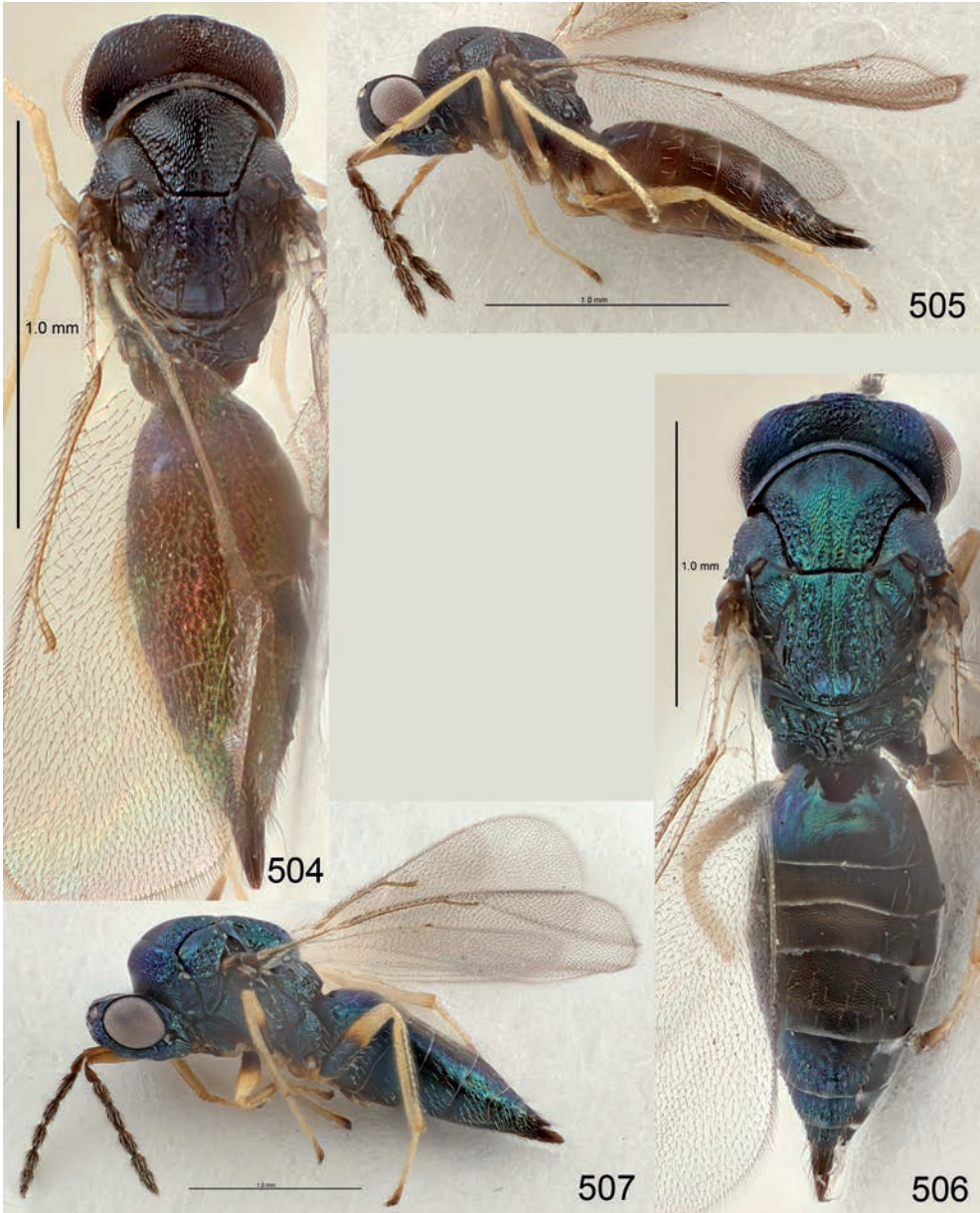
Figs 492–495. *Galeopsomyia medrosa*, holotype ♀ – (492) habitus dorsal view; (493) habitus lateral view. *Galeopsomyia melasoma*, holotype ♀ – (494) habitus dorsal view; (495) habitus lateral view.



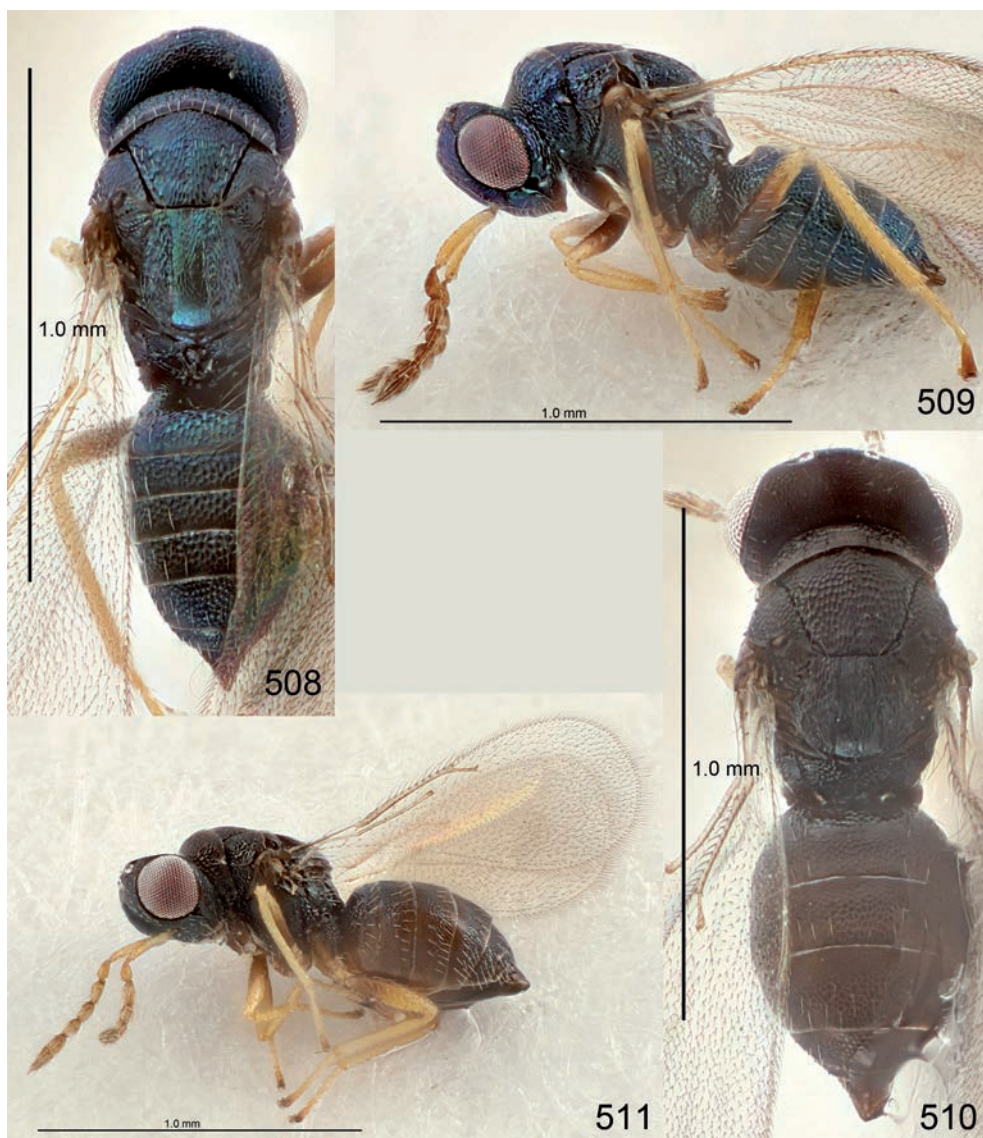
Figs 496–499. *Galeopsomyia meleadis*, holotype ♀ – (496) habitus dorsal view; (497) habitus lateral view. *Galeopsomyia minoris*, holotype ♀ – (498) habitus dorsal view; (499) habitus lateral view.



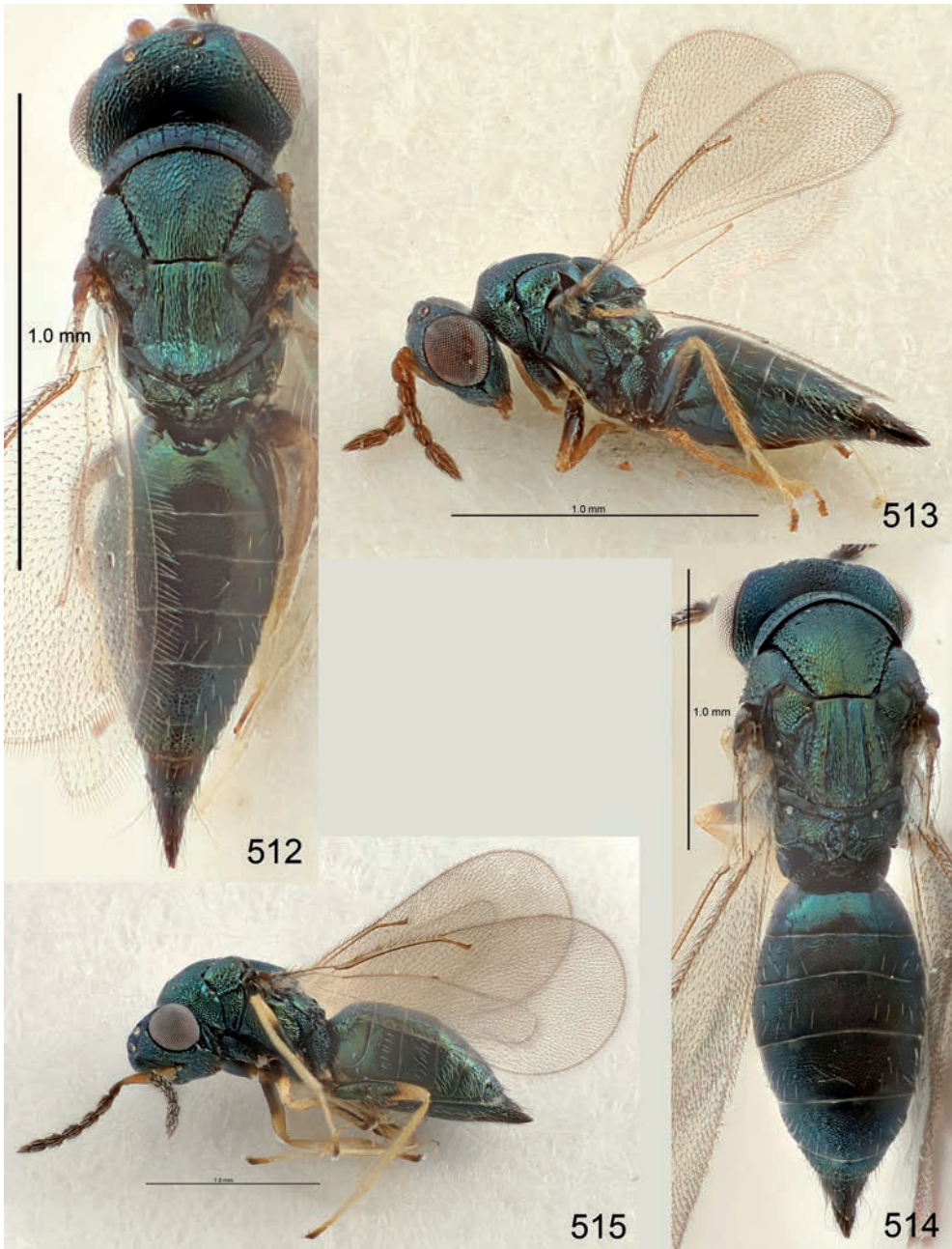
Figs 500–503. *Galeopsomyia mesana*, holotype ♀ – (500) habitus dorsal view; (501) habitus lateral view. *Galeopsomyia methea*, holotype ♀ – (502) habitus dorsal view; (503) habitus lateral view.



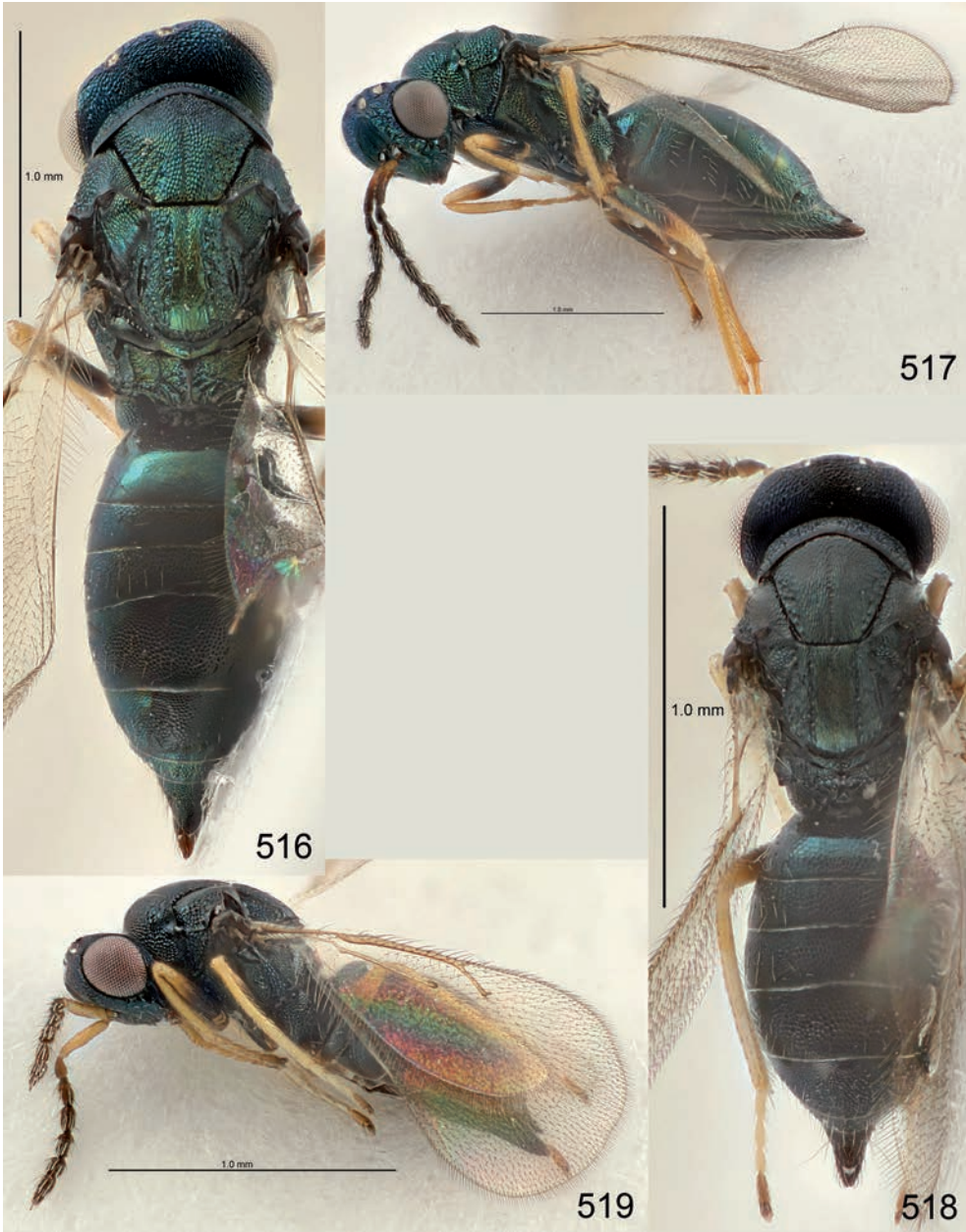
Figs 504–507. *Galeopsomyia miga*, holotype ♀ – (504) habitus dorsal view; (505) habitus lateral view. *Galeopsomyia milagra*, holotype ♀ – (506) habitus dorsal view; (507) habitus lateral view.



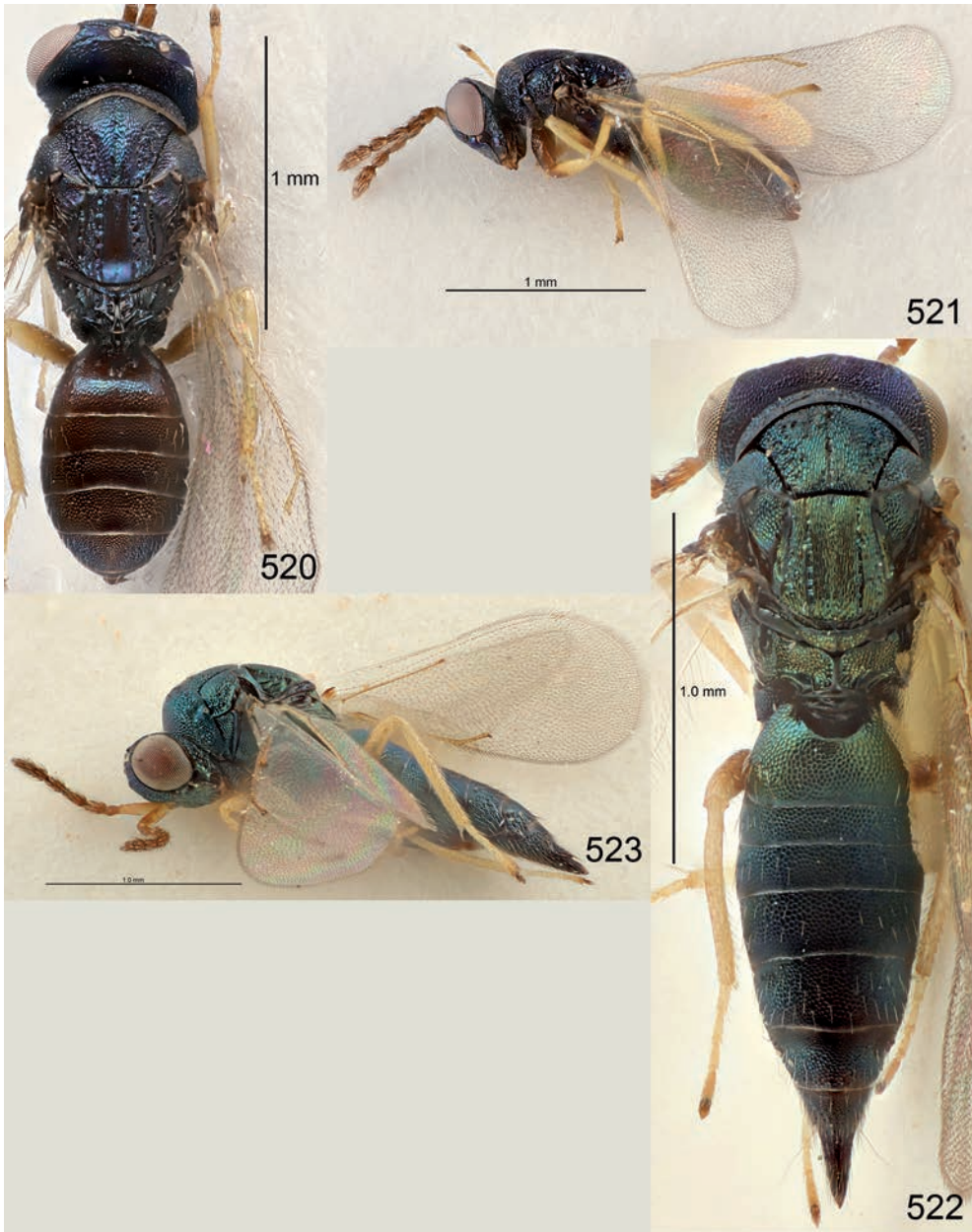
Figs 508–511. *Galeopsomyia miliaris*, holotype ♀ – (508) habitus dorsal view; (509) habitus lateral view. *Galeopsomyia miria*, holotype ♀ – (510) habitus dorsal view; (511) habitus lateral view.



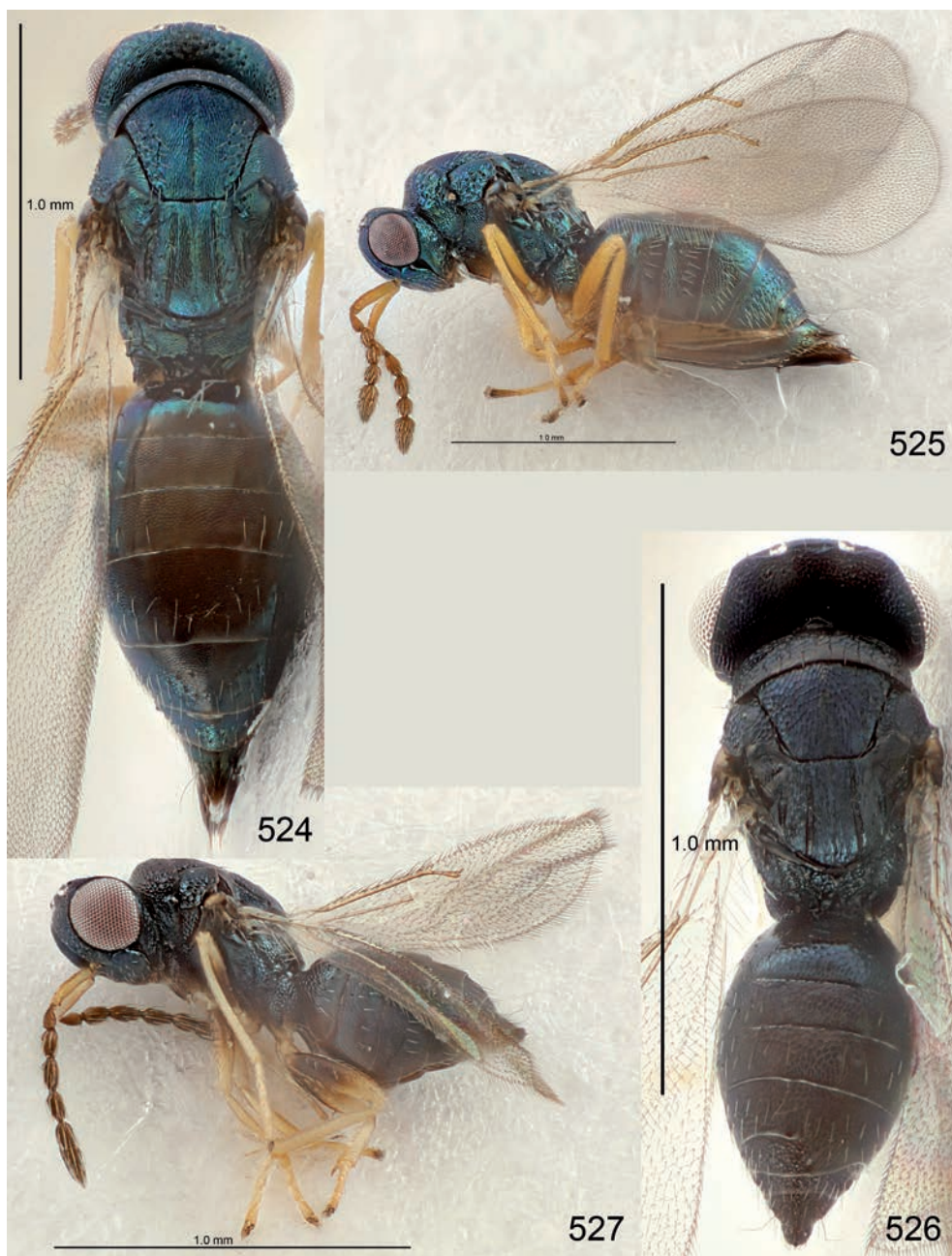
Figs 512–515. *Galeopsomyia moleris*, holotype ♀ – (512) habitus dorsal view; (513) habitus lateral view. *Galeopsomyia montanis*, holotype ♀ – (514) habitus dorsal view; (515) habitus lateral view.



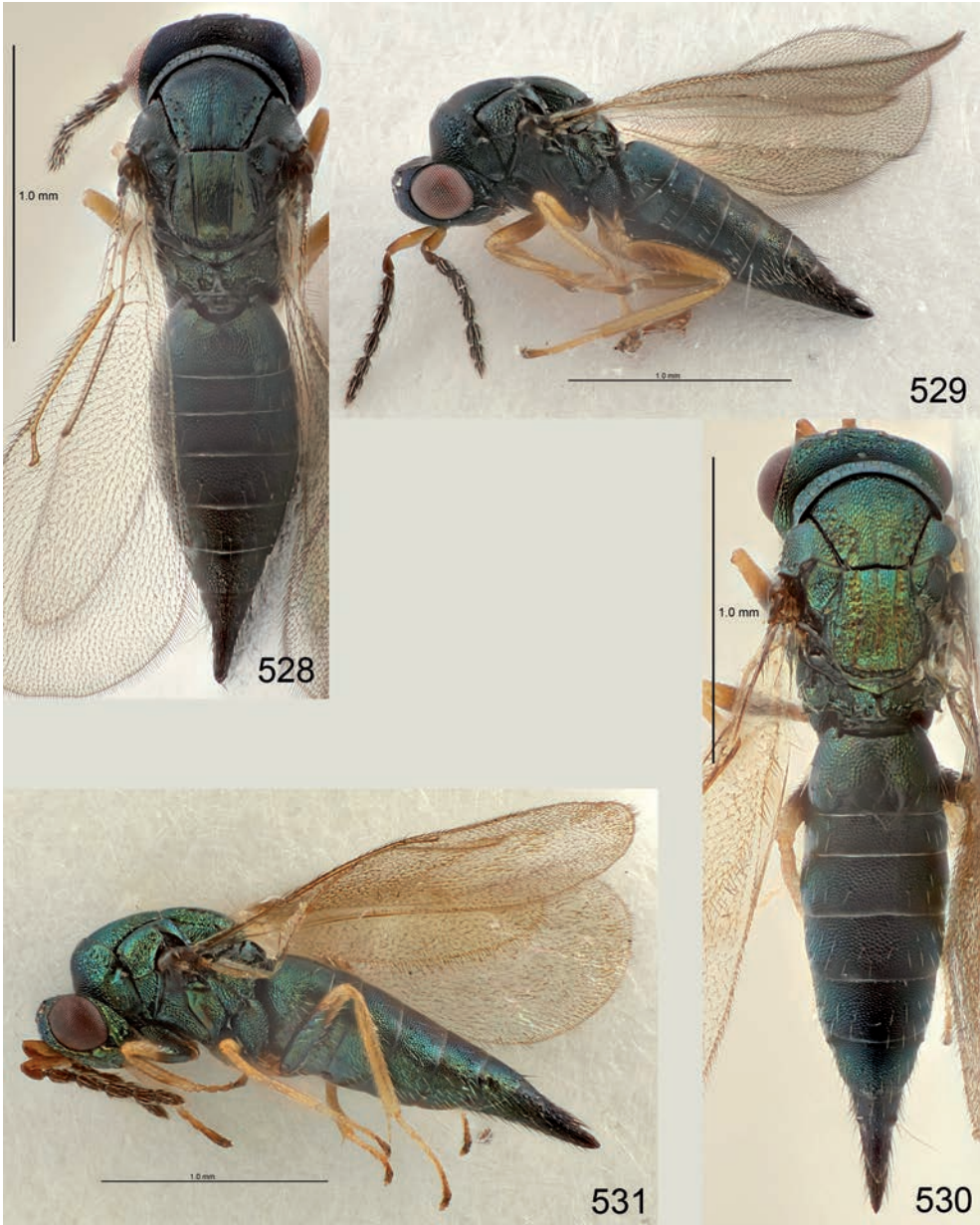
Figs 516–519. *Galeopsomyia mora*, holotype ♀ – (516) habitus dorsal view; (517) habitus lateral view. *Galeopsomyia moradis*, holotype ♀ – (518) habitus dorsal view; (519) habitus lateral view.



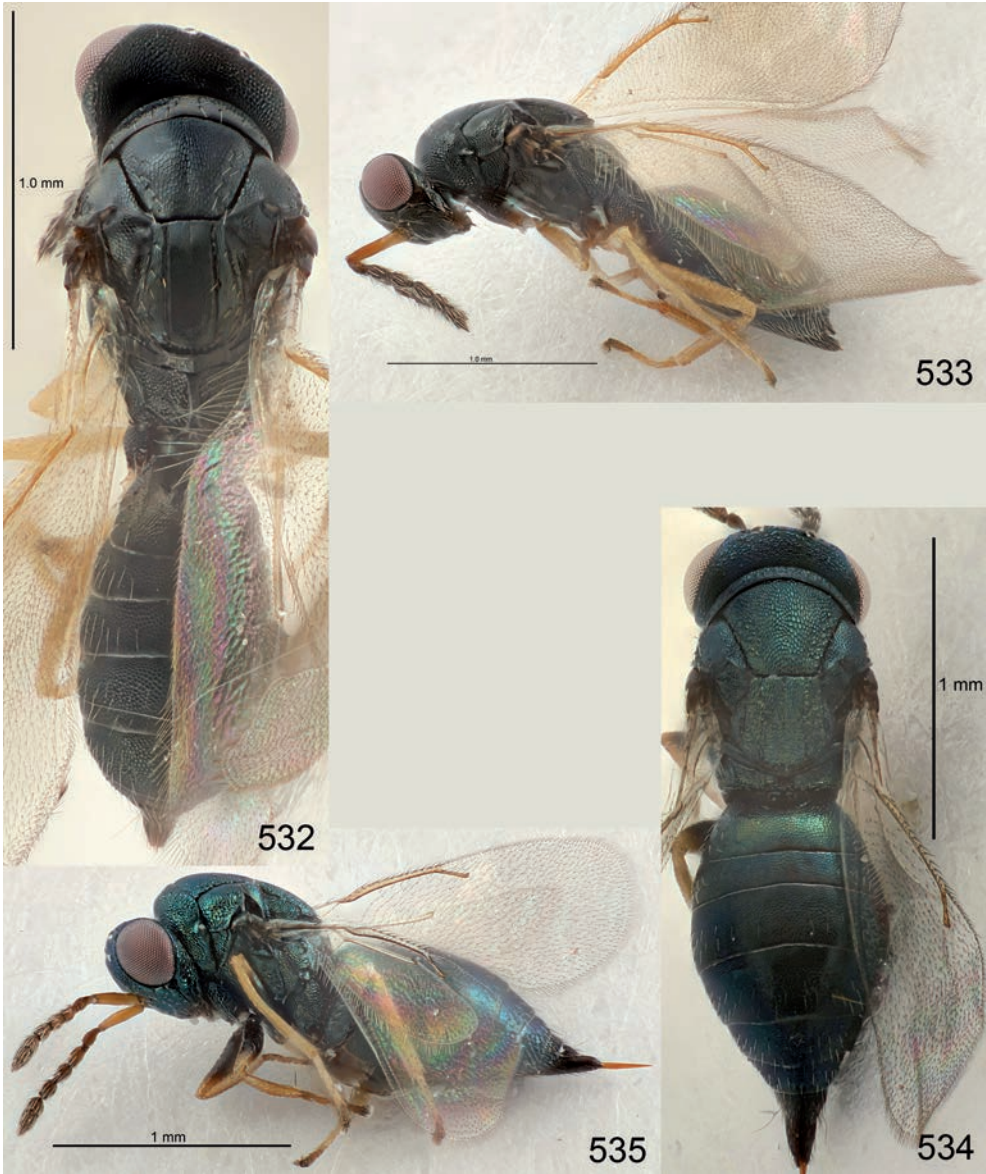
Figs 520–523. *Galeopsomyia munda*, holotype ♀ – (520) habitus dorsal view; (521) habitus lateral view. *Galeopsomyia myrciae*, holotype ♀ – (522) habitus dorsal view; (523) habitus lateral view.



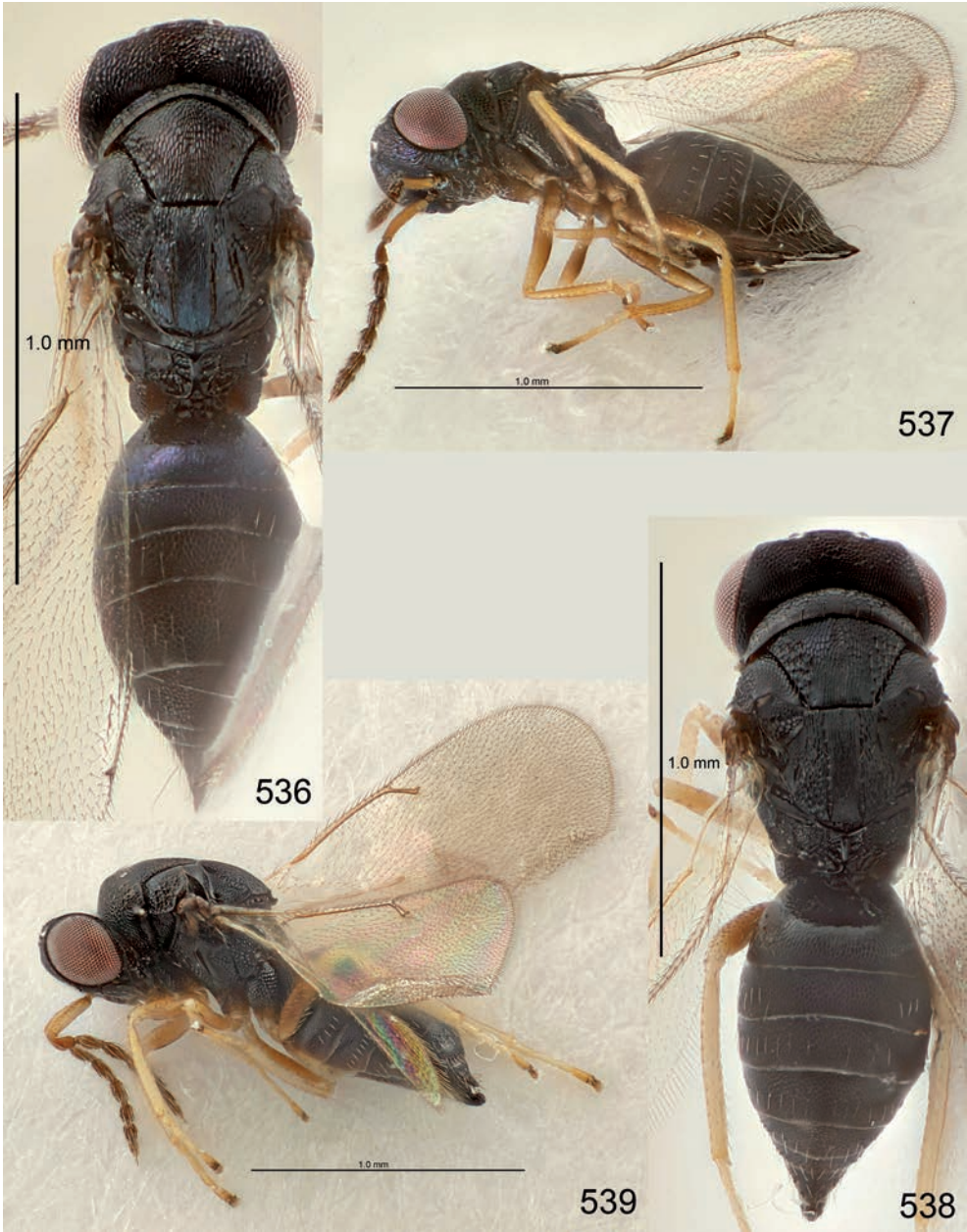
Figs 524–527. *Galeopsomyia myrsineae*, holotype ♀ – (524) habitus dorsal view; (525) habitus lateral view. *Galeopsomyia nana*, holotype ♀ – (526) habitus dorsal view; (527) habitus lateral view.



Figs 528–531. *Galeopsomyia navia*, holotype ♀ – (528) habitus dorsal view; (529) habitus lateral view. *Galeopsomyia neblina*, holotype ♀ – (530) habitus dorsal view; (531) habitus lateral view.



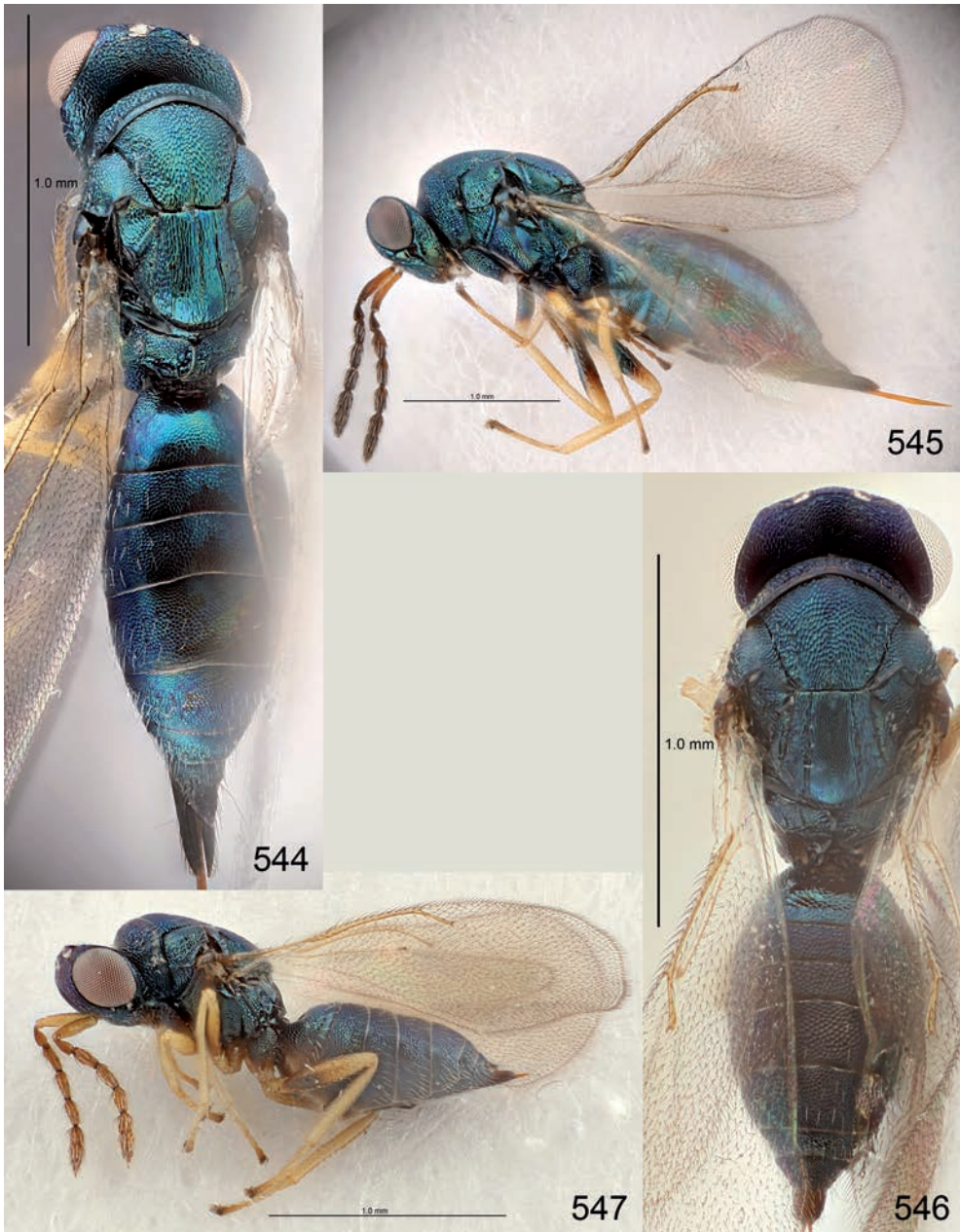
Figs 532–535. *Galeopsomyia nebulosa*, holotype ♀ – (532) habitus dorsal view; (533) habitus lateral view. *Galeopsomyia neotropicalis*, holotype ♀ – (534) habitus dorsal view; (535) habitus lateral view.



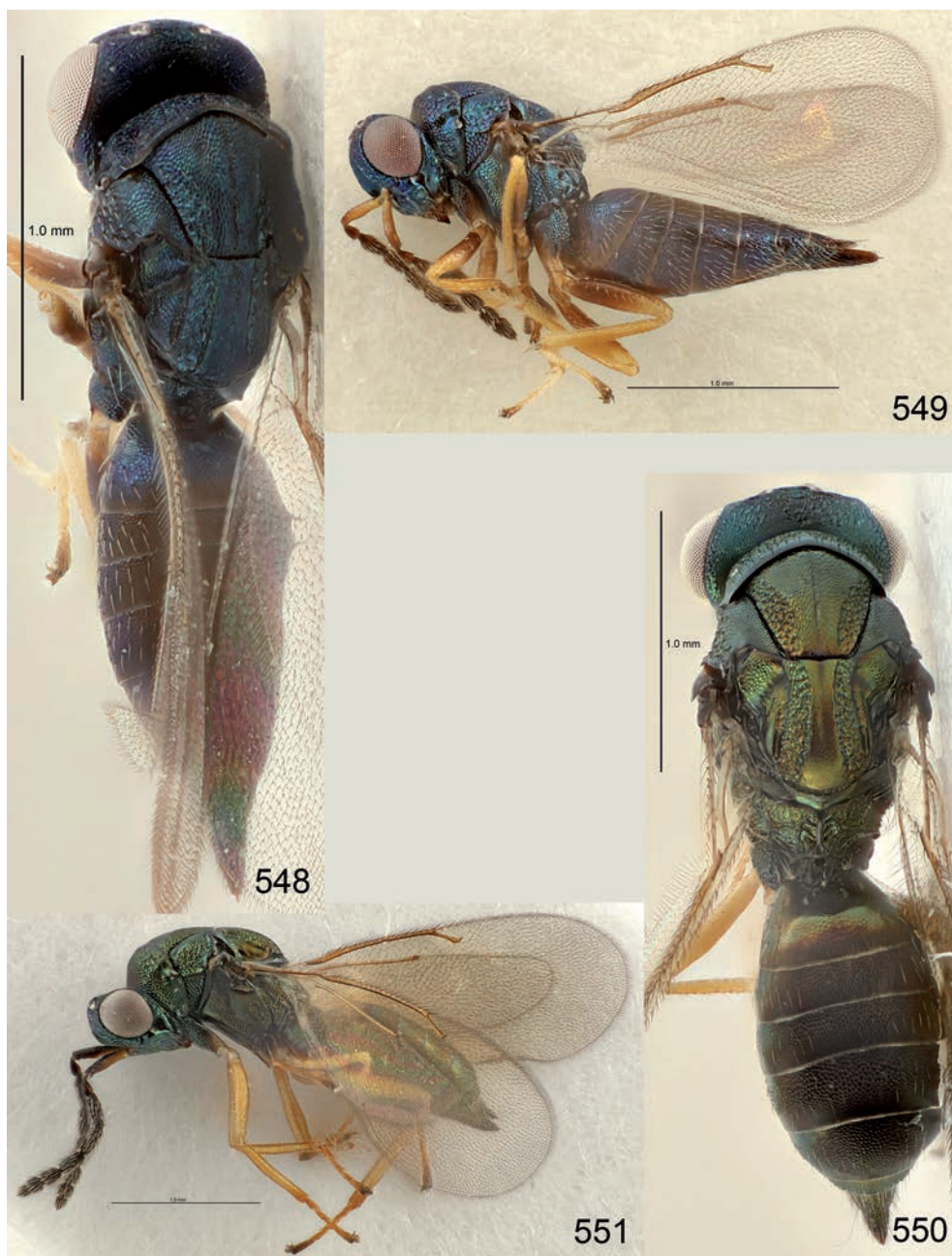
Figs 536–539. *Galeopsomyia nicoyae*, holotype ♀ – (536) habitus dorsal view; (537) habitus lateral view. *Galeopsomyia nigricans*, holotype ♀ – (538) habitus dorsal view; (539) habitus lateral view.



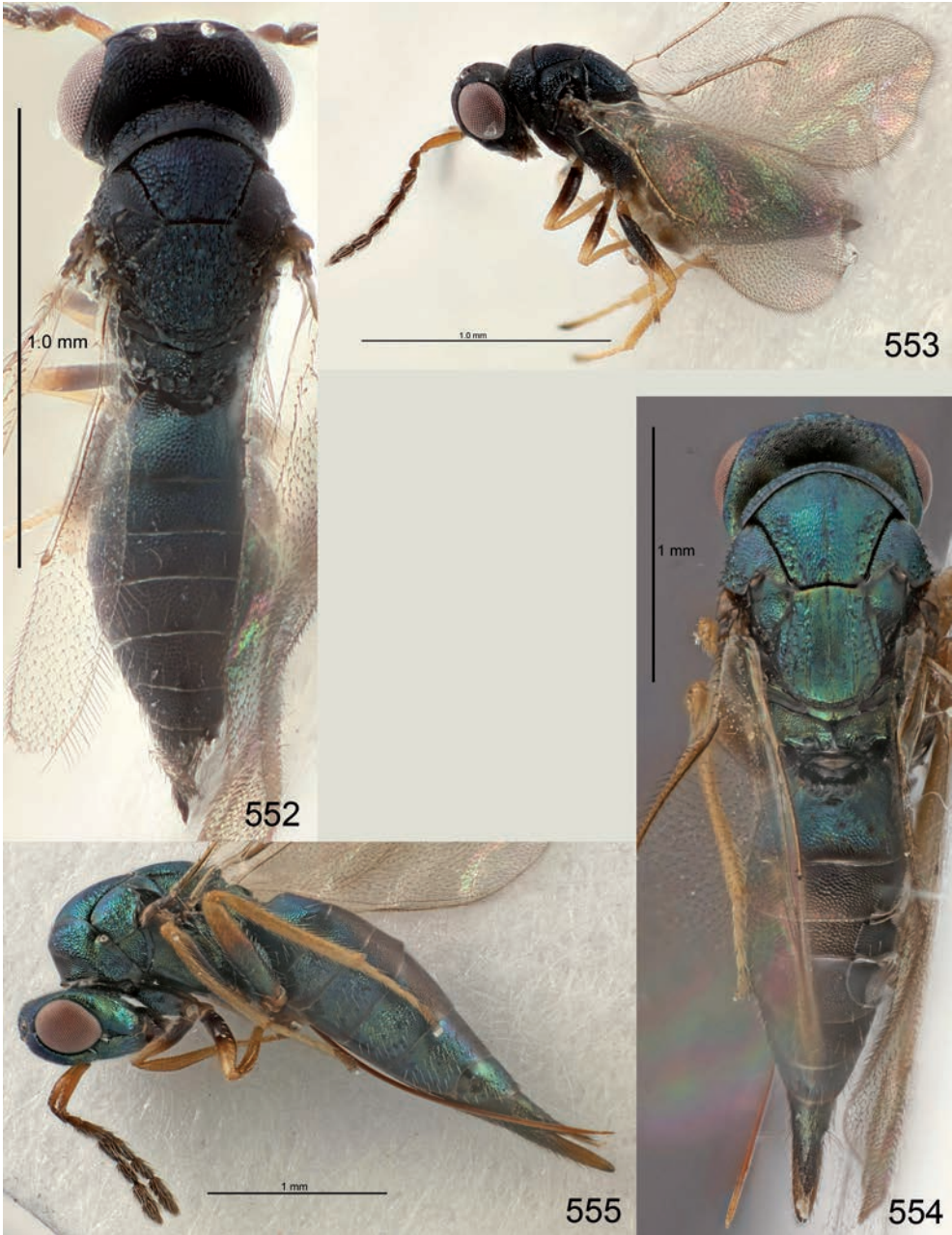
Figs 540–543. *Galeopsomyia nishidai*, holotype ♀ – (540) habitus dorsal view; (541) habitus lateral view. *Galeopsomyia nitida*, holotype ♀ – (542) habitus dorsal view; (543) habitus lateral view.



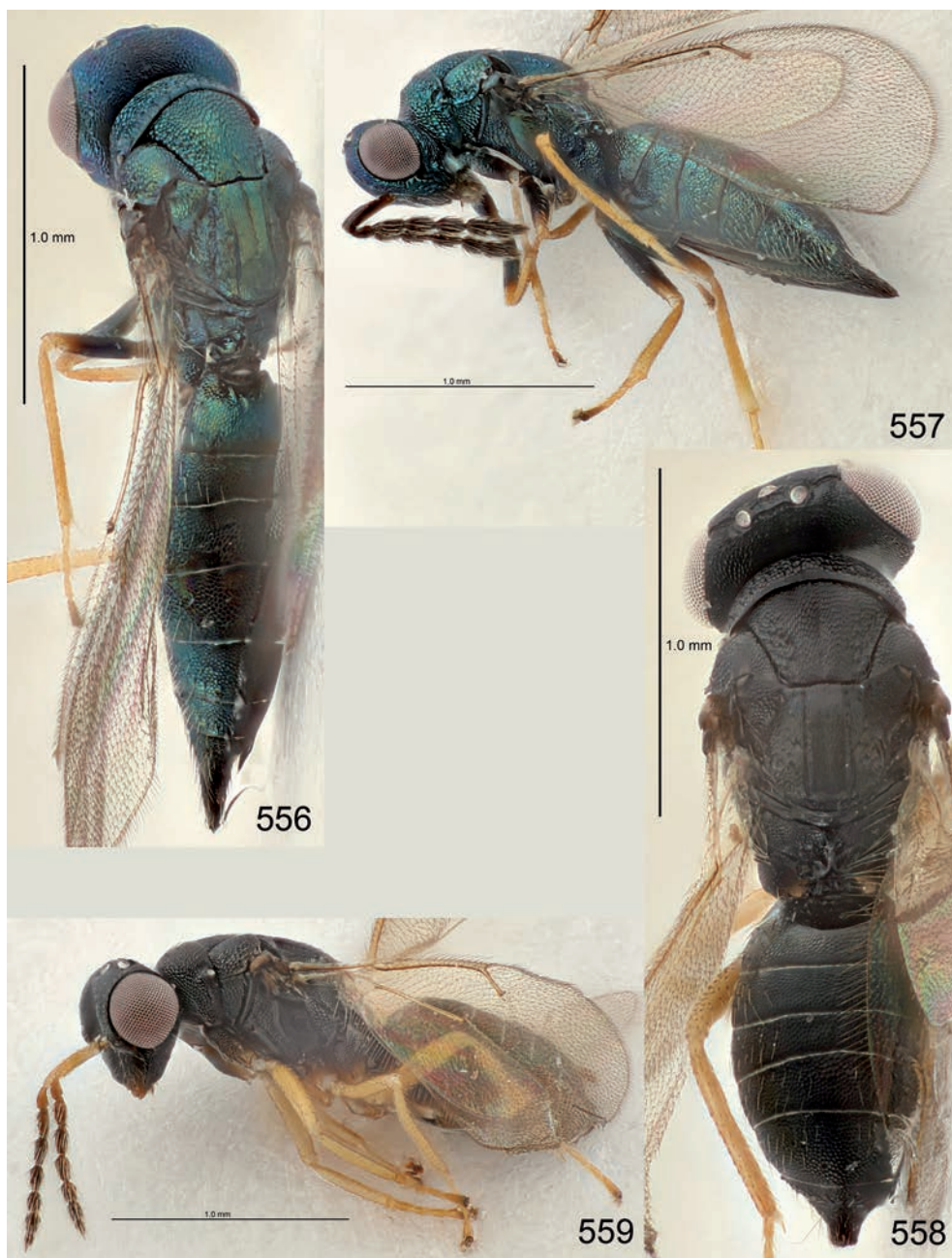
Figs 544–547. *Galeopsomyia noblitis*, holotype ♀ – (544) habitus dorsal view; (545) habitus lateral view. *Galeopsomyia oasis*, holotype ♀ – (546) habitus dorsal view; (547) habitus lateral view.



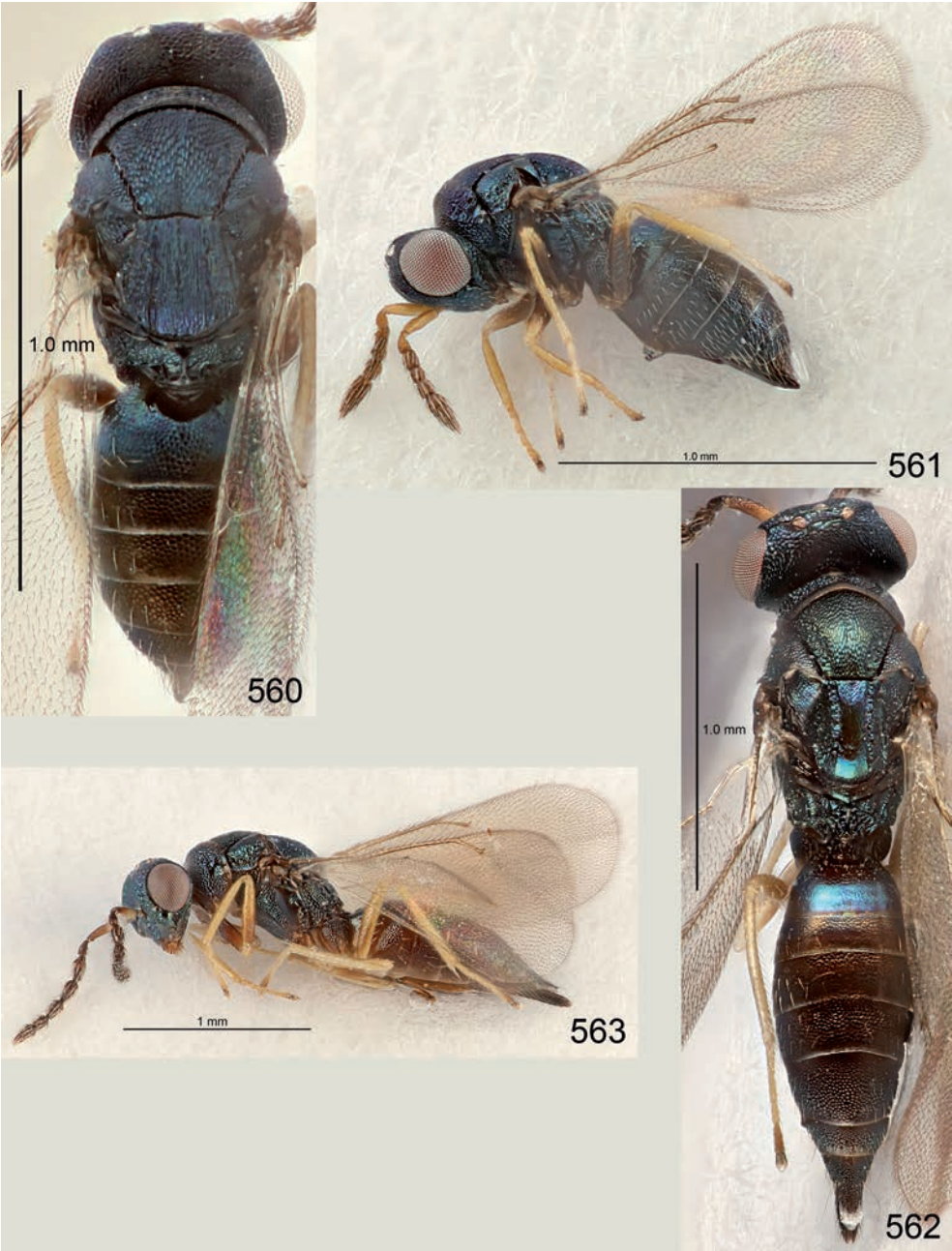
Figs 548–551. *Galeopsomyia ocoteae*, holotype ♀ – (548) habitus dorsal view; (549) habitus lateral view. *Galeopsomyia octava*, holotype ♀ – (550) habitus dorsal view; (551) habitus lateral view.



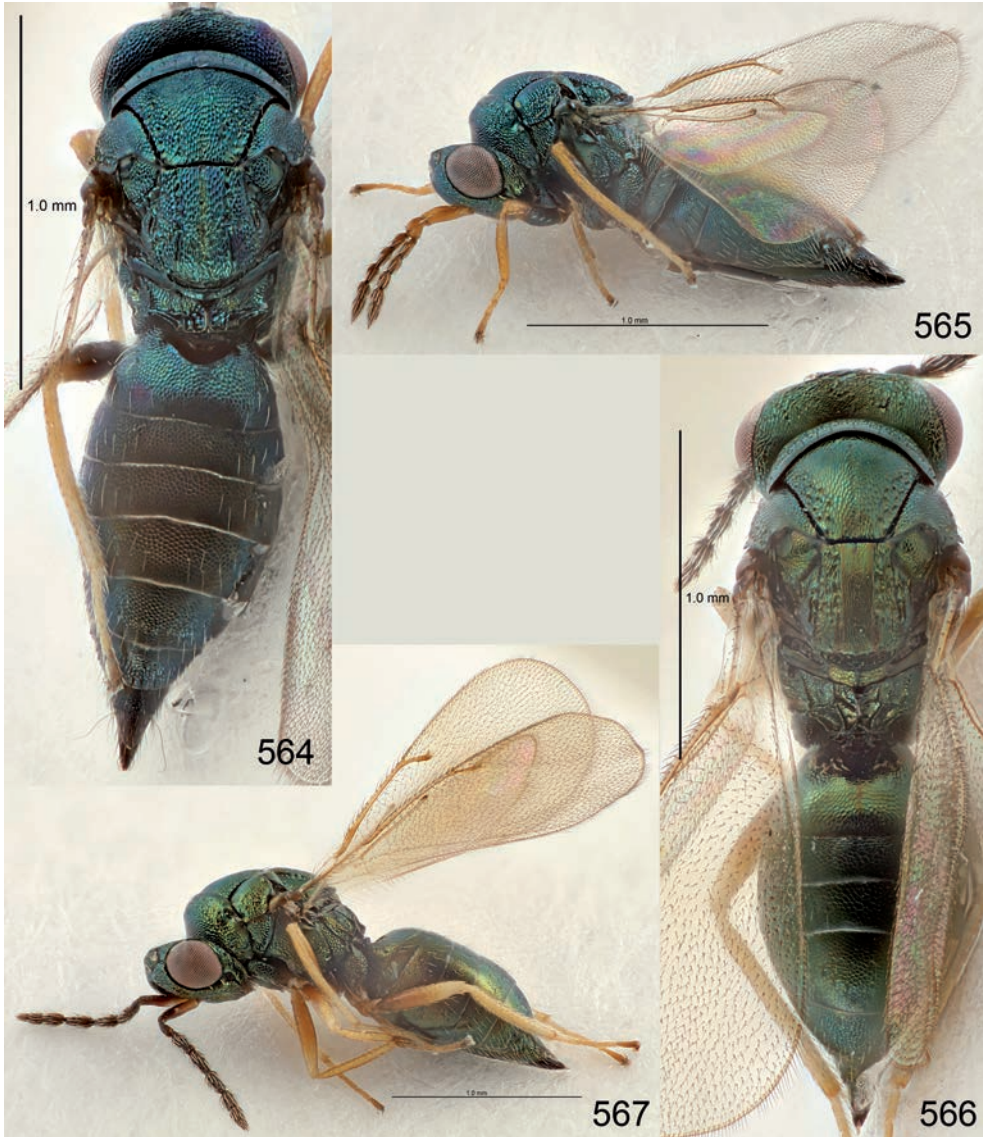
Figs 552–555. *Galeopsomyia opala*, holotype ♀ – (552) habitus dorsal view; (553) habitus lateral view. *Galeopsomyia opima*, holotype ♀ – (554) habitus dorsal view; (555) habitus lateral view.



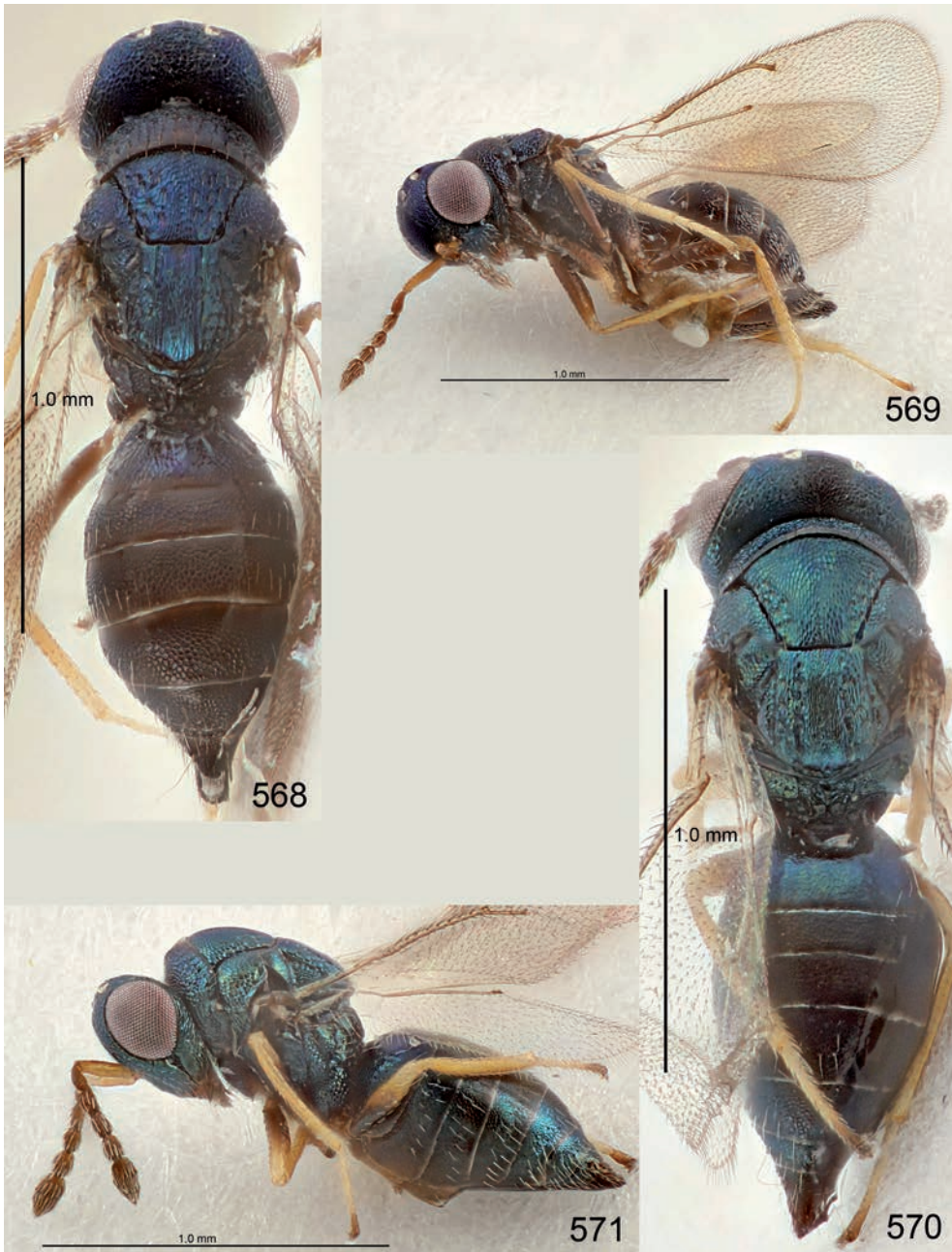
Figs 556–559. *Galeopsomyia orbitis*, holotype ♀ – (556) habitus dorsal view; (557) habitus lateral view. *Galeopsomyia orillia*, holotype ♀ – (558) habitus dorsal view; (559) habitus lateral view.



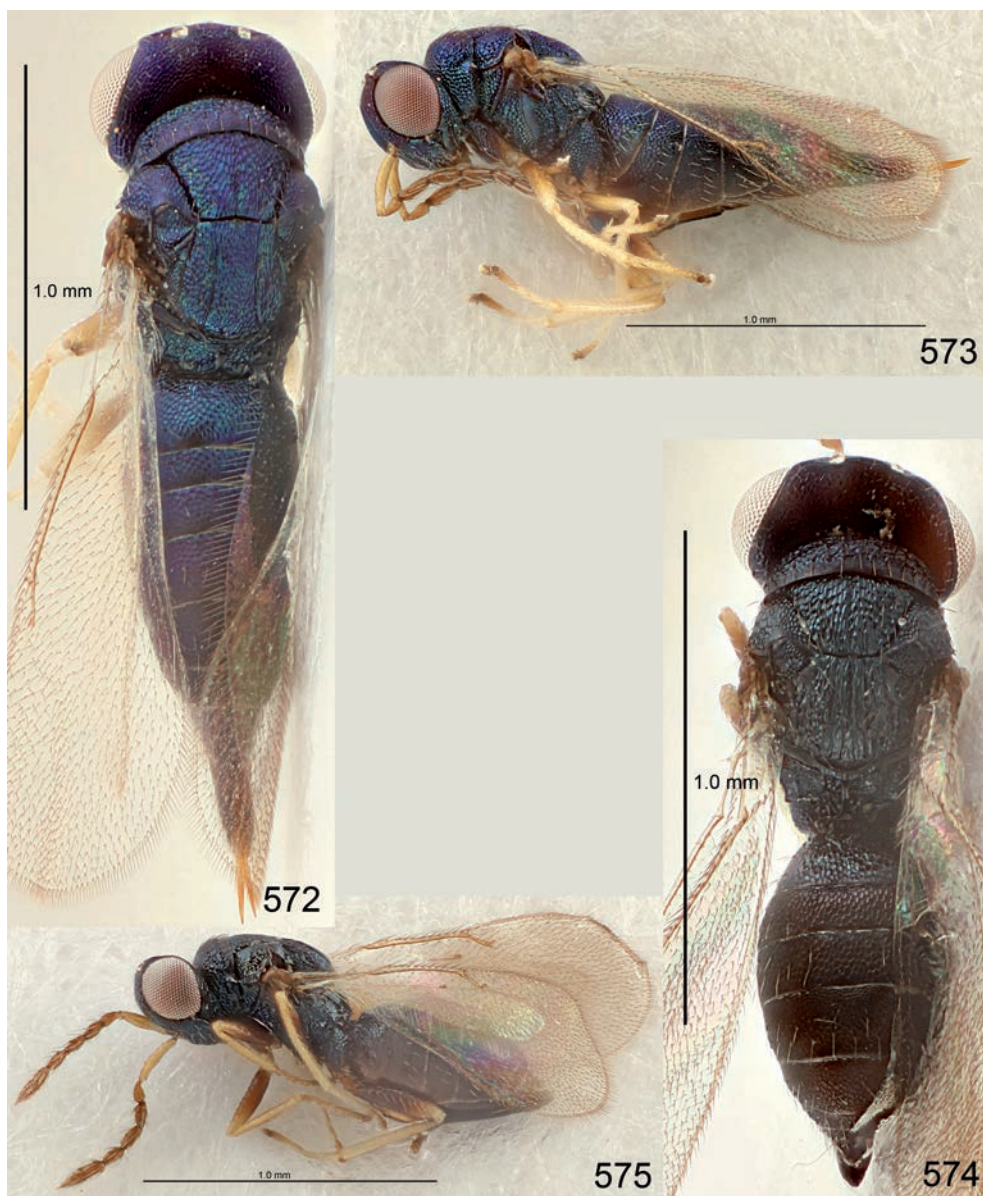
Figs 560–563. *Galeopsomyia osaensis*, holotype ♀ – (560) habitus dorsal view; (561) habitus lateral view. *Galeopsomyia osmia*, holotype ♀ – (562) habitus dorsal view; (563) habitus lateral view.



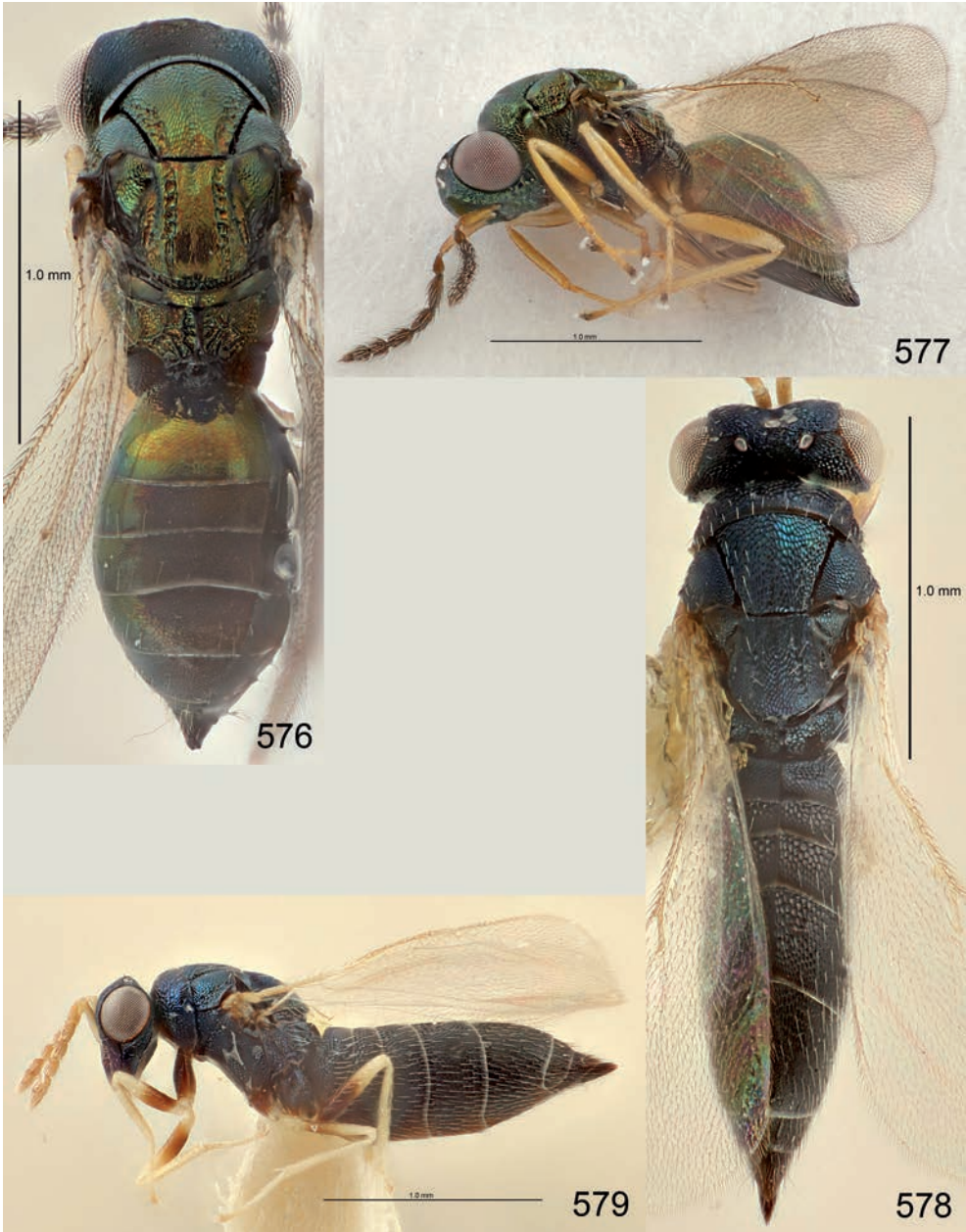
Figs 564–567. *Galeopsomyia pagana*, holotype ♀ – (564) habitus dorsal view; (565) habitus lateral view. *Galeopsomyia palenta*, holotype ♀ – (566) habitus dorsal view; (567) habitus lateral view.



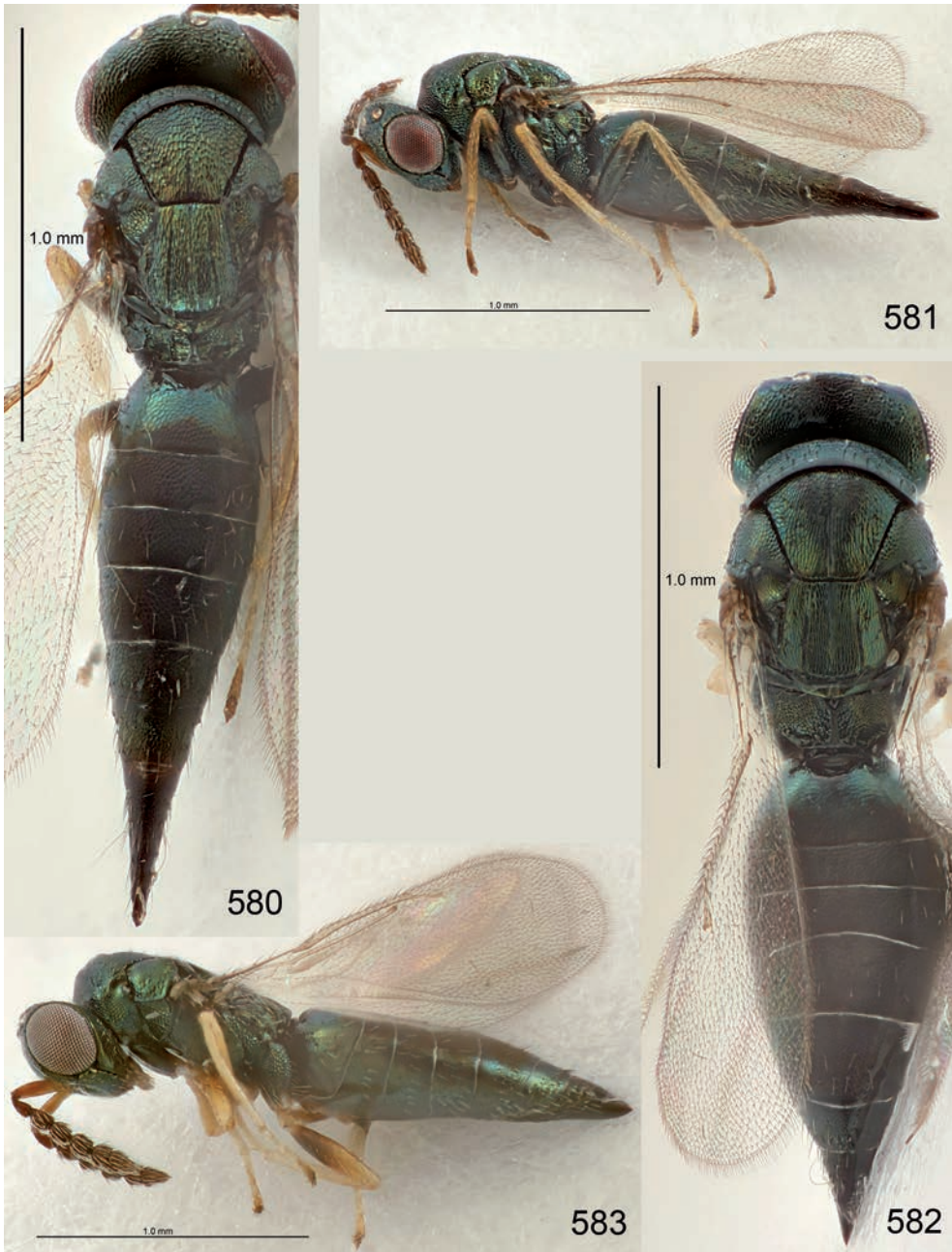
Figs 568–571. *Galeopsomyia palotis*, holotype ♀ – (568) habitus dorsal view; (569) habitus lateral view. *Galeopsomyia pardis*, holotype ♀ – (570) habitus dorsal view; (571) habitus lateral view.



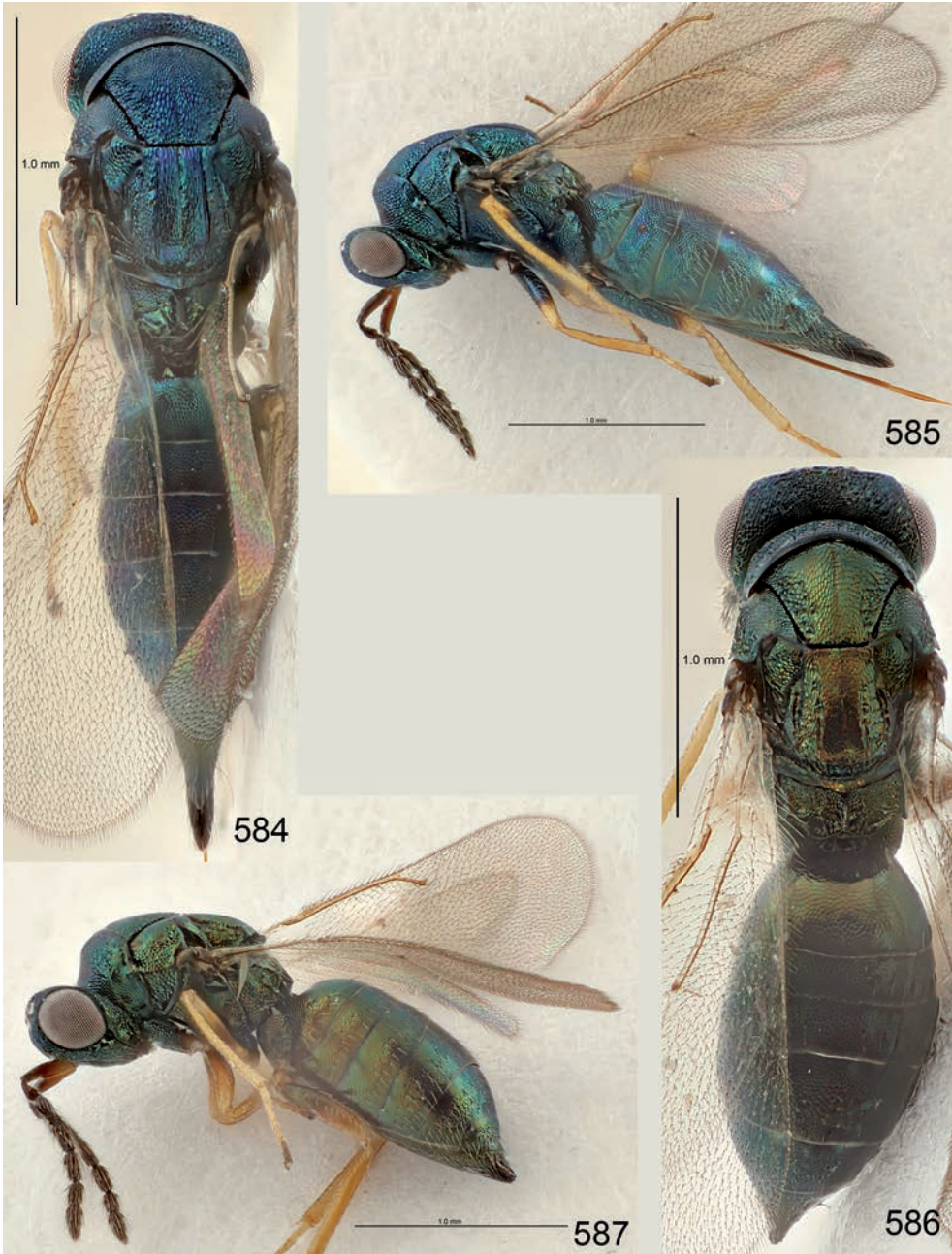
Figs 572–575. *Galeopsomyia patina*, holotype ♀ – (572) habitus dorsal view; (573) habitus lateral view. *Galeopsomyia pava*, holotype ♀ – (574) habitus dorsal view; (575) habitus lateral view.



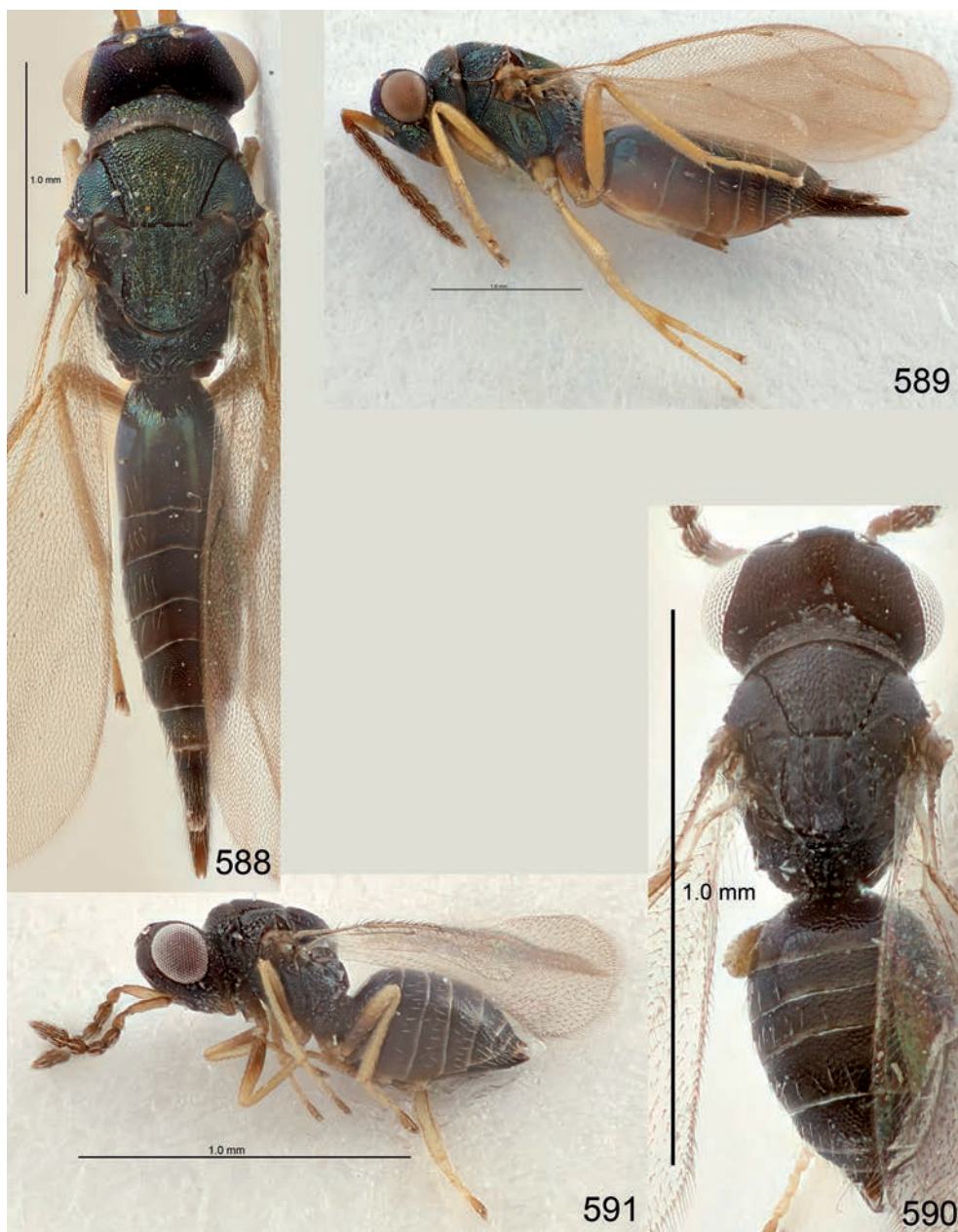
Figs 576–579. *Galeopsomyia pensada*, holotype ♀ – (576) habitus dorsal view; (577) habitus lateral view. *Galeopsomyia perasphondyliae*, holotype ♀ – (578) habitus dorsal view; (579) habitus lateral view.



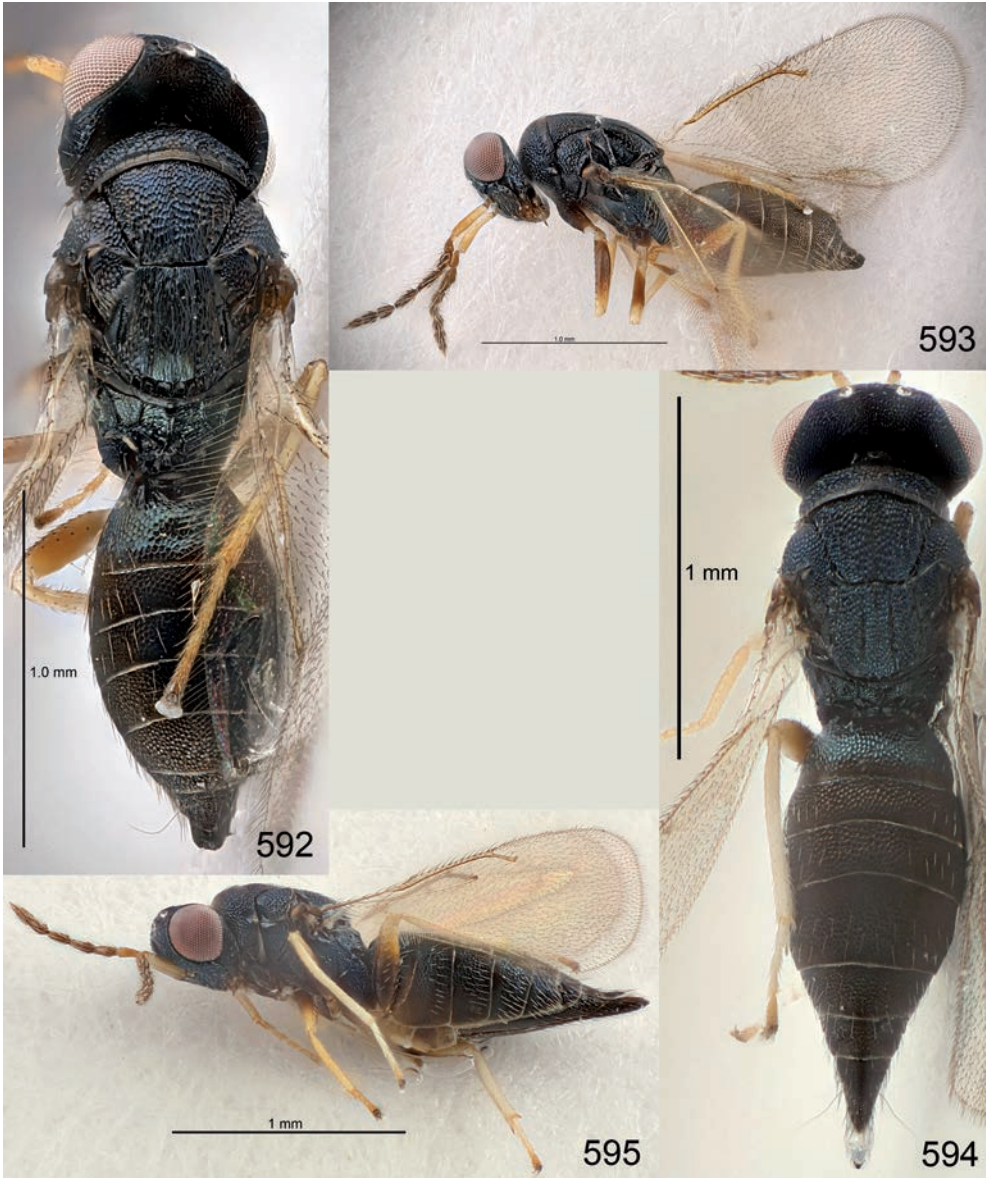
Figs 580–583. *Galeopsomyia perla*, holotype ♀ – (580) habitus dorsal view; (581) habitus lateral view. *Galeopsomyia philodendrae*, holotype ♀ – (582) habitus dorsal view; (583) habitus lateral view.



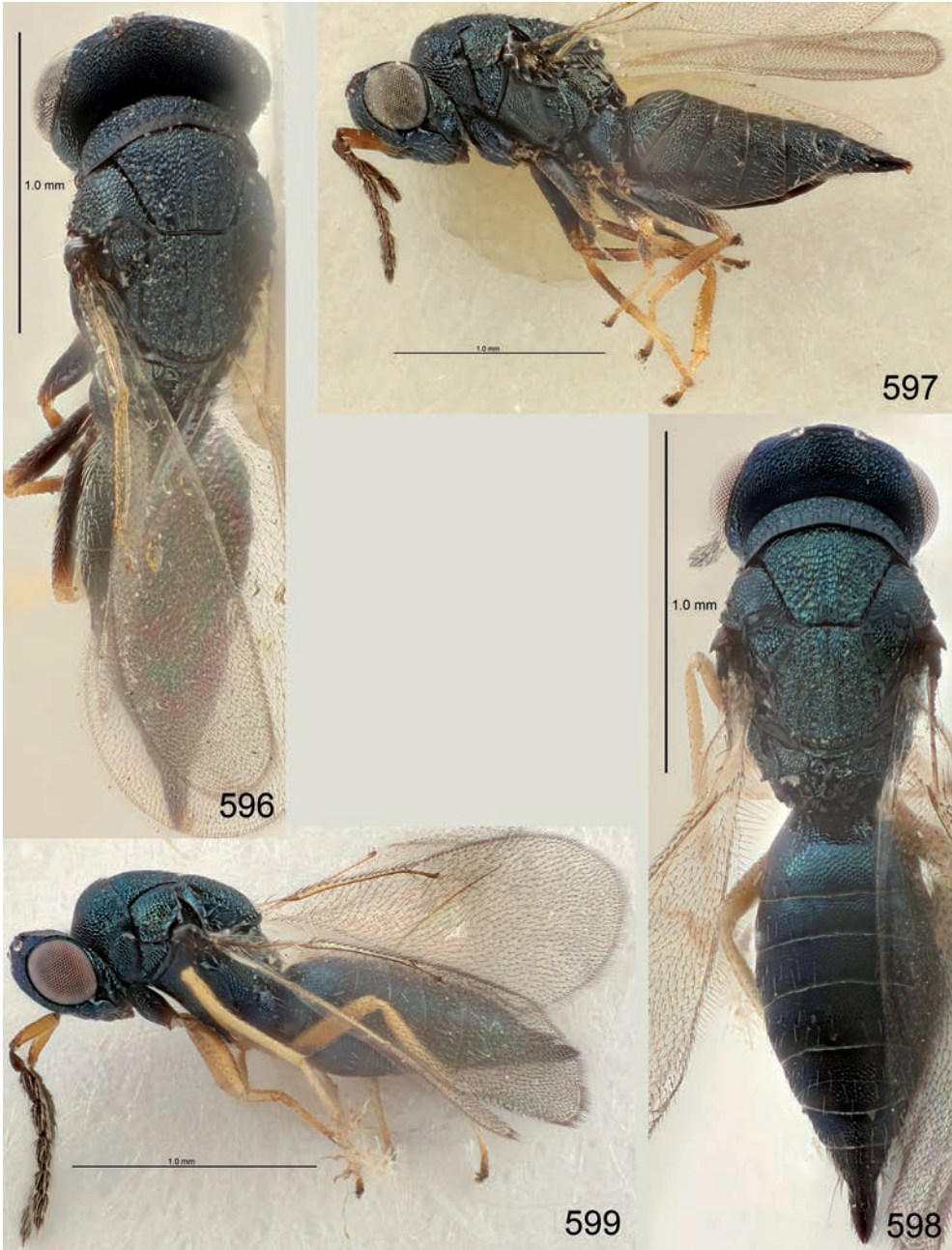
Figs 584–587. *Galeopsomyia picuda*, holotype ♀ – (584) habitus dorsal view; (585) habitus lateral view. *Galeopsomyia pilonensis*, holotype ♀ – (586) habitus dorsal view; (587) habitus lateral view.



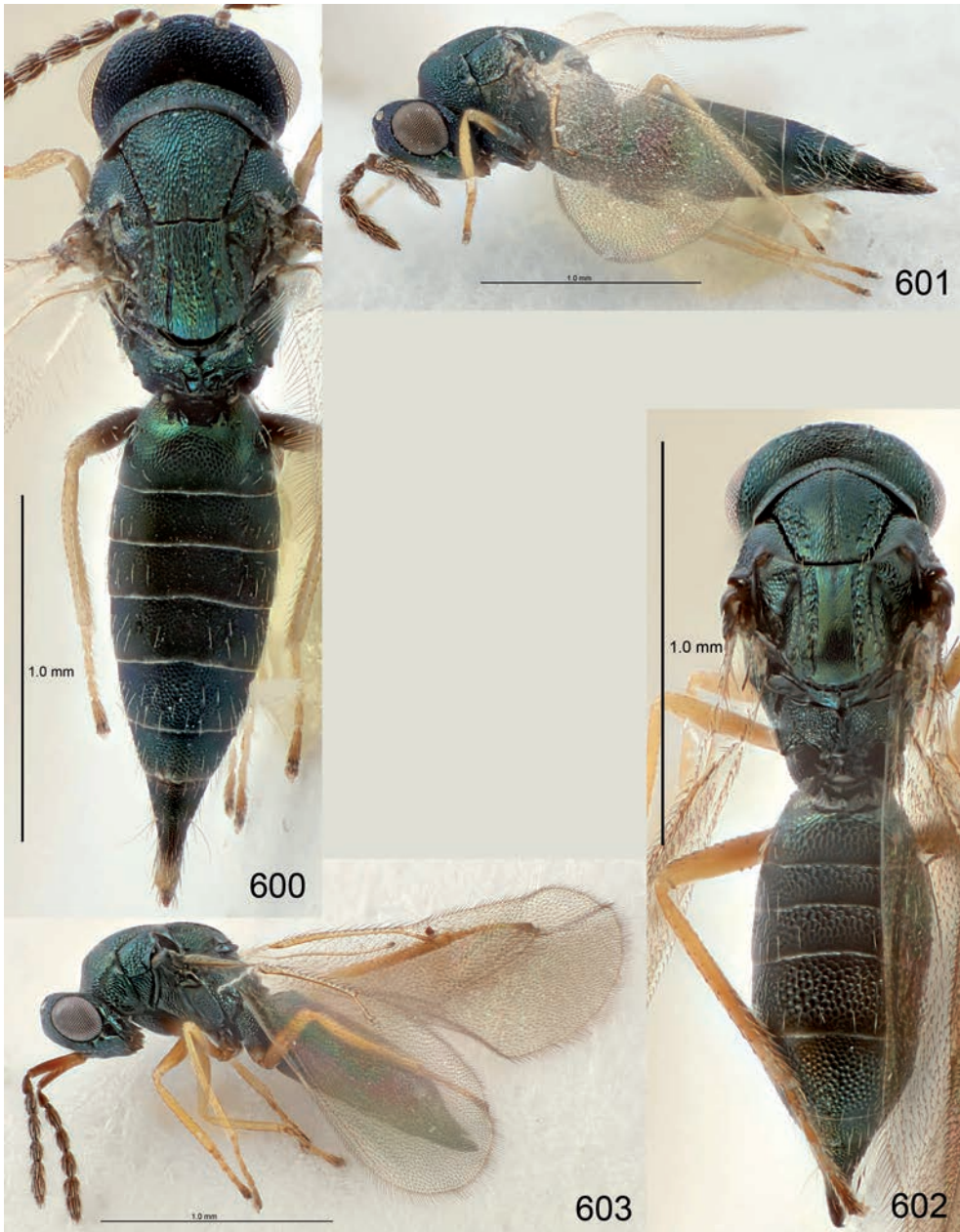
Figs 588–591. *Galeopsomyia piperae*, holotype ♀ – (588) habitus dorsal view; (589) habitus lateral view. *Galeopsomyia preta*, holotype ♀ – (590) habitus dorsal view; (591) habitus lateral view.



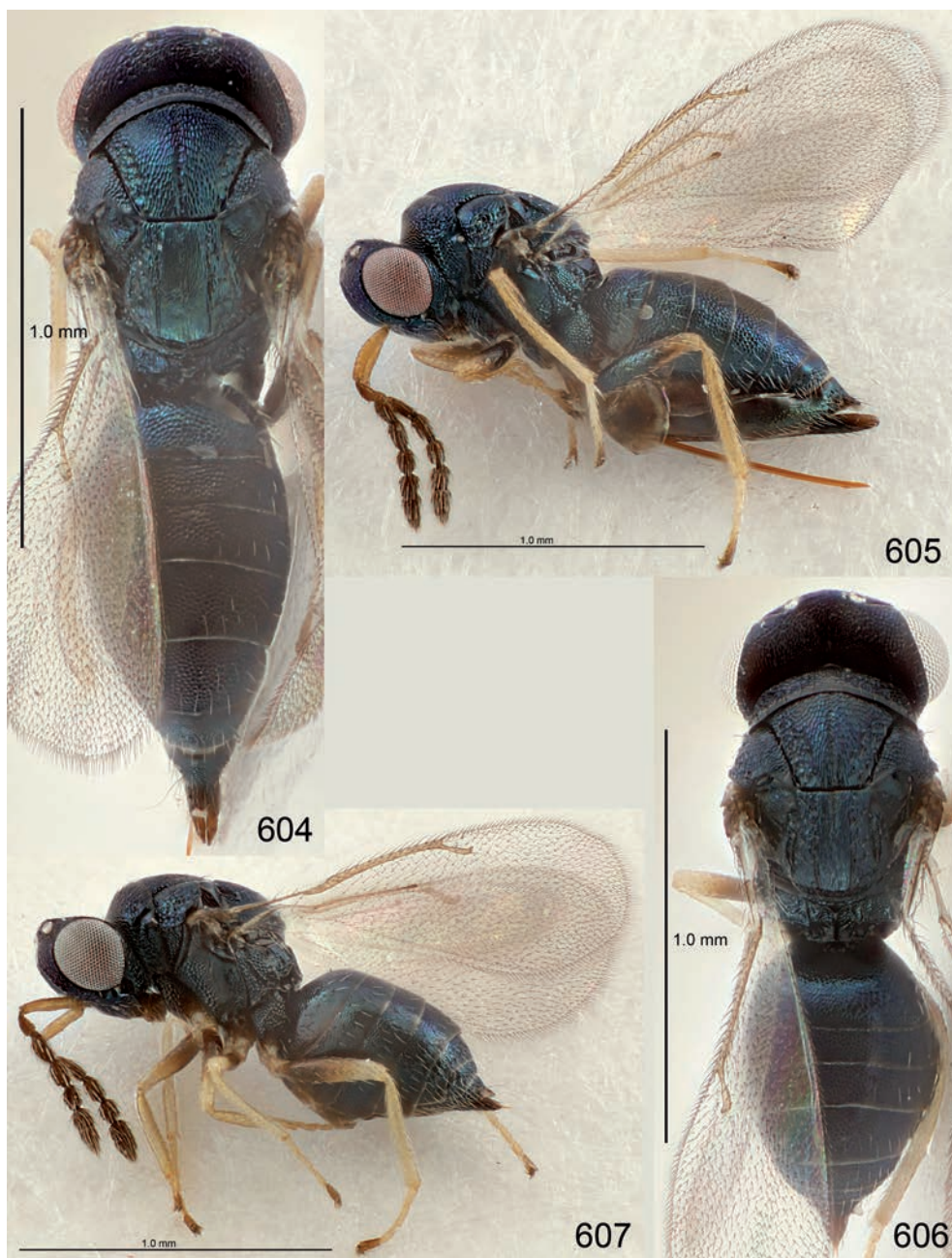
Figs 592–595. *Galeopsomyia pyrillia*, holotype ♀ – (592) habitus dorsal view; (593) habitus lateral view. *Galeopsomyia reticulata*, holotype ♀ – (594) habitus dorsal view; (595) habitus lateral view.



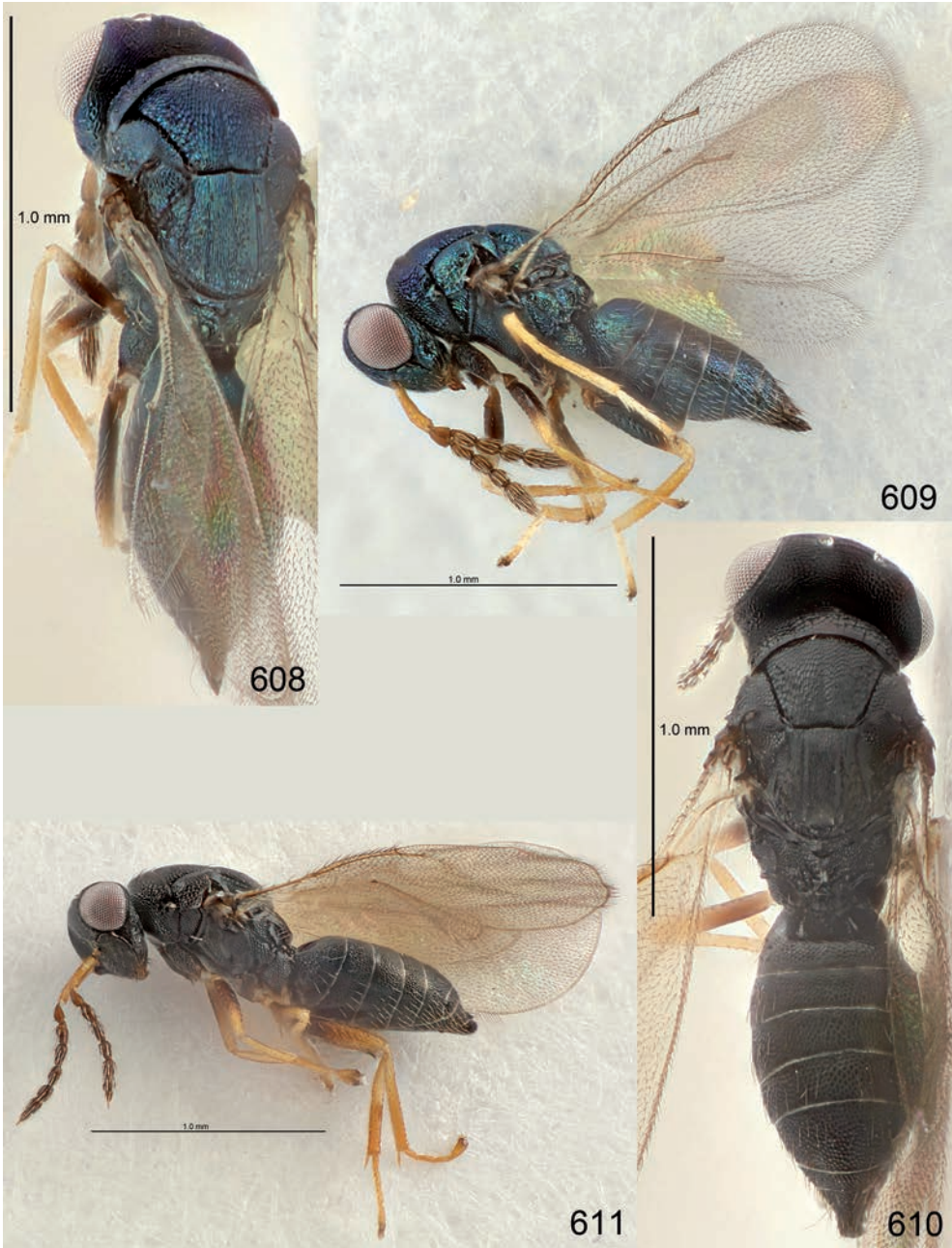
Figs 596–599. *Galeopsomyia roupalae*, holotype ♀ – (596) habitus dorsal view; (597) habitus lateral view. *Galeopsomyia rugosa*, holotype ♀ – (598) habitus dorsal view; (599) habitus lateral view.



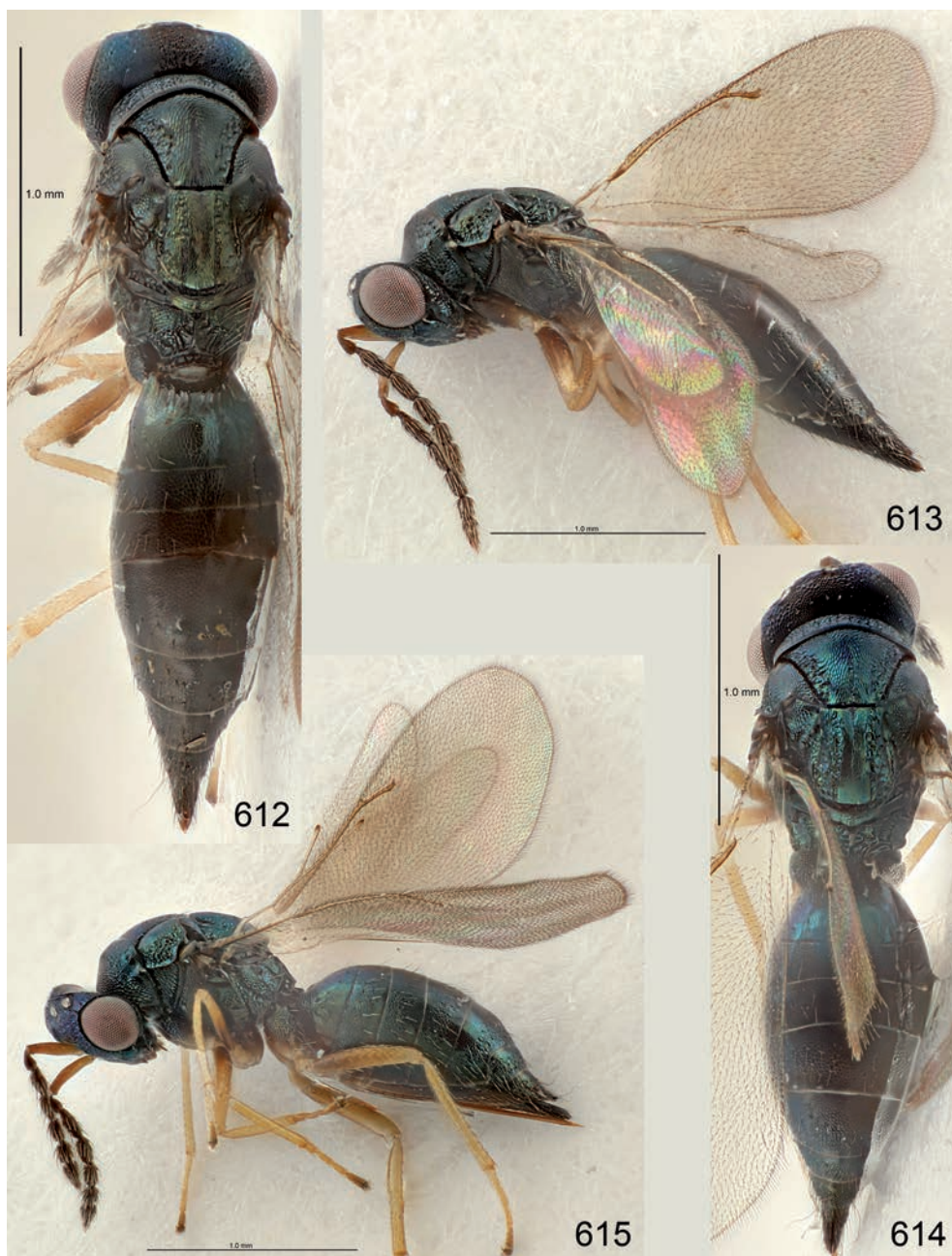
Figs 600–603. *Galeopsomyia scarpia*, holotype ♀ – (600) habitus dorsal view; (601) habitus lateral view. *Galeopsomyia schefflerae*, holotype ♀ – (602) habitus dorsal view; (603) habitus lateral view.



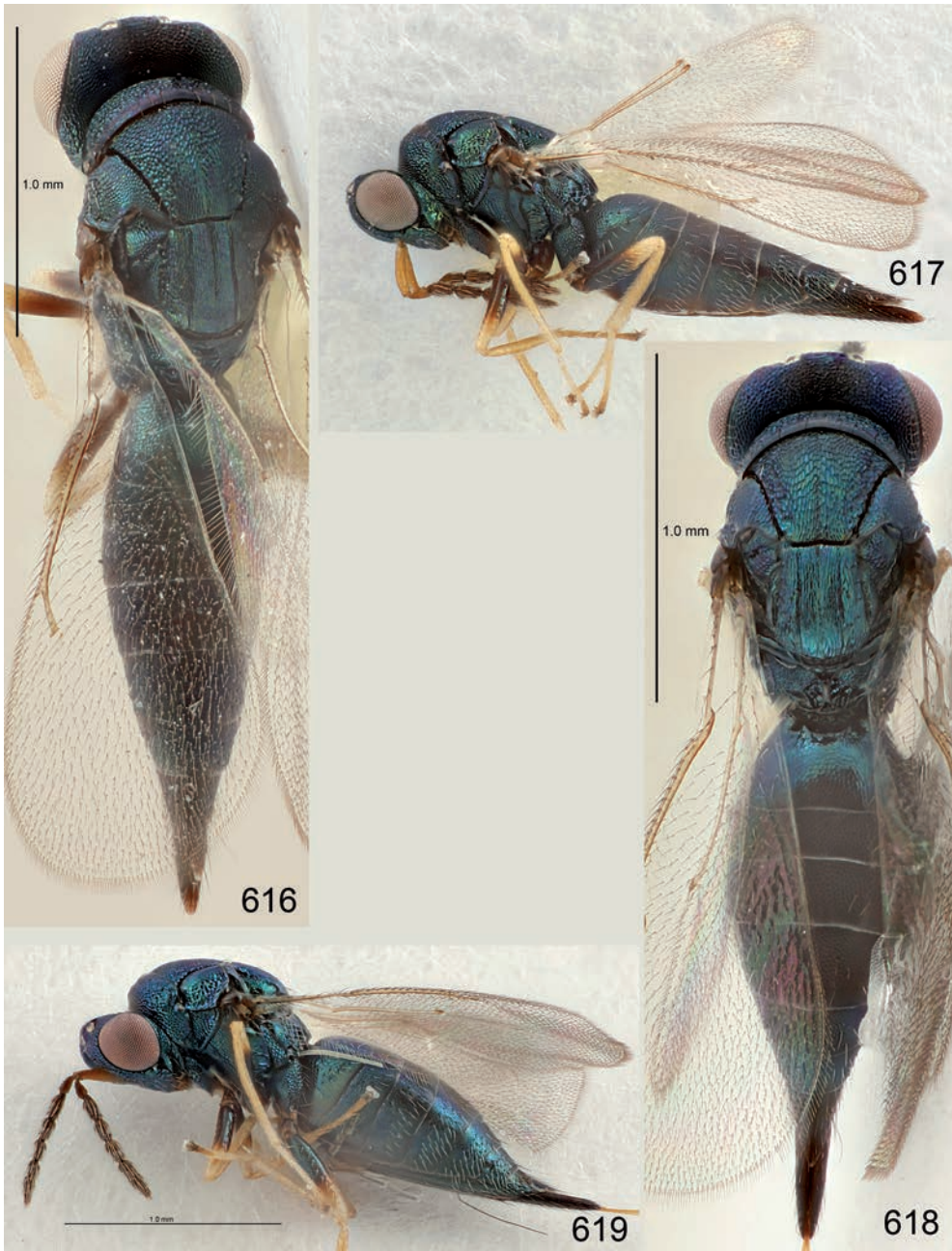
Figs 604–607. *Galeopsomyia teronadis*, holotype ♀ – (604) habitus dorsal view; (605) habitus lateral view. *Galeopsomyia tigrensis*, holotype ♀ – (606) habitus dorsal view; (607) habitus lateral view.



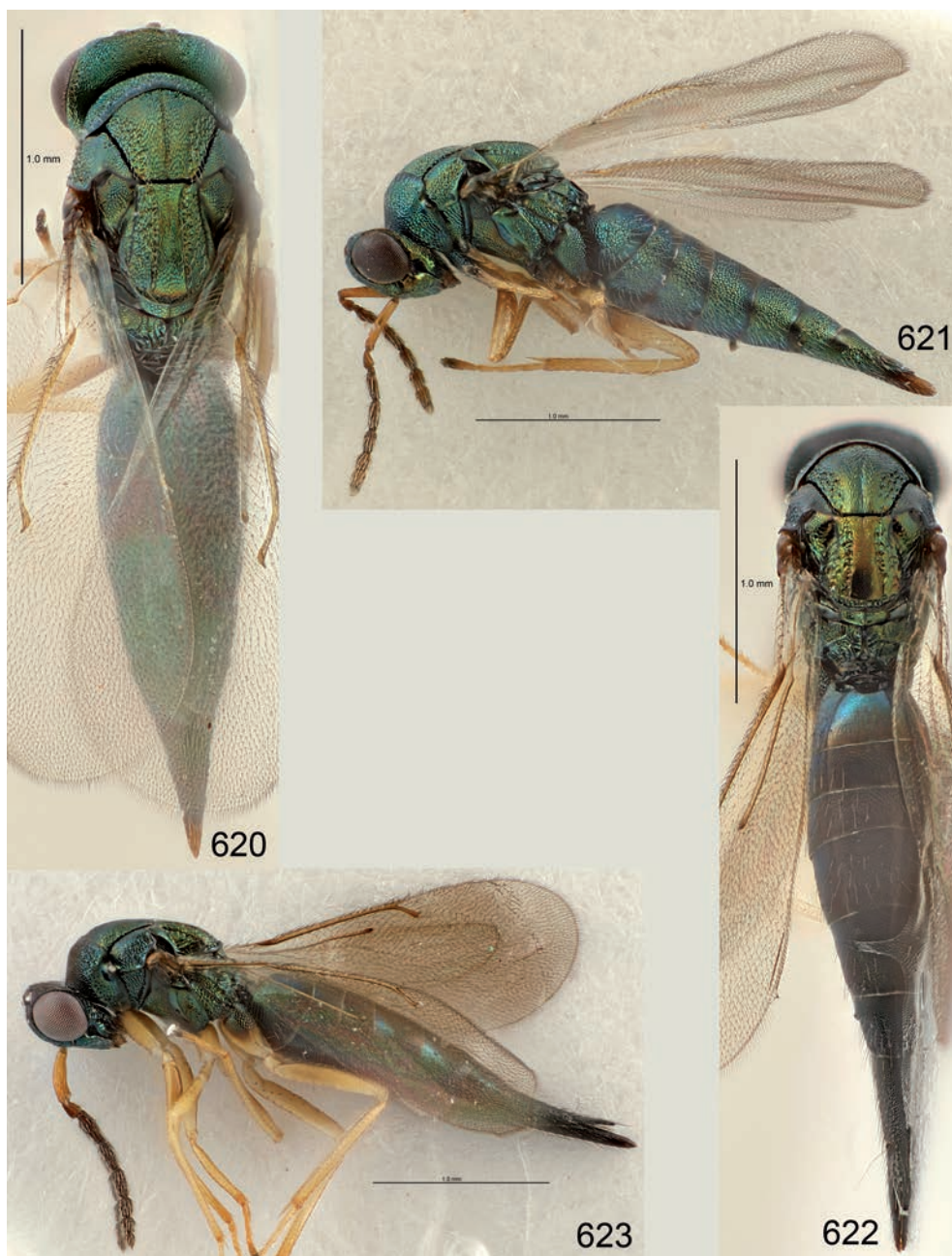
Figs 608–611. *Galeopsomyia triozae*, holotype ♀ – (608) habitus dorsal view; (609) habitus lateral view. *Galeopsomyia truncata*, holotype ♀ – (610) habitus dorsal view; (611) habitus lateral view.



Figs 612–615. *Galeopsomyia umanai*, holotype ♀ – (612) habitus dorsal view; (613) habitus lateral view. *Galeopsomyia veluda*, holotype ♀ – (614) habitus dorsal view; (615) habitus lateral view.



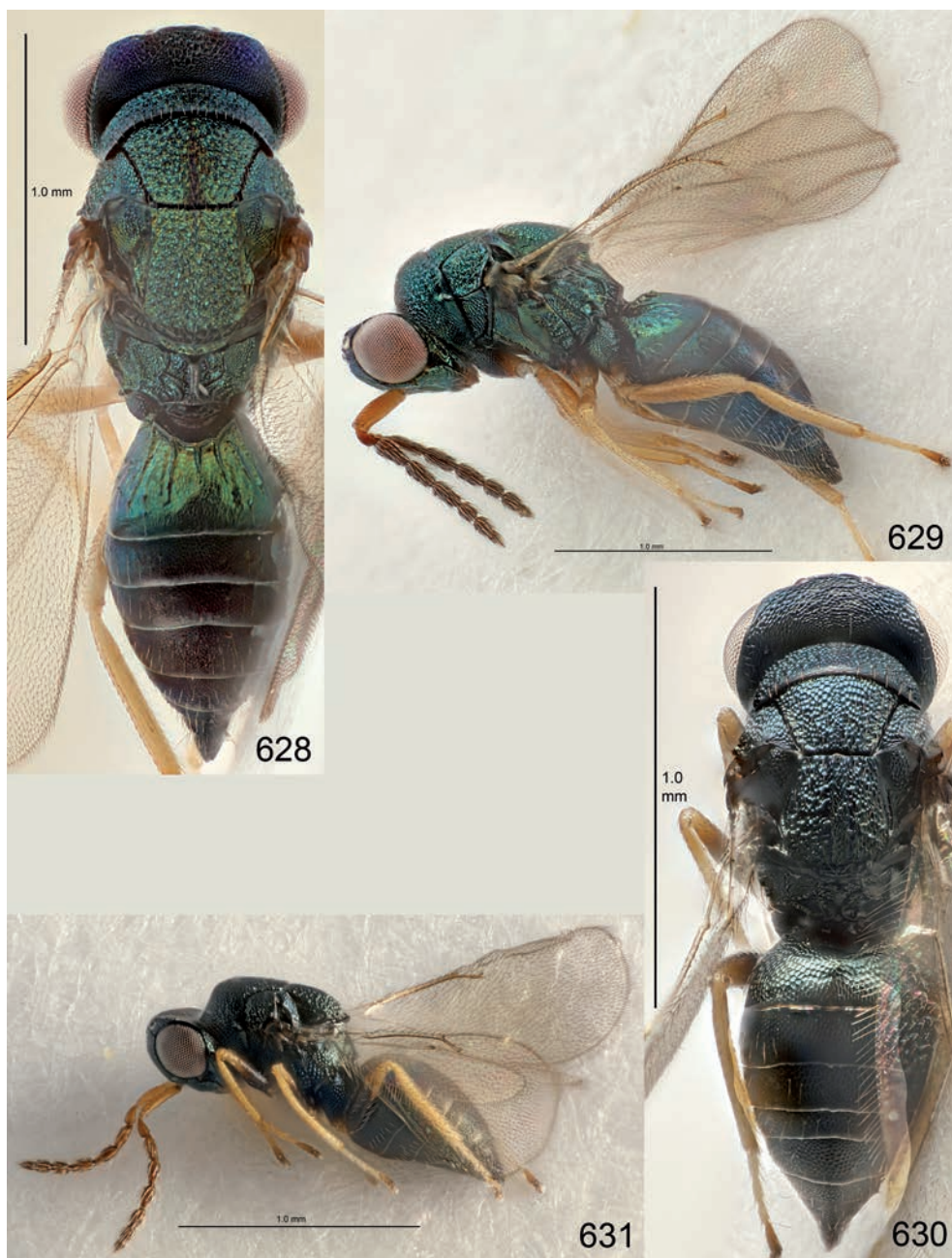
Figs 616–619. *Galeopsomyia ventrosa*, holotype ♀ – (616) habitus dorsal view; (617) habitus lateral view. *Galeopsomyia verbesinae*, holotype ♀ – (618) habitus dorsal view; (619) habitus lateral view.



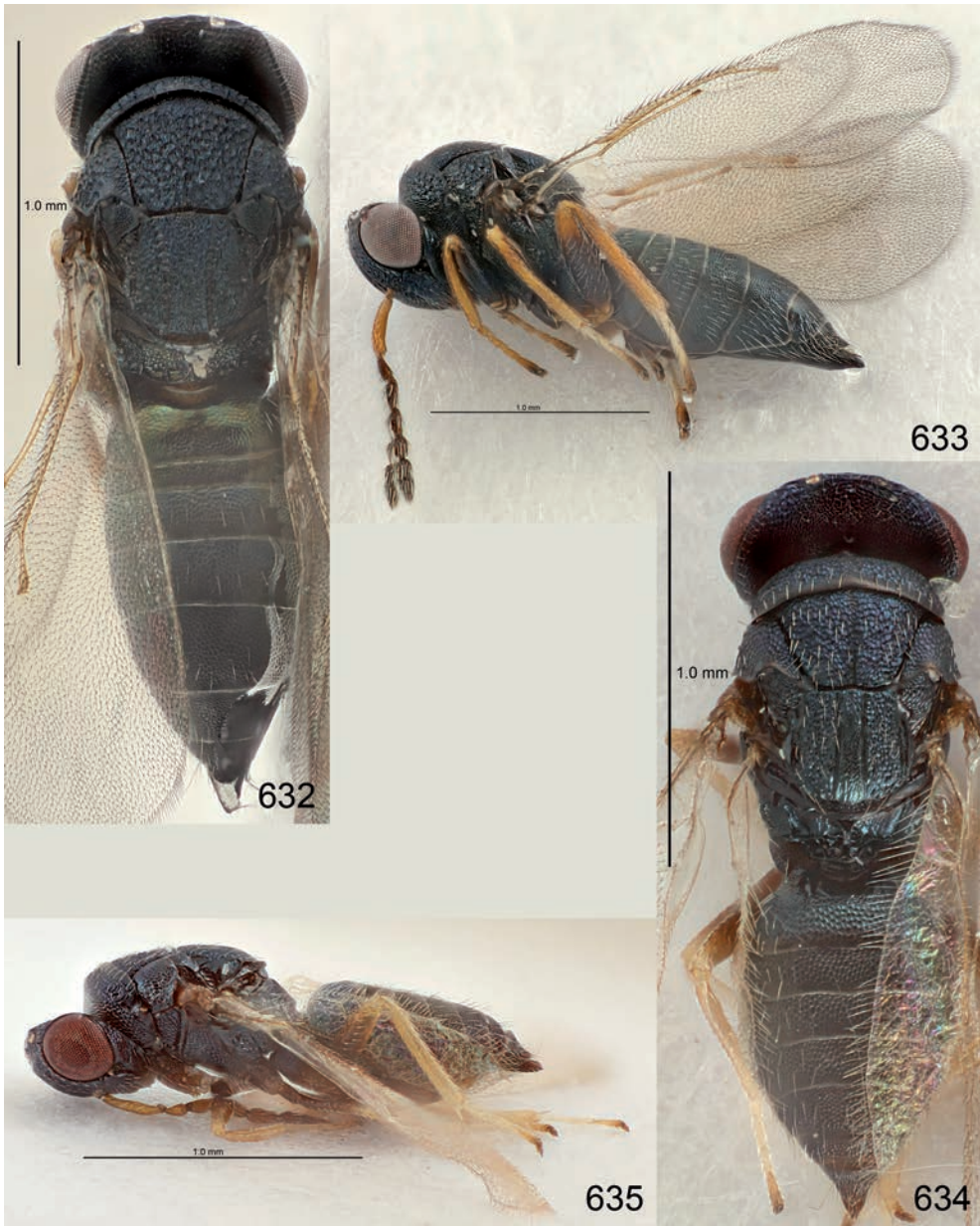
Figs 620–623. *Galeopsomyia weinmanniae*, holotype ♀ – (620) habitus dorsal view; (621) habitus lateral view. *Galeopsomyia wilsonae*, holotype ♀ – (622) habitus dorsal view; (623) habitus lateral view.



Figs 624–627. *Galeopsomyia wilsoni*, holotype ♀ – (624) habitus dorsal view; (625) habitus lateral view. *Galeopsomyia zurquiensis*, holotype ♀ – (626) habitus dorsal view; (627) habitus lateral view.



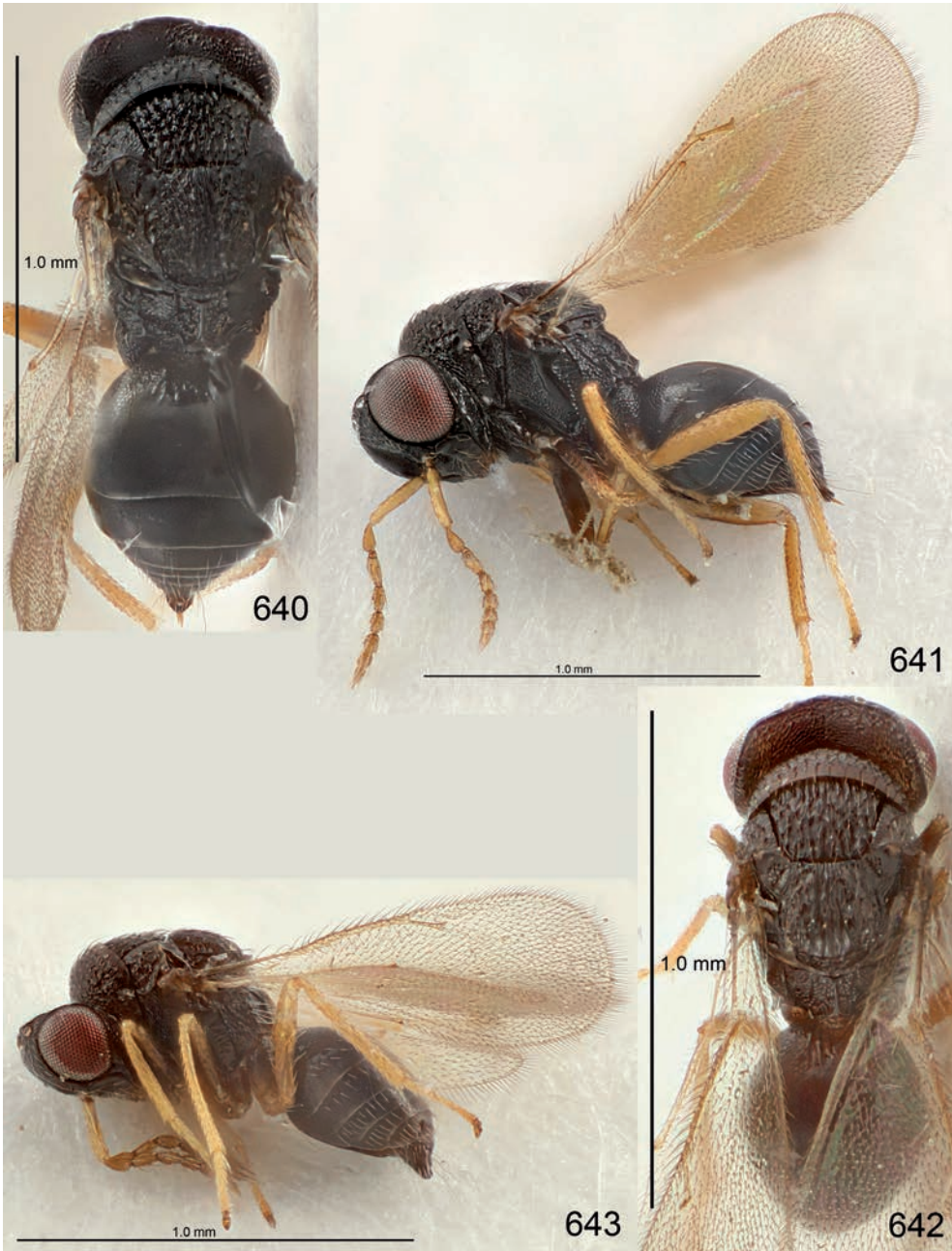
Figs 628–631. *Galeopsomyia capillosa*, holotype ♀ – (628) habitus dorsal view; (629) habitus lateral view. *Galeopsomyia gobis*, holotype ♀ – (630) habitus dorsal view; (631) habitus lateral view.



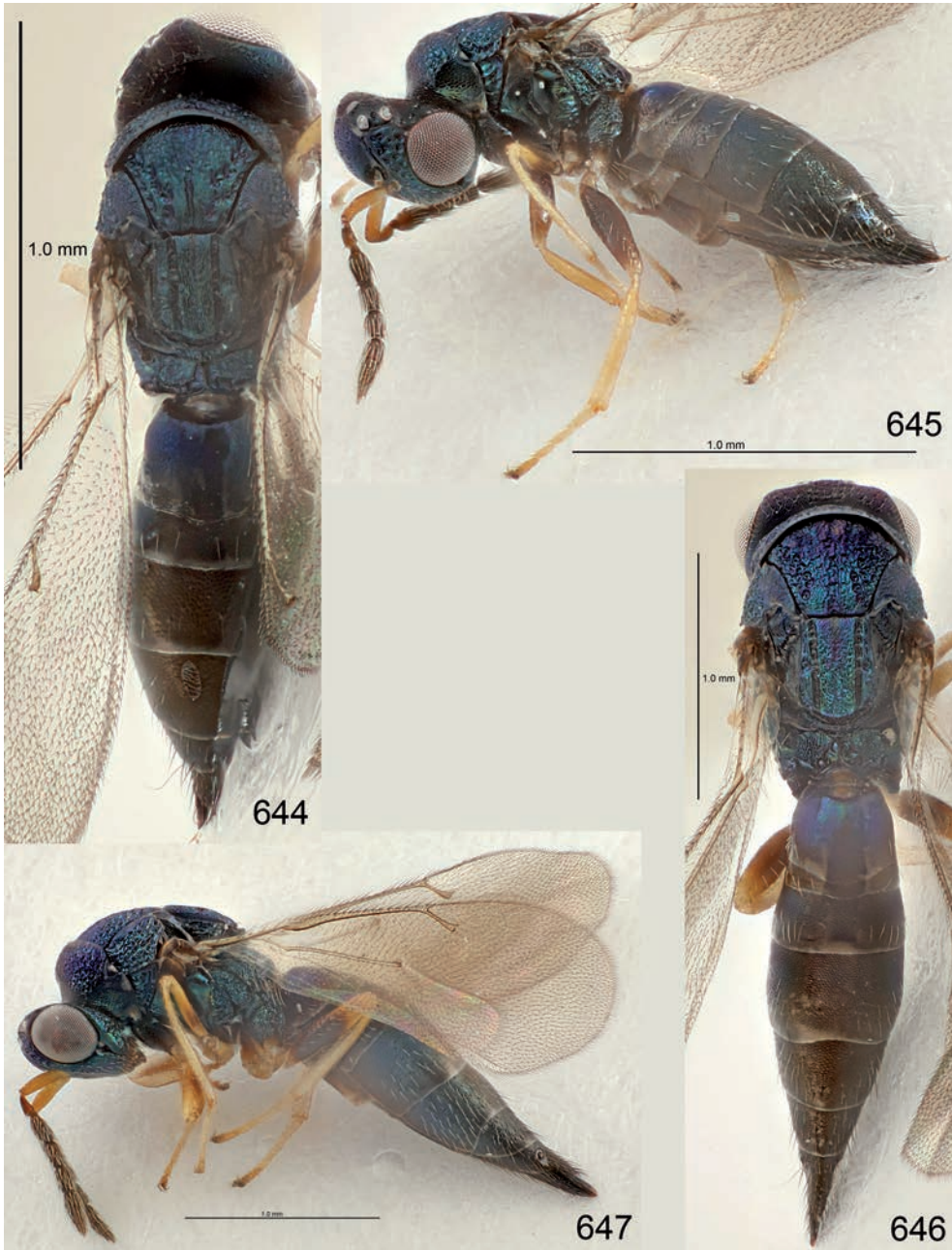
Figs 632–635. *Galeopsomyia hirsuta*, holotype ♀ – (632) habitus dorsal view; (633) habitus lateral view. *Galeopsomyia hirta*, holotype ♀ – (634) habitus dorsal view; (635) habitus lateral view.



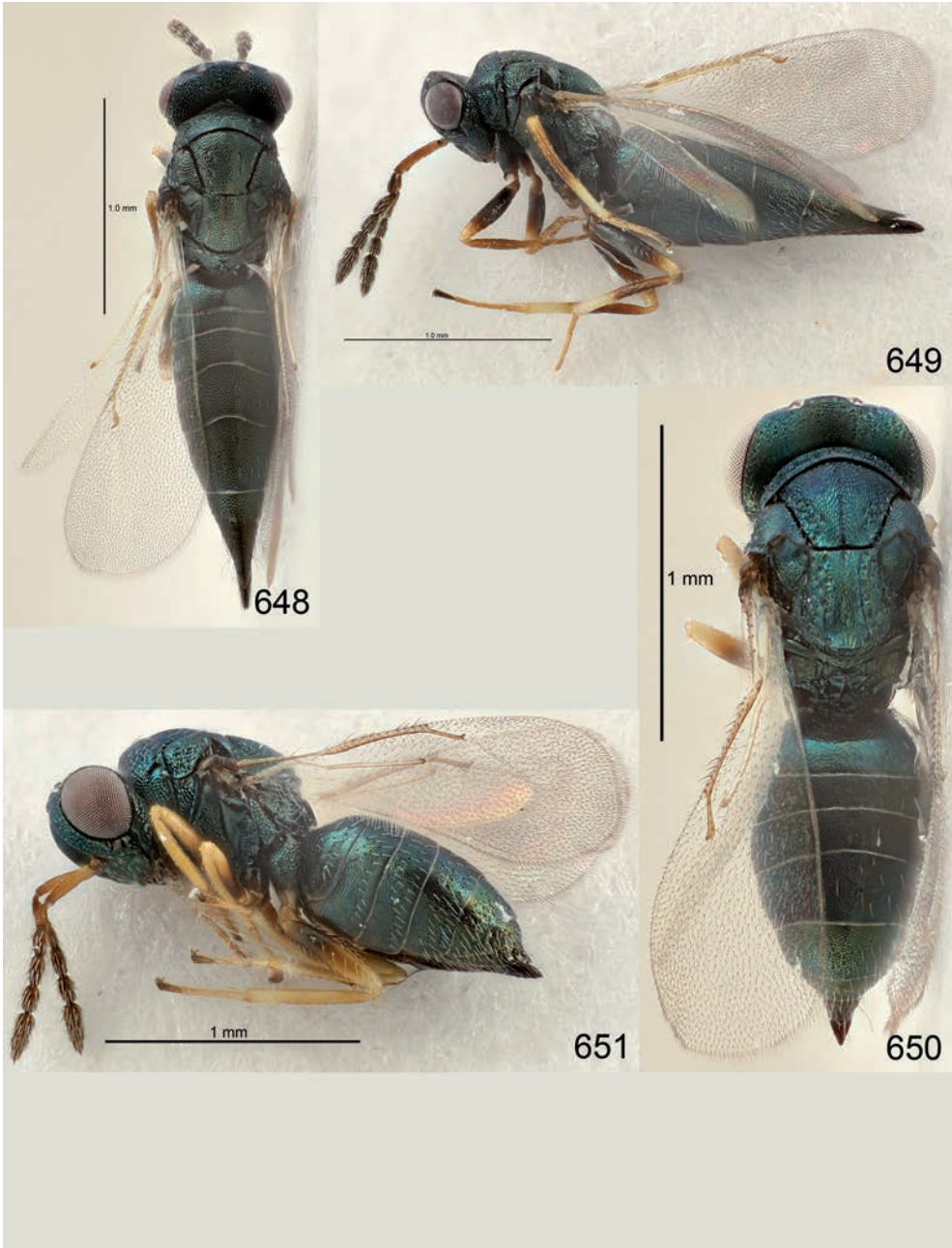
Figs 636–639. *Galeopsomyia papillosa*, holotype ♀ – (636) habitus dorsal view; (637) habitus lateral view. *Galeopsomyia scabiosa*, holotype ♀ – (638) habitus dorsal view; (639) habitus lateral view.



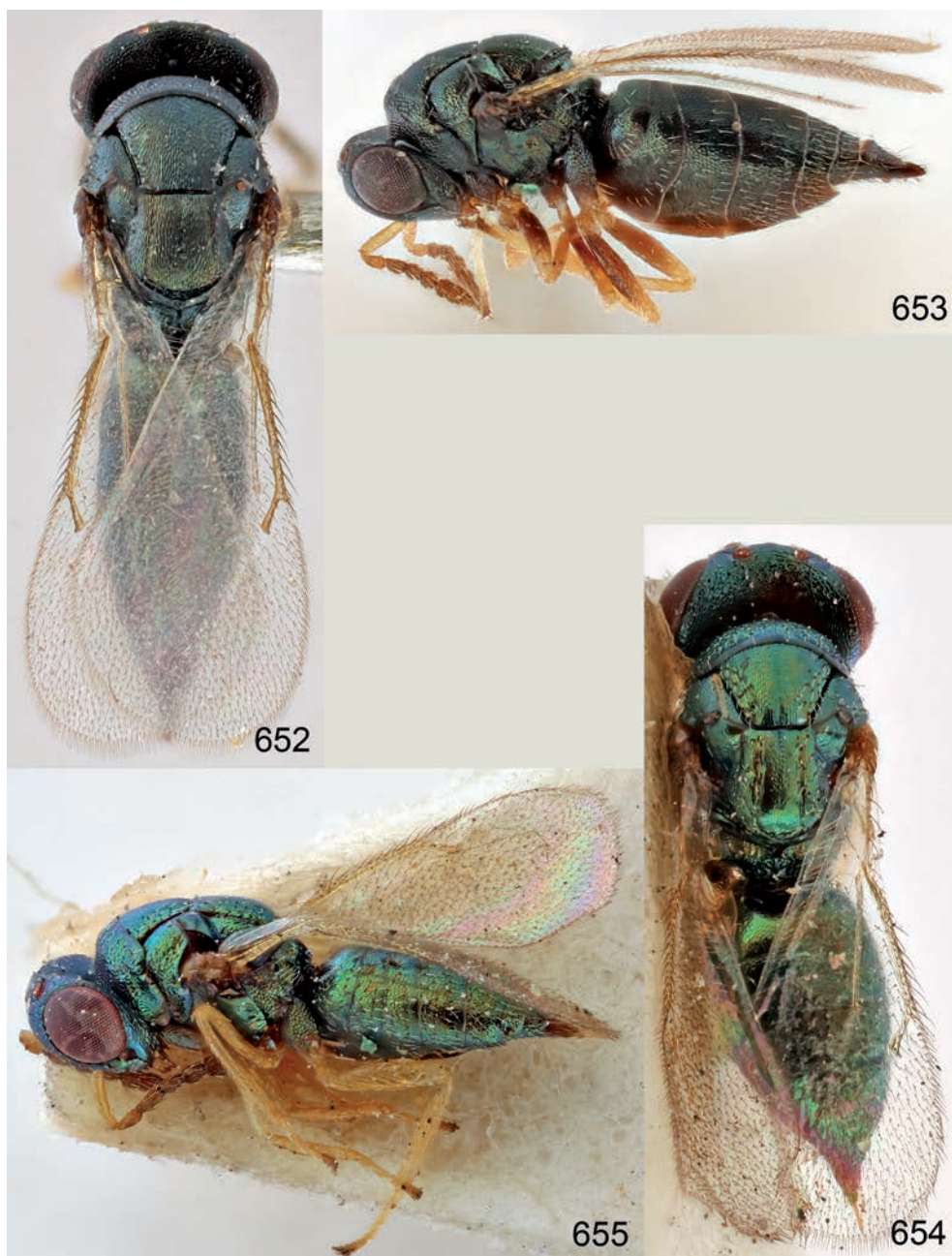
Figs 640–643. *Galeopsomyia aspratilis*, holotype ♀ – (640) habitus dorsal view; (641) habitus lateral view. *Galeopsomyia curiosa*, holotype ♀ – (642) habitus dorsal view; (643) habitus lateral view.



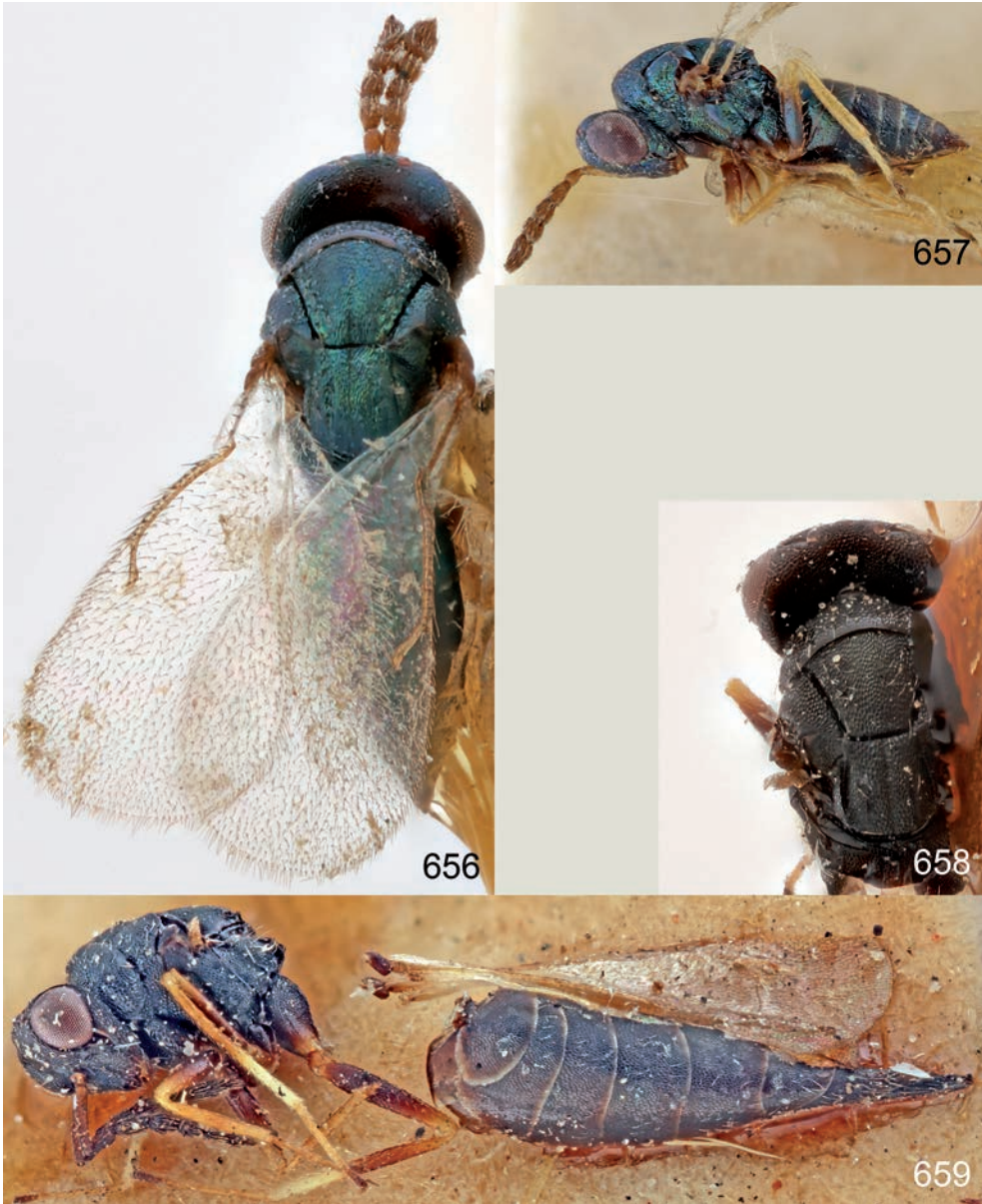
Figs 644–647. *Galeopsomyia alveolus*, holotype ♀ – (644) habitus dorsal view; (645) habitus lateral view. *Galeopsomyia asilis*, holotype ♀ – (646) habitus dorsal view; (647) habitus lateral view.



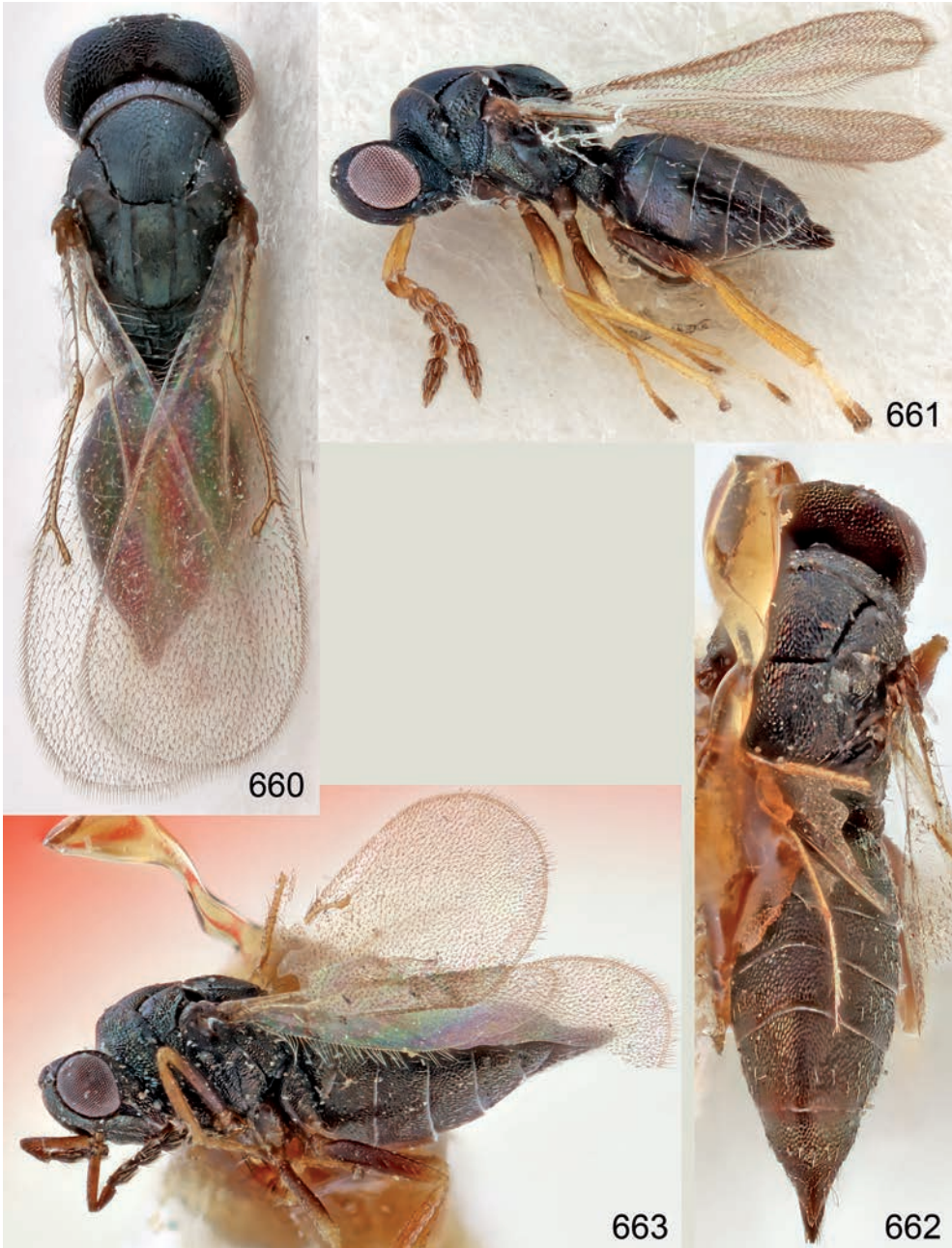
Figs 648–651. *Galeopsomyia epidius* (Walker), non-type ♀ – (648) habitus dorsal view; (649) habitus lateral view. *Galeopsomyia multisulcata* (Girault), non-type ♀ – (650) habitus dorsal view; (651) habitus lateral view.



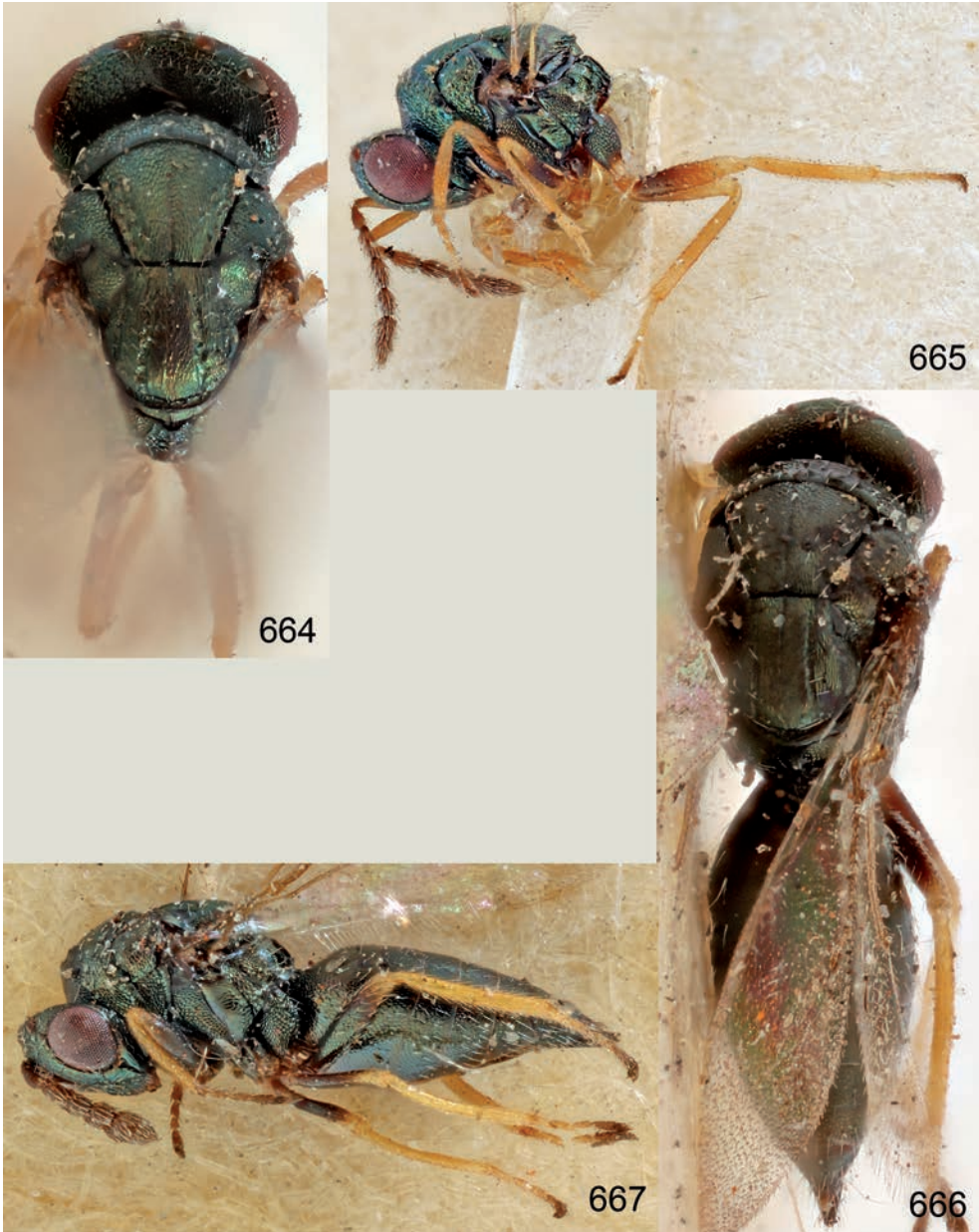
Figs 652–655. *Tetrastichodes compactus* Howard, lectotype ♀ (NHMUK 013458204) – (652) habitus dorsal view; (653) habitus lateral view. *Tetrastichus cupreus* Ashmead, lectotype ♀ (NHMUK 013458205) – (654) habitus dorsal view; (655) habitus lateral view.



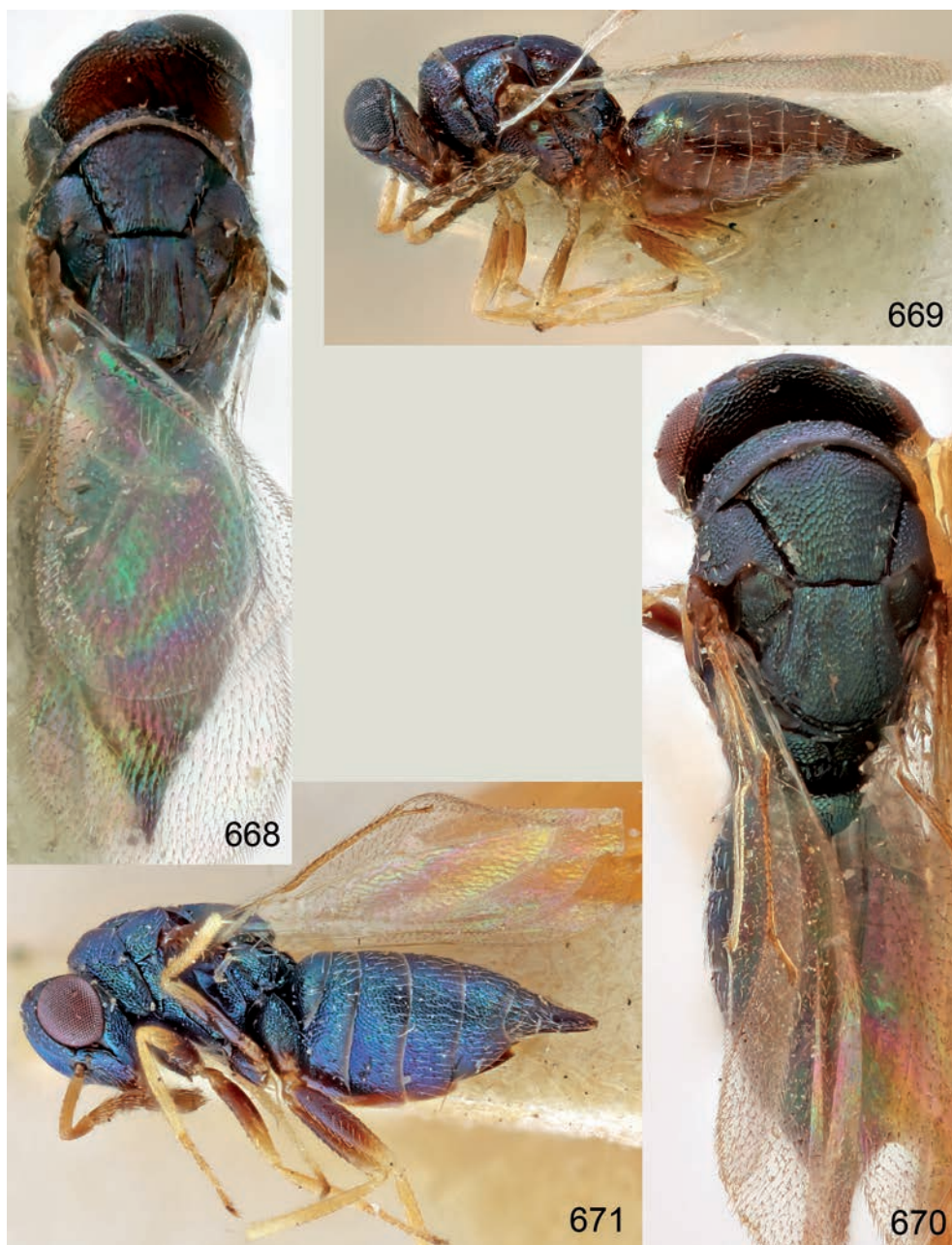
Figs 656–659. *Cirrospilus Deilochus* Walker, lectotype ♀ (NHMUK 010838709) – (656) habitus dorsal view; (657) habitus lateral view. *Tetrastichus epidius* Walker, lectotype ♀ (NHMUK 013458201) – (658) habitus dorsal view; (659) habitus lateral view.



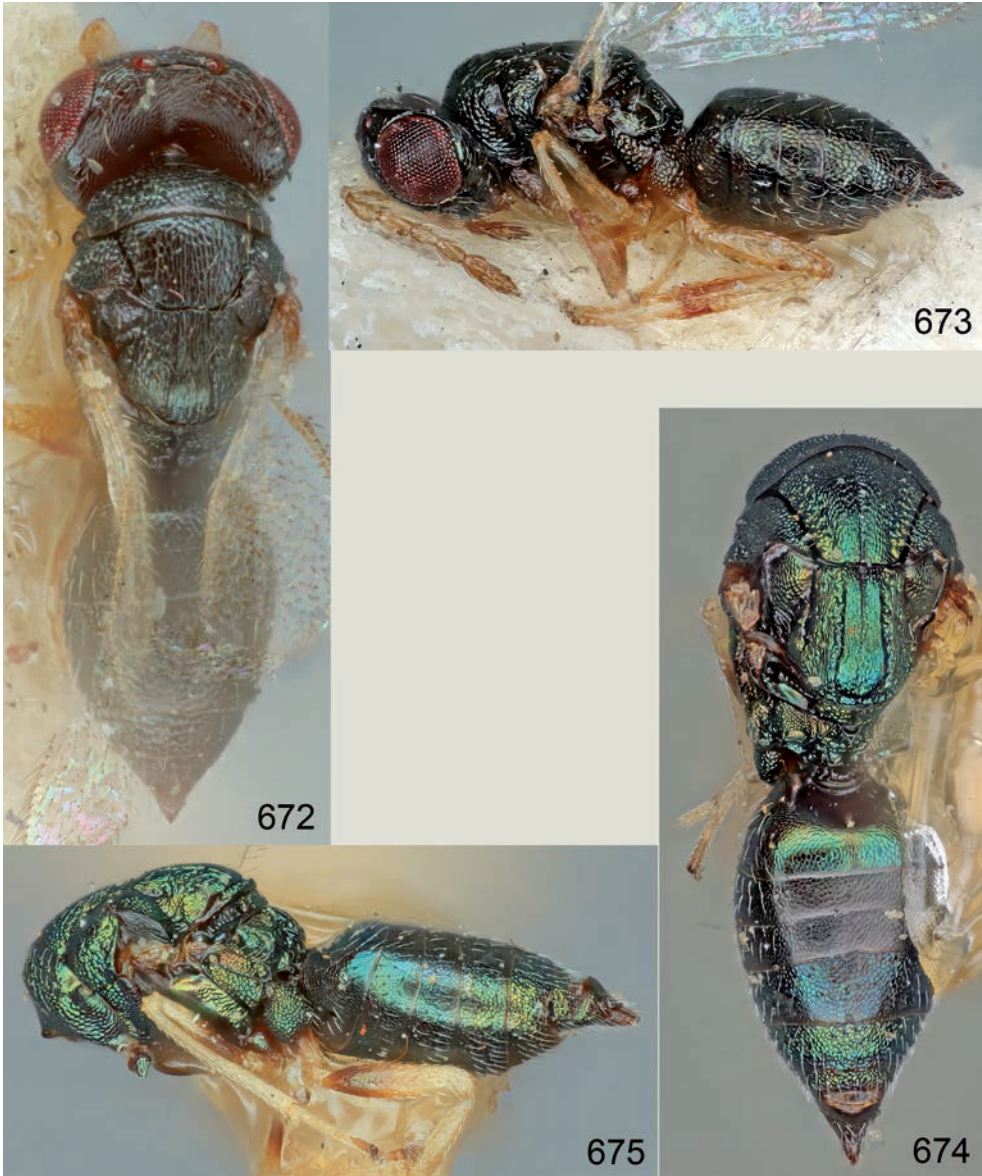
Figs 660–663. *Galeopsomyia fausta* La Salle, holotype ♀ (NHMUK 013458207) – (660) habitus dorsal view; (661) habitus lateral view. *Tetrastichus haemon* Walker, lectotype ♀ (NHMUK 013458202) – (662) habitus dorsal view; (663) habitus lateral view.



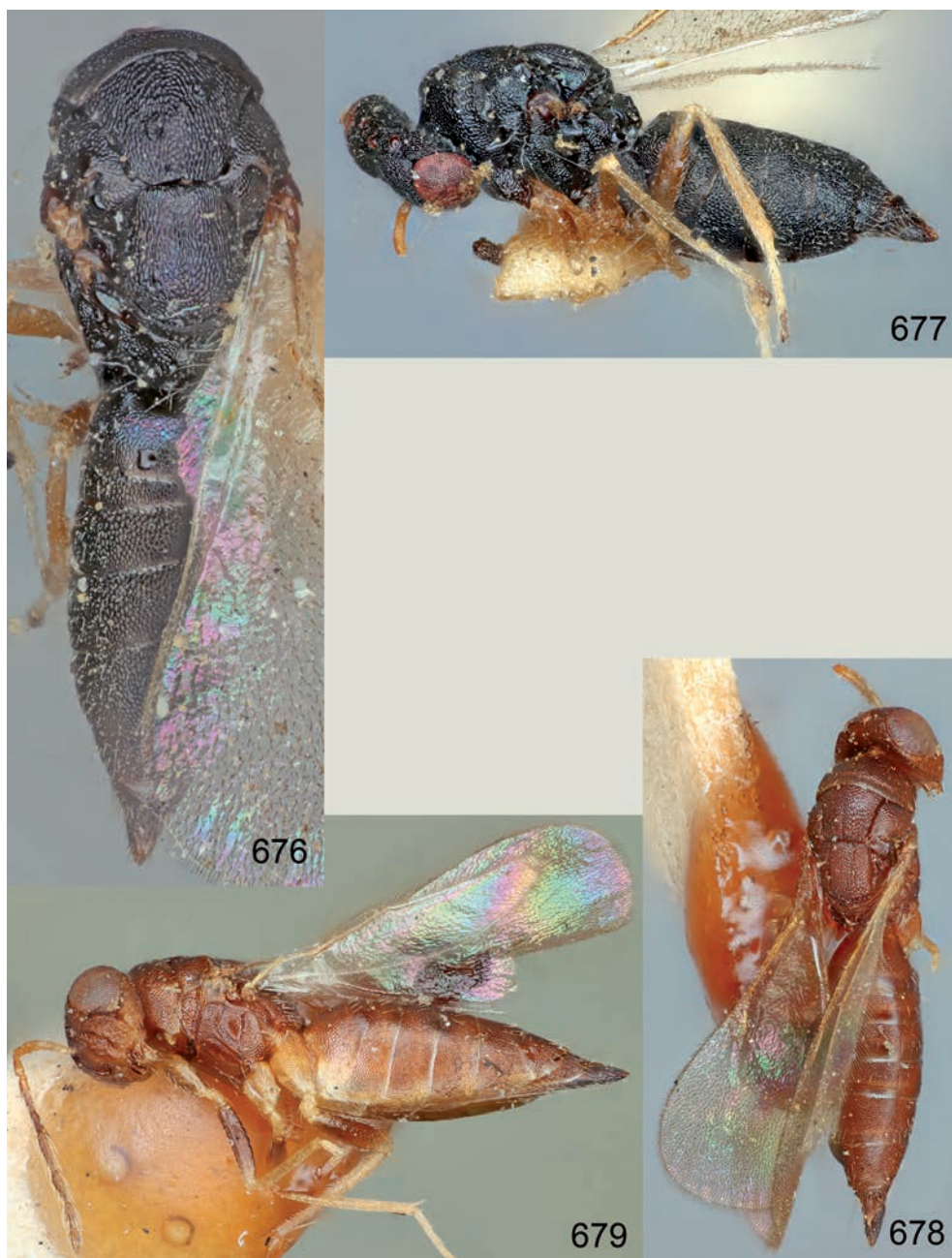
Figs 664–667. *Tetrastichus nicaraguaensis* Cameron, lectotype ♀ (petiole & gaster missing) (NHMUK 010838711) – (664) habitus dorsal view; (665) habitus lateral view. *Tetrastichus Scadius* Walker, lectotype ♀ (NHMUK 010838710) – (666) habitus dorsal view; (667) habitus lateral view.



Figs 668–671. *Tetrastichus sulcatus* Howard, holotype ♀ (NHMUK 013458203) – (668) habitus dorsal view; (669) habitus lateral view. *Cirrospilus Valerus* Walker, lectotype ♀ (NHMUK 013458206) – (670) habitus dorsal view; (671) habitus lateral view.



Figs 672–675. *Tetrastichodes flavipes* Howard, holotype ♀ (USNM type no. 10116) – (672) habitus dorsal view; (673) habitus lateral view. *Galeopsomopsis multisulcata* Girault, lectotype ♀ (head missing) (USNM type no. 20660) – (674) habitus dorsal view; (675) habitus lateral view.



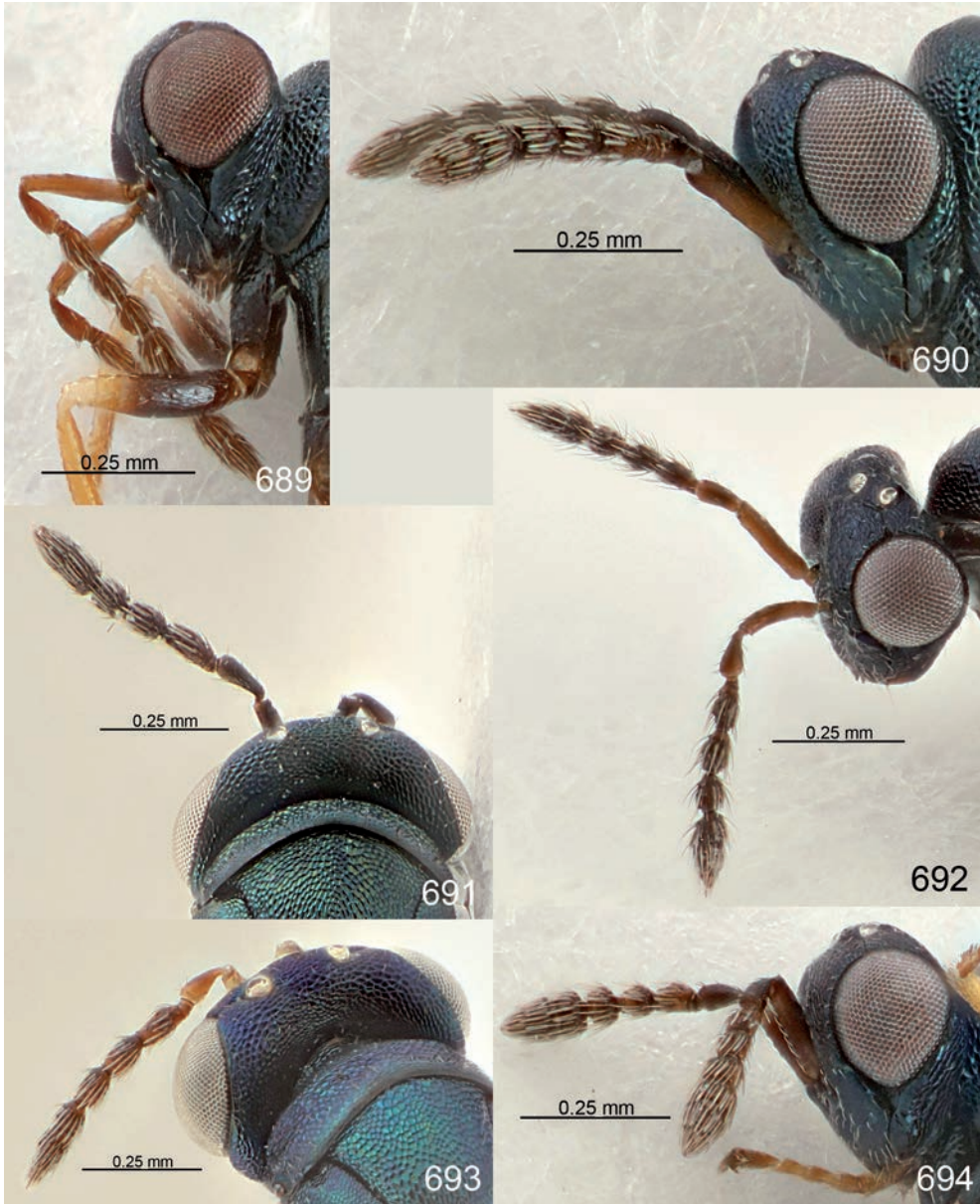
Figs 676–679. *Gyrolasia nigrocyaneus* Ashmead, lectotype ♀ (USNM type no. 8099) – (676) habitus dorsal view; (677) habitus lateral view. *Trichoporus persimilis* Ashmead, lectotype ♀ (USNM type no. 60566) – (678) habitus dorsal view; (679) habitus lateral view.



Figs 680–683. *Galeopsomopsis transcarinatus* Gahan, holotype ♀ (USNM type no. 22303) – (680) habitus dorsal view; (681) habitus lateral view. *Trichoporus viridicyaneus* Ashmead, lectotype ♀ (USNM type no. 8099) – (682) habitus dorsal view; (683) habitus lateral view.



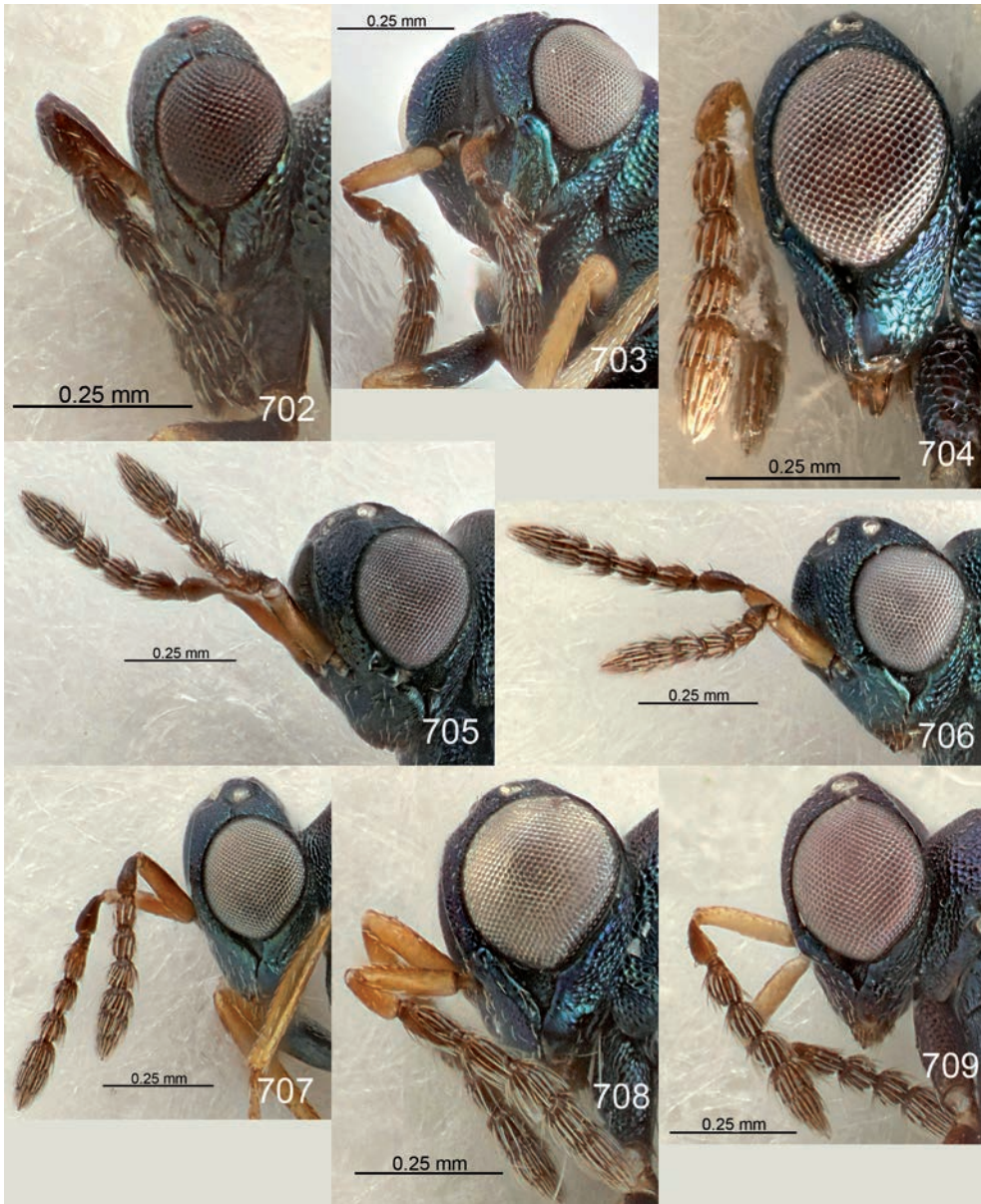
Figs 684–688. *Galeopsomyia macaxeira* Perioto, Costa & Lara, ♀ – (684) head frontal view, ht; (685) mesosoma and head dorsal view, ht; (686) propodeum dorsal view, pt; (687) gaster lateral view, pt; (688) gaster dorsal view, pt.



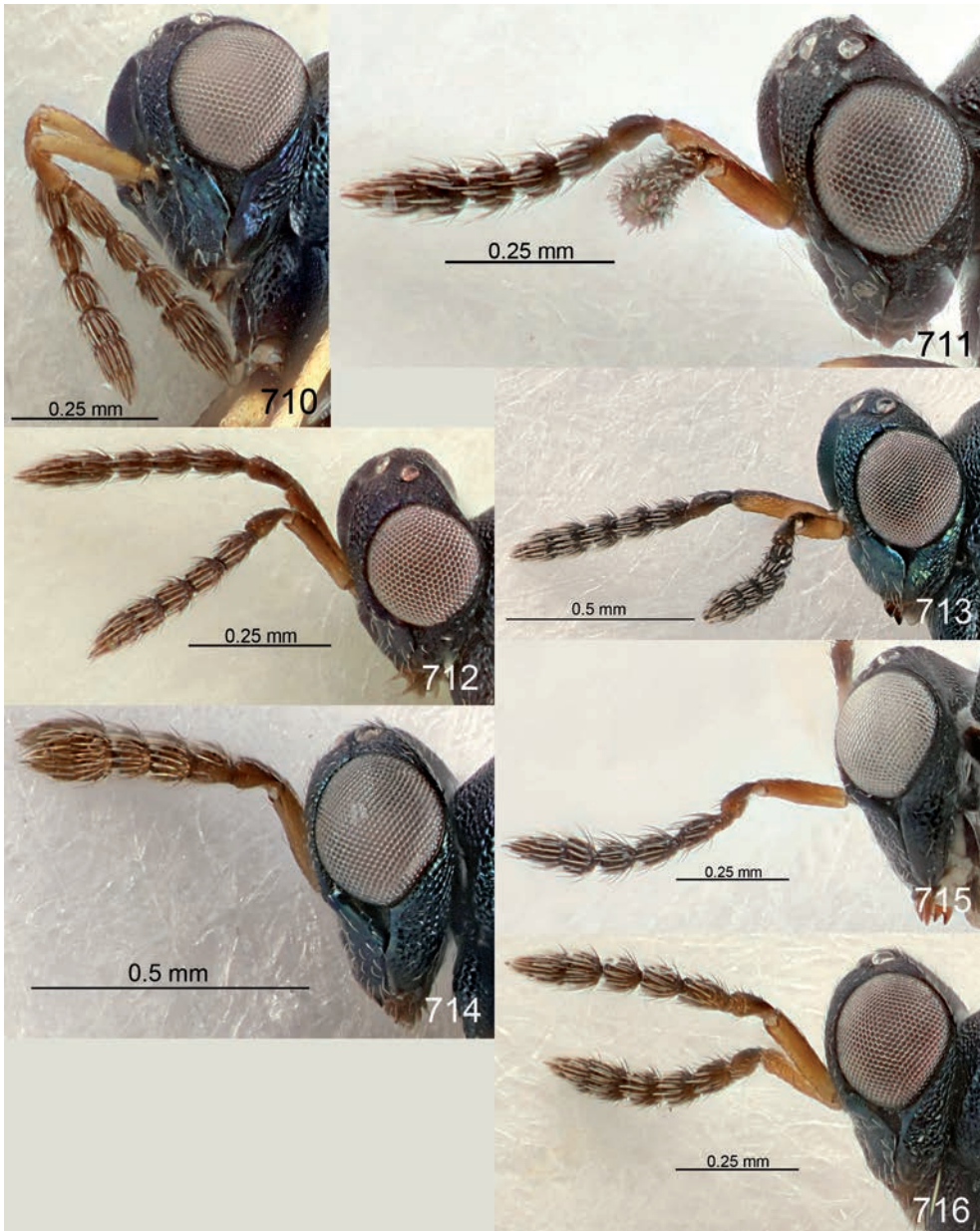
Figs 689–694. Head incl. antennae, lateral view ♀ – (689) *Galeopsomyia aciana*; (690) *G. aliosa*; (691) *G. aronia*; (692) *G. altamiraensis*; (693) *G. azofeifai*; (694) *G. blancaensis*.



Figs 695–701. Head incl. antennae, lateral view ♀ – (695) *Galeopsomyia bentoni*; (696) *G. brasiliensis*; (697) *G. cabroensis*; (698) *G. bidensiae*; (699) *G. camachoi*; (700) *G. candica*; (701) *G. cissusae*.



Figs 702–709. Head incl. antennae, lateral view ♀ – (702) *Galeopsomyia carinata*; (703) *G. estera*; (704) *G. hallwachsae*; (705) *G. domingoensis*; (706) *G. herediensis*; (707) *G. harryramirezi*; (708) *G. iangauldi*; (709) *G. itabunaensis*.



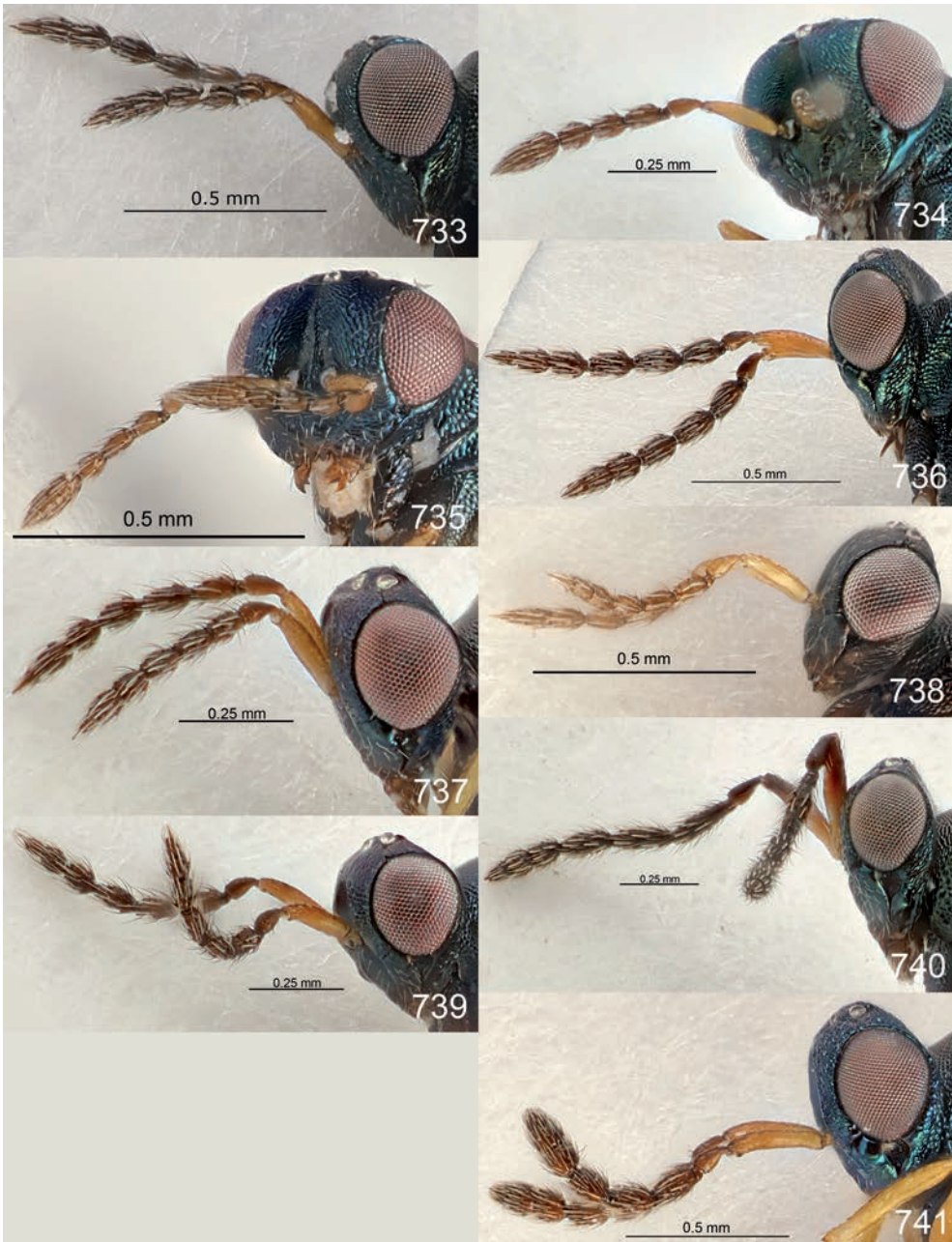
Figs 710–716. Head incl. antennae, lateral view ♀ – (710) *Galeopsomyia janzeni*; (711) *G. monteverdensis*; (712) *G. jimenezi*; (713) *G. labilis*; (714) *G. manuelperereira*; (715) *G. mimosa*; (716) *G. mogensenae*.



Figs 717–723. Head incl. antennae, lateral view ♀ – (717) *Galeopsomyia perseae*; (718) *G. ranyamanjunathae*; (719) *G. saga*; (720) *G. noyesi*; (721) *G. plaumanni*; (722) *G. rubii*; (723) *G. seminarum*.



Figs 724–732. Head incl. antennae, lateral view ♀ – (724) *Galeopsomyia springerae*; (725) *G. corista*; (726) *G. fuga*; (727) *G. lama*; (728) *G. amadea*; (729) *G. rosea*; (730) *G. insignis*; (731) *G. admirabilis*; (732) *G. abra*.



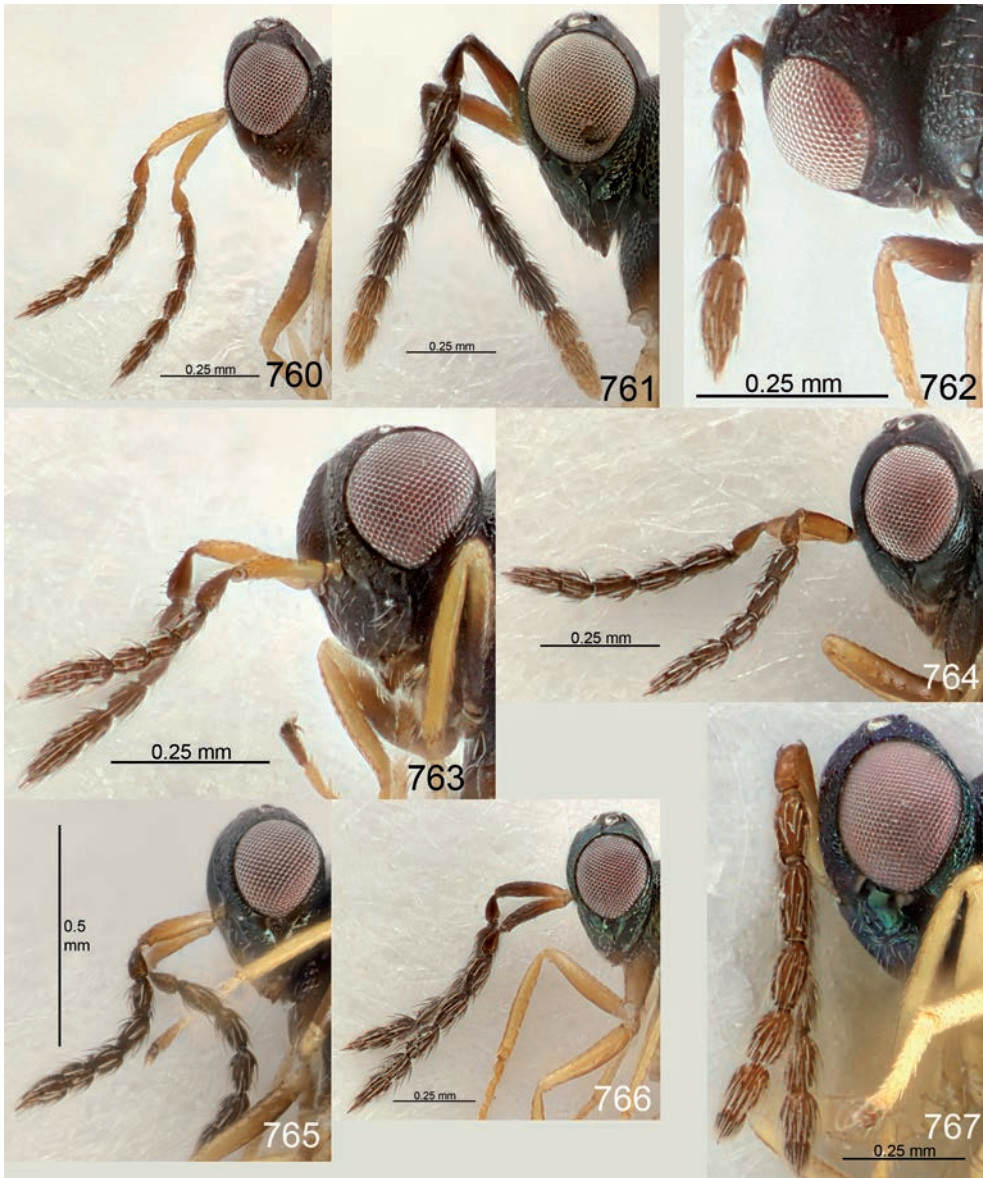
Figs 733–741. Head incl. antennae, lateral view ♀ – (733) *Galeopsomyia actis*; (734) *G. adobia*; (735) *G. agonis*; (736) *G. alanis*; (737) *G. alegra*; (738) *G. aliante*; (739) *G. altura*; (740) *G. amyra*; (741) *G. anis*.



Figs 742–750. Head incl. antennae, lateral view ♀ – (742) *Galeopsomyia alambra*; (743) *G. anysia*; (744) *G. arada*; (745) *G. artis*; (746) *G. aureoviridis*; (747) *G. ambigua*; (748) *G. avis*; (749) *G. bariolis*; (750) *G. beltanis*.



Figs 751–759. Head incl. antennae, lateral view ♀ – (751) *Galeopsomyia atrata*; (752) *G. baldosa*; (753) *G. bicolor*; (754) *G. bestis*; (755) *G. boria*; (756) *G. bravis*; (757) *G. bricenoi*; (758) *G. burreadis*; (759) *G. carbonis*.



Figs 760–767. Head incl. antennae, lateral view ♀ – (760) *Galeopsomyia cararaensis*; (761) *G. carballoi*; (762) *G. cecropiae*; (763) *G. bimaculata*; (764) *G. carinifer*; (765) *G. cernia*; (766) *G. chrysops*; (767) *G. clematisae*.



Figs 768–775. Head incl. antennae, lateral view ♀ – (768) *Galeopsomyia clavata*; (769) *G. codata*; (770) *G. copala*; (771) *G. cortina*; (772) *G. crabra*; (773) *G. cosidis*; (774) *G. criniera*; (775) *G. cyaneoviridis*.



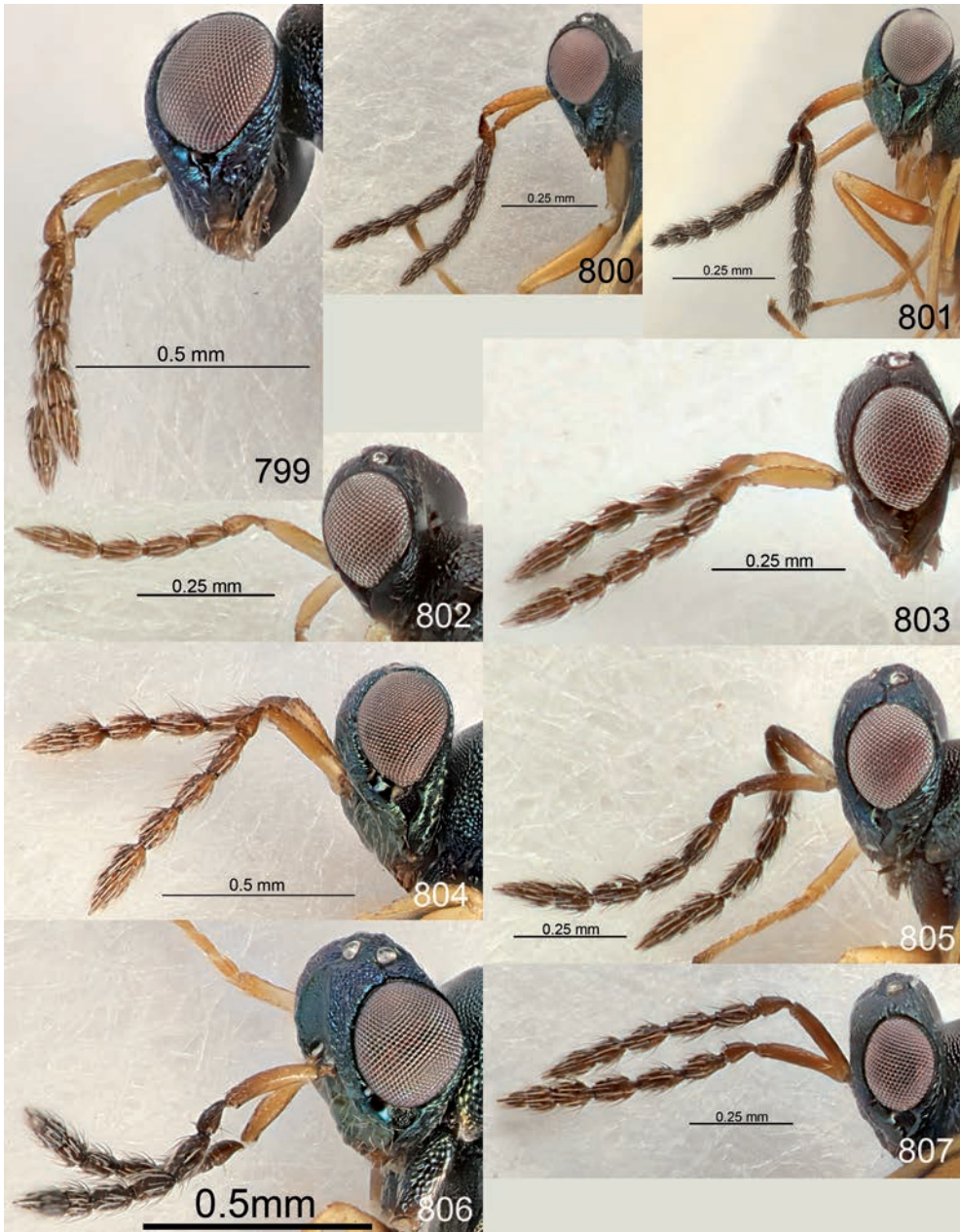
Figs 776–783. Head incl. antennae, lateral view ♀ – (776) *Galeopsomyia coccolobae*; (777) *G. edera*; (778) *G. estrella*; (779) *G. daleskeyae*; (780) *G. devania*; (781) *G. diriaensis*; (782) *G. dolosa*; (783) *G. eolio*.



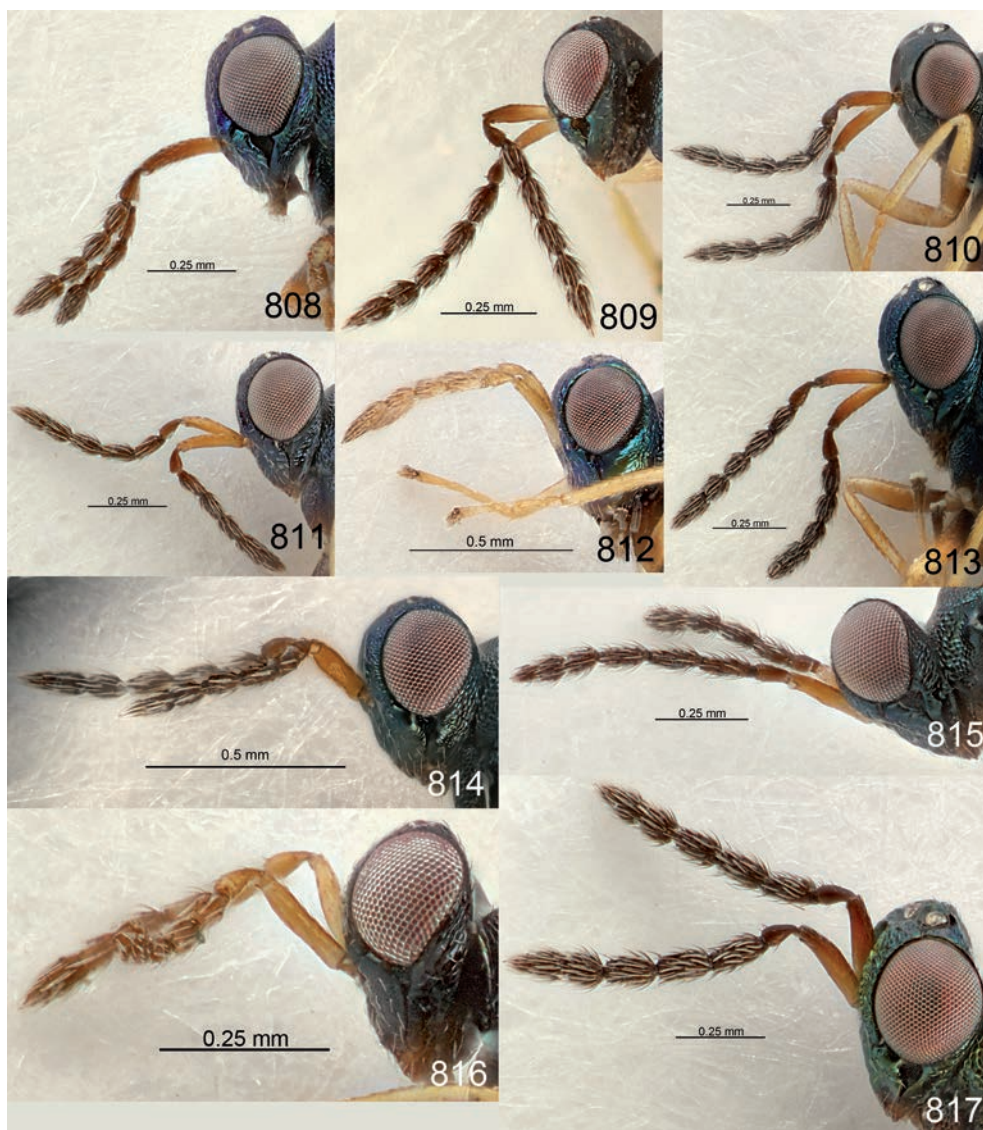
Figs 784–790. Head incl. antennae, lateral view ♀ – (784) *Galeopsomyia eridana*; (785) *G. evgenyazakharovi*; (786) *G. elisia*; (787) *G. eximia*; (788) *G. faina*; (789) *G. falla*; (790) *G. fernandezii*.



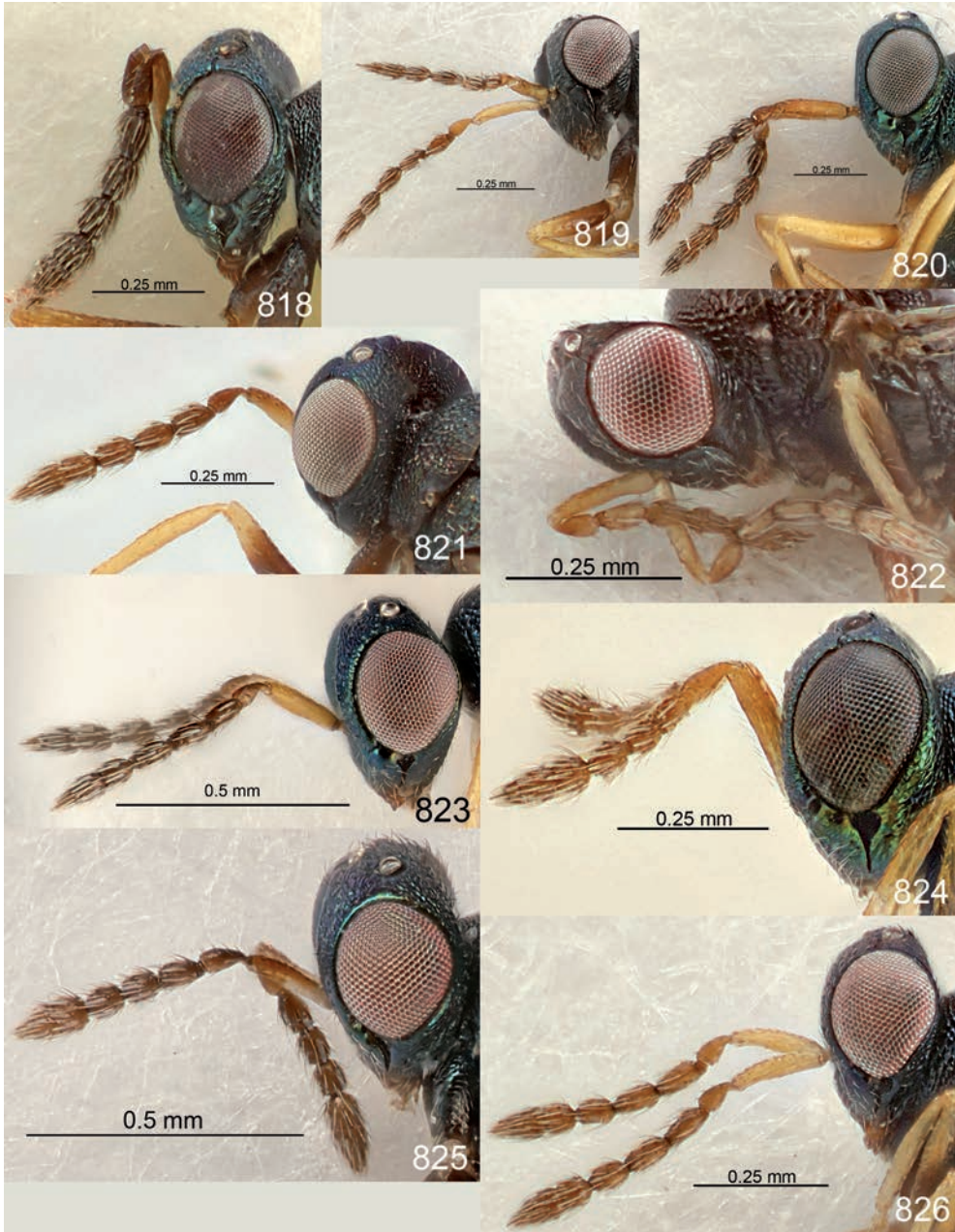
Figs 791–798. Head incl. antennae, lateral view ♀ – (791) *Galeopsomyia fieris*; (792) *G. giria*; (793) *G. gonzalezi*; (794) *G. gavia*; (795) *G. flora*; (796) *G. gridis*; (797) *G. graciliclava*; (798) *G. hesperis*.



Figs 799–807. Head incl. antennae, lateral view ♀ – (799) *Galeopsomyia gutierrezzi*; (800) *G. grandis*; (801) *G. illydis*; (802) *G. hiata*; (803) *G. infusca*; (804) *G. intesa*; (805) *G. ira*; (806) *G. isola*; (807) *G. lapsa*.



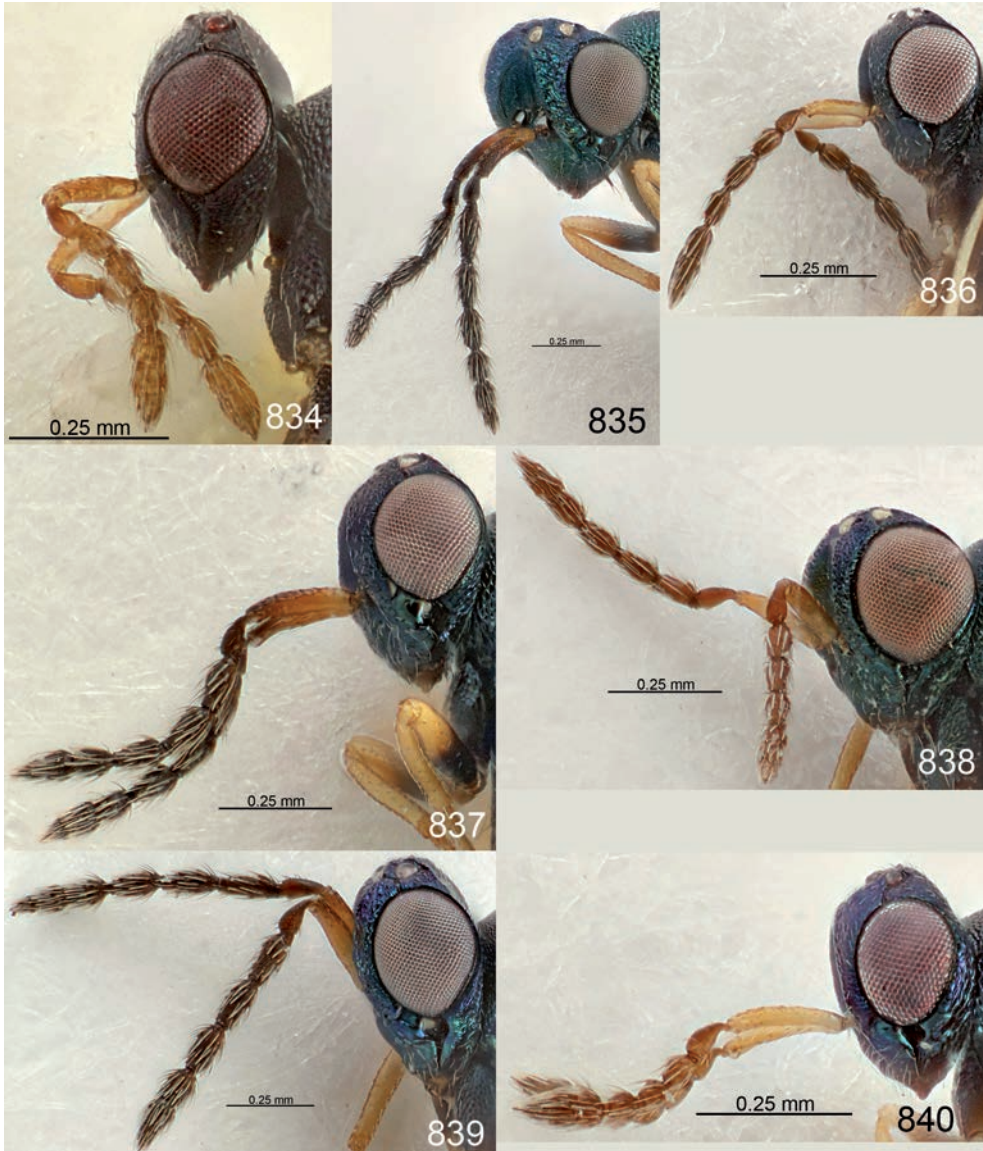
Figs 808–817. Head incl. antennae, lateral view ♀ – (808) *Galeopsomyia ingae*; (809) *G. juni*; (810) *G. lacinia*; (811) *G. lobi*; (812) *G. lemuris*; (813) *G. latosa*; (814) *G. lealis*; (815) *G. lema*; (816) *G. liria*; (817) *G. limonensis*.



Figs 818–826. Head incl. antennae, lateral view ♀ – (818) *Galeopsomyia leonae*; (819) *G. macanis*; (820) *G. maculifer*; (821) *G. lunaniae*; (822) *G. lumbrada*; (823) *G. magra*; (824) *G. malandrina*; (825) *G. manga*; (826) *G. manotris*.



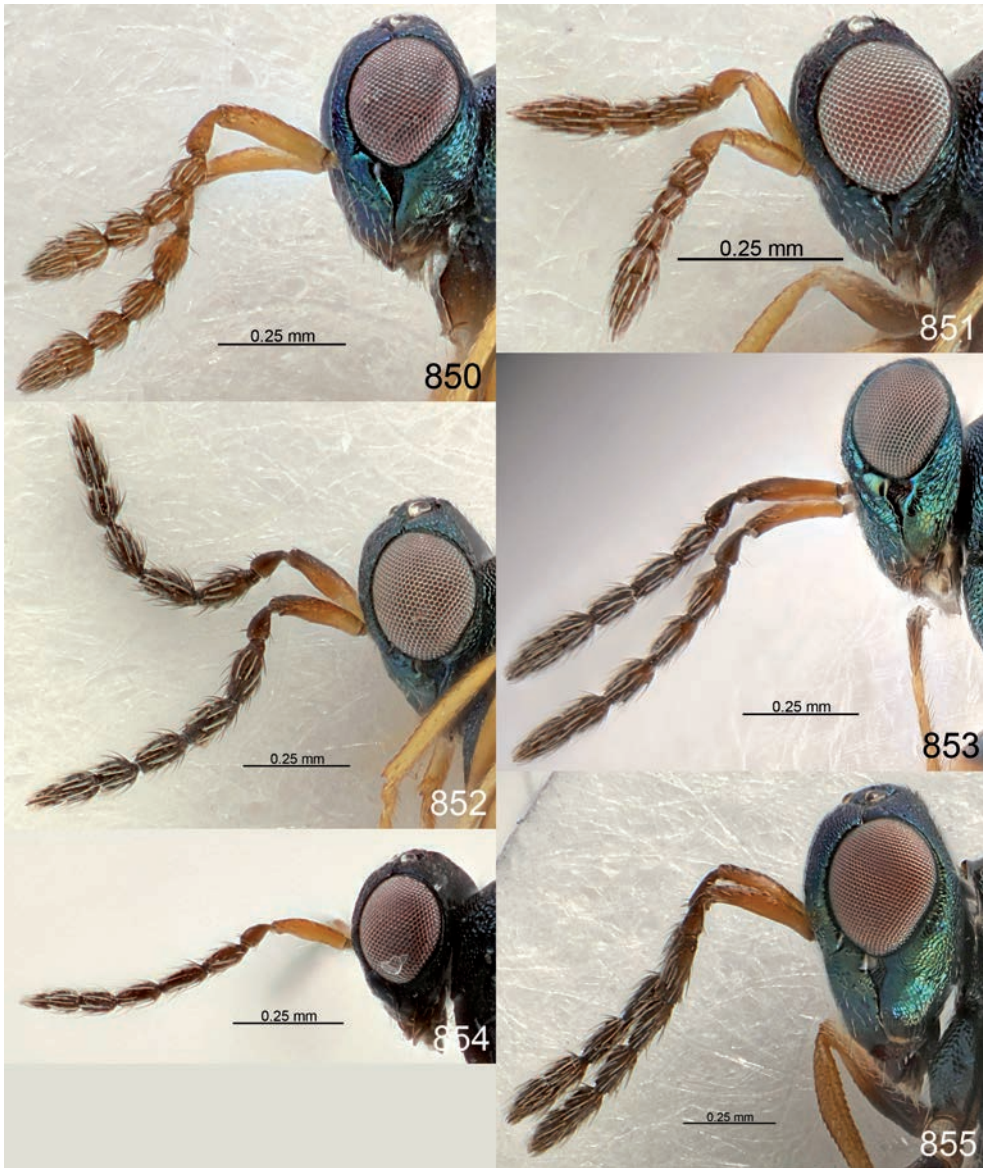
Figs 827–833. Head incl. antennae, lateral view ♀ – (827) *Galeopsomyia majalis*; (828) *G. medrosa*; (829) *G. maya*; (830) *G. matearis*; (831) *G. meleadis*; (832) *G. minoris*; (833) *G. mesana*.



Figs 834–840. Head incl. antennae, lateral view ♀ – (834) *Galeopsomyia melasoma*; (835) *G. mora*; (836) *G. nana*; (837) *G. marbis*; (838) *G. methea*; (839) *G. milagra*; (840) *G. miliaris*.



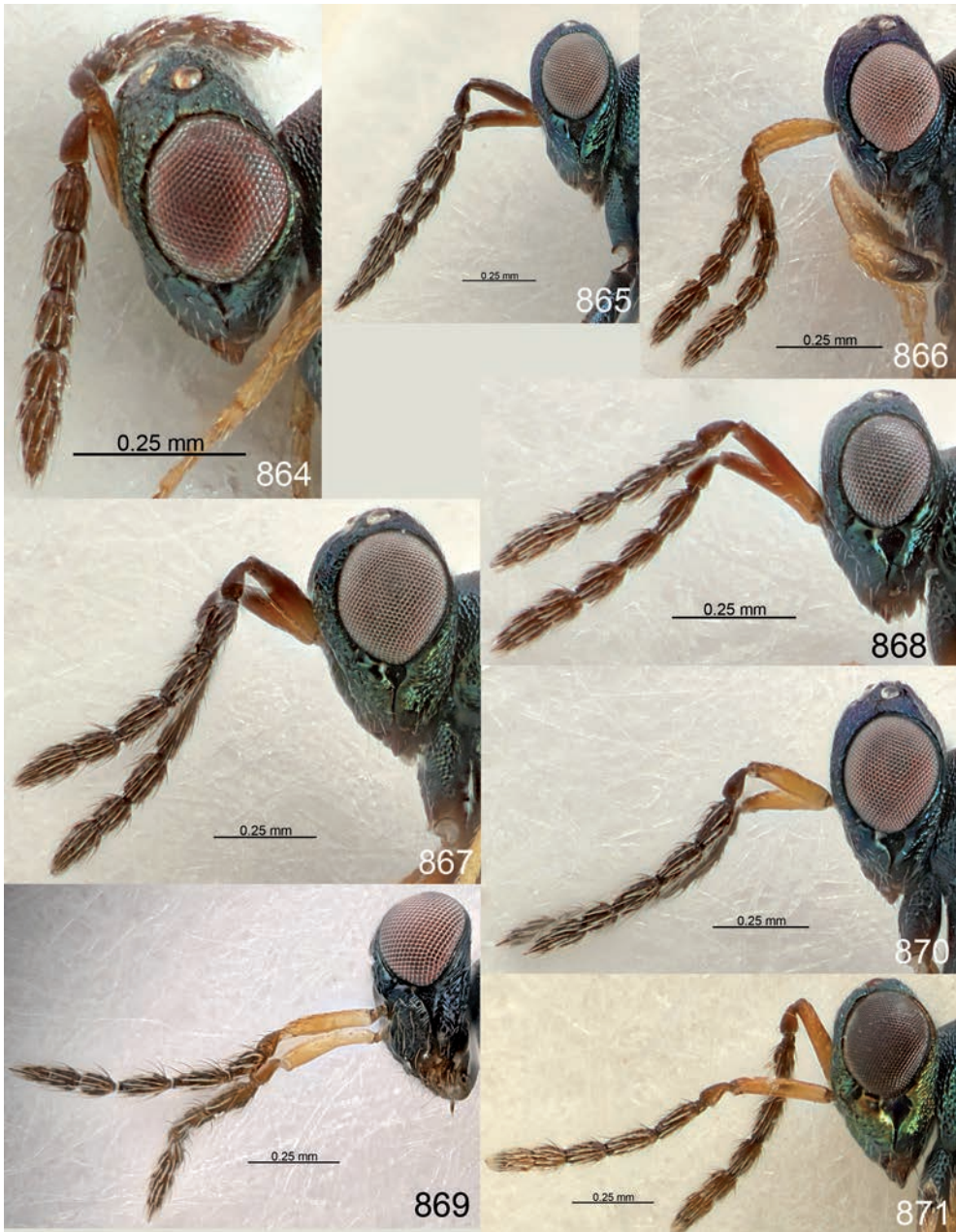
Figs 841–849. Head incl. antennae, lateral view ♀ – (841) *Galeopsomyia miria*; (842) *G. montanis*; (843) *G. moradis*; (844) *G. myrciae*; (845) *G. navia*; (846) *G. neotropicalis*; (847) *G. nicoyae*; (848) *G. nitida*; (849) *G. octava*.



Figs 850–855. Head incl. antennae, lateral view ♀ – (850) *Galeopsomyia myrsineae*; (851) *G. osaensis*; (852) *G. nishidai*; (853) *G. noblitis*; (854) *G. opala*; (855) *G. opima*.



Figs 856–863. Head incl. antennae, lateral view ♀ – (856) *Galeopsomyia nigricans*; (857) *G. orillia*; (858) *G. palenta*; (859) *G. pagana*; (860) *G. pardis*; (861) *G. pava*; (862) *G. pensada*; (863) *G. preta*.



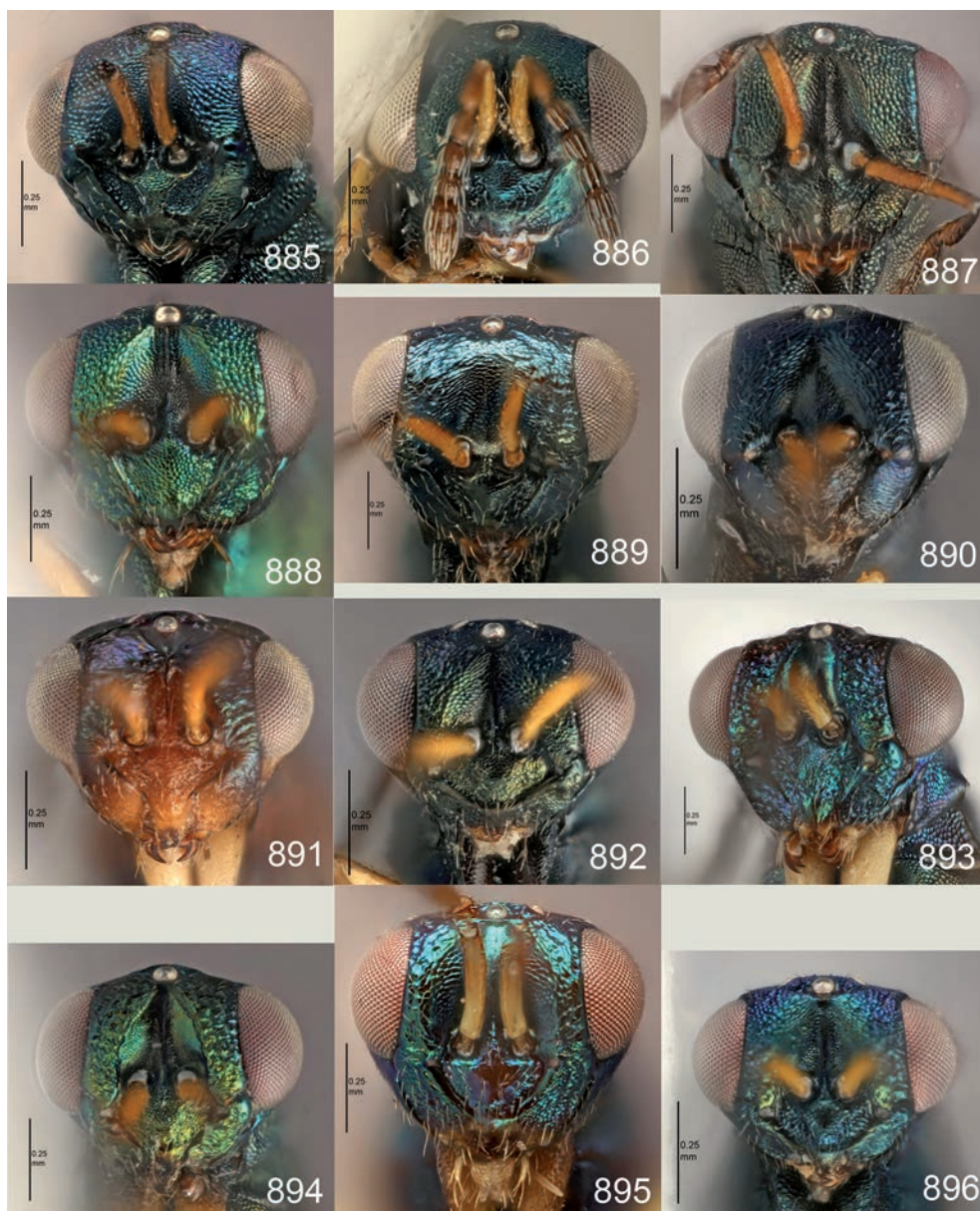
Figs 864–871. Head incl. antennae, lateral view ♀ – (864) *Galeopsomyia perla*; (865) *G. picuda*; (866) *G. teronadis*; (867) *G. pilonensis*; (868) *G. schefflerae*; (869) *G. pyrillia*; (870) *G. rugosa*; (871) *G. weinmanniae*.



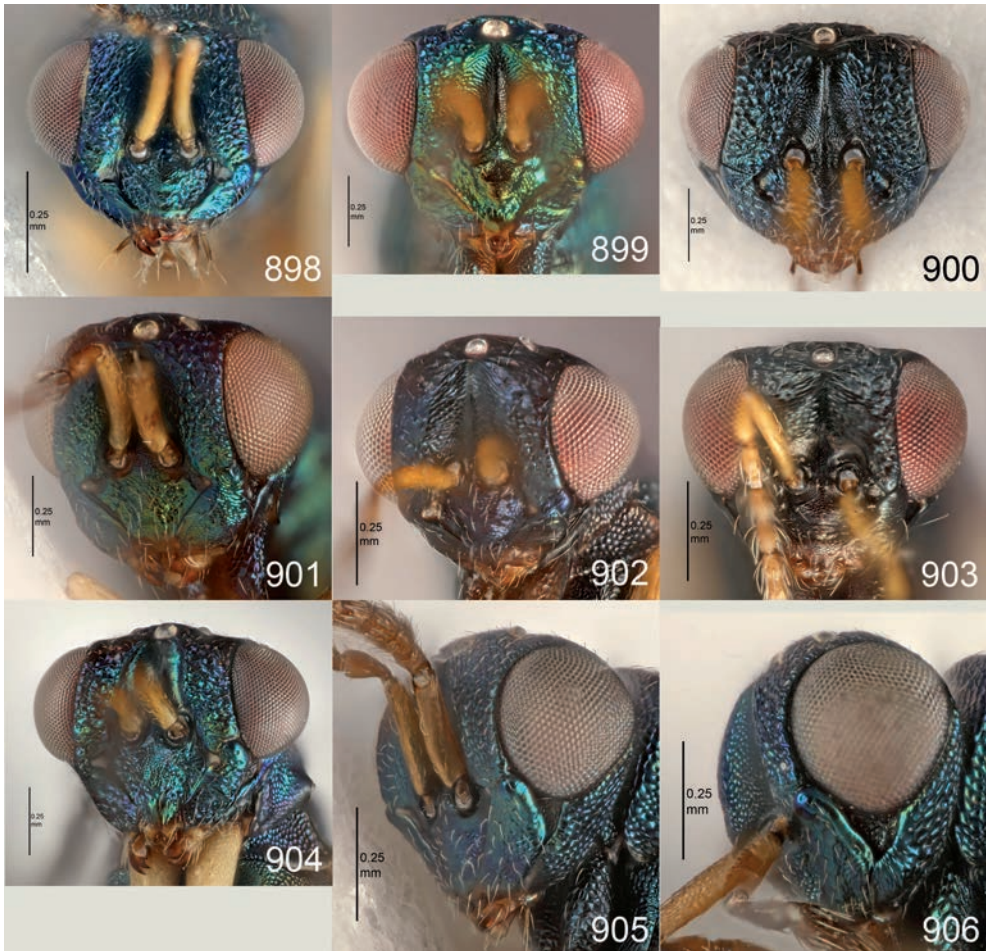
Figs 872–878. Head incl. antennae, lateral view ♀ – (872) *Galeopsomyia triozae*; (873) *G. tigrensis*; (874) *G. umanai*; (875) *G. veluda*; (876) *G. truncata*; (877) *G. wilsonae*; (878) *G. verbessinae*.



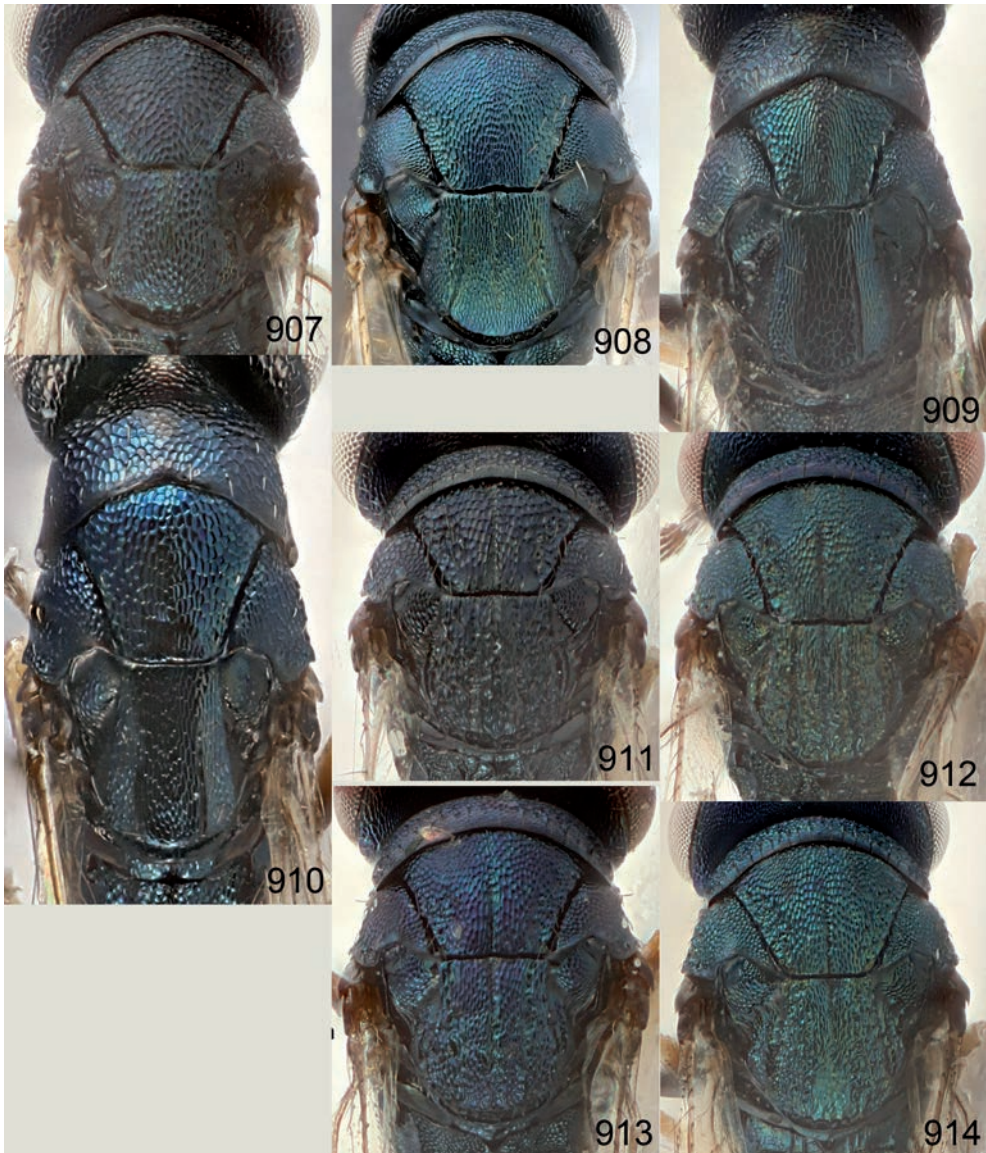
Figs 879–884. Head incl. antennae, lateral view ♀ – (879) *Galeopsomyia capillosa*; (880) *G. curiosa*; (881) *G. wilsoni*; (882) *G. gobis*; (883) *G. hirsuta*; (884) *G. scabiosa*.



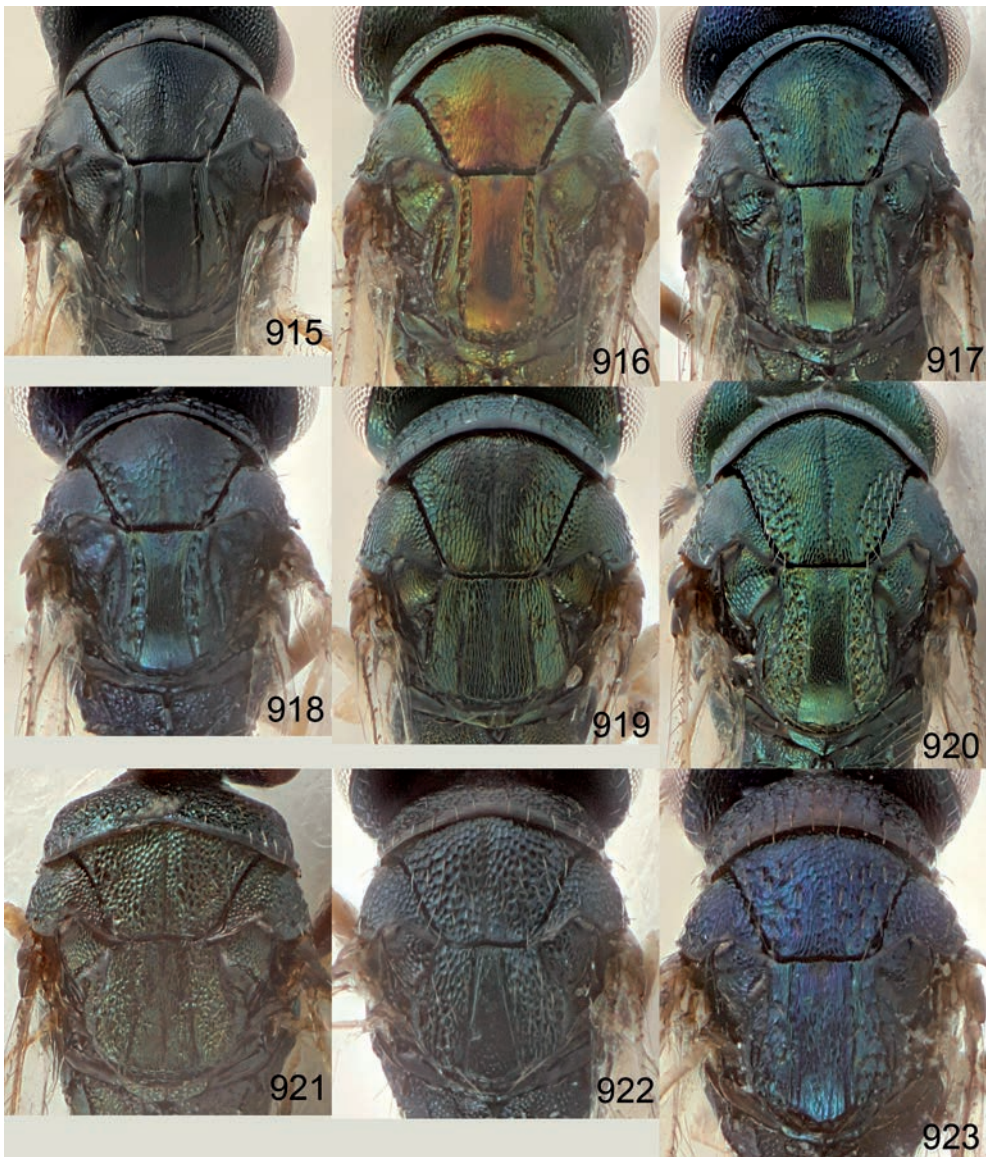
Figs 885–896. Head frontal view, ♀ – (885) *Galeopsomyia fucata* ht; (886) *G. lobi* ht; (887) *G. epidius* n-t; (888) *G. rubii* pt; (889) *G. lasallei* pt; (890) *G. rosea* ht; (891) *G. admirabilis* ht; (892) *G. copala* pt; (893) *G. grandis* pt; (894) *G. illydis* pt; (895) *G. lemuris* pt; (896) *G. montanis* pt.



Figs 898–906. Head frontal view, ♀ – (898) *Galeopsomyia multisulcata* n-t; (899) *G. capilliosa* ht; (900) *G. hirsuta* ht; (901) *G. papillosa* ht; (902) *G. scabiosa* ht; (903) *G. aspratilis* pt; (904) *G. asilis* pt; (905) *G. manuelperereirai* ht, head lateral view; (906) *G. estera* ht, head lateral view.



Figs 907–914. Mesoscutellum dorsal view, holotype ♀ – (907) *Galeopsomyia casacocaensis*; (908) *G. alas*; (909) *G. mynta*; (910) *G. corista*; (911) *G. ladrona*; (912) *G. methea*; (913) *G. amphis*; (914) *G. baldosa*.



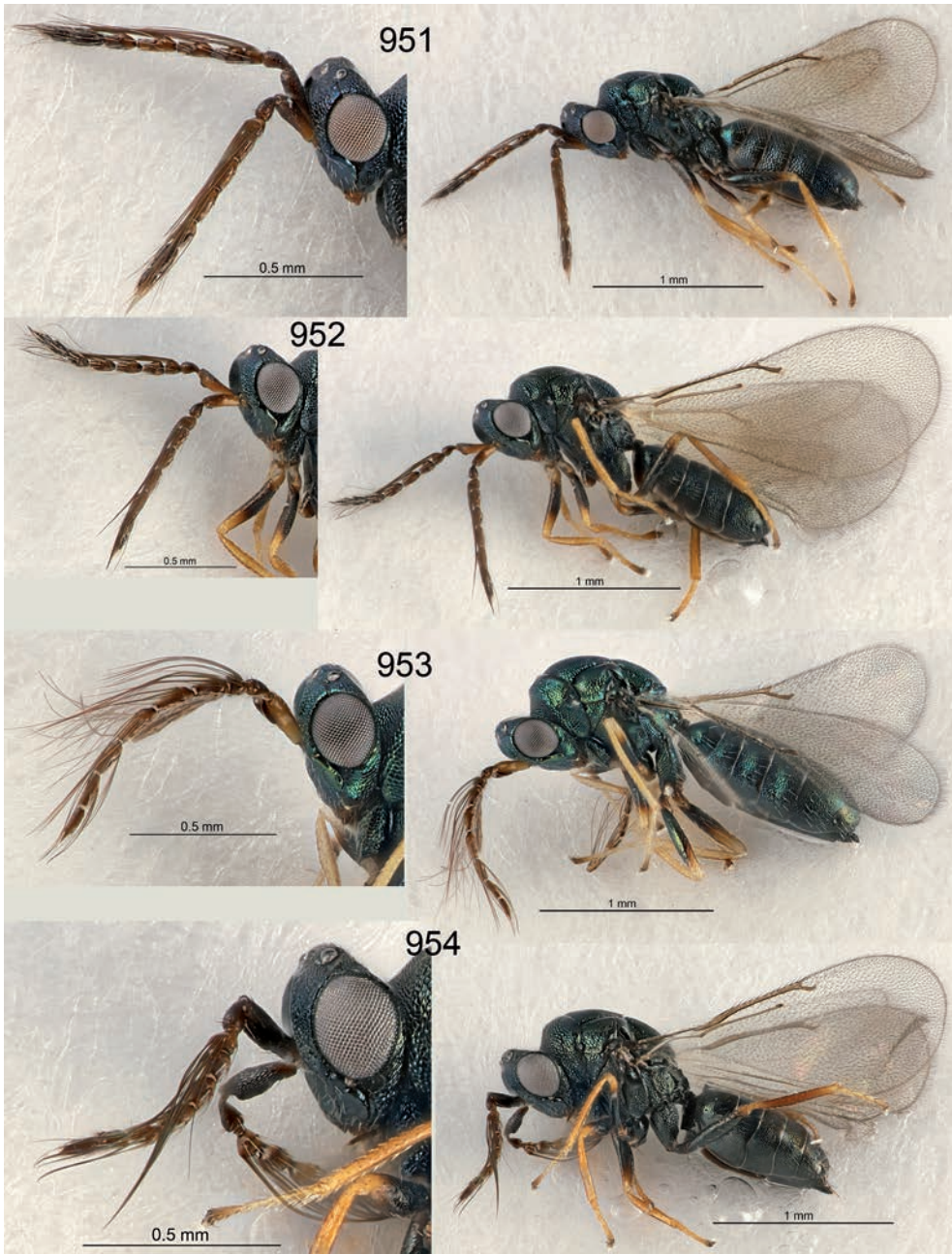
Figs 915–923. Mesoscutellum dorsal view, holotype ♀ – (915) *Galeopsomyia nebulosa*; (916) *G. chrysops*; (917) *G. daleskeyae*; (918) *G. ajax*; (919) *G. philodendrae*; (920) *G. maculifer*; (921) *G. aramis*; (922) *G. hiata*; (923) *G. palotis*.



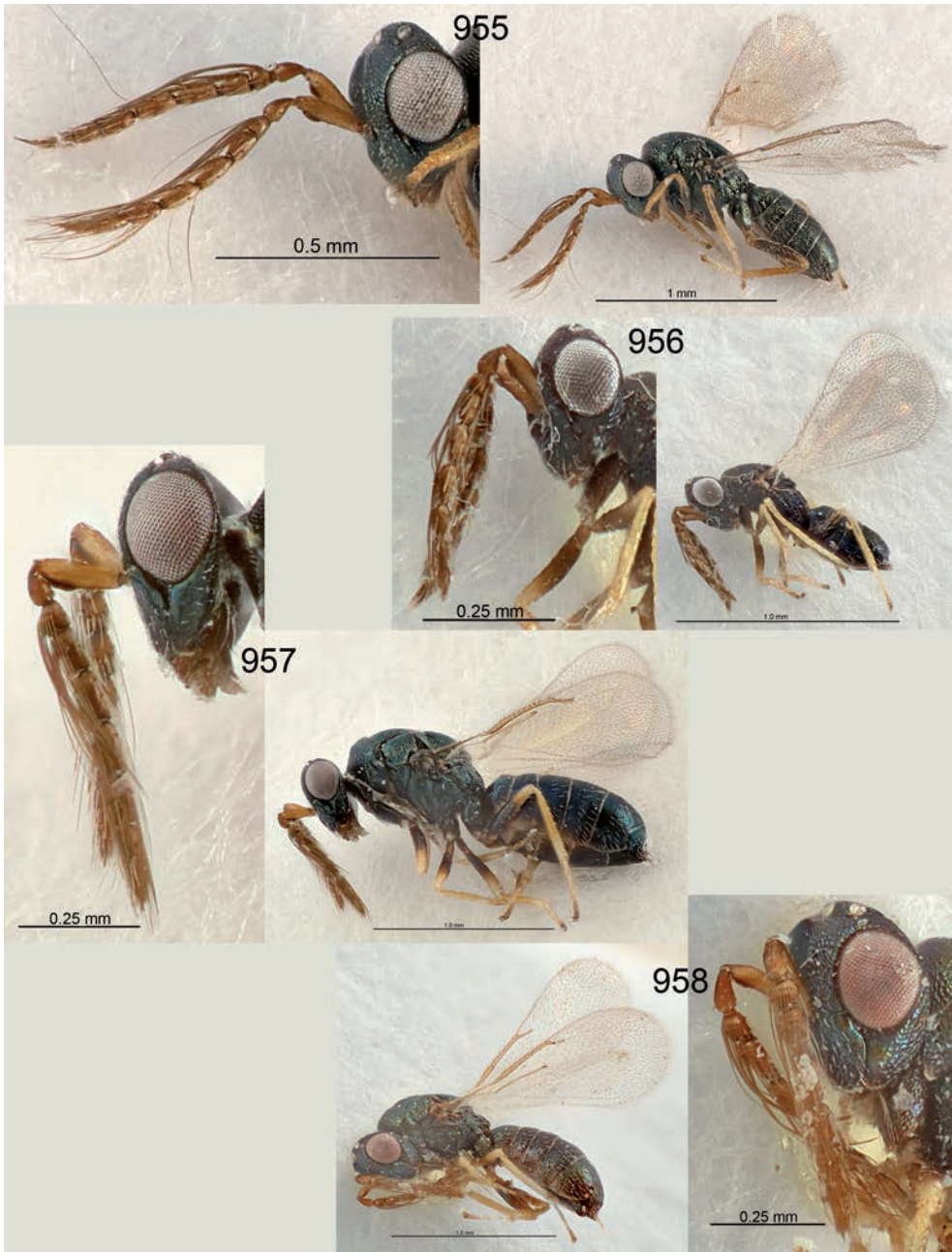
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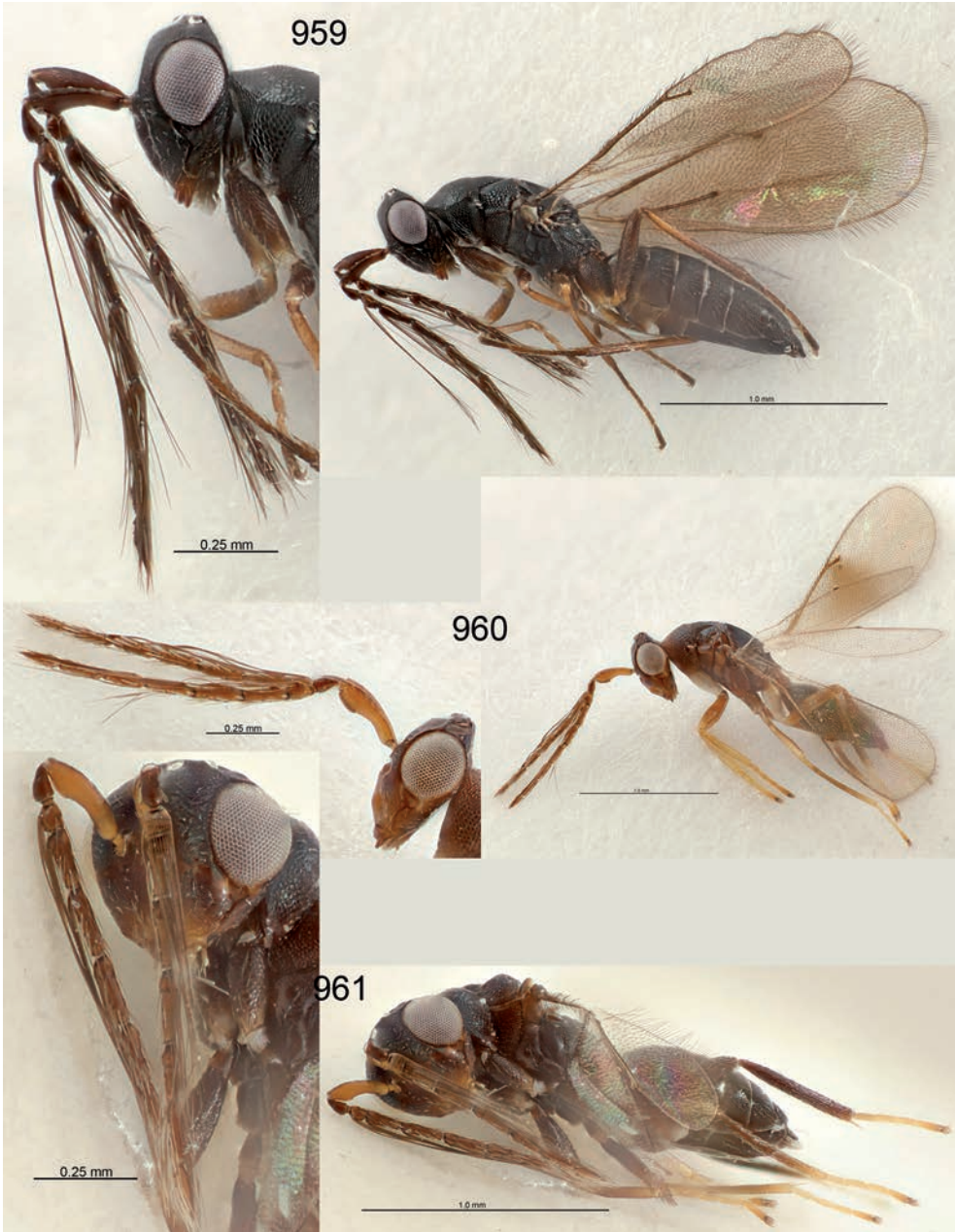
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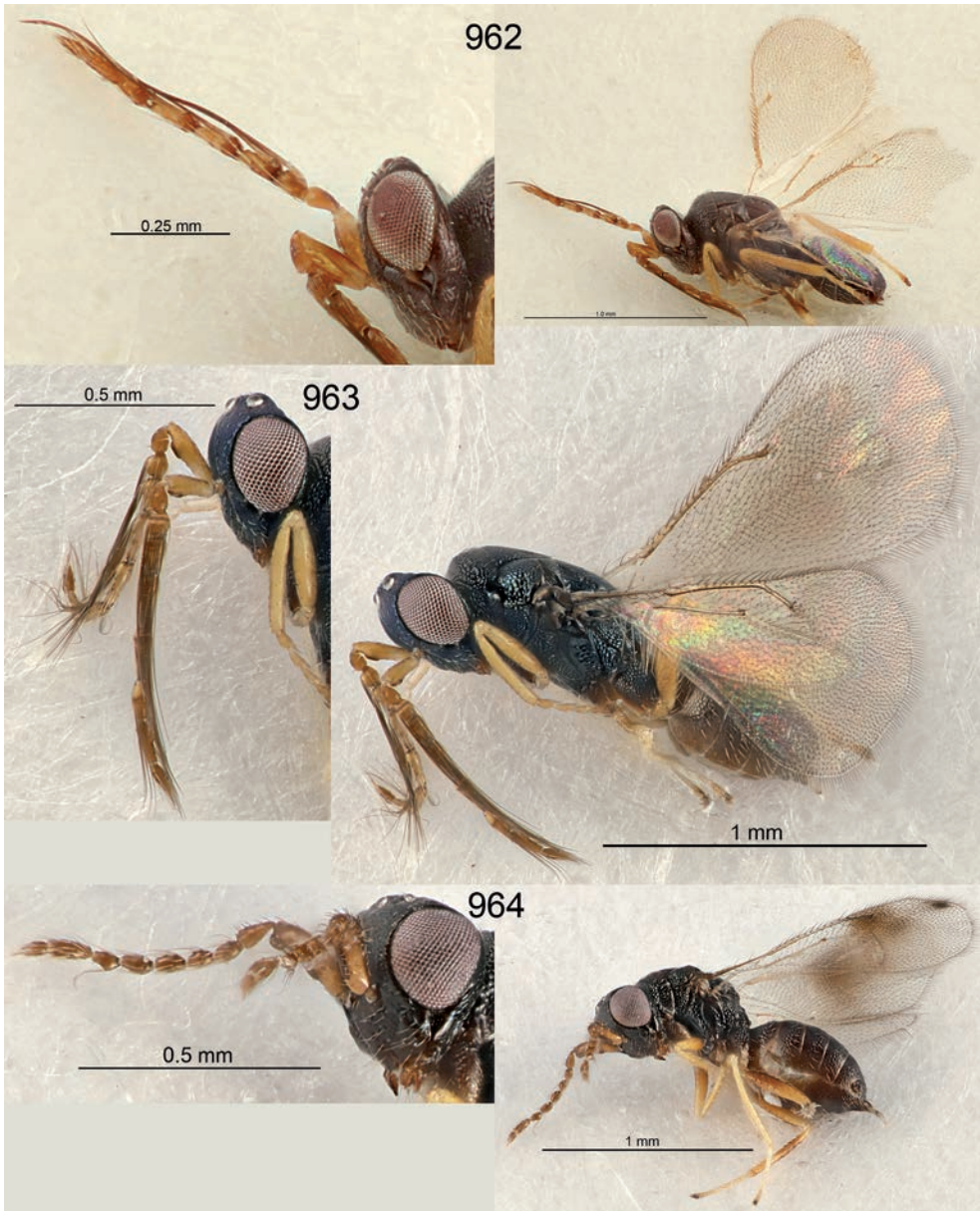
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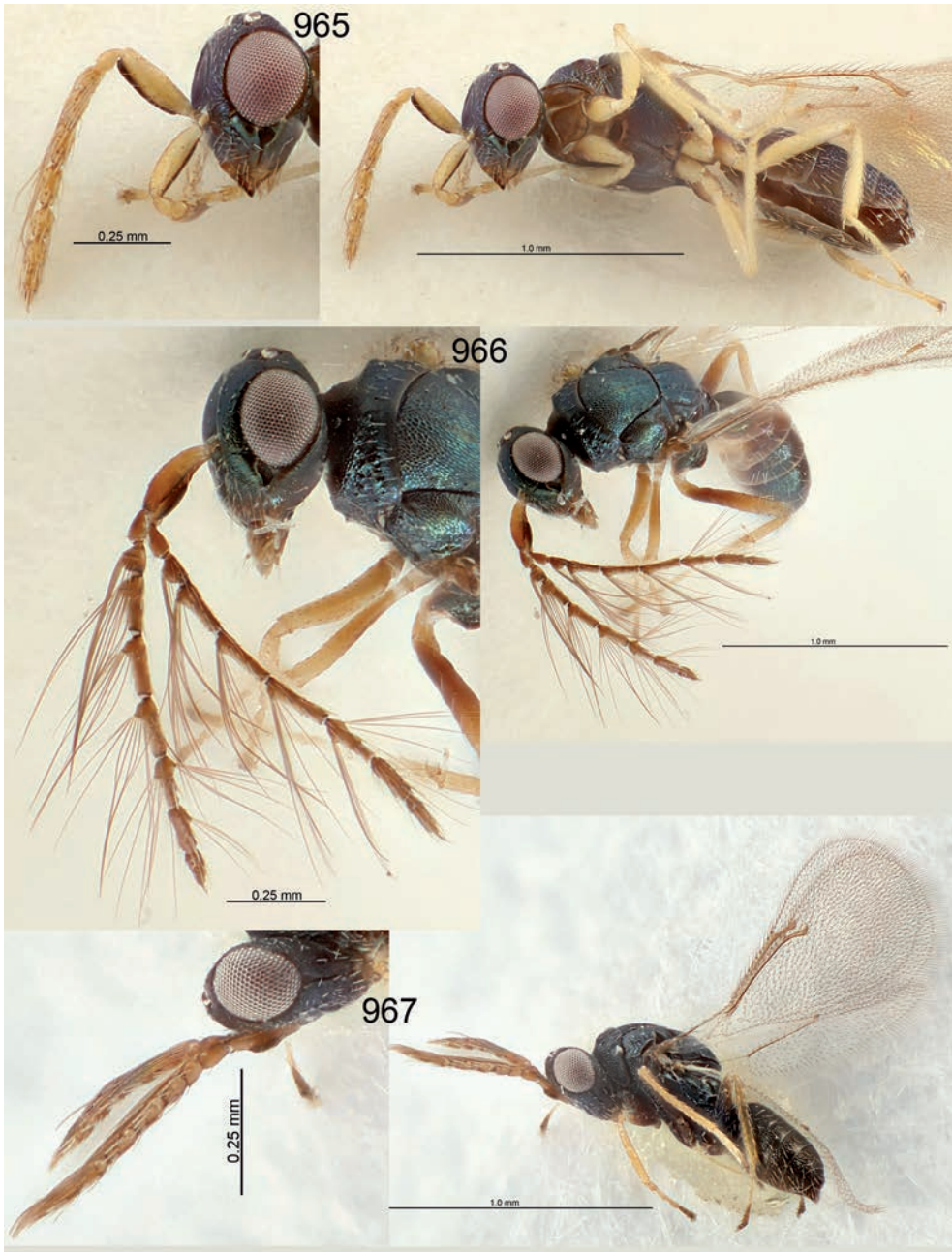
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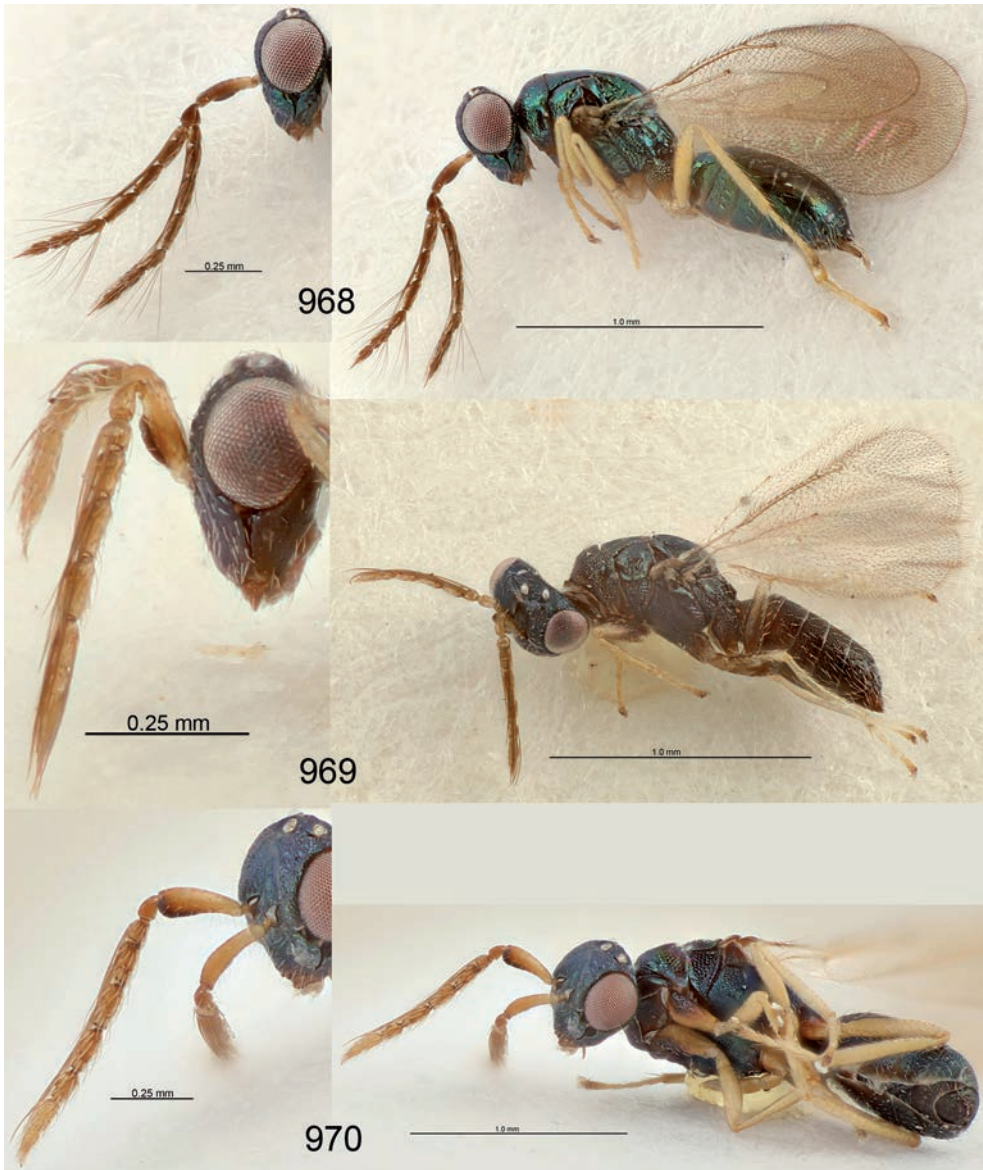
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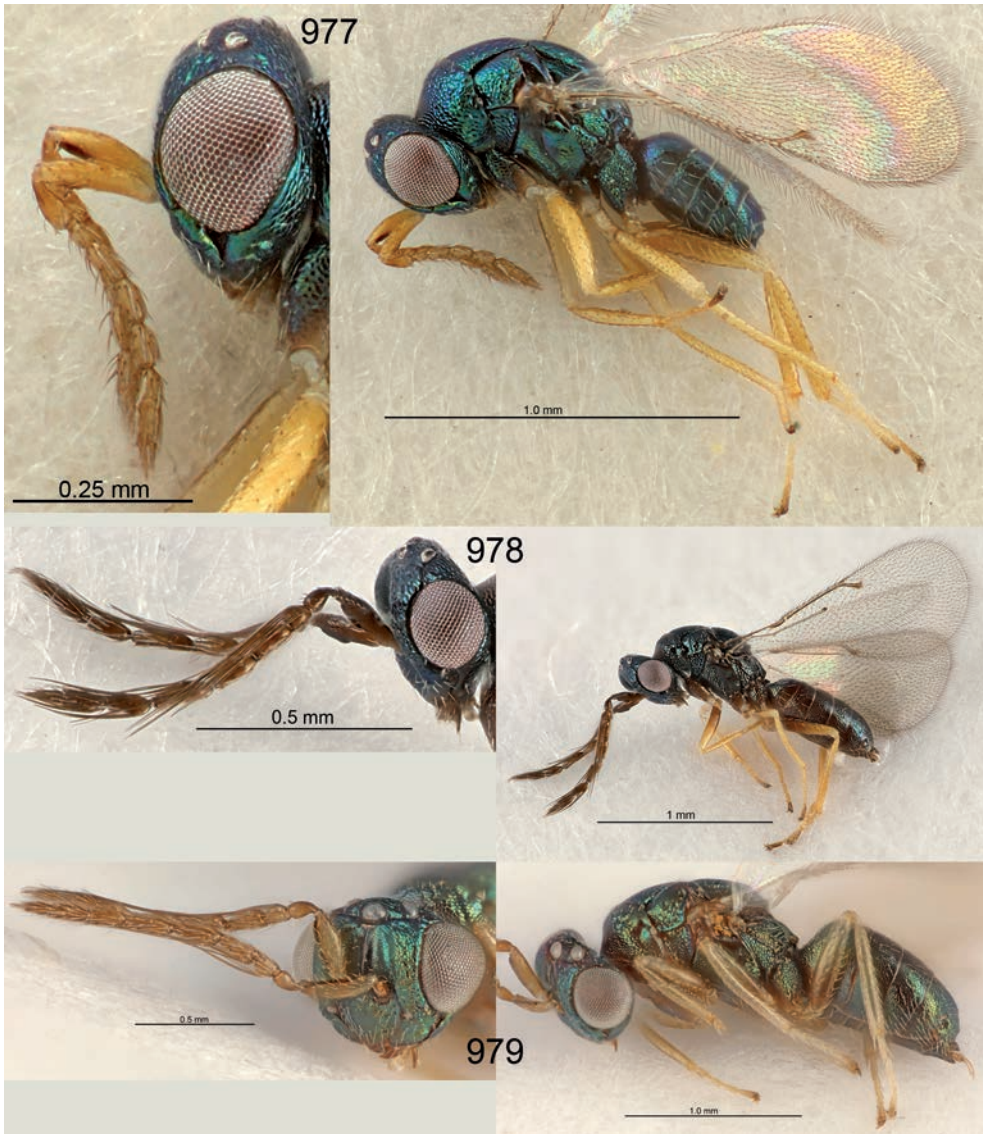
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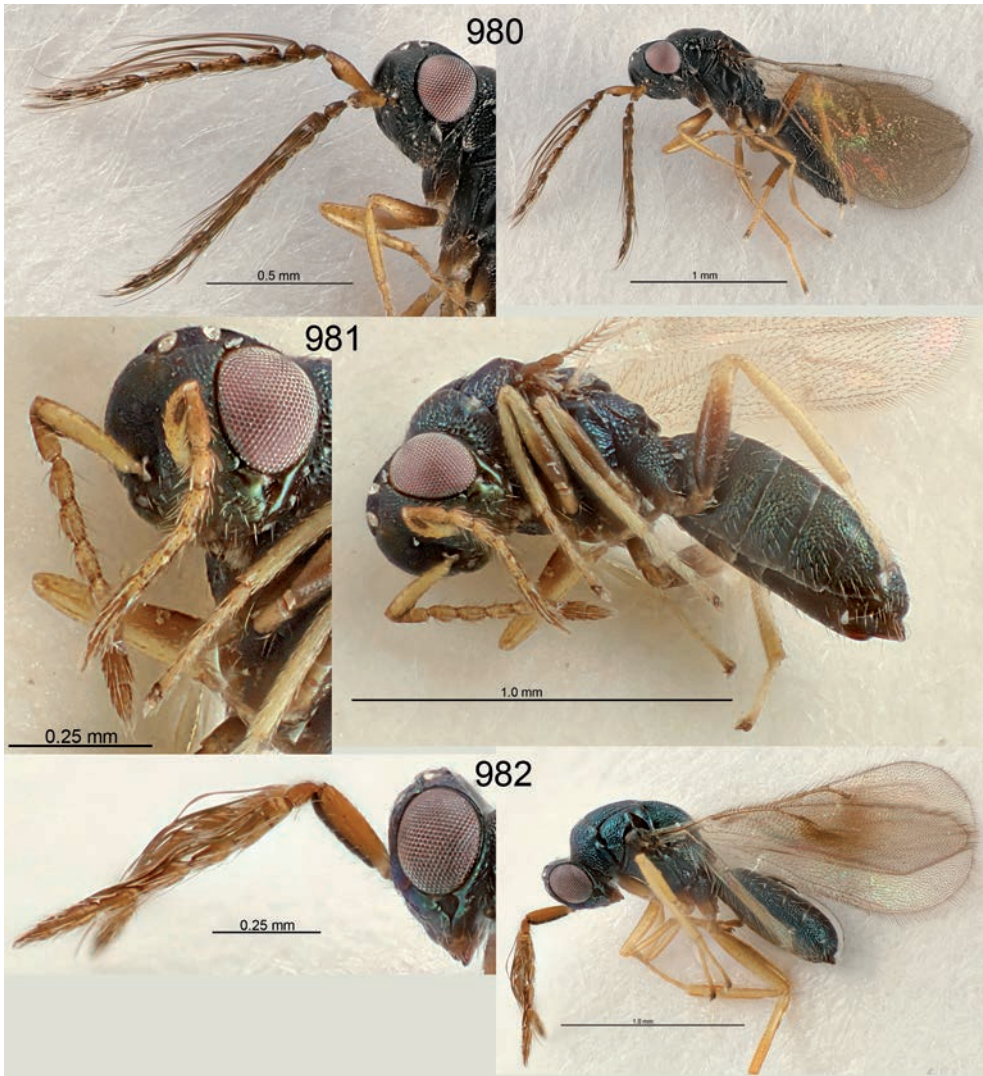
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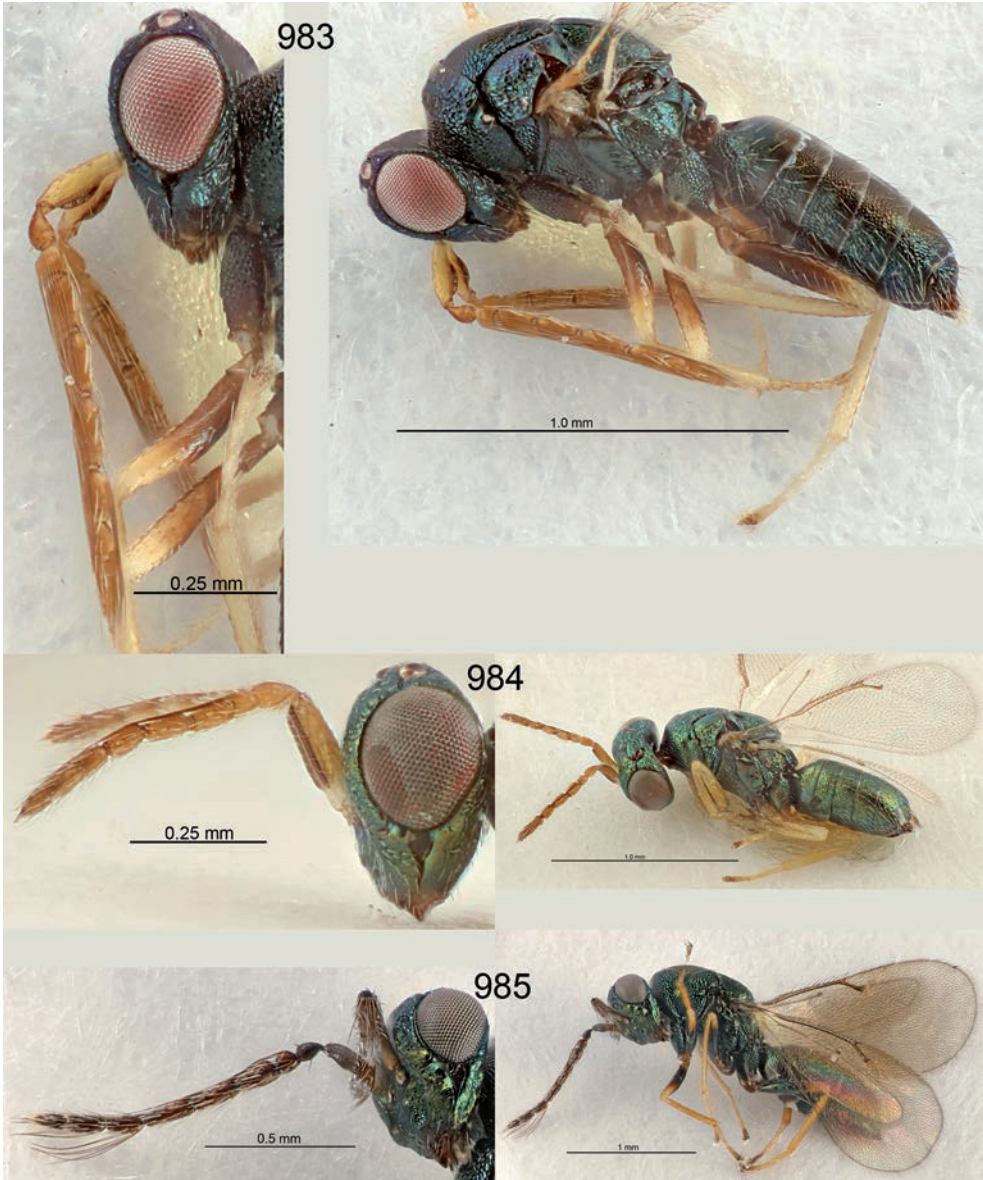
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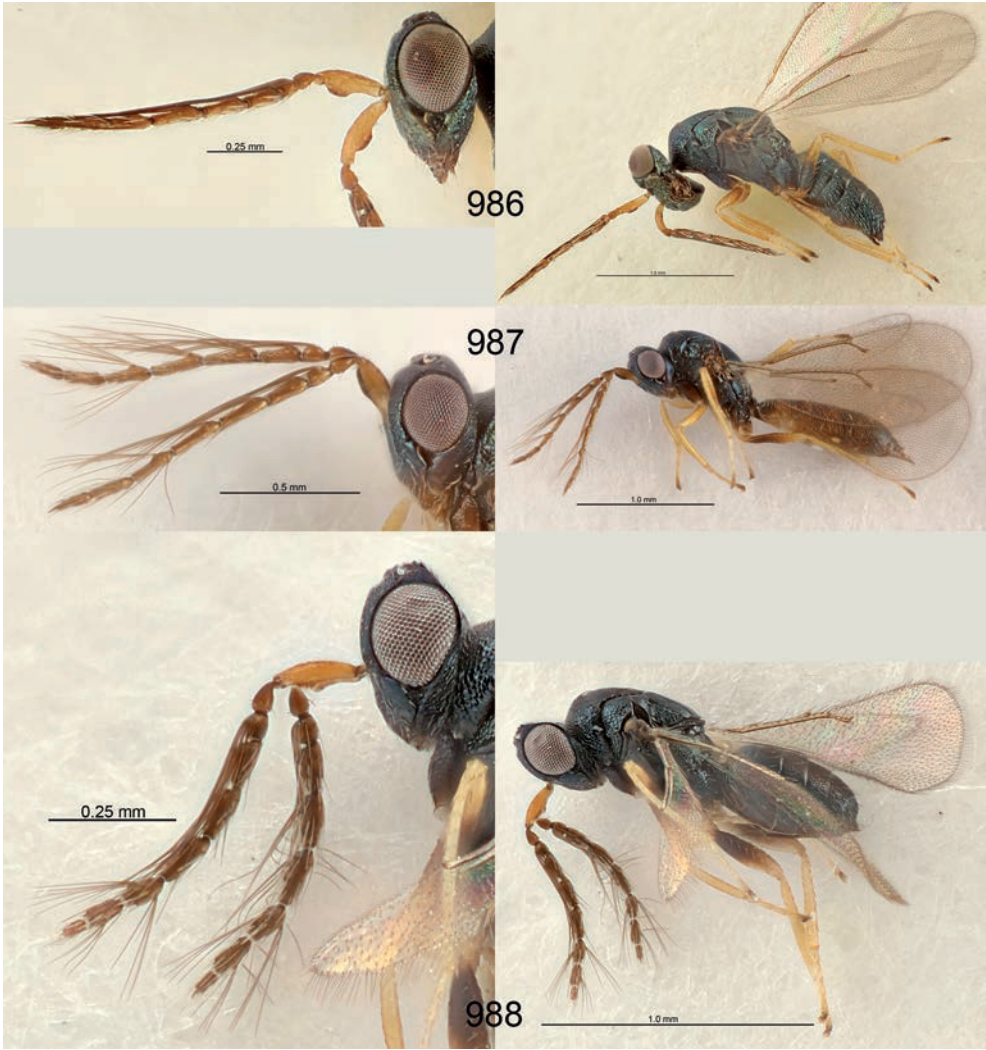
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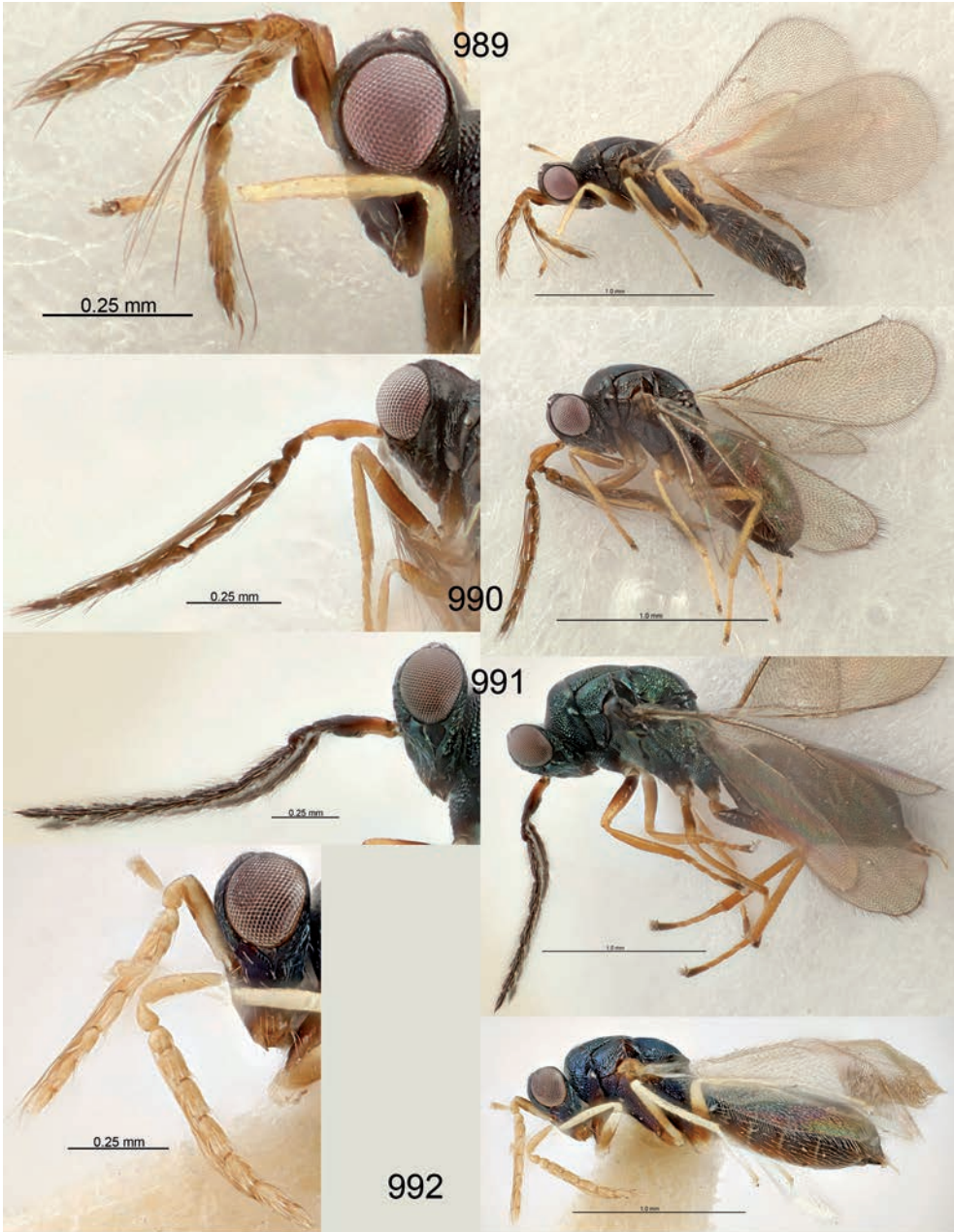
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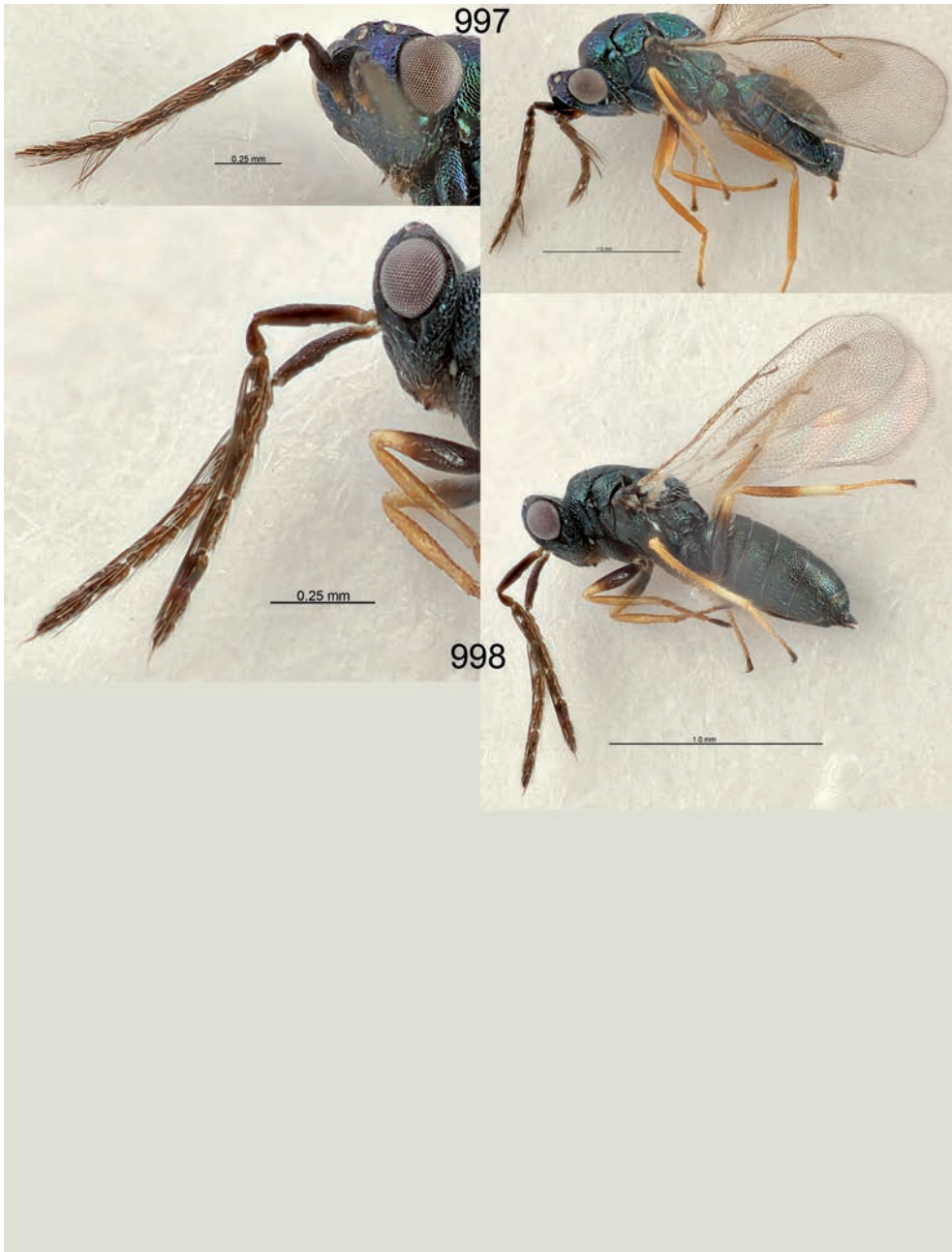
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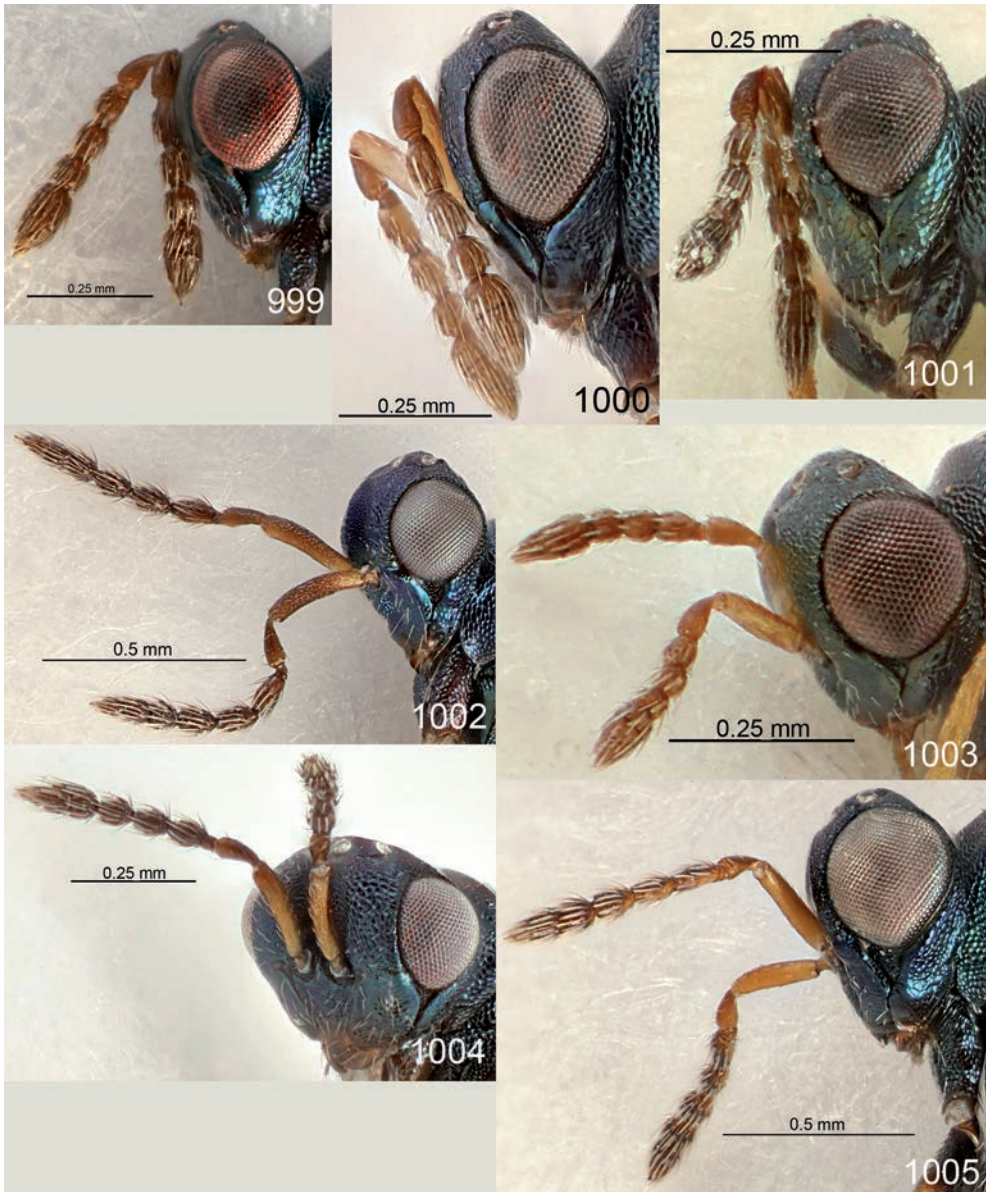
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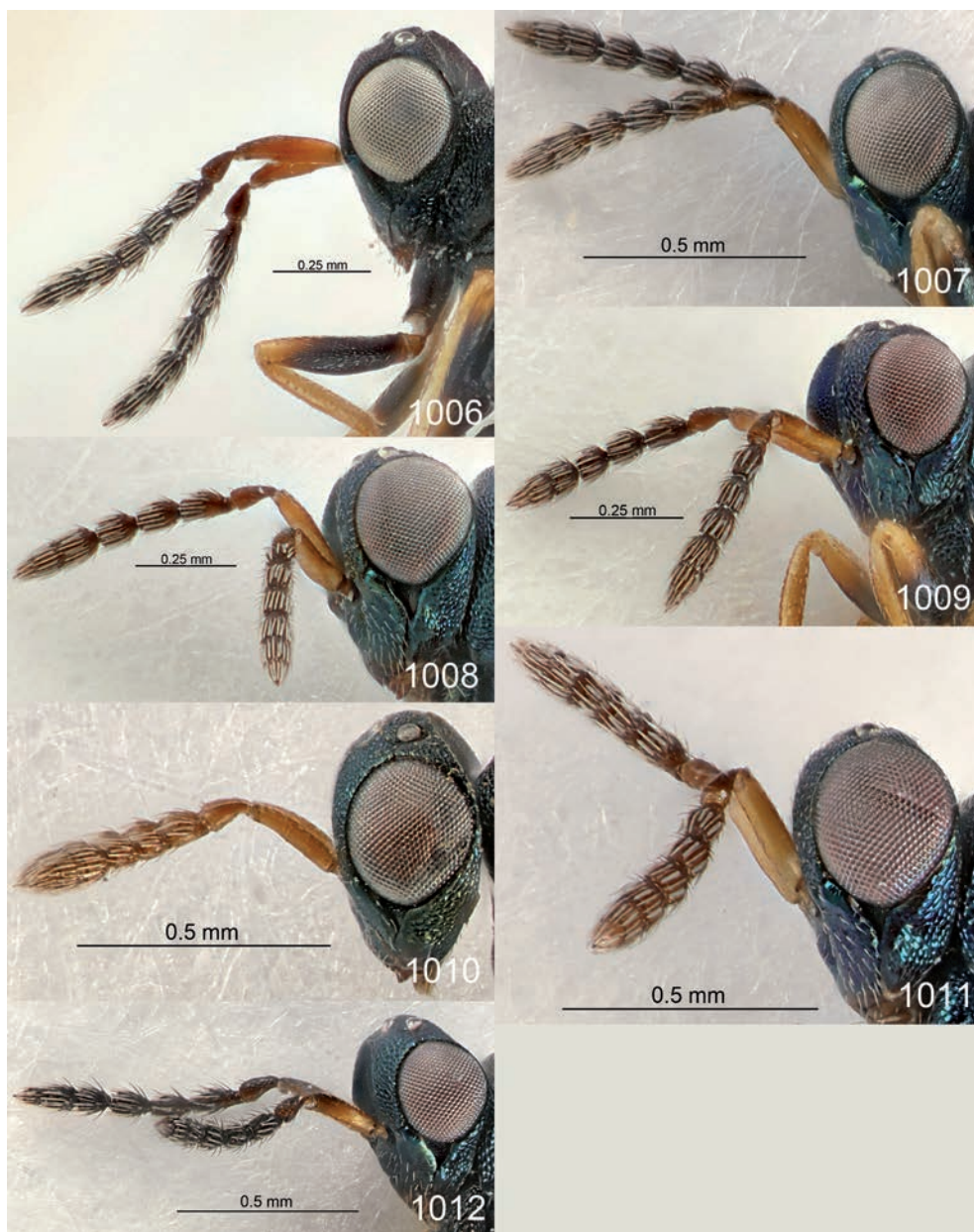
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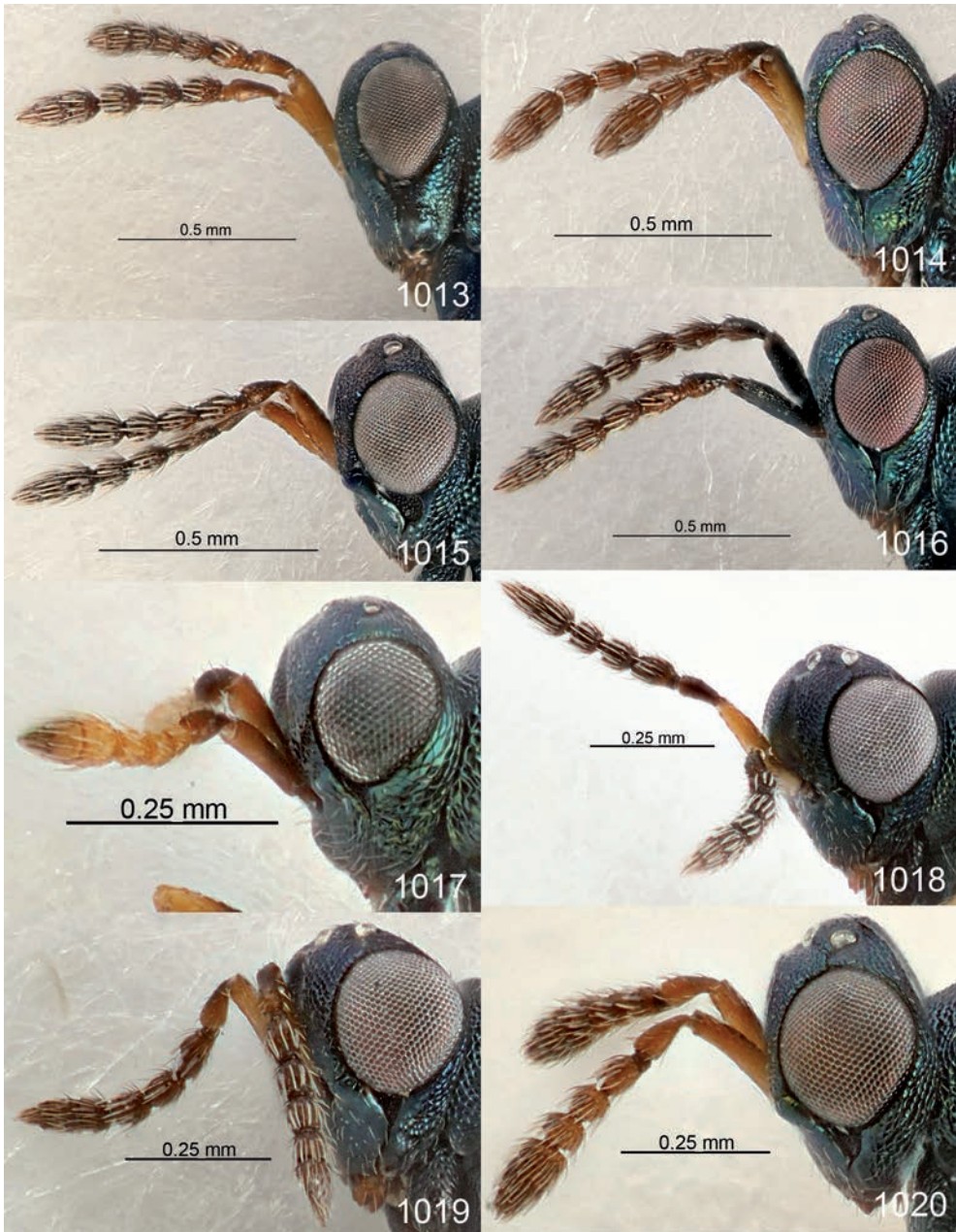
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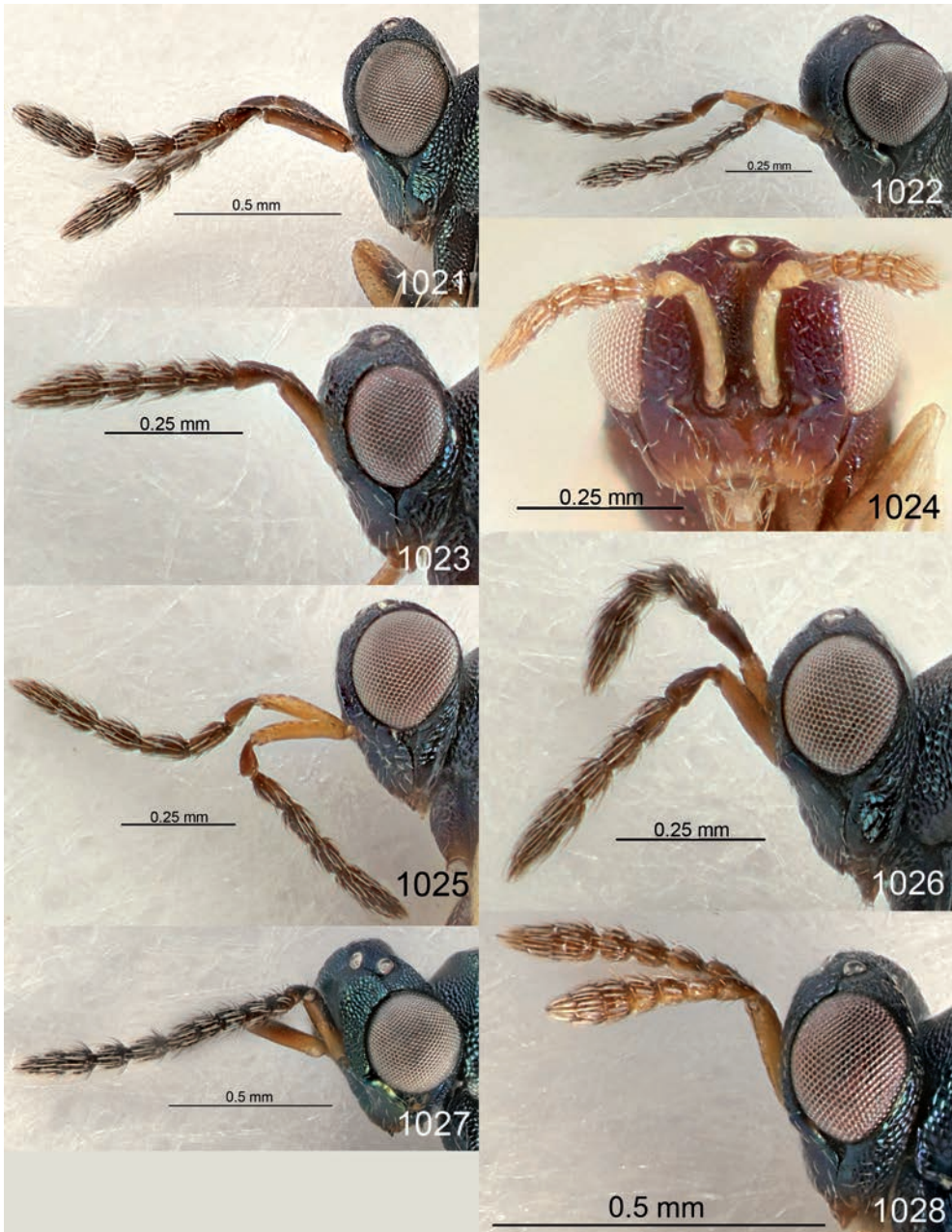
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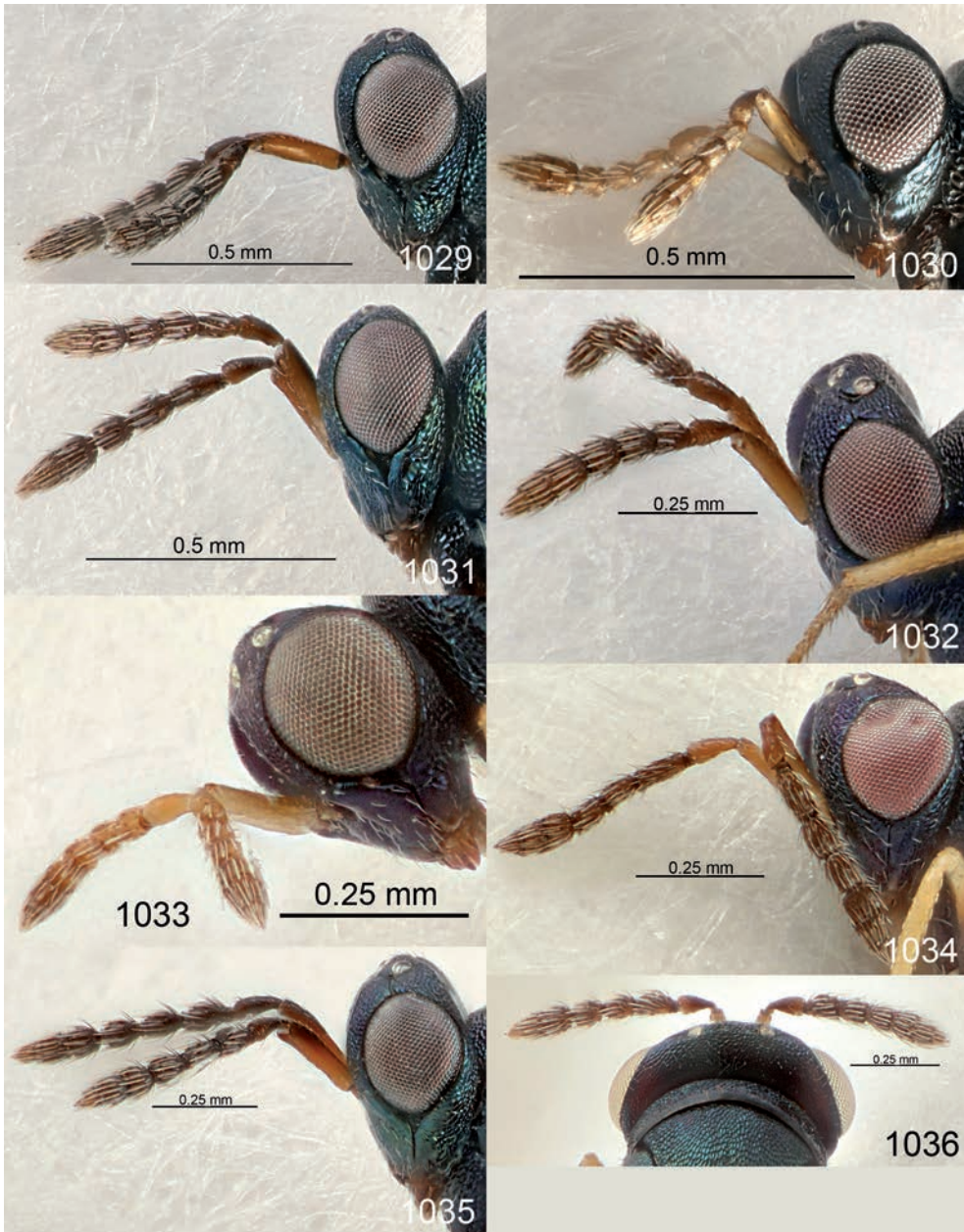
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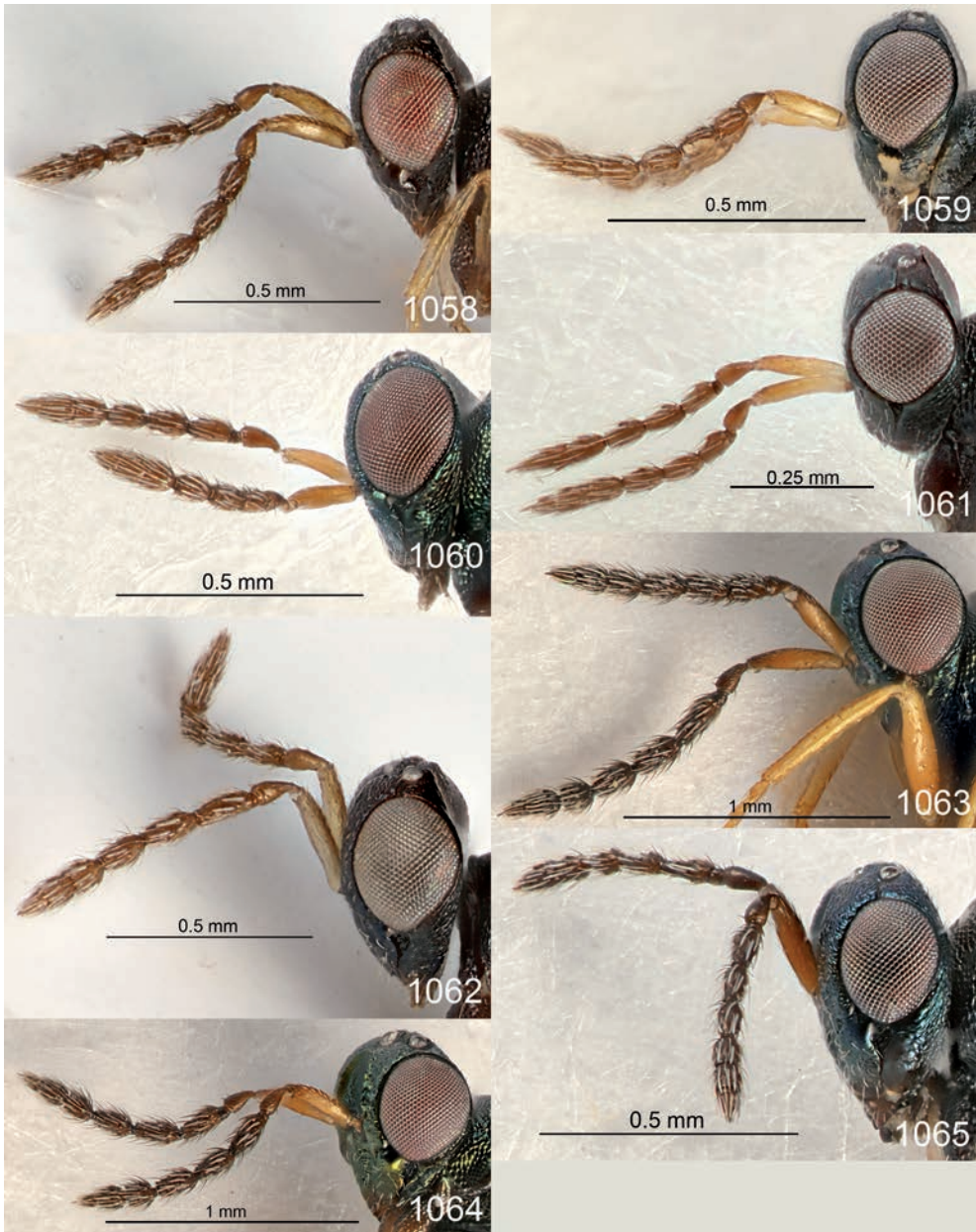
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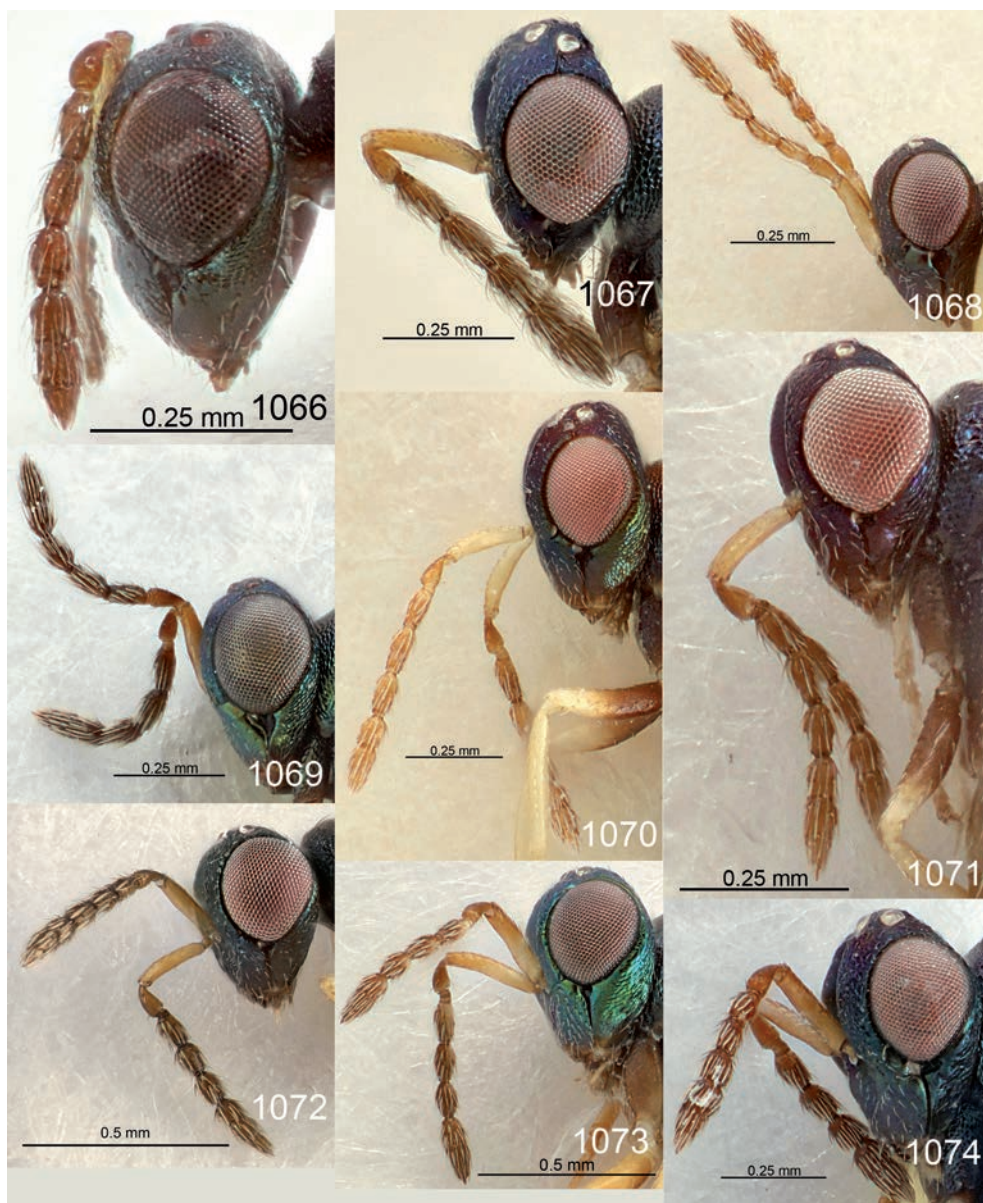
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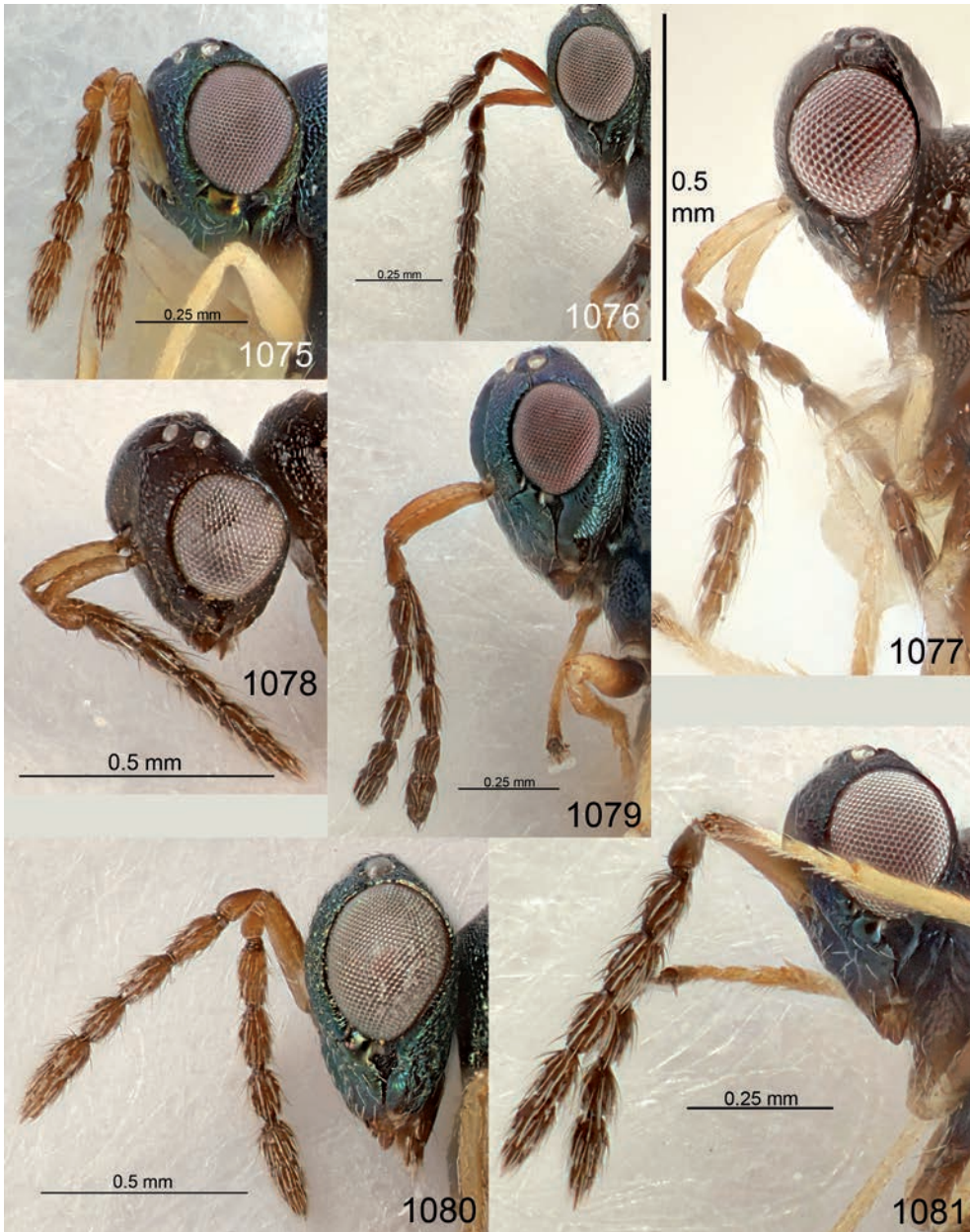
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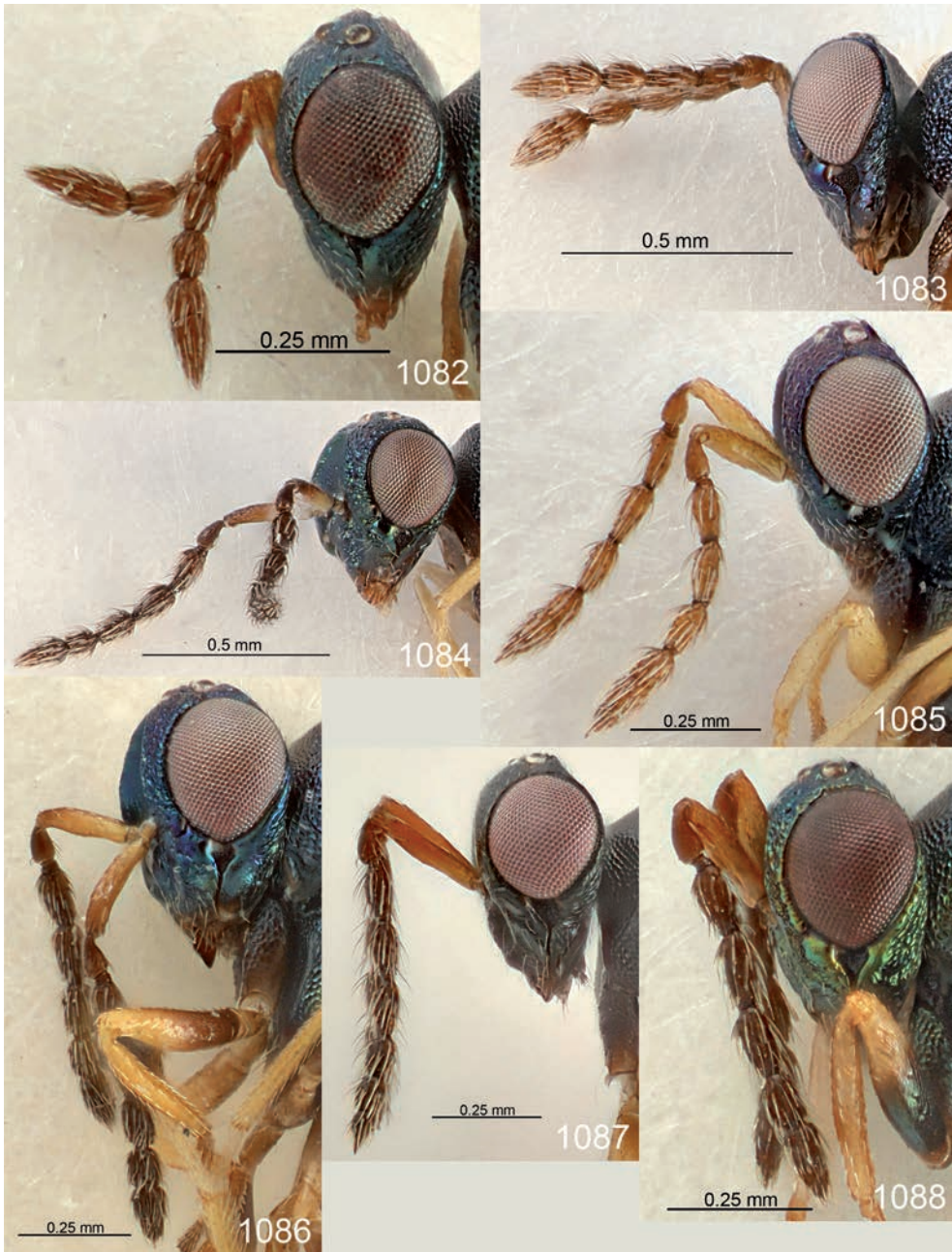
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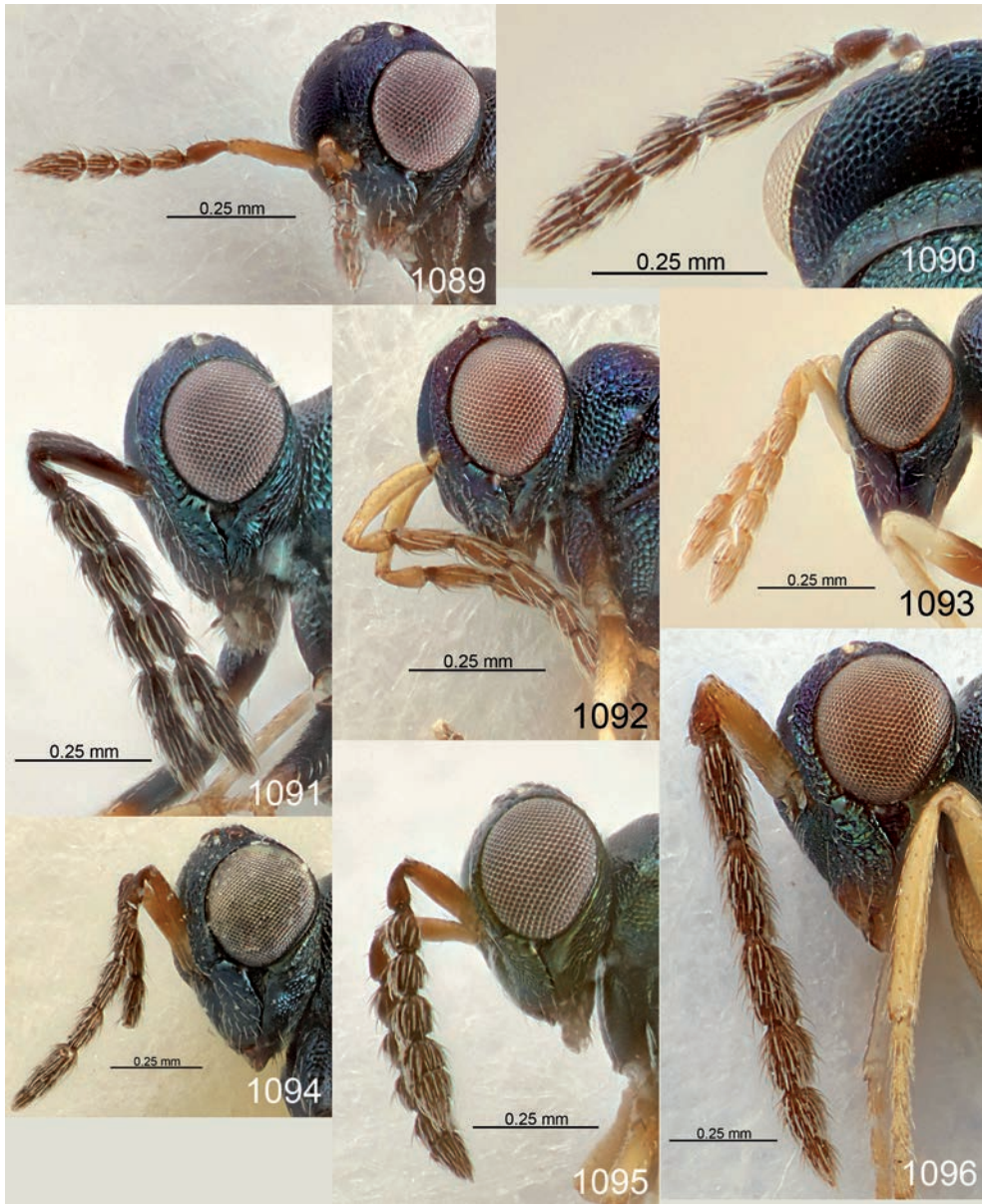
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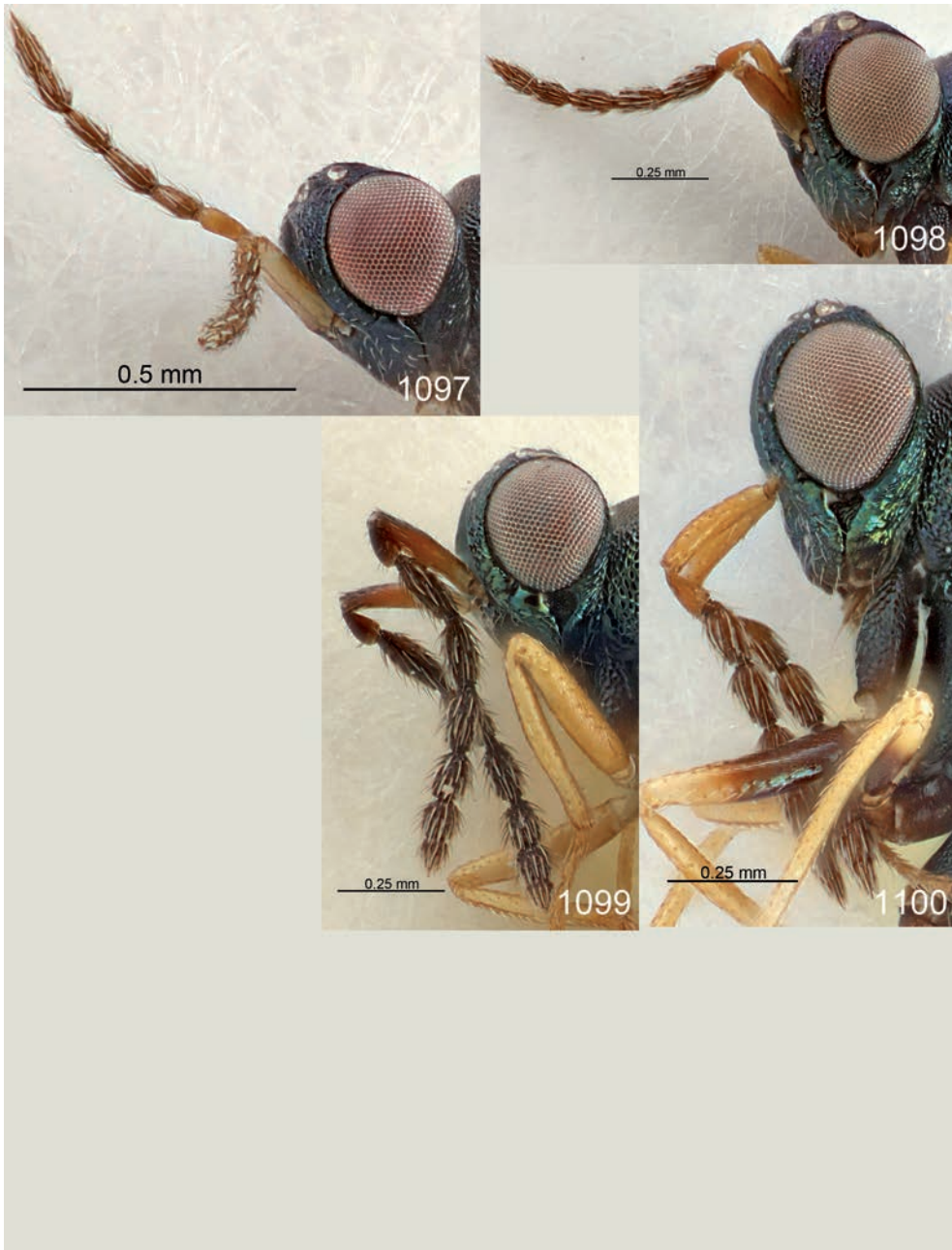
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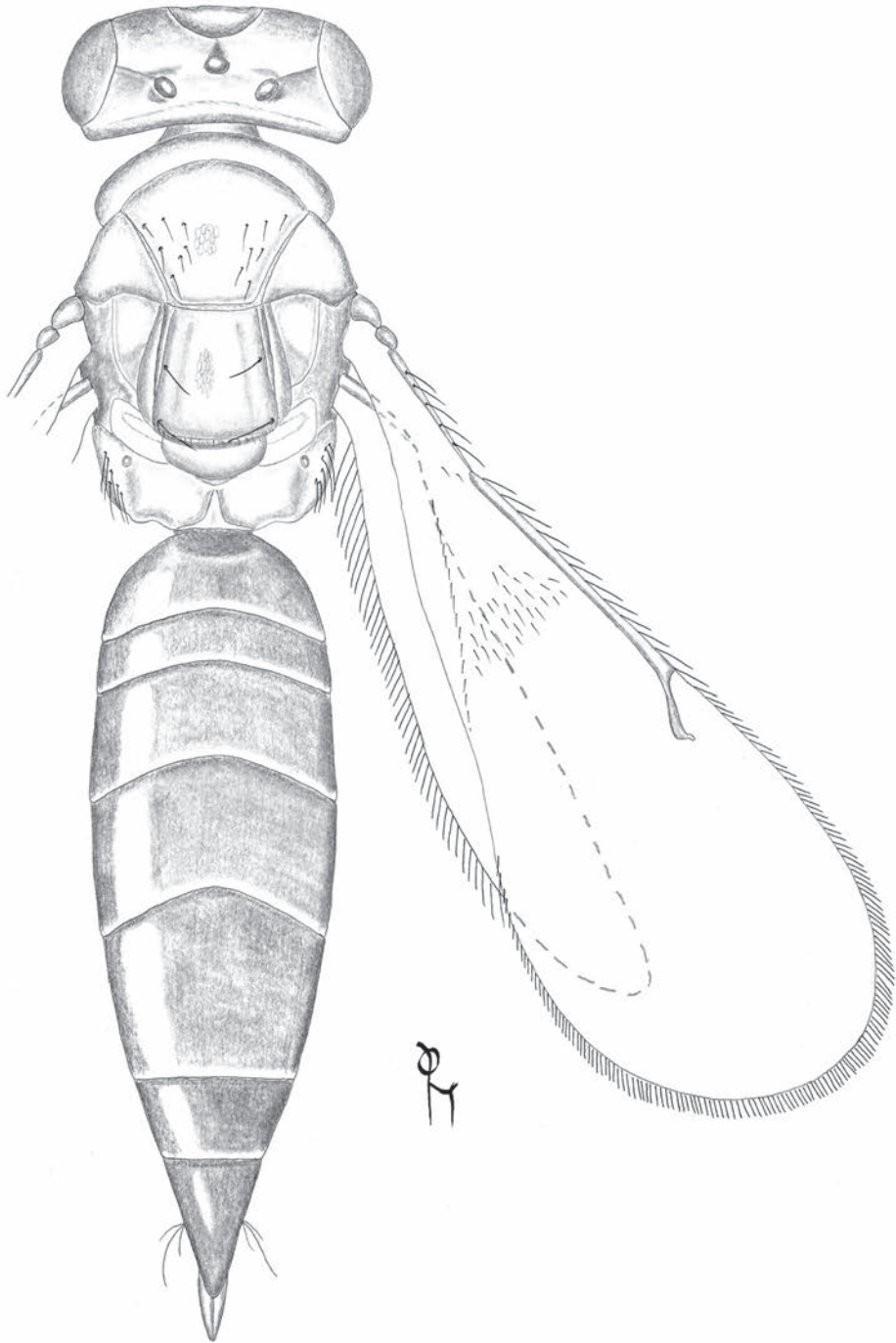


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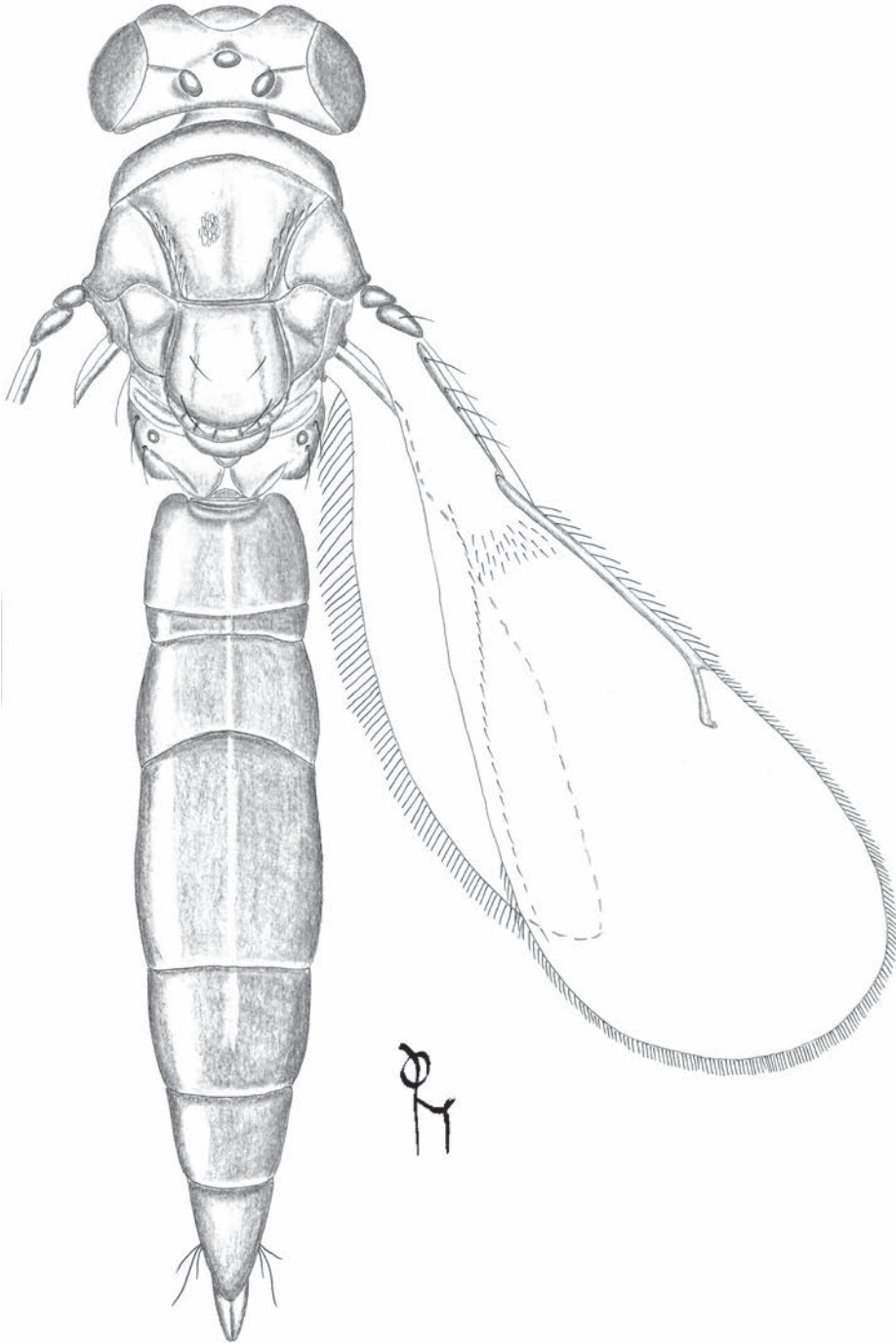


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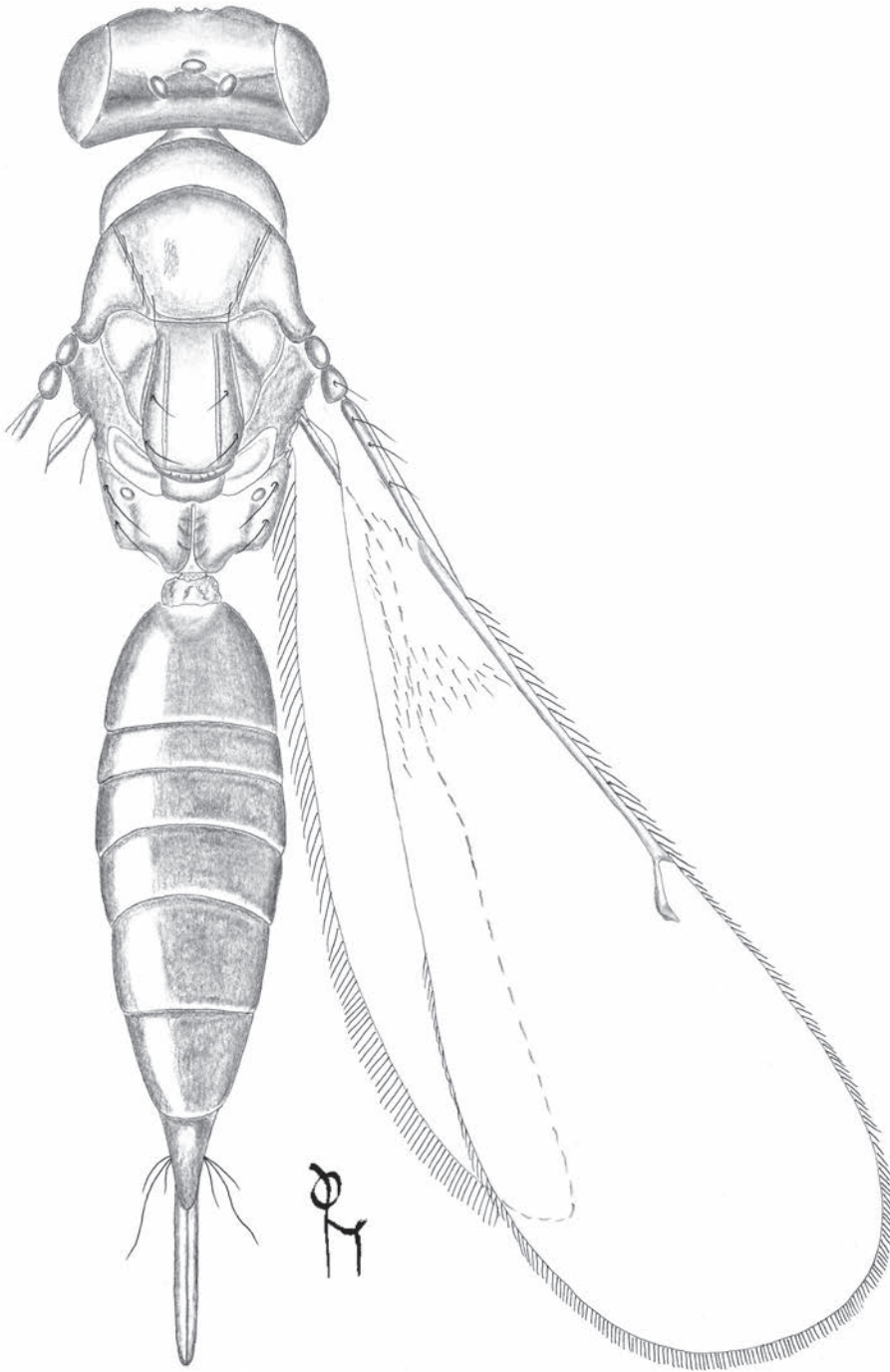


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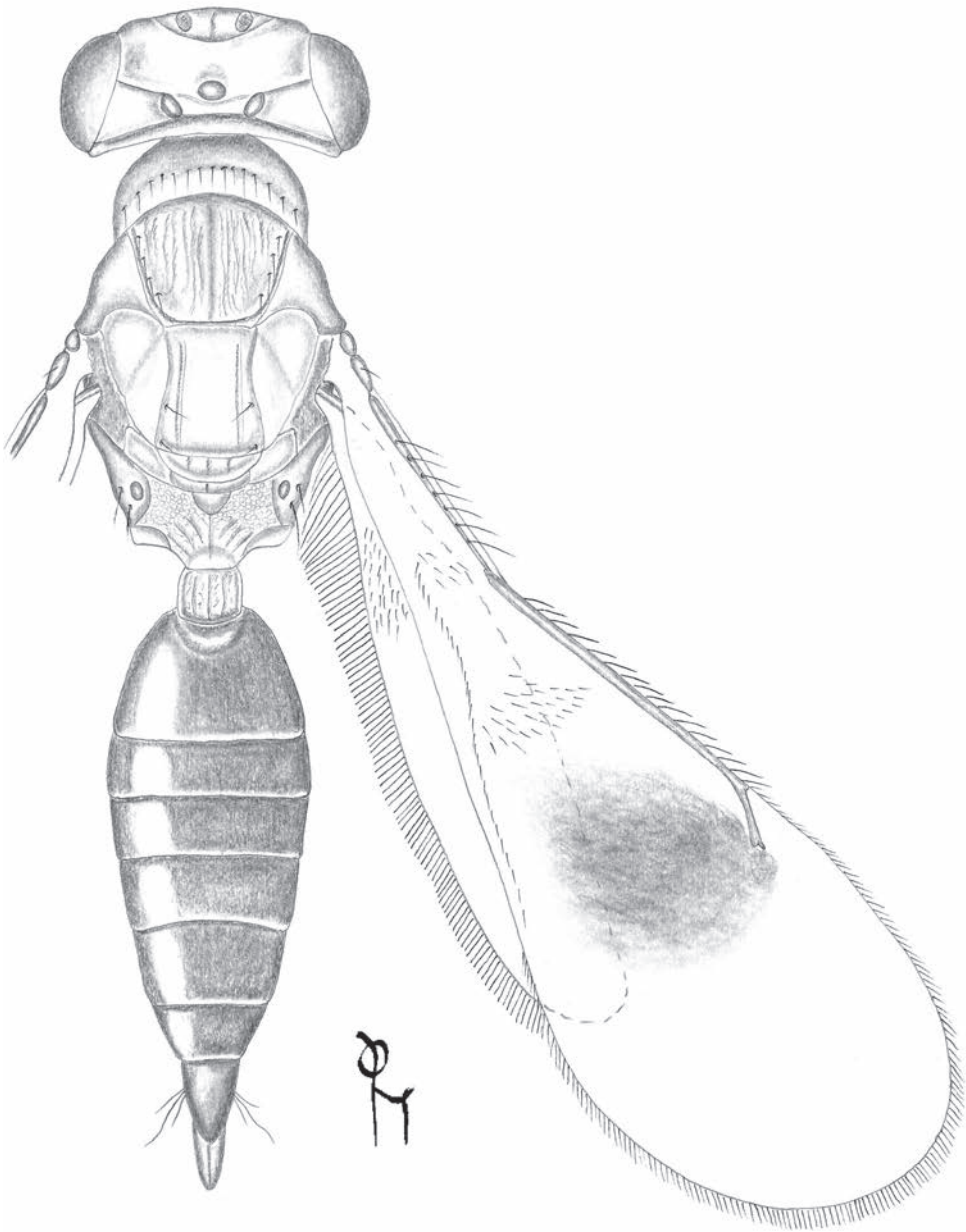


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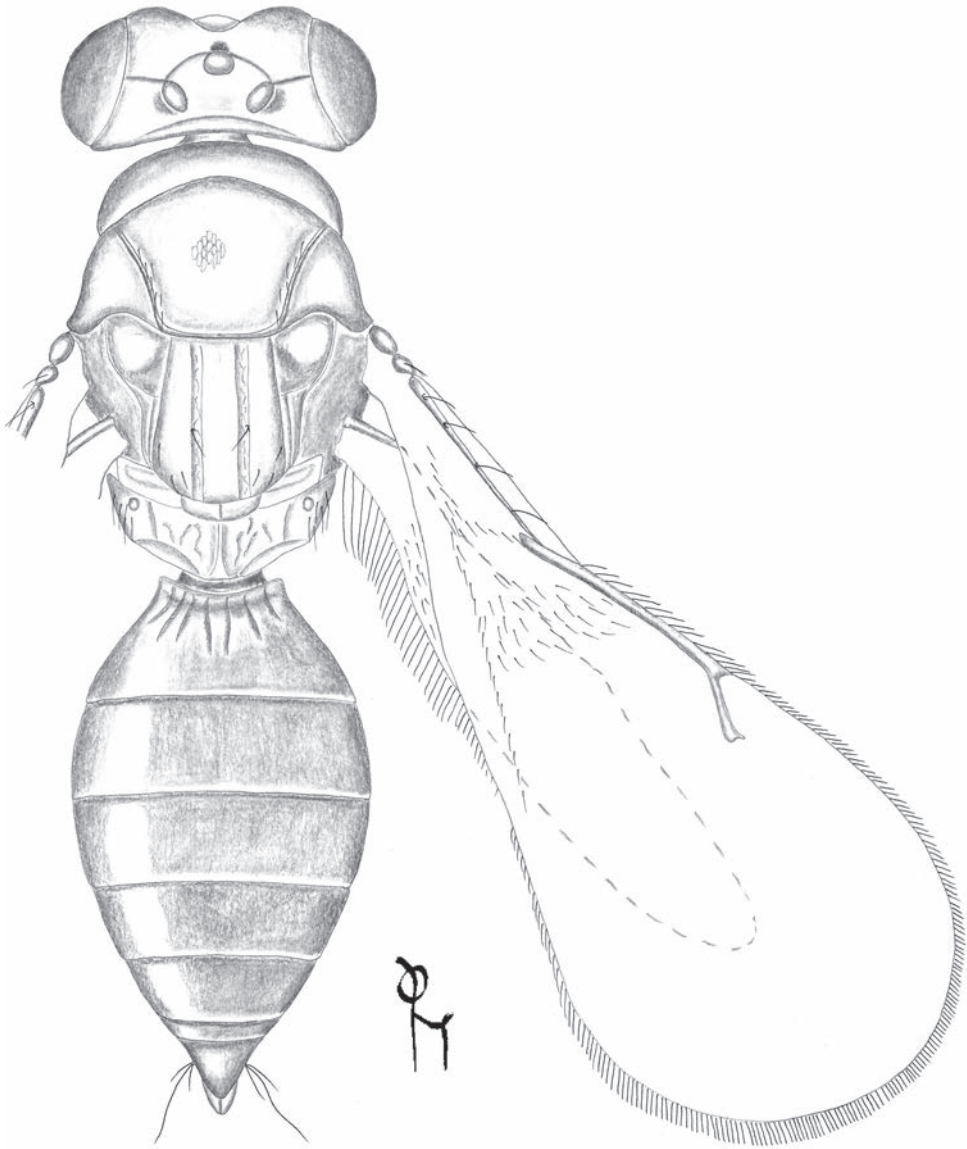


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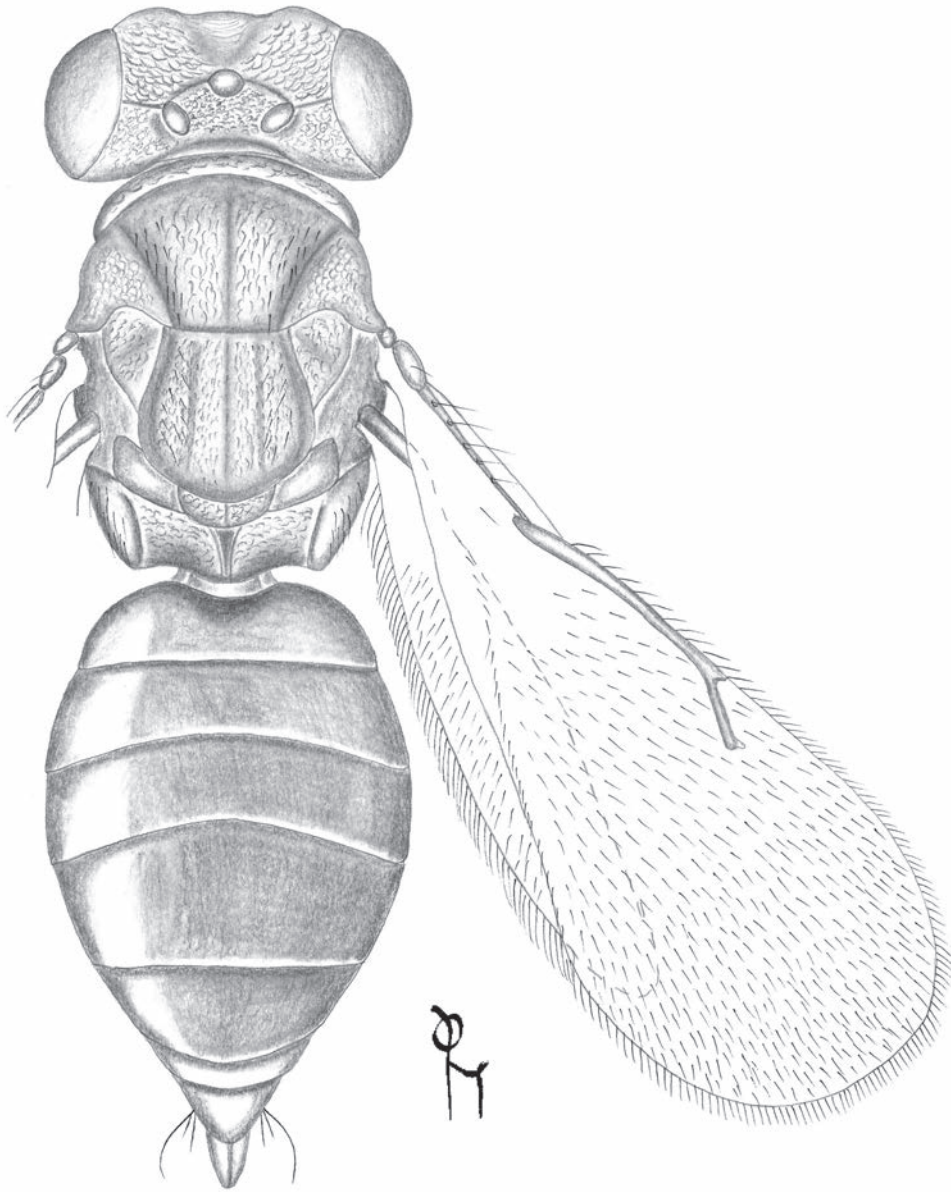


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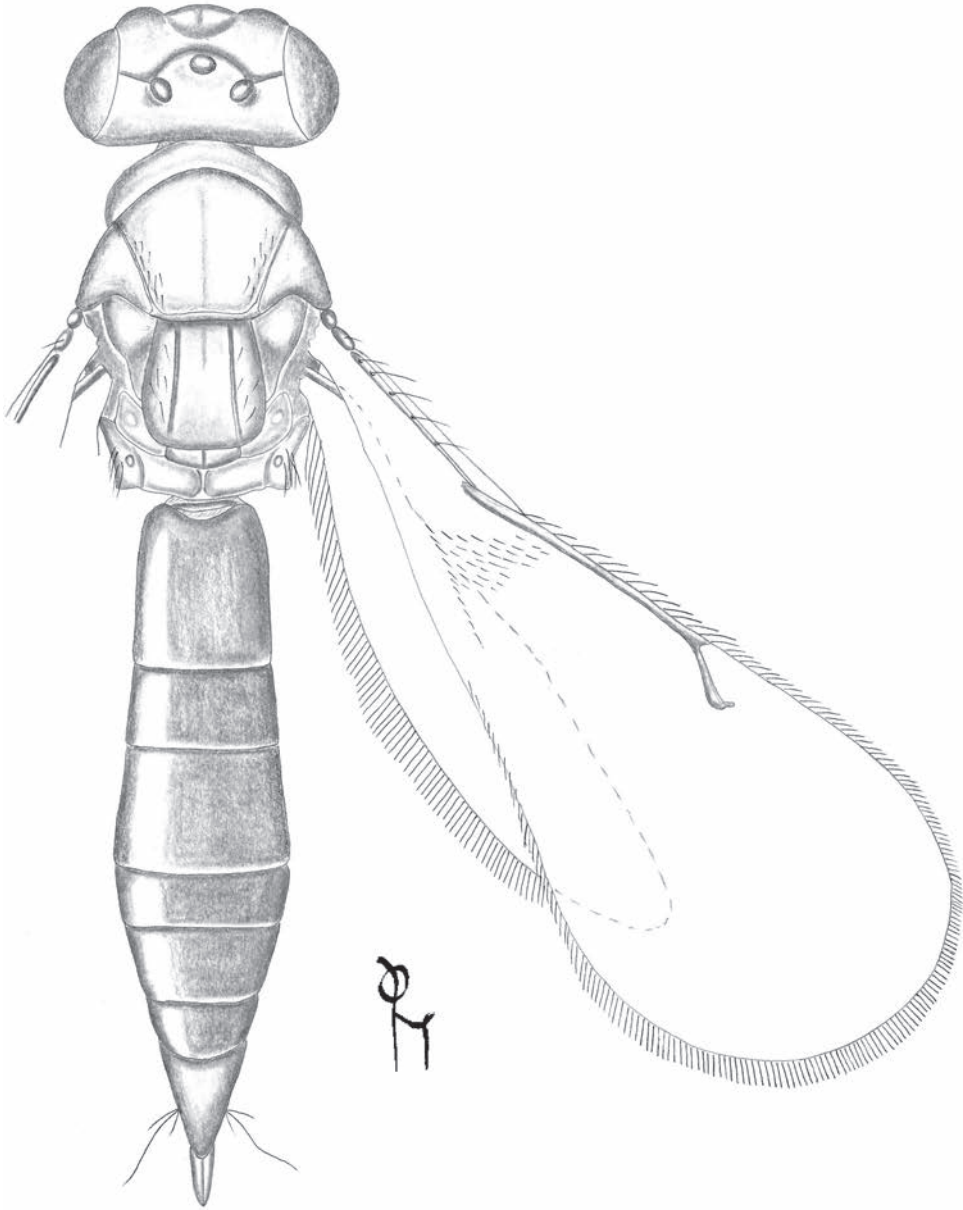


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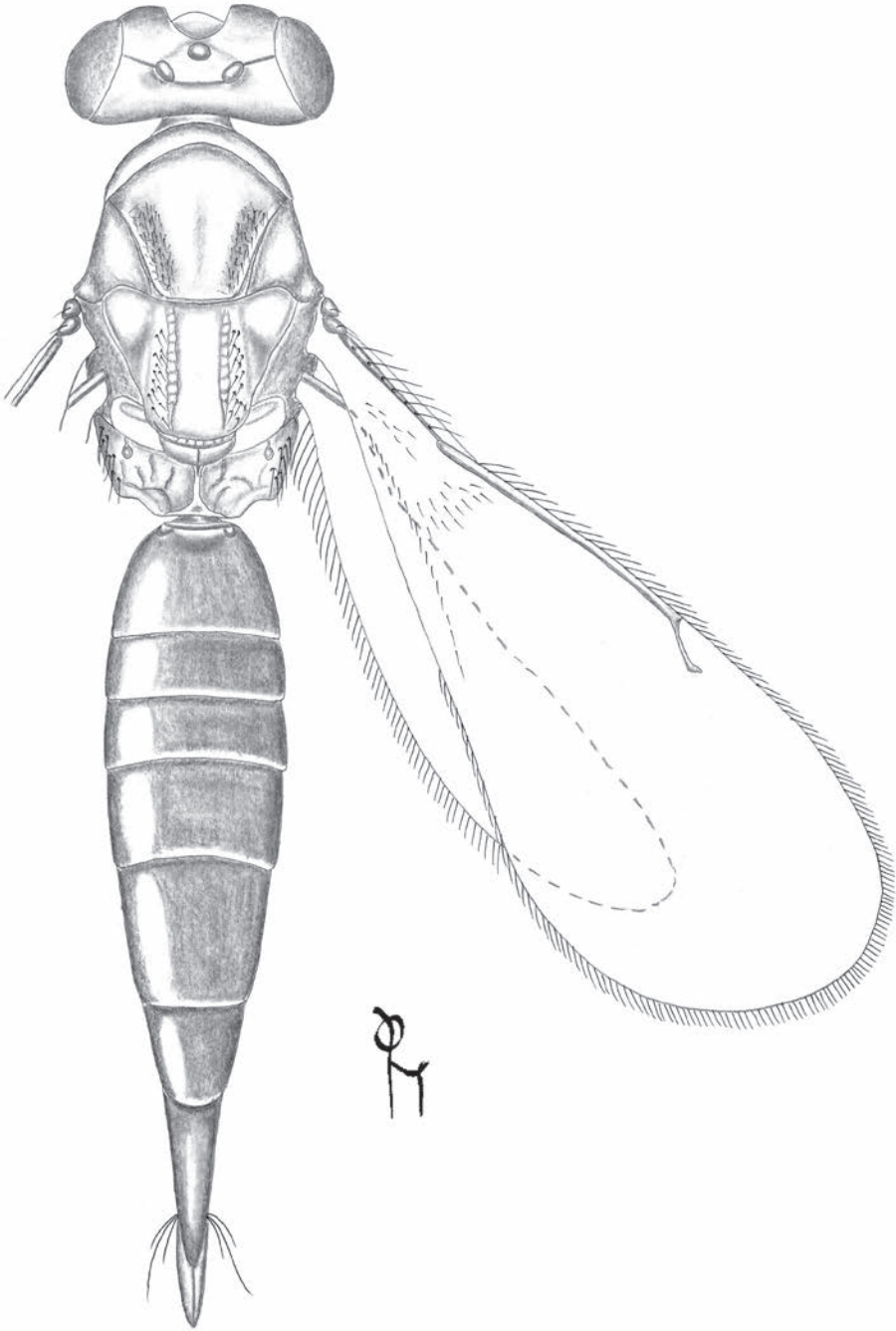


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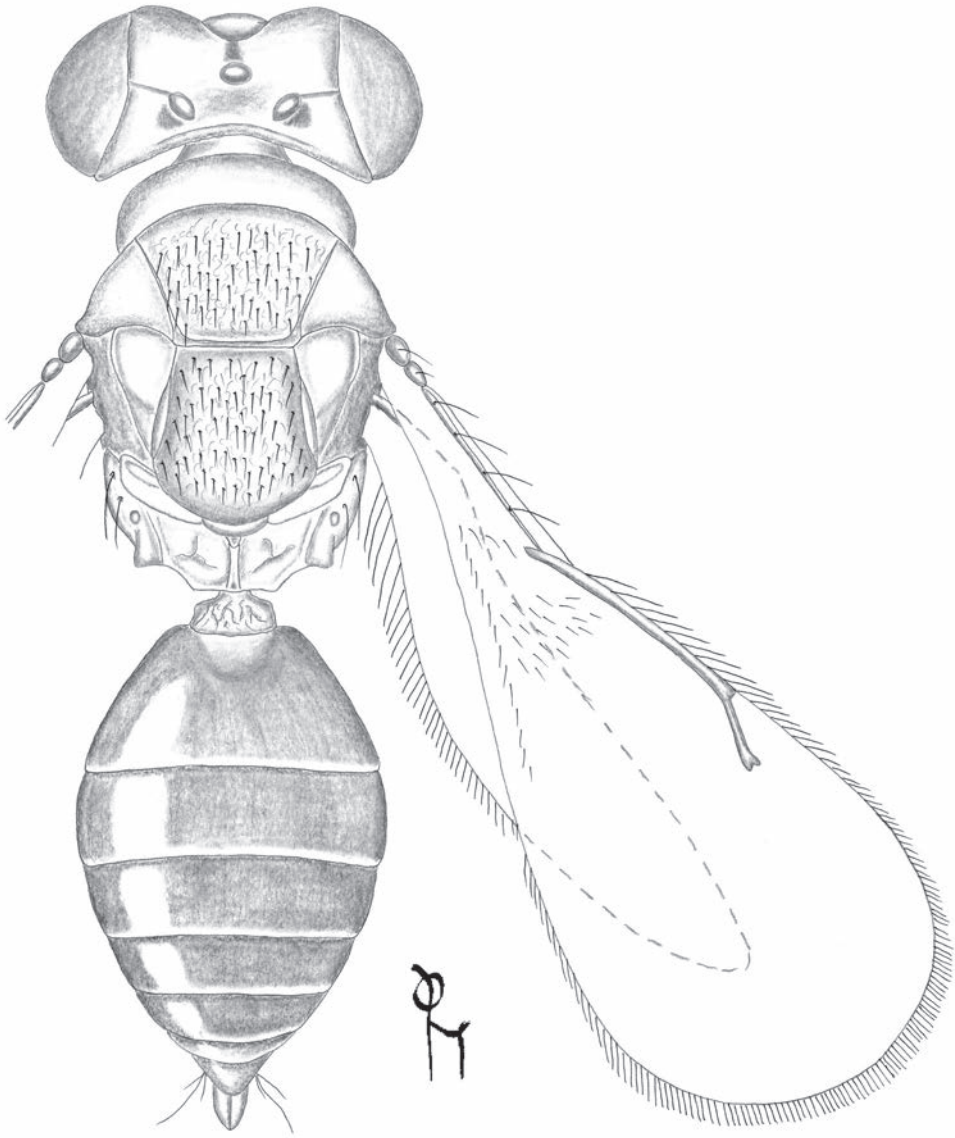


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