World Catalog of the Family Tethinidae (Diptera)

WAYNE N. MATHIS
and
LORENZO MUNARI

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ABSTRACT

Mathis, Wayne N., and Lorenzo Munari. World Catalog of the Family Tethinidae (Diptera). *Smithsonian Contributions to Zoology*, number 584, 27 pages, frontispiece, 1996.—All genera and species of the dipterous family Tethinidae are cataloged. Included are 126 species and 14 genera that are arranged within a classification of five subfamilies. The distribution of each species is given by major zoogeographic region(s) and country(ies) within each region. Information on the natural history, as available in the literature, and depository of primary types also are provided. Taxonomic and nomenclatural changes are as follows: The subfamily Apetaeninae Mathis and Munari is proposed, three new combinations are included (*Dasyrhicnoessa sexseriata* (Hendel), *Tethina dubiosa* (Collin), and *Tethina heringi* (Hendel)), one new synonymy (*Dasyrhicnoessa asymbasia* Sasakawa = *Dasyrhicnoessa sexseriata* (Hendel)), and *Tethina minutissima* (Bezzi) is transferred to the family Chyromyidae.

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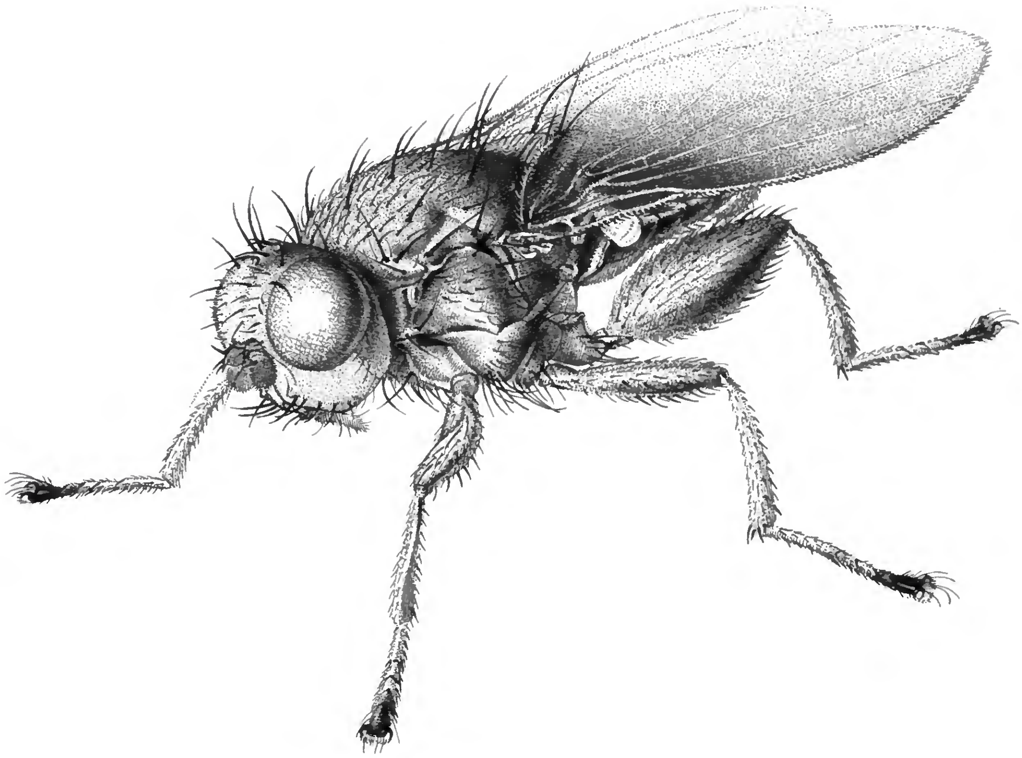

FRONTISPIECE.—*Afrotethina femoralis* (Munari) (♂).

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Introduction

True flies of the family Tethinidae occur in temperate and tropical zones of the world, primarily on or near seashores. A few species are found inland, usually in saline or alkaline environments, but occasionally they are found in meadow-like habitats. The family has comparatively few species (126), and aside from Hendel's revision (1934), which is now 62 years old and woefully out-of-date (more than one-half of the species were not included), the family has never been treated comprehensively. The intent of this paper is to catalog all taxa that have been described.

Catalogs or checklists are indispensable tools for anyone needing a currently accepted name and frequently other pertinent information, such as bibliographic and distributional data. This is crucial because most information is filed under a species' scientific name, which is the key to retrieval of information from the literature or collections. The system, however, is dynamic and subject to interpretation. The taxonomic literature is constantly changing to reflect current work, and some species are known by more than one name. Thus, a complete listing of names, including synonyms, is an important starting point for locating information, whether as the basis for applied or basic research or simply to satisfy one's curiosity.

The information included in a catalog is arranged in a logical and organized format that allows for its convenient and rapid conveyance, i.e., a quick and easy storage and retrieval system. The format and amount of information presented varies greatly, however, and these issues have, in part, led to semantic debates over differences between the terms "checklist" and "catalog," and to attempts to obviate the issue through use of a more neutral or more modern term, such as database (Cogan et al., 1980; Thompson and Knutson, 1987). Our use of the term catalog is intended to convey a more comprehensive treatment, including information on all valid names, synonyms, type species, and deposition of primary types. The bibliographic section for each name includes references (author, date, and page number of the original description and most subsequent citations), as well as distributional and other biotic information, as available in the literature. Some citations that occur in the literature of Tethinidae are omitted from this catalog and the bibliographic section, especially where we suspect that the species was misidentified and inclusion would perpetuate inaccurate distributional data. Neither did we include all citations from the extensive literature on the ecology of halo- and thalassophilous (sea loving) insects (including check-lists), rather we consulted, and recorded from, primary papers only.

The sequence of subfamilies and genera should not be interpreted strictly to represent a phylogenetic scheme, as no comprehensive study is available for the family. Indeed, one subfamily, Zaleinae, comprising but four species, was most recently included in the family Canacidae. When D.K. McAlpine (1982, 1985) proposed the subfamily Zaleinae he was unsure of its phylogenetic relationships, although he did associate it with the Canacidae. Others have followed that precedent (Mathis, 1989, 1992), mostly for convenience and completeness. We concur with Freidberg (1995) that this subfamily is intermediate within the Canacidae/Tethinidae assemblage and for completeness have included it here.

DISTRIBUTION.—The family occurs in temperate and tropical zones on most major continents and many continental and oceanic islands (also the subantarctic islands of Kerguelen, Possession, Marion, Macquarie, Antipodes, Bounty, and

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Reviewers: Allen L. Norrbom, Systematic Entomology Laboratory, United States Department of Agriculture, c/o National Museum of Natural History, Washington, D.C. 20560; Curtis W. Sabrosky, 205 Medford Leas, Medford, New Jersey 08055; J.R. Vockeroth, Centre for Land and Biological Resources Research, Central Experimental Farm, Ottawa, Ontario, Canada K1A 0C6.

Campbell). In nature, sites where tethinids occur usually are characterized by a surfeit of individuals and a paucity of species.

NATURAL HISTORY.—Tethinidae are mostly halophiles, occurring in coastal marine habitats, although some species are found inland, usually associated with saline biotopes, such as salt lakes and alkaline hot springs. A few species, such as *Pelomyia coronata* (Loew), are exceptions, being associated with meadows that occur in mountain passes, forests, and oases (Melander, 1952:194). Adults of thalassophilous species are commonly found in coastal marine habitats (Karl, 1930), including the intertidal zone, wrack heaps (usually brown algae that are most abundant along temperate seashores bathed by cold currents), salt marshes, dune vegetation, lagoon-litoriparian zones, mangroves (particularly species of *Dasyrhicnoessa*), and on salty soils or bare sand. Two species of *Apetaenus, A. littoreus* (Hutton) and *A. watsoni* Hardy, occur on seabird dung and are associated with colonies of penguins and other seabirds. Some species occur in habitats that have been dramatically and usually adversely modified by human activities, such as meadows polluted by industrial emissions (Bährmann, 1982) or slaughterhouses and poultry farms (Zuska and Laštovka, 1969). These synanthropic habitats are usually sites of salt accumulation and enrichment.

The biology and immature stages of the family are very incompletely known. Hardy and Delfinado (1980) reared *Dasyrhicnoessa vockerothi* Hardy and Delfinado from deposits of seaweed on beaches in Hawaii, and Ferrar (1987) provided some observations on the puparia of *Tethina* (*Rhicnoessa*) *grisea* (Fallén). Séguy (1940) and Hardy (1962) described the larva of two species of the subantarctic genus *Apetaenus* Eaton. Gorczytza (1988) reported on the spatial and seasonal distribution of some European species (*Pelomyiella mallochi* (Sturtevant), *Tethina* (*Tethina*) *albosetulosa* (Strobl), *Tethina* (*Tethina*) *illota* Haliday, *Tethina* (*Rhicnoessa*) *flavigenis* (Hendel), and *Tethina* (*Rhicnoessa*) *grisea* (Fallén)) from a study using color traps on the Frisian Islands of Mellum and Memmert. Tréhen and Vernon (1982) and Tréhen et al. (1985) conducted extensive ecological investigations on the genera *Apetaenus* and *Listriomastax* Enderlein on Crozet Islands.

Only one parasite of Tethinidae is recorded. Rossi (1988) described a new species of Laboulbeniales (Ascomycetes) that is parasitic on *Pseudorhicnoessa rattii* Munari from the Seychelles.

PHYLOGENETIC RELATIONSHIPS.—The phylogenetic relationships of the Tethinidae, either with other families (outgroups, sister groups) or among the included taxa, are not entirely resolved, and further clarification will require cladistic analysis at all taxonomic levels. At the familial level, J.F. McAlpine (1989:1472) identified five synapomorphies that link Tethinidae with Canacidae and noted that "these are clear indications of a sister-group relationship between them . . . and may even indicate that they are subgroups of a single family." Other authors (Hennig, 1958; Griffiths, 1972; D.K. McAlpine, 1982; Freidberg, 1995) also suggested a relationship with the family Canacidae, but Griffiths (1972) further noted some affinities with the Chloropidae and Milichiidae. According to J.F. McAlpine's (1989) phylogenetic inference, which included an analysis of 25 characters for the families Tethinidae and Canacidae, the Tethinidae, together with Australimyzidae, Braulidae, Carnidae, Canacidae, Milichiidae, Risidae, Cryptochetidae, and Chloropidae (including Mindidae and Siphonellopsidae), comprise the superfamily Carnoidea (= Chloropoidea). Of the 25 characters J.F. McAlpine considered, five were determined to be synapomorphies that establish the monophyly of the Canacidae/Tethinidae lineage.

Freidberg (1995) reviewed the phylogenetic status of Zaleinae as part of his description of *Suffomyia* and its type species, *S. littoralis*. Although clearly associating *Suffomyia* with Zaleinae within the Canacidae/Tethinidae complex, Freidberg concluded that Zaleinae is an intermediate taxon between Canacidae and Tethinidae and further suggested that all three taxa be recognized as a single family, with Canacidae as the oldest family-group name.

At the generic and subfamilial levels, Foster (1976a) proposed an hypothesis of phylogenetic relationships that remains the only analysis available. Foster's hypothesis was offered as a preface to systematic reviews of two Nearctic groups, and his phylogenetic study was focused primarily on Nearctic taxa (*Tethina illota*, from the Palearctic Region, also was included). Foster suggested that his analysis be considered tentative (1976a:337), "as much data are still to be obtained on certain character complexes, such as the male genitalia and the immature stages." Foster proposed two monophyletic subfamilies, Tethininae and Pelomyiinae, with *Pelomyia, Pelomyiella,* and *Neopelomyia* in the latter and all other Nearctic species in the genus *Tethina* as part of Tethininae. Foster's analysis provides an excellent hypothesis for further testing and refinement on a more comprehensive basis.

A comprehensive, phylogenetic analysis of the family is ripe for the plucking and is especially needed at the subfamilial level. Placement of *Masoniella* Vockeroth within the existent classification, for example, has cast uncertainty on the relationships between, and blurred the characterizations of, the subfamilies Tethininae and Pelomyiinae. Moreover, the relationships between the subfamilies with single or few included genera, such as Horaismopterinae, Apetaeninae, and Zaleinae, are attractive for phylogenetic analysis and invite further consideration.

Vockeroth (1965:726) annotated one species entry, *Pelomyia coronata* (Loew), in the Nearctic catalog of Tethinidae with the comment that this species was "an unworked complex." Additional complexes, such as *Tethina albula* (Loew), are known to exist and are further evidence that much descriptive, revisionary, and phylogenetic work remains to be done in the family.

The family now contains 126 valid species that are ranked in 14 genera. No fossil Tethinidae are known.

FORMAT.—The format we have adopted follows that advocated by systematists from the Systematic Entomology

Laboratory (United States Department of Agriculture) (Hodges, pers. comm., 1983). Details are illustrated in the following hypothetical examples of generic and species entries (genera *Xus* and *Yus* and species *albus* and *zeus*). All valid generic and species names are indicated in boldfaced type.

Genus *Xus* Author(s) (number of species in the genus)

Xus Author(s), year:page. Type species: *Xus albus* Author(s), year, method of type designation.—Author(s), year:page [annotation(s)].

Yus Author(s), year:page. Type species: *Yus zeus* Author(s), year, method of type designation.—Author(s), year:page [annotation(s), such as "synonymy"].

albus Author(s). Geographic distribution by major faunal realm(s): Country (province or state, usually as an abbreviation).

Yus albus Author(s), year:page [type locality (Country. Province or state: specific locality (annotation(s), such as elevation or habitat. Specific information on the type locality is desirable, and, to be explicit and complete, we have provided this information without abbreviations. In many cases, such as when a specific site is not published or when the type locality is vague, we have quoted this information as it appears in the original publication.); primary type(s) and gender(s), deposition information].—Author, year:page [annotation(s)].

Xus zeus Author(s), year:page [type locality (Country. Province or state: specific locality (annotation(s), such as elevation or habitat); primary type(s) and gender(s), deposition information].—Author, year:page [annotation(s), such as "synonymy"].

Yus zeus.—Author(s), year:page [annotation(s), such as "generic combination"].

Within a taxon, the subordinate taxa are listed alphabetically, i.e., genera within a tribe, species within a genus.

OTHER TREATISES ON THE TETHINIDAE.—Although this is the first treatment of the family on a worldwide basis since Hendel (1934), there are several papers that treat Tethinidae on a regional basis. These may be of interest and use to the reader, and a summary of these and revisionary works is provided here.

Faunal Treatments (papers listed chronologically under major faunal realms): Afrotropical: Vanschuytbroeck (1976, fauna of St. Helena); Cogan (1980, catalog); Munari (1988, fauna of the Seychelles; 1990, fauna of Aldabra; 1994 checklist of Afrotropical species).

Australasian/Oceanian: Hardy and Delfinado (1980, Hawaiian fauna); Mathis and Sasakawa (1989, catalog); Sasakawa (1995, Micronesian fauna).

Nearctic: Melander (1952, review); Vockeroth (1965, catalog; 1987, family treatment, key to genera); Cole (1969, fauna of Western North America).

Neotropical: Malloch (1934, fauna of Patagonia and South Chile); Foster (1976b, catalog).

Oriental: Steyskal and Sasakawa (1977, catalog).

Palearctic: Czerny (1928, Palearctic fauna); Séguy (1934, fauna of France); Frey (1949, 1958a, 1958b, faunas of Madeira, the Canary Islands, and Cape Verde Islands, respectively); Collin (1960, fauna of Great Britain); Trojan (1962, checklist of Polish fauna); Stackelberg (1970, western Palearctic fauna); Cogan (1976, checklist of the British fauna); Soós (1978, Mongolian fauna, checklist of Palearctic fauna; 1981, Hungarian fauna; 1984, catalog); Sasakawa (1981, 1986, Japanese fauna); Roháček (1986, Slovakian fauna); Beschovski (1994a, Tunisian fauna; 1994b, Bulgarian fauna); Canzoneri et al. (1995, Italian fauna).

Revisionary Treatments (papers listed chronologically): Collin (1966, Palearctic species of *Tethina* and *Rhicnoessa*); Foster (1976a, review of *Neopelomyia* and the *milichioides* group of *Tethina*); Sabrosky (1978, revision of *Horaismoptera*); Munari (1981b, review of *Pseudorhicnoessa;* 1991b, review of *Afrotethina*).

ABBREVIATIONS.—Primary types are abbreviated HT, holotype; LT, lectotype; and ST, syntype. Other abbreviations are as follows:

	Museums
AM	Australian Museum, Sydney, Australia
AMNH	American Museum of Natural History, New York, New York, U.S.
ANIC	Australian National Insect Collection, CSIRO, Canbera, Australia
BMNH	The Natural History Museum (former British Museum (Natural History)), London, England
BBM	Bernice P. Bishop Museum, Honolulu, Hawaii, U.S.
CANT	Canterbury Museum, New Zealand
CAS	California Academy of Sciences, San Francisco, California, U.S.
CNC	Canadian National Collection, Ottawa, Canada
CTC	Collection of M. Carles-Tolrá, Barcelona, Spain
DCSA	Dipterorum Collectionis Strobl, Admont, Austria
DEI	Deutsches Entomologisches Institut, Eberswald, Germany
HNHM	Hungarian Natural History Museum, Budapest, Hungary
IOC	Instituto Oswaldo Cruz, Rio de Janeiro, Brazil
KPU	Kyoto Prefectural University, Kyoto, Japan
KU	Snow Entomology Museum, University of Kansas, Lawrence, U.S.
MCV	Museo Civico di Storia Naturale di Venezia, Venice, Italy
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.
MNHN	Muséum National d'Histoire Naturelle, Paris, France
NMI	National Museum of Ireland, Dublin, Ireland
NMP	Natal Museum, Pietermaritzburg, South Africa
NMW	Naturhistorisches Museum, Vienna, Austria
NRS	Naturhistoriska Riksmuseet, Stockholm, Sweden
NZAC	New Zealand Arthropod Collection, Entomology Division, DSIR, Auckland, New Zealand
TAU	Tel Aviv University, Tel Aviv, Israel
UMO	University Museum, Oxford University, Oxford, England
USNM	National Museum of Natural History (former United States National Museum), Smithsonian Institution, Washington, D.C., U.S.
ZIL	Zoological Institute, Lund University, Lund, Sweden
ZMHU	Zoologisches Museum der Humboldt Universität, Berlin, Germany
ZMA	Instituut voor Taxonomische Zoologie, Zoologisch Museum, Universiteit van Amsterdam, Amsterdam, Netherlands

ZMO	Zoological Museum, University of Oslo, Oslo, Norway
	States of the United States
AZ	Arizona
CA	California
CT	Connecticut
DE	Delaware
FL	Florida
GA	Georgia
MA	Massachusetts
MD	Maryland
ME	Maine
MO	Missouri
NC	North Carolina
NJ	New Jersey
NY	New York
OR	Oregon
RI	Rhode Island
TX	Texas
VA	Virginia
WA	Washington
	Canadian Provinces
BC	British Columbia
QB	Quebec
	Mexican States
BCN	Baja California Norte
DUR	Durango
SON	Sonora
	Australian States
NSW	New South Wales
QLD	Queensland

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Description of the Family Tethinidae

SIZE AND COLORATION.—Moderately small to minute flies, length 1.6–4.0 mm; frequently covered with pale yellowish to brown microtomentum.

HEAD.—Usually somewhat round, sometimes higher than long, rarely elongate; shape and size of eye varying with shape of head; eye sparsely or densely setulose or bare. Chaetotaxy of head: postocellar setae absent; paravertical setae (= postocellar setae, sensu Steyskal, 1976) extremely weak to relatively strong, generally widely separated at base, convergent (divergent in Zaleinae), simulating postocellar setae; inner and outer vertical setae present; 1 well-developed, inclinate, upper postocular seta generally present (absent in Zaleinae, Pelomyiinae, and Apetaeninae); ocellar setae well developed, elongate, behind level of anterior ocellus; sometimes with a pair of widely divergent setulae posterior to ocelli (pseudopostocellar setulae, sensu J.F. McAlpine, 1989); 1–4 orbital and 0–4 fronto-orbital setae. Antenna short, porrect or decumbent; first flagellomere round or oval; arista sub-basal with very short pubescence. Face sometimes characterized by 2 shiny protuberances laterad to the facial cavity just above vibrissal pore (*Tethina*) or nearby (*Afrotethina* and *Horaismoptera;* Malloch (1948:494) described this feature as "a pair of small shiny angulate protuberances near epistome that may represent the true vibrissal angles", but not found in Apetaeninae, Pelomyiinae, *Dasyrhicnoessa, Tethinosoma,* and Zaleinae); face either with a shallow, median carina (*Tethina*) or essentially flat; face relatively narrow and high (Pelomyiinae) or strongly depressed and short (Horaismopterinae and Zaleinae). Genal width varying, very narrow to exceptionally wide (*Horaismoptera*), though gena of male usually narrower than that of female; gena bearing few to many scattered setulae between eye and ventral row of setulae or bare except for ventral or nearly ventral row of setulae. Proboscis long (except *Apetaenus*), with labellum geniculate; palpus moderately long.

THORAX.—*Chaetotaxy:* Usually 3 postpronotal setae, outer (lower) seta, curved anteriorly or upward, inner seta mesoclinate, curved over mesonotum, and middle seta, the largest, curved posteriorly (0–1 seta in Apetaeninae, 1–2 setae in Pelomyiinae and Zaleinae); 2 notopleural setae; 1 presutural intra-alar seta; dorsocentral setae usually 4 (1 + 3), sometimes 3 (1 + 2 in some *Apetaenus*) or 5 (*Tethinosoma* and *Listriomastax* 2 + 3); 1–2 supra-alar setae (if 2, posterior seta shorter and weaker); 2 postalar setae; acrostichal setae variable, irregularly multiseriate in 4–6 rows, in 2 rows with well-developed or hair-like setae, or absent; prescutellar acrostichal setae variable, well developed, hair-like, or absent; usually 2 pairs of marginal scutellar setae (in *Horaismoptera vulpina* Hendel the scutellum has numerous setae toward sides of dorsal surface between basal and apical scutellar setae); disc of scutellum usually bare (setulae on disc, sometimes appearing as pubescence, in Apetaeninae, *Afrotethina, Pseudorhicnoessa,* and *Suffomyia*); 1 proepisternal; 0–1 moderate to very weak proepimeral seta;

anepisternum with 1 or more setae and some setulae posteriorly; katepisternum bearing 1 well-developed, elongate, posterodorsal seta (2 in *Apetaenus litoralis*), otherwise mostly bare; remaining thoracic pleurae (anepimeron, meron, katatergite, and anatergite) bare; prosternum broad anteriorly.

Wing: Generally uniformly faintly yellow or brown, without spots or bands; costal vein generally lacking spines along anterior margin (*Horaismoptera* and *Tethinosoma* bearing several strong, erect, spine-like setae); costal vein interrupted just before apex of radial vein R_1, deeply so in *Horaismoptera;* only basal section of subcosta visible, apically touching or fused with apex of vein R_1; cells *bm* and *dm* fused or separate; position of crossvein *r-m* variable; cell *cup* present but small; anal vein virtually absent or produced weakly as a slight fold; anal angle and alula well developed (the former reduced in Apetaeninae, the latter strongly reduced in *Suffomyia*); vein A_1 variable; vein A_2 long, clearly visible but little sclerotized. Micropterous species found in the subantarctic genera *Apetaenus* and *Listriomastax;* aptery unknown.

Legs: Generally slender, with only hind femora of male sometimes strongly swollen (in a few species of *Afrotethina* and some *Tethina*); coxae and femora with some long, hair-like setae (some species of Pelomyiinae with fore femur also bearing 1–6 strong, spine-like setae anteroventrally); ctenidium present or absent; tibiae without setae (except *Horaismoptera* and *Pseudorhicnoessa,* which have strong setae or bear stout setulae on femora and tibia) but with an apical ventral spur on mid tibia and sometimes an apical anteroventral spur on hind tibia; dorsal, preapical setae on tibiae absent. Halter pale, usually white to yellowish white; reduced and rudimentary in micropterous species of *Apetaenus.*

ABDOMEN.—Most Tethininae with transverse pale stripe along posterior margin of tergites; moderately setulose to strongly setulose (Apetaeninae). Male syntergosternite 7 + 8 usually short (large only in Zaleinae, as in Canacidae), and partially fused with tergite 6. Postabdomen of female mostly telescopically retracted; 2 sclerotized spermathecae variable in shape, below with a narrower cylindrical extension into the spermathecal duct; cercus subcylindrical or compressed, from 2–8 times as long as broad, sometimes bearing spine-like setulae; tergites 7 and 8 mostly with characteristic pigmented areas; epiproct generally very small, bearing dorsally a pair of setulae on apical third; hypoproct large. Postabdomen of male with epandrium bearing 2 pairs of surstyli ventrally (except for *Tethina,* Apetaeninae, and *Suffomyia,* which have a single pair of surstyli; in *Tethina* surstyli partially fused with epandrium); anterior surstylus very distinctive, heterogeneous in shape and setal vestiture; posterior surstylus, as a rule, strongly setulose and lobe-shaped, sometimes partially fused with epandrium or bearing a ventrolateral lobe-shaped protrusion that resembles a true surstylus that is fused with epandrium; inner basal corners of surtsyli connected to broad interparameral sclerite; cerci very short to exceptionally developed (*Horaismoptera*); hypandrial structures strongly varying in shape, particularly the large lateral hypandrial arms and postgonites; aedeagal apodeme very long, slender; ejaculatory apodeme usually large; aedeagus simple, usually elongate, sinuous, subcylindrical, with a more or less dense ventral pubescence (short and without dense ventral pubescence in Zaleinae), often with several microscopic papillae.

Key to Genera of Tethinidae

1. Paravertical setae (postverticals or pseudopostocellars of some authors) divergent. Eye densely setulose. Palpus markedly elongate and prominent anteriorly; proboscis comparatively small. Dorsal pregenital sclerite of male (tergite 6 + syntergosternite 7 + 8) large, with a visible transverse line or suture separating a much longer anterior section from a short posterior section (inverted sternite 8). Aedeagus short, stumpy, lacking a close ventral micropubescence (Zaleinae) 2

   Paravertical setae more or less convergent. Eye setulose or bare. Palpus and proboscis usually normally developed. Tergite 6 well differentiated from short syntergosternite 7 + 8 (long in *Horaismoptera* and some Apetaeninae), the latter forming a dorsal pregenital sclerite. Aedeagus usually very long and sinuous, ventrally micropubescent 3

2. Head rectangular in profile; clypeus large in relation to face. First flagellomere large, in lateral view longer than wide. Prescutellar acrostichal setae absent; scutellum strongly elongate, bearing 4 pairs of unequal setae. Claws strongly curved. Alula markedly reduced; cells *br* and *bm* united. Epandrium with 1 pair of surstyli . . . . ***Suffomyia*** Freidberg, 1995

   Head oval in profile; clypeus narrower. First flagellomere not so large, discoid, typical of Tethinidae. Prescutellar acrostichal setae present; scutellum of normal shape, not setulose aside from 2 pairs of lateral scutellar setae. Claws shallowly curved. Alula normally developed; cell *br* clearly separate from cell *bm.* Epandrium with 2 pairs of surstyli . . . . ***Zalea*** D.K. McAlpine, 1985

3. Clypeus large, protruding anteriad beyond shallowly emarginate oral margin. Vein $A_1 + CuA_2$ long, subequal to length of discal cell; wing, if fully developed, long and narrow, three times longer than wide (micropterous in some species of *Apetaenus*). Tergite 2, and sometimes 1, elongate, as long or longer than wide (Apetaeninae) 4

   Clypeus small, if exposed not protruding anteriad beyond oral margin. Vein $A_1 + CuA_2$ short, much shorter than discal cell; wing usually shorter, about twice as long as wide (less often 2.5–3 times). Tergites wider than long 5

4. Vein R_1 setulose above (visible in fully winged specimens). Postpronotum bearing 1 large seta; dorsocentral setae 3–4 . . . . ***Apetaenus*** Eaton, 1875

   Vein R_1 bare above. Postpronotum bearing at most setulae; dorsocentral setae 5 . . . . ***Listriomastax*** Enderlein, 1909

5. Costa spinose. 1–3 fronto-orbital setae inclinate to slightly proclinate, 2–3 orbital setae lateroclinate 6

   Costa not spinose. Fronto-orbital and orbital setae usually with similar orientation, mostly reclinate or lateroclinate 7

6. Dorsocentral setae 5; prescutellar acrostichal setae absent. Face lacking vertical series of setae (with 1 vibrissal seta). Costa lacking well-developed setae just before the subcostal break and where the humeral break would be; discal cell long, penultimate section of vein CuA_1 over twice length of apical section (Tethininae) . . . . ***Tethinosoma*** Malloch, 1930

   Dorsocentral setae 4; prescutellar acrostichal setae well developed. Face with vertical series of well-developed setae, orientation of setae lateroclinate to slightly curved upward except for dorsalmost, inclinate pair that arise from a pair of shiny tubercles. Costa bearing 3–6 well-developed setae between humeral crossvein and subcostal break; discal cell short, penultimate section of vein CuA_1 about $^1/_2$ length of apical section (Horaismopterinae) . . . . ***Horaismoptera*** Hendel, 1907

7. Gena bare except for a ventral or nearly ventral row of setulae. Acrostichal setulae in two or more complete or nearly complete rows (Tethininae) 8

   Gena bearing few to many scattered setulae between eye and ventral row of setulae. Acrostichal setulae sparse or absent (Pelomyiinae) 13

8. Fronto-orbital setae 2, reclinate; gena narrow, height about $^1/_8$ eye height; frons essentially bare of setulae. Cell *bm* and discal cell confluent, crossvein *bm* absent. Prescutellar acrostichal absent; postpronotum bearing 1 seta; mesonotum smooth, at most with a few scattered setulae other than major setae . . . . ***Masoniella*** Vockeroth, 1995

   Fronto-orbital setae 3–4; gena wider, about $^1/_8$–$^1/_3$ eye height; frons bearing some setulae in addition to larger setae. Cell *bm* and discal cell distinct. Prescutellar acrostichal setae present; postpronotum with 3 or more setae, ventral seta curved upward; mesonotum with more or less numerous rows of coarse setulae arising from punctures 9

9. Eye mostly densely covered with small, pale, interfacetal setulae. Epandrium with 2 surstyli. Mid and hind tibiae with or without strong anterodorsal and posterodorsal setae; scutellum pubescent on disc (if bare then lacking shiny tubercle above vibrissal pore) 10

   Eye appearing bare, setulae very sparse or lacking. Epandrium with 1 surstylus, partially fused with epandrium. Mid and hind tibiae evenly setulose, lacking anterodorsal or posterodorsal setae; scutellar disc bare (shiny tubercle above vibrissal pore present; *Tethina* Haliday, 1837) 12

10. Vibrissal seta present on apex of vibrissal angle; shiny tubercle above the foremost strong peristomal seta lacking. Scutellar disc bare except for marginal setae. Anterior surstylus varying in shape but not curved hook-like (Pantropical) . . . . ***Dasyrhicnoessa*** Hendel, 1934

Vibrissal seta absent on apex of vibrissal angle; vibrissal apex occupied by shiny tubercle (sometimes as a scarcely visible fold); foremost peristomal setae inclinate, simulating a vibrissal seta. Scutellar disc covered with a more or less scattered pubescence in addition to marginal setae 11

11. Mid and hind tibiae evenly setulose, lacking anterodorsal or posterodorsal setae. Anterior surstylus always curved, mostly hook-like (Afrotropical) . . . . ***Afrotethina*** Munari, 1986

Mid and hind tibiae bearing strong anterodorsal and posterodorsal setae. Anterior surstylus not shaped as above (Afrotropical, Australasian/Oceanian) . . . . ***Pseudorhicnoessa*** Malloch, 1914

12. Both proepisternal and proepimeral setae present. Abdominal setae and setulae mixed in color (black and white) but mostly dark. Head usually roundish or sometimes relatively prognathous, with antenna porrect or decumbent and oriented laterally (the *milichioides* group). Labellum as long as head (the *milichioides* group) or shorter than head. Gena mostly with a lengthwise golden-shiny band . . . . ***Tethina,*** subgenus ***Rhicnoessa*** Loew, 1862

Only proepisternal seta present (if proepimeral setae present, these pale, whitish). Abdominal setae and setulae always pale, whitish. Head roundish or strongly prognathous (*T. illota* (Haliday, 1838)) but with antenna always porrect. Labellum shorter than head. Gena homogeneously pale, microtomentose . . . . ***Tethina,*** subgenus ***Tethina*** Haliday, 1837

13. Head elongate, longer than high; eye oblique and lower face protruding; fronto-orbital setae 3 . . . . ***Neopelomyia*** Hendel, 1917

Head higher than long; face vertical, not produced; eye round; fronto-orbital setae 1–2 14

14. Fronto-orbital setae 2 (anterior seta in *P. mallochi* very short and weak, sometimes difficult to see); face and peristoma microtomentose, without shiny stripes. Acrostichal setulae absent . . . . ***Pelomyiella*** Hendel, 1934

Fronto-orbital seta 1, well developed; face below with 2 narrow, shiny stripes, each continuous with a shiny peristomal ridge. A few acrostichal setulae present . . . . ***Pelomyia*** Williston, 1893

Catalog

Family TETHINIDAE Hendel

Tethinidae Hendel, 1916:297; 1917:45. Type genus: *Tethina* Haliday.

Subfamily APETAENINAE Mathis and Munari, new subfamily

Apetaeninae Mathis and Munari, 1996:6 (herein). Type genus: *Apetaenus* Eaton.

Genus *Apetaenus* Eaton (4 species)

Apetaenus Eaton, 1875:58. Type species: *Apetaenus litoralis* Eaton, by monotypy.—Griffiths, 1972:232 [phylogenetic relationships].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

Macrocanace Tonnoir and Malloch, 1926:5. Type species: *Milichia littorea* Hutton, by original designation.—Harrison, 1953:272–276 [revision]; 1976:142–143 [key to species].—Griffiths, 1972:232 [phylogenetic relationships].—Mathis and Sasakawa, 1989:667 [synonymy].

australis (Hutton). Australian/Oceanian: Antipodes Islands, Campbell Island.

Ochtiphila australis Hutton, 1902:174 [Campbell Island; HT ♂, NZAC (formerly in CANT)].

Macrocanace australis.—Tonnoir and Malloch, 1926:5 [generic combination].—Harrison, 1976:142–143 [southern islands of New Zealand subregion].

Apetaenus australis.—Mathis and Sasakawa, 1989:667 [generic combination, Australasian/Oceanian catalog].

Macrocanace antipoda Harrison, 1953:276 [Antipodes

Island: Ringdove Bay (spider's web); HT ♀, NZAC]; 1959:251 [synonymy].

litoralis Eaton. Crozet Islands, Kerguelen Islands, Macquarie Island.

Apetaenus litoralis Eaton, 1875:58 [(France.) Kerguelen Island; LT ♂ (designated by Harrison, 1959:99), BMNH].—Enderlein, 1909:396, 432 [key, description, figures (plates 48, 52)].—Harrison, 1959:98–99 [revision].—Hennig, 1971:53–56 [discussion, figures of head, ♂ and ♀ terminalia].—Tréhen and Vernon, 1982:108–118 [ecology].—Papp, 1983:272 [citation].—Tréhen et al., 1985:607 [alar development].—Mathis and Sasakawa, 1989:667, 803 [Australasian/Oceanian catalog].

littoreus (Hutton). Australian /Oceanian: Antipodes Island, Bounty Islands.

Milichia littorea Hutton, 1902:174 [Antipodes Islands (on pools between tide marks); HT ♂, NZAC (formerly in CANT)].

Macrocanace littorea.—Tonnoir and Malloch, 1926:5 [generic combination].—Harrison, 1953:274–276 [revision]; 1959:250 [revision]; 1976:142 [Antipodes Island, Bounty Islands].

Apetaenus littoreus.—Mathis and Sasakawa, 1989:667 [generic combination, Australasian/Oceanian catalog].

watsoni Hardy. Australian /Oceanian: Macquarie Island.

Apetaenus watsoni Hardy, 1962:965 [Macquarie Island. Hurd Point; HT ♂, ANIC].—Watson, 1967:28–29 [ecology].—Harrison, 1976:127 [citation, Macquarie Island].—Mathis and Sasakawa, 1989:667 [Australasian /Oceanian catalog].

Genus *Listriomastax* Enderlein (1 species)

Listriomastax Enderlein, 1909:396. Type species: *Listriomastax litorea* Enderlein, 1909, by original designation.—Griffiths, 1972:232 [phylogenetic relationships].

litorea Enderlein. Australasian/Oceanian: Crozet Islands, Kerguelen Islands, Marion Island.

Listriomastax litorea Enderlein, 1909:398 [(France.) Crozet Islands: Possession Island, Weihnachts-Bucht; ST ♂♀, ZMHU].—Tréhen and Vernon, 1982:108–118 [ecology].—Papp, 1983:272–275 [discussion, figures of ♂ and ♀ terminalia].—Tréhen et al., 1985:607 [alar development].—Mathis and Sasakawa, 1989:804 [Australasian /Oceanian catalog].

Subfamily HORAISMOPTERINAE Sabrosky

Horaismopterinae Sabrosky, 1978:335. Type genus: *Horaismoptera* Hendel.

Genus *Horaismoptera* Hendel (3 species)

Horaismoptera Hendel, 1907:238. Type species: *Horaismoptera vulpina* Hendel, by monotypy.—Sabrosky, 1978:327–336 [revision].—Cogan, 1980:693 [Afrotropical catalog].—Soós, 1984:110 [Palearctic catalog].—Munari, 1986:41–44 [discussion].

Selidacantha Bezzi, 1908:197. Type species: *Selidacantha microphthalma* Bezzi, by original designation [preoccupied, Hulst, 1896, Lepidoptera].—Bezzi, 1908:197 [synonymy (in a footnote)].

Oestroparea Séguy, 1933:30. Type species: *Oestroparea grisea* Séguy, by original designation.—Hennig, 1958:659.—Sabrosky, 1978:328 [synonymy].

hennigi Sabrosky. Oriental: Sri Lanka.

Horaismoptera hennigi Sabrosky, 1978:330 [Sri Lanka. Mannar District: Olaithoduvai (10 mi NW Mannar; rotten seaweed); HT ♂, USNM].

microphthalma (Bezzi). Afrotropical: Namibia, South Africa.

Selidacantha microphthalma Bezzi, 1908:198 [Namibia. Lüderitz Bay (Angra Pequena); LT ♂ (designated by Munari, 1994:25), ZMHU].

Horaismoptera microphthalma.—Sabrosky, 1978:330 [generic combination, revision, probable senior synonym of *H. grisea*].—Cogan, 1980:693 [Afrotropical catalog].—Munari, 1994:27 [list, Afrotropics].

Oestroparea grisea Séguy, 1933:30 [Namibia. Swakopmund; ST ♂♀, MNHN].—Munari, 1994:25 [synonymy].

Horaismoptera grisea.—Sabrosky, 1978:329 [generic combination, revision, probable junior synonym of *H. microphthalma* (Bezzi)].—Cogan, 1980:693 [Afrotropical catalog].—Munari, 1991b:179 [citation, Namibia].

vulpina Hendel. Afrotropical: Abd al Kuri (near Socotra), Kenya, Madagascar. Palearctic: Egypt, Iran, Oman, Yemen.

Horaismoptera vulpina Hendel, 1907:240 [Yemen. Abd-al-Kuri; ST ♂, NMW].—Hennig, 1965:2 [citation, Iran].—Sabrosky, 1978:329 [revision].—Cogan, 1980:693 [Afrotropical catalog].—Soós, 1984:110 [Palearctic catalog].—Munari, 1994:23, 27 [citation, Afrotropical list, Kenya and Madagascar].

Subfamily PELOMYIINAE Foster

Pelomyiinae Foster, 1976a:337. Type genus: *Pelomyia* Williston.

Genus *Neopelomyia* Hendel (2 species)

Neopelomyia Hendel, 1917:46. Type species: *Tethina rostrata* Hendel, by original designation.—Curran, 1934:331 [key].—Hendel, 1934:53 [citation].—Melander, 1952:192 [key].—Vockeroth, 1965:727 [Nearctic catalog]; 1987:1075 [key].—Foster, 1976a:346 [revision].

longicerca Foster. Nearctic: United States (CA).

Neopelomyia longicerca Foster, 1976a:349 [United States. California: Orange County, Laguna Beach; HT ♂, USNM (73641)].

rostrata (Hendel). Nearctic: Canada (BC), United States (CA, OR, WA).

Tethina rostrata Hendel, 1911:41 [Canada. British Columbia: Pender Island (not Pender, Idaho, as stated in the original description); LT ♂ (designated by Foster, 1976a:349), NMW].—Malloch, 1913:147 [citation].—Melander, 1913:297 [key]; 1952:190 [revision].—Saunders, 1928:545 [biology].

Neopelomyia rostrata.—Hendel, 1917:46 [generic combination, in key]; 1934:38 [generic key], 54 [citation].—Sturtevant, 1923:7 [citation].—Hennig, 1937:139 [notes].—Melander, 1952:198 [citation].—Vockeroth, 1965:727 [Nearctic catalog]; 1987:1076 [figure of head].—Cole, 1969:386 [distribution, diagnosis].—Foster, 1976a:349 [revision].

Genus *Pelomyia* Williston (9 species)

Pelomyia Williston, 1893:258. Type species: *Pelomyia occidentalis* Williston, by monotypy [as Ephydridae].—Becker, 1896:274 [as Ephydridae].—Kuntze, 1897:20 [as *Tethina*].—Williston, 1908:295, 307 [as Ephydridae and Agromyzidae].—Hendel, 1911:41 [as *Tethina* in Milichiidae]; 1917:46 [key to genera]; 1934:51 [revision, references].—Malloch, 1913:146 [as *Tethina* in Ephydridae]; 1934:456-460 [revision, southern South American species].—Melander, 1913:297 [as *Tethina* of authors, not Haliday, 1838]; 1952:193 [revision of Nearctic species].—Sturtevant, 1923:5-8 [discussion].—Czerny, 1928:2 [revision of Palearctic species, generic misidentification].—Séguy, 1934:397-400 [review, French fauna, generic misidentification].—Hennig, 1937:138 [Neotropical distribution].—Ardö, 1957:131 [review, North Europe, generic misidentification].—Trojan, 1962:63 [review, Poland, generic misidentification].—Stackelberg, 1970:356 [review, fauna of USSR, generic misidentification].—Foster, 1976b:1-2 [Neotropical catalog].—Hardy and Delfinado, 1980:375 [revision of Hawaiian species].—Vockeroth, 1987:1075 [key].—Mathis and Sawakawa, 1989:667 [Australasian/Oceanian catalog].

coronata (Loew). Nearctic: United States (GA). Neotropical: Mexico (DUR) and Peru.

Rhicnoessa coronata Loew, 1866:185 [United States. "Georgia"; HT ♀, MCZ].

Tethina coronata.—Malloch, 1913:147 [generic combination, citation].—Melander, 1913:297 [key].

Pelomyia coronata.—Hendel, 1917:46 [generic combination in key]; 1934:51 [key], 52 [citation].—Sturtevant, 1923:7-8 [citation, in part].—Curran 1934:330 [figure of wing].—Hennig, 1939:82 [figure of ♂ terminalia].—Melander, 1952:193, 212 [revision, figures of ♂ terminalia].—Vockeroth, 1965:726 [Nearctic catalog, noted to be an unworked species complex]; 1987:1076-1077 [figures of head and wing].—Cole, 1969:386 [distribution, discussion].—Foster, 1976b:1 [Neotropical catalog].

cruciata Hendel. Nearctic: United States (MO).

Pelomyia cruciata Hendel, 1934:52 [United States. Missouri: Independence County, Atherton; ST ♂♀, NMW].—Melander, 1952:195 [citation].—Vockeroth, 1965:726 [Nearctic catalog].

intermedia Malloch. Neotropical: Argentina.

Pelomyia intermedia Malloch, 1934:460 [Argentina. Buenos Aires: Bahia Blanca; HT ♀, BMNH].—Hennig, 1937:140 [citation].—Foster, 1976b:2 [Neotropical catalog].

nubila Melander. Nearctic: United States (CA).

Pelomyia nubila Melander, 1952:195 [United States. California: Orange County, Corona del Mar, San Clemente; ST (3♂, 5♀), USNM].—Vockeroth, 1965:726 [Nearctic catalog].—Cole, 1969:386 [distribution, diagnosis].

occidentalis Williston. Nearctic: United States (CA).

Pelomyia occidentalis Williston, 1893:258 [United States. California: Monterey County, Monterey; ST (1♂, 1♀), KU].—Melander, 1913:297 [as a synonym of *P. coronata* (Loew)]; 1952:193 [as a synonym of *P. coronata* (Loew)].—Sturtevant, 1923:7 [as a synonym of *P. coronata* (Loew)].—Curran, 1934:330 [generic combination, figure of head].—Hendel, 1934:52 [as a synonym of *P. coronata* (Loew)].—Vockeroth, 1965:726 [Nearctic catalog].

Pelomyia coronata of authors, not Loew, 1866 [misidentification].—Melander, 1913:297 [key].—Sturtevant, 1923:7-8 [citation].

peruviana Malloch. Neotropical: Bolivia, Chile, Peru.

Pelomyia peruviana Malloch, 1934:458 ["Peru"; HT ♀, USNM].—Hennig, 1937:140 [citation]; 1939:82 [figure of ♂ terminalia].—Foster, 1976b:2 [Neotropical catalog].

steyskali Hardy and Delfinado. Australasian/Oceanian: Hawaii (Molokai, Oahu). Nearctic: United States (CA, OR, TX, WA). Palearctic: Czech Republic, Hungary, Poland, Slovakia.

Pelomyia steyskali Hardy and Delfinado, 1980:375 [United States. Oregon: Curry County, Gold Beach (8 mi N); HT ♂, USNM].—Zuska and Laštovka, 1969:207 [as *Pelomyia* sp., Czech Republic].—Szadziewski, 1983:47 [as *P. coronata*, Poland, ecology, figures of ♂ terminalia].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].—Roháček, 1992:128-129 [discussion, ecology, Czech Republic, Hungary, Slovakia].

trivittata Malloch. Neotropical: Chile.

Pelomyia trivittata Malloch, 1934:459 [Chile. Malleco: Renaico; HT ♂, USNM].—Hennig, 1937:140 [citation].—Foster, 1976b:2 [Neotropical catalog].

viedmae Malloch. Neotropical: Argentina.

Pelomyia viedmae Malloch, 1934:460 [Argentina. Rio Negro: Viedma; HT ♂, BMNH].—Foster, 1976b:2 [Neotropical catalog].

Genus *Pelomyiella* Hendel (9 species)

Pelomyiella Hendel, 1934:39. Type species: *Pelomyia hungarica* Czerny, by original designation.—Curran 1934:331 [key].—Hendel, 1934:52-53 [key, list].—Melander, 1952:196 [revision Nearctic species].—Collin, 1960:191 [review, British species].—Vockeroth, 1965:727 [Nearctic catalog]; 1987:1075 [key].—Soós, 1978:407-411 [key, Palearctic fauna, catalog]; 1981:130-132 [key, Hungary]; 1984:107 [Palearctic catalog].—Beschovski, 1994b:17 [Bulgarian species].

cinerella (Haliday). Palearctic: Canary Islands, Denmark, England, Finland, France, Ireland, Germany, Madeira, Mongolia, Netherlands, Poland, Spain, Sweden, Tibet.

Opomyza (Leptomyza) cinerella Haliday, 1837:151 [Northern Ireland. Down: Holywood (muddy seashore); ST (6 ♂♀), NMI, ZMHU].

Opomyza cinerella.—Walker, 1853:235 [citation, England].

Rhicnoessa cinerella.—Loew, 1865:38 [generic combination, revision].—Czerny, 1902:256 [citation].—Becker, 1905b:252 [Palearctic catalog]; 1908:164 [citation, Canary Islands].—Tuccimei, 1913:231 [citation, Italy].

Anthophilina cinerella.—Rondani, 1875:186 [key], 187 [generic combination, citation].

Leptomyza cinerella.—Czerny, 1902:256 [generic combination, placement in *Rhicnoessa*].

Tethina cinerella.—Hendel, 1911:42 [generic combination, citation].—Ringdahl, 1948:3 [citation].

Pelomyia cinerella.—Czerny, 1928:2 [generic combination, revision].—de Meijere, 1928:79 [citation].—Karl, 1930:68 [citation, figure of head].—Krogerus, 1932:118 [citation, Finland].—Séguy, 1934:399 [key, review, France].—Ardö, 1957:131 [citation].—Trojan, 1962:64 [key, figure of head].—Stackelberg, 1970:356 [citation].

Pelomyiella cinerella.—Hendel, 1934:52 [key], 53 [generic combination, citation].—de Meijere, 1939:162 [citation].—Hennig, 1939:82 [figure of ♂ terminalia, as *P. cinerea*].—Collin, 1960:191 [citation, England].—Frey, 1949:36 [citation, Madeira].—Cogan, 1976:87 [citation, England].—Rald, 1976:113-115 [key, Denmark, figure of head, citation].—Soós, 1978:408-411 [key, Palearctic catalog]; 1981:132 [key]; 1984:107 [Palearctic catalog].—Hackman, 1980:150 [citation, Finland].—Szadziewski, 1983:48 [citation, Poland].

hungarica (Czerny). Palearctic: Austria, Hungary, Slovakia.

Pelomyia hungarica Czerny, 1928:2 [Hungary. Szatymaz; HT ♀, ZMHU].—Stackelberg, 1970:356 [citation].—Trojan, 1962:64 [key, figure of head].

Pelomyiella hungarica.—Hendel, 1934:39 [generic key], 52 [key], 53 [generic combination, citation].—Soós, 1978:407, 411 [key, Palearctic catalog]; 1981:131-132 [key, citation, habitus, figure]; 1983:312 [citation, Hungary]; 1984:108 [Palearctic catalog].—Roháček, 1983:1022 [citation, Slovakia]; 1986:176 [citation, Slovakia]; 1987:260 [citation, Slovakia]; 1992:129 [biology, citation, Slovakia].—Franz, 1989:255 [citation, Austria].

mallochi (Sturtevant). Nearctic: British Columbia to Baffin Island, south to California and New York. Palearctic: Austria, Bulgaria, Czech Republic, Denmark, England, France, Germany, Greenland, Hungary, Italy, Mongolia, Netherlands, Poland, Slovakia, Tibet, Yugoslavia.

Pelomyia mallochi Sturtevant, 1923:7 [Massachusetts: Barnstable County, North Falmouth; HT ♀, AMNH].

Pelomyiella mallochi.—Hendel, 1934:52 [key], 53 [generic combination, citation].—de Meijere, 1939:162 [citation].—Melander, 1952:196-197 [revision].—Collin, 1960:191 [citation].—Vockeroth, 1965:727 [Nearctic catalog]; 1987:1076-1077 [figures of head and wing].—Cole, 1969:386 [distribution, diagnosis].—Cogan, 1976:87 [citation, England].—Rald, 1976:112-115 [key, Denmark, figures of head and wing, citation].—Soós, 1978:407 [key], 408 [discussion], 412 [Palearctic catalog]; 1981:131 [key, citation]; 1984:108 [Palearctic catalog].—Bährmann, 1982:75-78 [ecology, citation, Germany].—Roháček, 1983:1022 [citation, Slovakia]; 1986:176 [citation, Slovakia]; 1987:260 [citation, Slovakia]; 1992:129 [biology, citation, Czech Republic and Slovakia].—Szadziewski, 1983:47-48 [citation, figures of ♂ terminalia].—Gorczytza, 1988:304, 307 [figure of habitus and head, citation, ecology].—Franz, 1989:255 [citation, discussion].—Beschovski, 1994b:18 [review, figures of ♂ terminalia].

Pelomyia angustifacies de Meijere, 1928:76 [Netherlands. Amsterdam and Diemen (Zuidersee); ST (1♂, 3♀), ZMA]; 1932:286 [discussion].—Czerny, 1930:450 [citation, as *P. angustifrons* (sic)].—Karl, 1930:68 [citation].—Hendel, 1934:53 [synonymy].—Ardö, 1957:131 [citation].

Pelomyia kuntzei Czerny, 1928:3 ["Insel Borkum, England, Neusiedler See, Keczel (Ungarn)"; ST ♂♀, ZMHU (apparently lost)]; 1930:450 [synonymy with *P. angustifacies*].—Karl, 1930:68 [synonymy].—Hendel, 1934:53 [citation, synonymy].—Séguy, 1934:399 [key, review, France].—Trojan, 1962:64-65 [figure of head, key].—Stackelberg, 1970:356 [citation].

Tethina parvula of authors, not Loew, 1869 [misidentification].—Malloch, 1913:147 [generic combination, citation].—Melander, 1913:297 [key].

Tethina illota of authors, not Haliday, 1838 [misidentification].—Kuntze, 1897:20 [discussion].

maritima (Melander). Nearctic: United States (TX).

Tethina maritima Melander, 1913:297 [United States. Texas: Galveston County, Galveston; ST 3♀, USNM].

Pelomyia maritima.—Sturtevant, 1923:7 [generic combination].

Pelomyiella maritima.—Hendel, 1934:53 [generic combination].—Melander, 1952:197 [revision].—Vockeroth, 1965:727 [Nearctic catalog].

melanderi (Sturtevant). Nearctic: Canada (BC). United States (AZ, CA, OR, WA). Mexico.

Pelomyia melanderi Sturtevant, 1923:7 [United States. California: Santa Clara County, Palo Alto; HT ♂, AMNH].

Pelomyiella melanderi.—Hendel, 1934:52 [key], 53 [generic combination, citation].—Melander, 1952:196–197 [revision].—Vockeroth, 1965:727 [Nearctic catalog].—Griffiths, 1972:305 [figure of ♂ terminalia].

Tethina parvula of authors, not Loew, 1869 [misidentification].—Hendel, 1911:43 [review, figure of head]; 1934:53 [synonymy].

mongolica Soós. Palearctic: Mongolia.

Pelomyiella mongolica Soós, 1978:409 [Mongolia. Southgobi: "Nojon nuruu, Grenzposten Ovot Chuural" (1500 m); HT ♂, HNHM]; 412 [Palearctic catalog]; 1984:108 [Palearctic catalog].

nigra Soós. Palearctic: Mongolia.

Pelomyiella nigra Soós, 1978:411, 412 [Mongolia. Uvs: "S. Rand des Sees Örög nuur" (1500 m); HT ♂, HNHM; Palearctic catalog]; 1984:108 [Palearctic catalog].

obscurior (Becker). Palearctic: China (Tibet).

Tethina obscurior Becker, 1907b:308 [China. Tibet. Zaidam (Fl. Orogyn, Syrtyn ju Nanyschanja Gobi); ST 6 (sex ?), ZMHU (only 2)].—Hendel, 1911:42 [list].—Czerny, 1928:2 [citation].

Pelomyiella obscurior.—Soós, 1978:408, 412 [key, Palearctic catalog]; 1984:108 [Palearctic catalog].

Pelomyiella cinerella obscurior.—Hendel, 1934:52 [key], 53 [generic combination, citation].

opacula (Zetterstedt). Palearctic: Sweden.

Notiphila opacula Zetterstedt, 1860:6317 ["Scania merid. ad Illstorp" (Sweden); HT ♂, ZIL].

Pelomyiella opacula.—Zatwarnicki, 1991:330 [generic combination, probably synonym of *P. cinerella*].

Subfamily TETHININAE Hendel

Tethininae Hendel, 1916:297 [as a family]; 1917:45. Type genus: *Tethina* Haliday.

Genus *Afrotethina* Munari (7 species)

Afrotethina Munari, 1986:44. Type species: *Afrotethina aemiliani* Munari, by original designation; 1991a:169 [checklist]; 1991b:183–184 [key to species].

aemiliani Munari. Afrotropical: Kenya.

Afrotethina aemiliani Munari, 1986:44 [Kenya. Diani Beach; HT ♂, MCV]; 1994:16, 26 [citation, list, Kenya, figure of ♂ terminalia].

aurisetulosa (Lamb). Afrotropical: Madagascar, Mozambique, Seychelles (Aldabra, Cosmoledo, Mahé).

Tethina aurisetulosa Lamb, 1914:368 [Seychelles. Mahé: Anonyme Island, Long Island; LT ♂ (designated by Munari, 1988:45), BMNH].—Cogan, 1980:693 [Afrotropical catalog].

Rhicnoessa aurisetulosa.—Hendel, 1934:44 [key], 48 [generic combination, citation].

Afrotethina aurisetulosa.—Munari, 1988:45–46 [generic combination, figures of ♂ terminalia]; 1990:55 [citation, Aldabra]; 1991b:180 [citation, Madagascar, Mozambique]; 1994:17, 26 [citation, list, Madagascar].

brevicostata Munari. Afrotropical: Madagascar, Seychelles (Aldabra), South Africa (Natal).

Afrotethina brevicostata Munari, 1990:56 [Seychelles. Aldabra: Grande Terre, Anse Cedre (shoreline on beach); HT ♂, BMNH]; 1991b:180 [citation, South Africa]; 1994:17, 26 [citation, list, Madagascar].

femoralis (Munari). Afrotropical: Kenya, Madagascar, South Africa (Cape, Natal).

Pseudorhicnoessa femoralis Munari, 1981b:94 [Kenya. Diani Beach; HT ♂, MCV; figures of hind leg and ♂ terminalia]; 1991b:180–181 [citation, Madagascar, South Africa].

Afrotethina femoralis.—Munari, 1991a:166–168 [generic combination, figure of ♂ terminalia, spermathecae]; 1994:17, 26 [citation, list, Madagascar, South Africa].

kaplanae Munari. Afrotropical: Cameroon.

Afrotethina kaplanae Munari, 1994:17 [Cameroon. Kribi (beach); HT ♂, TAU].

persimilis Munari. Afrotropical: Namibia.

Afrotethina persimilis Munari, 1991b:181 [Namibia. Swakop River mouth (near Swakopmund, 22°31′S, 14°32′E); HT ♂, NMP]; 1994:26 [list, Afrotropics].

stuckenbergi Munari. Afrotropical: South Africa (Cape).

Afrotethina stuckenbergi Munari, 1990:58 [South Africa. South West Cape, Ysterfontein; HT ♂, BMNH]; 1991b:183 [citation, South Africa]; 1994:26 [list, Afrotropics].

Genus *Dasyrhicnoessa* Hendel (13 species)

Dasyrhicnoessa Hendel, 1934:38. Type species: *Rhicnoessa fulva* Hendel, by original designation.—Malloch, 1935:93 [discussion].—Sasakawa, 1974:2-5 [revision Oriental species].—Steyskal and Sasakawa, 1977:394 [Oriental catalog].—Hardy and Delfinado, 1980:370 [revision Hawaiian species].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

boninensis Sasakawa. Australasian/Oceanian: Bonin Islands, Volcano Island.

Dasyrhicnoessa boninensis Sasakawa, 1995:58 [Bonin Islands. Chichi Jima, Omura (Camp Beach); HT ♂, BBM (12773); figures of ♂ terminalia].

ferruginea Lamb. Afrotropical: Kenya, Madagascar, Seychelles (Aldabra, Astove, Mahé). Australasian/Oceanian: Marquesas. Nearctic: Bermuda, U.S. (FL). Neotropical: Bahamas (South Bimini), Belize, Mexico, West Indies (Cuba, Dominica, St. Lucia, St. Vincent).

Rhicnoessa ferruginea Lamb, 1914:367 [Seychelles. Mahé; LT ♂ (designated by Munari, 1988:48), BMNH].—Hendel, 1934:44 [key], 49 [citation].—Bezzi, 1928:140 [synonymy with *R. sexseriata* Hendel].

Tethina ferruginea.—Cogan, 1980:639 [generic combination, Afrotropical catalog].

Dasyrhicnoessa ferruginea.—Munari, 1988:48 [generic combination]; 1990:54 [citation, Aldabra and Seychelles]; 1991b:180 [citation, Madagascar]; 1994:20, 26 [citation, Kenya and Madagascar, list Afrotropics].—Mathis and Sasakawa, 1989:667 [Australiasian/Oceanian catalog].—Woodley and Hilburn, 1994:53 [list, Bermuda].—Sasakawa, 1995:60–61 [revision, Micronesia, figures of ♂ terminalia].

Tethina lasiophthalma Malloch, 1933:17 [Marquesas. Hivaoa: Tahauku; HT ♂, BBM].—Munari, 1988:48 [synonymy with *R. ferruginea* Lamb].

Dasyrhicnoessa lasiophthalma.—Sasakawa, 1974:2 [generic combination].—Steyskal and Sasakawa, 1977:394 [Oriental catalog].—Munari, 1986:49 [discussion, Seychelles].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

freidbergi Munari. Afrotropical: Cameroon, Nigeria.

Dasyrhicnoessa freidbergi Munari, 1994:20 [Cameroon. Kribi (beach, Rt. N7); HT ♂, TAU].

fulva (Hendel). Oriental: Taiwan.

Rhicnoessa fulva Hendel, 1913:110 [Taiwan. Anping and Tainan; ST 4 (sex ?), NMW].—Malloch, 1914:308 [citation].

Dasyrhicnoessa fulva.—Hendel, 1934:51 [generic combination].—Hennig, 1939:82–83 [figure of ♂ terminalia].—Steyskal and Sasakawa, 1977:394 [Oriental catalog].

fulvescens Malloch. Australasian/Oceanian: Australia (QLD).

Dasyrhicnoessa fulvescens Malloch, 1935:93 [Australia. Queensland: Townsville; HT ♀, AM].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

insularis Aldrich. Australasian/Oceanian: Caroline Islands, Christmas Island, Gilbert Islands, Hawaii (Canton Island, Hawaii, Frigate Shoal, Maui, Oahu, Palmyra Island, Pearl and Hermes Reef), Mariana Islands (Saipan, Tinian), Marshall Islands, and Wake Island.

Tethina insularis Aldrich 1931:395 [(United States.) Wake Island; HT ♂, USNM (41629)].—Hardy 1952:463 [citation].

Rhicnoessa insularis.—Hendel, 1934:44 [key], 48 [generic combination, citation].

Dasyrhicnoessa insularis.—Hardy and Delfinado, 1980:371–373 [generic combination, citation, figures of head, wing, ♂ and ♀ terminalia; Oahu, Maui, Hawaii, Frigate Shoal, Pearl and Hermes Reef, Canton Island, and Palmyra Island].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].—Sasakawa, 1995: 61–64 [revision, Micronesia, figures of ♂ terminalia].

phyllodes Sasakawa. Australasian/Oceanian: Caroline Islands (Palau), Mariana Islands (Guam). Oriental: Japan (Ryukyus).

Dasyrhicnoessa phyllodes Sasakawa, 1995:64 [Caroline Islands. Palau Islands: Babelthuap Island, Almongui (Ngaramlungui); HT ♂, USNM; figures of ♂ terminalia].

platypes Sasakawa. Oriental: Japan (Ryukyus).

Dasyrhicnoessa platypes Sasakawa, 1986:437 [Japan. Ryukyus: Okinawa; HT ♂, USNM].—Morimoto, 1989:833 [list, Japan].

serratula Malloch. Australasian/Oceanian: Australia (QLD).

Dasyrhicnoessa serratula Malloch, 1935:94 [Australia. Queensland: Townsville; ST ♀, AM].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

sexseriata Hendel. Australasian/Oceanian: Caroline Islands (Yap, Palau, Ponape), Fiji Islands, Mariana Islands (Guam, Saipan), Marshall Islands, Wake Island. Oriental: China (Hong Kong), Philippines, Taiwan.

Rhicnoessa sexseriata Hendel, 1913:110 [Taiwan. Anping; HT ♀, NMW]; 1934:44 [key], 49 [citation].—Malloch, 1914:309 [citation].

Tethina sexseriata.—Steyskal and Sasakawa, 1977:395 [generic combination, Oriental catalog].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].

Dasyrhicnoessa sexseriata.—NEW COMBINATION.

Dasyrhicnoessa asymbasia Sasakawa, 1995:56 [Caroline Islands. Yap Islands: Rummang Island (at light); HT ♂, USNM; figures of ♂ terminalia].—NEW SYNONYMY.

tripunctata Sasakawa. Oriental: Philippines.

Dasyrhicnoessa tripunctata Sasakawa, 1974:5 [Philippines. Palawan: Tinabog (3 km NE); HT ♂, BBM (10355)].—Steyskal and Sasakawa, 1977:394 [Oriental catalog].

vockerothi Hardy and Delfinado. Afrotropical: Seychelles (Aldabra, Mahé). Australasian/Oceanian: Caroline Islands (Truk, Palau), Gilbert Islands, Hawaii (Hawaii, Kauai, Maui, Molokai, Oahu), Mariana Islands (Guam, Saipan), Marshall Islands, Wake Island. Oriental: Japan (Ryukyus).

Dasyrhicnoessa vockerothi Hardy and Delfinado, 1980:373 [United States. Hawaii: Kauai, Haena (collected on beach); HT ♂, BBM].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].—Munari, 1990:53 [citation, Aldabra and Seychelles]; 1994:27 [list, Afrotropics].—Sasakawa, 1995:66–69 [revision, Micronesia, figures of ♂ terminalia].

Dasyrhicnoessa occidentalis Munari, 1986:47 [Seychelles. Mahé: Mahé Beach (10 km N); HT ♂, MCV]; 1988:51 [citation, Seychelles]; 1990:53 [synonymy].

yoshiyasui Sasakawa. Oriental: Japan (Ryukyus).

Dasyrhicnoessa yoshiyasui Sasakawa, 1986:439 [Japan. Ryukyus: Iriomote-jima Island, Uehara (on beach); HT ♂, KPU (236)].—Morimoto, 1989:833 [list, Japan].

Genus *Masoniella* Vockeroth (1 species)

Masoniella Vockeroth, 1989:1075 [nomen nudum]; 1995:732. Type species: *Masoniella richardsi* Vockeroth, by original designation.

richardsi Vockeroth. Nearctic: United States (CA).

Masoniella richardsi Vockeroth, 1987:1075 [nomen nudum]; 1995:732 [United States. California. San Bernardino County, Helendale; HT ♂, CNC].

Genus *Pseudorhicnoessa* Malloch (3 species)

Pseudorhicnoessa Malloch, 1914:306. Type species: *Pseudorhicnoessa spinipes* Malloch, by original designation.—Hendel, 1934:54 [citation].—Steyskal and Sasakawa, 1977:394 [Oriental catalog].—Munari, 1981b:92 [key to species]; 1991a:169 [checklist].—Mathis and Sasakawa, 1989:667 [Australasian/Oceanian catalog].

Macrotethina Malloch, 1935:91 (as a subgenus of *Tethina*). Type species: *Tethina* (*Macrotethina*) *tibiseta* Malloch, by original designation.—Mathis and Sasakawa, 1989:667 [synonymy].

rattii Munari. Afrotropical: Mauritius, Seychelles (Mahé). Oriental: Sri Lanka.

Pseudorhicnoessa rattii Munari, 1981b:92 [Seychelles. Mahé: Anse Louis; HT ♂, MCV; figures of hind leg and ♂ terminalia]; 1988:42–44 [citation, Seychelles, figures of ♂ terminalia]; 1990:55 [citation, Seychelles and Mauritius]; 1994:27 [list, Afrotropics].—Rossi, 1988:176–177 [parasitic fungus].

spinipes Malloch. Australasian/Oceanian: Caroline Islands, Mariana Islands (Guam, Saipan), Marshall Islands. Oriental: North Borneo, Philippines, Japan (Ryukyus), Taiwan, Vietnam.

Pseudorhicnoessa spinipes Malloch, 1914:307 [Taiwan. Takao; HT ♀, USNM].—Hendel, 1934:54 [citation].—Sasakawa, 1974:6 [revision]; 1981:520 [citation]; 1986:433–434 [key, citation, Ryukyus]; 1995:69–71 [revision, Micronesia, figures of ♂ terminalia].—Steyskal and Sasakawa, 1977:395 [Oriental catalog].—Morimoto, 1989:933 [list, Japan].

tibiseta (Malloch). Australasian/Oceanian: Australia (QLD).

Tethina (*Macrotethina*) *tibiseta* Malloch, 1935:91 [Australia. Queensland: Townsville; HT ♂, AM].

Pseudorhicnoessa tibiseta.—Mathis and Sasakawa, 1989:667 [generic combination, Australasian/Oceanian catalog].

Genus *Tethina* Haliday (59 species)

Tethina Haliday in Curtis, 1837:293 (as a subgenus of *Opomyza;* published in synonymy; first made available by use in Haliday, 1838:188). Type species: *Opomyza* (*Tethina*) *illota* Haliday, 1838, by subsequent monotypy (Haliday, 1838:188).—Becker, 1905a:234 [Palearctic catalog].—Hendel, 1917:46 [key to genera].—Sturtevant, 1923:5–7 [discussion of synonymy, listing of Nearctic species].—Czerny, 1928:3 [revision].—Malloch, 1934:453 [revision Chilean species, discussion, key].—Séguy, 1934:399 [review, key, French fauna].—Melander, 1952:199 [revision Nearctic species].—Ardö, 1957:131 [citation, fauna of northern Europe].—Collin, 1960:192 [review, British species]; 1966:20–25 [revision Palearctic species].—Trojan, 1962:65 [review, Poland].—Vockeroth, 1965:727–728 [Nearctic catalog]; 1987:1075 [key].—Prado and Tavares, 1966:429–431 [review, Brazilian species].—Stackelberg, 1970:356 [review, USSR fauna].—Cogan and Dear, 1975:179 [discussion].—Foster, 1976b:2-3 [Neotropical catalog].—Steyskal and Sasakawa, 1977:395 [Oriental catalog].—Soós, 1978:412 [Palearctic catalog]; 1981:132–137 [key, Hungarian species]; 1984:108 [Palearctic catalog].—Cogan, 1980:693 [Afrotropical catalog].—Hardy and Delfinado, 1980:377 [revision Hawaii species].—Thompson and Mathis, 1981:86 [citation, nomenclature].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].—Canzoneri et al., 1990:37–38 [fauna of Pelagian Islands (Italy)].—Beschovski, 1994b:20 [diagnosis of genus and of the *albosetulosa* and *czerni* groups].

Rhicnoessa Loew, 1862:174. Type species: *Rhicnoessa cinerea* Loew, by monotypy.—Loew, 1865:34–39 [revision].—Hendel, 1902:261–264 [systematics].—Becker, 1905b:252 [Palearctic catalog].—Williston, 1908:292, 296 [figure of head, key].—Collin, 1911:234 [probable synonymy with *Tethina*]; 1960:192–193 [review, British species]; 1966:25–32 [revision, Palearctic species].—Hendel, 1911:41 [generic remarks]; 1917:46 [synonymy in key]; 1934:46 [references].—Malloch, 1913:147 [discussion, figure of head].—Melander, 1913:298 [key to Nearctic species]; 1952:200 [revision of Nearctic species].—de Meijere, 1928:78 [discussion].—Curran, 1934:331 [key].—Hennig, 1937:138 [distribution in neotropics].—Cogan and Dear, 1975:179 [discussion].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Munari, 1990:60–61 [status as a subgenus of *Tethina*].—Beschovski, 1993:104 [diagnosis, as a genus]; 1994b:18 [diagnosis, as a genus].

Phycomyza Melander, 1952:198. Type species: *Rhicnoessa milichioides* Melander, by original designation.—Vockeroth, 1965:727 [Nearctic catalog].—Foster, 1976a:338 [synonymy].

acrostichalis Freidberg and Beschovski. Palearctic: Israel.

Tethina acrostichalis Freidberg and Beschovski, 1996:97 [Israel. Tel Aviv Dunes; HT ♂, TAU].

alboguttata Strobl. Afrotropical: St. Helena. Palearctic: Algeria, Canary Islands, Morocco, Spain, Tunisia.

Rhicnoessa alboguttata Strobl, 1900:6 [Spain. Cádiz: Algeciras; HT ♂, DCSA].—Becker, 1905b:252 [Palearctic catalog].—Hendel, 1934:42 [key], 46 [citation].—Frey, 1958a:52 [citation, Canary Islands].—Collin, 1966:26, 28–29 [key, discussion].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Carles-Tolrá, 1992:349 [citation, Spain].

Tethina alboguttata.—Czerny, 1928:3–4 [key, generic combination, revision].—de Meijere, 1928:79 [citation].—Vanschuytbroeck, 1976:106 [citation, St. Helena].—Cogan, 1980:693 [Afrotropical catalog].—Carles-Tolrá, 1992:349 [citation, Spain]; 1994:23 [list, Spain].—Beschovski, 1993:104–105 [list, illustration of ♂ terminalia].—Munari, 1994:23, 27 [citation, St. Helena, list, Afrotropics].—Freidberg and Beschovski, 1996:102 [revision, list, Morocco].

albosetulosa (Strobl). Afrotropical: Senegal. Palearctic: Austria, Azores, Bulgaria, Canary Islands, Denmark, England, France, Mediterranean subregion, European Atlantic coast.

Rhicnoessa albosetulosa Strobl, 1900:7 [Spain. Cádiz: Algeciras; ST (1♂, 4♀), DCSA].—Becker, 1905b:252 [Palearctic catalog]; 1907a:405 [citation, Tunisia].—Mercier, 1925:178 [citation, France].

Rhicnoessa albosetulosa variety *beckeri* Strobl, 1906:375 [Egypt. "Alexandrien" (from Becker, 1903:184); ST (sex ?), ZMHU].

Tethina albosetulosa.—Hendel, 1934:39 [key], 40 [generic combination, citation].—Hennig, 1937:140 [citation]; 1939:82 [figure of ♂ terminalia].—Frey, 1945:80 [citation, Azores].—Collin, 1960:192 [citation]; 1966:20, 22–23 [key, discussion].—Cogan, 1976:87 [citation, England].—Rald, 1976:113, 116 [key, Denmark, citation].—Soós, 1978:412 [Palearctic catalog]; 1981:133–134 [habitus figure, key, citation]; 1984:108 [Palearctic catalog].—Gorczytza, 1988:307 [citation, ecology, figure of head].—Canzoneri et al., 1990:37 [citation, Pelagian Islands].—Munari and Canzoneri, 1992:26–35 [revision, morphology].—Beschovski, 1993:104–105 [list, illustrations of ♂ terminalia]; 1964:263 [citation]; 1994b:20–22 [review, illustration of ♂ terminalia, Bulgaria].—Munari, 1994:27 [list, Afrotropics].

Tethina albosetulosa albipila.—Frey, 1958a:52 [citation, Canary Islands].

Rhicnoessa albipsila Mercier, 1925:179 [France. Côte du Calvados, "dune de Courseulles," Saint-Lunare, Spain; ST (sex ?), MNHN].—Hendel, 1934:41 [synonymy].

Rhicnoessa albipila [sic] of authors, not Mercier, 1925 [error].—Soós, 1984:108 [citation].

Tethina griseola of authors (sensu Czerny, 1928), not van der Wulp, 1871 [misidentification].—Czerny, 1928:5 [revision].—de Meijere, 1932:286 [discussion].—Hendel, 1934:41 [synonymy].—Séguy, 1934:400 [key, France].—Beschovski, 1975:5 [citation].

Tethina albissima Collin, 1966:23 [Italy. "Rosolina Mare" (near Venice); HT ♀ (destroyed, only a paratype remains), MCV].—Soós, 1978:412 [Palearctic catalog]; 1984:108 [Palearctic catalog].—Canzoneri et al., 1990:37 [citation, Pelagian Islands].—Munari and Canzoneri, 1992:33 [synonymy].

Tethina diversa Collin, 1966:24 [Italy. "Sp. Alberoni" (near Venice); HT ♂, MCV].—Soós, 1978:412 [Palearctic catalog]; 1984:108 [Palearctic catalog].—Munari and Canzoneri, 1992:33 [synonymy].

Tethina mixta Collin, 1966:24 [France. Plage S. Raphael, Var; HT ♂, MCV].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Canzoneri et al., 1990:37 [citation, Pelagian Islands].—Munari and Canzoneri, 1992:33 [synonymy].

albula (Loew). Nearctic: Massachusetts to Florida and Texas. Neotropical: Argentina and Chile.

Rhicnoessa albula Loew, 1869:44 [United States. Rhode Island: Newport County, Newport; ST ♂♀, MCZ].—Johnson, 1910:812 [citation]; 1913:89 [citation]; 1930:156 [citation].—Malloch, 1913:147 [citation].—Melander, 1913:298 [key]; 1952:201–202 [key, citation].—Frey, 1919:15 [citation].—Hendel, 1934:43 [key], 46–47 [citation].—Hennig, 1937:140 [citation].

Tethina albula.—Sturtevant, 1923:6 [generic combination].—Johnson, 1925:286 [citation].—Curran, 1934:330 [citation].—Vockeroth, 1965:727 [Nearctic catalog].—Prado and Tavares, 1966:431–432 [revision, figures of ♂ terminalia].—Foster, 1976b:2 [Neotropical catalog].

angustifrons Melander. Nearctic: United States (CA).

Tethina angustifrons Melander, 1952:199 [United States. California: San Luis Obispo County, Asilomar, Morro Dunes, Pismo Beach; ST 17 ♂♀, USNM].—Vockeroth, 1965:727 [Nearctic catalog].—Cole, 1969:386 [distribution, diagnosis].

angustipennis (Melander). Nearctic: United States (CA).

Rhicnoessa angustipennis Melander, 1952:203 [United States. California: San Luis Obispo County, Morro Bay (dunes NW); ST (2♂, 2♀), USNM; figure of ♂ terminalia].—Cole, 1969:387 [distribution, diagnosis].

Tethina angustipennis.—Vockeroth, 1965:727 [generic combination, Nearctic catalog].

bermudaensis (Melander). Nearctic: Bermuda.

Rhicnoessa bermudaensis Melander, 1952:203 [Bermuda. Castle and Cooper Islands; ST 32 ♂♀, USNM].

Tethina bermudaensis.—Vockeroth, 1965:727 [generic combination, Nearctic catalog].—Woodley and Hilburn, 1994:53-54 [list, Bermuda].

brasiliensis Prado and Tavares. Neotropical: Brazil (Bahia, Rio de Janeiro, Rio Grande do Norte).

Tethina brasiliensis Prado and Tavares, 1966:435 [Brazil. Rio de Janeiro: Ilha do Governador (Galeão); HT ♂, IOC (13358); figures of ♂ and ♀ terminalia].—Foster, 1976b:2 [Neotropical catalog].

carioca Prado and Tavares. Neotropical: Brazil (Rio de Janeiro).

Tethina carioca Prado and Tavares, 1966:433 [Brazil. Rio de Janeiro: Ilha do Governador (Galeão); HT ♂, IOC (13356); figures of ♂ terminalia and wing].—Foster, 1976b:2 [Neotropical catalog].

Tethina albula of authors, not Loew, 1869 [misidentification].—Frey, 1919:15.

chilensis Malloch. Neotropical. Chile.

Tethina chilensis Malloch, 1934:455 [Chile. Antofagasta: Antofagasta; HT ♂, USNM (allotype on same pin)].—Foster, 1976b:2 [Neotropical catalog].

cinerea (Loew). Palearctic: Canary Islands, Mediterranean subregion, Black Sea, northern Europe.

Rhicnoessa cinerea Loew, 1862:175 [Bulgaria. Varna; HT ♂, ZMHU].—Loew, 1865:35 [revision].—Strobl, 1900:6 [discussion].—Becker, 1905b:252 [Palearctic catalog]; 1907a:405 [citation, Tunisia]; 1908:164 [citation, Canary Islands].—Hendel, 1934:46 [as a synonym of *Anthomyza grisea* Fallén].—de Meijere, 1939:162 [as a synonym of *Anthomyza grisea* Fallén].—Collin, 1966:25, 28 [key, discussion].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Szadziewski, 1983:46 [citation].—Beschovski, 1993:104, 106 [list, illustration of ♂ terminalia]; 1994b:18-20 [review, key to Bulgarian species, illustration of ♂ terminalia].—Carles-Tolrá, 1994:23 [list, Spain].

Tethina cinerea.—Czerny, 1928:4 [key, generic combination, revision].—de Meijere, 1928:79 [citation]; 1932:287 [discussion on taxonomic status].—Karl, 1930:69 [citation].—Séguy, 1934:400 [key, France].—Ringdahl, 1948:3 [citation].—Tiensuu, 1954:42 [citation].—Ardö, 1957:131 [citation].—Trojan, 1962:66 [key, figure of head].—Beschovski, 1964:263 [citation]; 1975:5 [citation].—Stackelberg, 1970:356 [citation].—Soós, 1981:135 [key].

czernyi (Hendel). Palearctic: North and east sea coasts of Europe, Bulgaria, Germany, Hungary, Mongolia, Spain, Transcaucasus, Turkey.

Rhicnoessa czernyi Hendel, 1934:46 ["TransKaspien, Kleinasien, Spanien, Berlin, Nord-und Ostseeküsten"; ST (1♂, 1♀), NMW].—Hennig, 1939:82 [figure of ♂ terminalia].—Collin, 1966:26, 28 [key, discussion].—Soós, 1978:411-412 [citation, Palearctic catalog]; 1984:109 [Palearctic catalog].

Tethina czernyi.—Soós, 1981:135 [generic combination, key, citation]; 1983:312 [citation, Hungary].—Szadziewski, 1983:46 [citation].—Beschovski, 1993:104-105 [list, illustration of ♂ terminalia]; 1994b:22 [review, illustration of ♂ terminalia, Bulgaria].

Tethina grisea.—sensu Czerny, 1928:4 [misidentification].—Hendel, 1934:46 [synonymy (nec Fallén)].

denudata (Melander). Nearctic: United States (CA).

Rhicnoessa denudata Melander, 1952:204 [United States. California: Santa Barbara County, Carpenteria (edge of dunes at seashore); ST (7♂, 18♀), USNM].

Tethina denudata.—Vockeroth, 1965:727 [generic combination, Nearctic catalog].

dubiosa (Collin). Palearctic: Italy.

Rhicnoessa dubiosa Collin, 1966:30 [Italy. Lido di Volano (near Ferrara); HT ♂, MCV].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].

Tethina dubiosa.—NEW COMBINATION herein.

flavigenis (Hendel). Palearctic: Bulgaria, Denmark, England, Germany, Italy, Spain, Tunisia.

Rhicnoessa flavigenis Hendel, 1934:47 [Spain. "Algeciras, Andalusien"; ST (1♂, 4♀), DEI, NMW].—Collin, 1960:192-193 [citation]; 1966:26, 29 [key, discussion].—Rald, 1976:115-116 [key, Denmark, citation].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Gorczytza, 1988:307-308 [figure of head, citation, ecology].

Tethina flavigenis.—Cogan, 1976:87 [generic combination, citation, England].—Beschovski, 1993:104-105 [list, illustration of ♂ terminalia]; 1994b:22 [review, illustration of ♂ terminalia, Bulgaria].

grisea (Fallén). Palearctic: Azores, Canary Islands, England, Mediterranean subregion, European Atlantic, Black Sea.

Anthomyza grisea Fallén, 1823:7 [Sweden; ST ♀, NRS].—Czerny, 1902:255-256 [citation, descriptive notes, placement in *Rhicnoessa*].

Opomyza grisea.—Meigen, 1830:112 [generic combination].

Leptomyza grisea.—Macquart, 1835:581 [generic combination].

Anthophilina grisea.—Zetterstedt, 1848:2699 [generic combination].—Rondani, 1875:186 [key], 187 [citation].

Rhicnoessa grisea.—Strobl 1900:8 [generic combination, discussion, Spain].—Becker, 1905b:252 [Palearctic catalog].—Collin, 1911:234 [citation, England]; 1960:192 [citation]; 1966:25, 28 [key, discussion].—Hendel, 1934:42 [key], 46 [citation].—de Meijere, 1939:162 [citation].—Frey, 1945:80 [citation, Azores]; 1958a:52 [citation, Canary Islands].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].—Szadziewski, 1983:46 [citation].—Ferrar, 1987:399, 894 [description and figures of immature stages].—Gorczytza, 1988:307-308 [figure of head, citation, ecology].—Beschovski, 1993:104, 106 [list, illustration of ♂ terminalia]; 1994b:18-20 [key, illustration of ♂ terminalia].

Tethina grisea.—Wahlgren, 1927:375 [generic combination].—Czerny, 1928:4-5 [key, revision].—de Meijere, 1928:79 [citation]; 1932:287 [discussion on taxonomic status].—Karl, 1930:69 [citation].—Krogerus, 1932:118 [citation, Finland].—Séguy, 1934:400 [key, France].—Tiensuu, 1954:42 [citation].—Ardö, 1957:131 [citation].—Trojan, 1962:67 [key].—Beschovski, 1964:263 [citation].—Stackelberg, 1970:356 [citation].—Cogan, 1976:87 [citation, England].—Rald, 1976:113, 116 [key, Denmark, figure of head, citation].—Canzoneri et al., 1990:37 [citation, Pelagian Islands].

Rhicnoessa latigenis Becker, 1907a:405 [Tunisia. Tunis: La Marsa; Greece. Kandia (island near Crete); Spain. Canary Islands: Tenerife, Santa Cruz; ST ♂♀, ZMHU]; 1908:165 [repeat of original description].—Hendel, 1934:46 [synonymy].

Tethina latigenis.—Czerny, 1928:3, 6 [generic combination, key, revision].—Karl, 1930:69 [citation].—de Meijere, 1932:287 [discussion of taxonomic status].—Séguy, 1934:400 [key, France].—Trojan, 1962:65 [key].

grossipes Becker. Afrotropical: Cape Verde Islands. Palearctic: Canary Islands.

Rhicnoessa grossipes Becker, 1908:165 [(Spain.) Canary Islands: Tenerife; HT ♂, ZMHU].—Hendel, 1934:44 [key], 48 [citation].—Frey, 1958a:52 [citation, Canary Islands]; 1958b:38 [citation, Cape Verde Islands].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].

Tethina grossipes.—Czerny, 1928:3, 5 [generic combination, key, revision].—Cogan, 1980:693 [Afrotropical catalog].—Munari, 1994:27 [list, Afrotropics].

guttata Freidberg and Beschovski. Palearctic: Israel, Tunisia.

Tethina guttata Freidberg and Beschovski, 1996:103 [Israel. Bor Meshash; HT ♂, TAU].

heringi (Hendel). Palearctic: Canary Islands.

Rhicnoessa heringi Hendel, 1934:49 [(Spain.) Canary Islands: Fuerteventura; ST (1♂, 1♀), NMW].—Frey, 1958a:52 [citation, Canary Islands].—Soós, 1978:413 [Palearctic catalog]; 1984:109 [Palearctic catalog].

Tethina heringi.—NEW COMBINATION herein.

horripilans (Melander). Nearctic: United States (WA).

Rhicnoessa horripilans Melander, 1952:204 [United States. Washington: Pacific County, Ilwaco; ST 170 ♂♀ (all 170 may not be syntypes), USNM].

Tethina horripilans.—Vockeroth, 1965:727 [generic combination, Nearctic catalog]; 1987:1076-1077 [figures of head, hind tibia, and wing].

illota (Haliday). Palearctic: Belgium, Canary Islands, Denmark, England, France, Germany, Ireland, Netherlands, Sweden.

Opomyza (Tethina) illota Haliday, 1838:188 [Ireland. Dublin: Killiney Bay; ST ♂♀, NMI (apparently lost)].

Tethina illota.—Becker, 1905a:234 [generic combination, Palearctic catalog].—Collin, 1911:234 [discussion, citation, England]; 1960:192 [citation]; 1966:22 [key, citation, discussion].—Hendel, 1917:46 [citation in key]; 1934:39 [key, citation].—Sturtevant, 1923:6 [discussion].—Czerny, 1928:3, 5-6 [key, revision].—de Meijere, 1928:79 [citation]; 1932:286 [discussion]; 1939:162 [citation].—Karl, 1930:69 [citation].—Séguy, 1934:399 [key, France].—Ardö, 1957:131 [citation].—Trojan, 1962:65-66 [key, figure of head].—Stackelberg, 1970:356 [citation].—Cogan, 1976:87 [citation, England].—Rald, 1976:113-114, 116 [key, Denmark, figure of head, citation].—Soós, 1978:412 [Palearctic catalog]; 1981:134 [figure of head, key]; 1984:109 [Palearctic catalog].—Gorczytza, 1988:307-308 [figure of head, citation, ecology].—Beschovski, 1993:104 [list].

Madiza griseola van der Wulp, 1871:198 [Netherlands. Scheveningen; ST ♂♀, ZMA].—Hendel, 1934:40 [synonymy].

Rhicnoessa griseola.—Becker, 1907a:405 [generic combination]; 1908:166 [citation, Canary Islands].

Tethina griseola.—de Meijere, 1928:78 [generic combination, discussion].—Karl, 1930:69 [citation].—Trojan, 1962:65 [key].

incisuralis (Macquart). Afrotropical: Cape Verde Islands. Palearctic: Canary Islands, England, North Africa, Spain, Syria.

Chlorops incisuralis Macquart, 1851:278 [Egypt; ST ♂, MNHN].

Rhicnoessa incisuralis.—Collin, 1949:201 [generic combination, synonymy of *R. pictipes* Becker]; 1960:192-193 [citation]; 1966:27, 29 [key, discussion].—Frey, 1958a:52 [citation, Canary Islands]; 1958b:38 [citation, Cape Verde Islands].—Hennig, 1971:14 [figure of antenna (as *R. incisurata*)].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].

Tethina incisuralis.—Cogan, 1976:87 [generic combination, citation, England]; 1980:693 [Afrotropical catalog].—Rald, 1976:115 [key].—Beschovski, 1993:104-105 [list, illustration of ♂ terminalia].—Munari, 1994:27 [as *T. incinsuralis;* list, Afrotropics].

Rhicnoessa pictipes Becker, 1903:185 [Egypt. Cairo and Siala; ST 13 ♂♀, ZMHU]; 1905b:252 [Palearctic catalog].—Hendel, 1934:45 [key], 50 [citation].—Collin, 1949:201 [synonymy]; 1966:32 [discussion].

Tethina pictipes.—Czerny, 1928:4, 7 [generic combination, key, revision].—de Meijere, 1928:79 [citation].—Karl, 1930:69 [citation].—Séguy, 1934:400 [key, France].—Ardö, 1957:131 [citation].—Trojan, 1962:66 [key].

inopinata Munari and Canzoneri. Palearctic: Greece.

Tethina (Tethina) inopinata Munari and Canzoneri, 1992:35 [Greece. Salonika: Sithoniá Peninsula (Calcid.), Isola Diaporos; HT ♂, MCV].

insulans Curran. Neotropical: Ecuador (Galápagos Islands).

Tethina insulans Curran, 1932:358 [Ecuador. Galápagos Islands: Floreana, Post Office Bay (seaside); HT ♂, ZMO].—Foster, 1976b:2 [Neotropical catalog].

intermedia Collin. Palearctic: Tunisia.

Tethina intermedia Collin, 1966:21 [Tunisia. Tunis: La Marsa; HT ♂, MCV].—Soós, 1978:412 [Palearctic catalog]; 1984:109 [Palearctic catalog].

karatasensis Munari. Palearctic: Turkey.

Tethina karatasensis Munari, 1981a:139 [Turkey. Karatàs; HT ♀, MCV].—Soós, 1984:109 [Palearctic catalog].—Freidberg and Beschovski, 1996:105 [revision].

lavendula (Melander). Nearctic: United States (CA).

Rhicnoessa lavendula Melander, 1952:205 [United States. California: Orange County, Huntington Beach and Balboa; ST (2♂, 1♀), USNM].

Tethina lavendula.—Vockeroth, 1965:727 [generic combination, Nearctic catalog].

longirostris (Loew). Palearctic: Algeria, Azores, Egypt, Italy, Spain, Tunisia.

Rhicnoessa longirostris Loew, 1865:36 [Italy. Sicily; ST (5♂, 3♀), ZMHU].—Becker, 1905b:252 [Palearctic catalog]; 1907a:405 [citation, Algeria, Tunisia].—Hendel, 1934:44 [key], 50 [citation].—Frey, 1945:80 [citation, Azores].—Collin, 1966:26, 29 [key, discussion].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].

Tethina longirostris.—Czerny, 1928:4, 6 [generic combination, key, revision, misidentification (see *T. strobliana* (Mercier))].—de Meijere, 1928:79 [citation].—Beschovski, 1993:104–105 [list, illustration of ♂ terminalia]; 1994b:24, 27 [review, illustrations of ♂ terminalia and head].

marmorata (Becker). Palearctic: Canary Islands.

Rhicnoessa marmorata Becker, 1908:164 [(Spain.) Canary Islands: Tenerife, Orotava; ST 12 ♂♀, ZMHU].—Hendel, 1934:44 [key], 48 [citation].—Frey, 1958a:52 [citation, Canary Islands].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].

Tethina marmorata.—Czerny, 1928:3, 6–7 [generic combination, key, revision].—Beschovski, 1993:104–106 [list, illustrations of ♂ terminalia].

milichioides (Melander). Nearctic: United States (CA, OR, WA).

Rhicnoessa milichioides Melander, 1913:299 [United States. Washington: King County, Seattle, Alki Point; LT ♂ (designated by Foster, 1976a:346), USNM].—Hendel, 1934:43 [key], 48 [citation].

Tethina milichioides.—Sturtevant, 1923:6 [generic combination].—Foster, 1976a:345 [revision].

Phycomyza milichioides.—Melander, 1952:198, 212 [generic combination, figure of ♂ terminalia].—Vockeroth, 1965:727 [Nearctic catalog].—Cole, 1969:386 [distribution, diagnosis].

munarii Carles-Tolrá. Palearctic: Spain.

Tethina (Rhicnoessa) munarii Carles-Tolrá, 1993:251 [Spain. Gerona, Cadaqués; HT ♂, CTC]; 1994:23 [list, Spain].

nigripes Czerny. Palearctic: Germany, Italy, Lebanon, Poland.

Tethina nigripes Czerny, 1928:7 [Germany. Sülldorf; and Lebanon. Beirut; ST ♂♀, deposition unknown].—Karl, 1930:69 [citation].—Ardö, 1957:131 [citation].—Trojan, 1962:67 [key].—Rald, 1976:115 [key].—Soós, 1981:136 [key].

Rhicnoessa nigripes.—Hendel, 1934:46 [key], 50 [generic combination, citation].—Collin, 1966:27, 30 [key, discussion].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].—Szadziewski, 1983:46–47 [citation, figure of ♂ terminalia].

nigriseta Malloch. Australasian/Oceanian: Australia (NSW, QLD).

Tethina nigriseta Malloch, 1924:337 [Australia. New South Wales: Woolgoolga; HT ♂, AM].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].

Rhicnoessa nigriseta.—Hendel, 1934:43 [key], 47 [citation].

Tethina (Tethina) nigriseta.—Malloch, 1935:92 [citation].

ochracea (Hendel). Afrotropical: Senegal, Seychelles (Aldabra), South Africa. Oriental: Taiwan. Palearctic: Bulgaria, Egypt, Italy, Spain, Turkey.

Rhicnoessa ochracea Hendel, 1913:109 [Taiwan. Anping; LT ♂ (designated by Munari, 1991a:166], NMW].—Malloch, 1914:308 [citation].—Hendel, 1934:45 [key], 50 [citation].

Tethina ochracea.—Steyskal and Sasakawa, 1977:395 [generic combination, Oriental catalog].—Munari, 1991a:166 [discussion]; 1994:23, 27 [citation, Egypt and South Africa, list, Afrotropics].—Carles-Tolrá, 1992:349 [citation, Spain]; 1994:23 [list, Spain].—Beschovski, 1993:104, 106 [list, illustrations of ♂ terminalia]; 1994b:24–25 [review, illustration of ♂ terminalia and head, Bulgaria].

Tethina canzonerii Munari, 1981a:142 [Turkey. Karatàs; HT ♂, MCV]; 1990:60, 68 [citation, Seychelles, South Africa, figures of ♂ terminalia].—Soós, 1984:108 [Palearctic catalog].—Canzoneri et al., 1990:37 [citation, Pelagian Islands].—Munari, 1991a:165 [synonymy].

orientalis (Hendel). Australasian/Oceanian: Mariana Islands (Guam). Oriental: China (Hong Kong), Japan (Ryukyus), Taiwan.

Rhicnoessa orientalis Hendel, 1934:47 [Taiwan. Anping; HT ♀, NMW].

Tethina orientalis.—Sasakawa, 1974:1 [generic combination, revision]; 1981:520 [citation]; 1986:433, 437 [key, citation]; 1995:54–55 [revision, Micronesia].—Steyskal and Sasakawa, 1977:395 [Oriental catalog].—Morimoto, 1989:833 [list, Japan].

pallidiseta Malloch. Australasian/Oceanian: Australia (NSW).

Tethina (Tethina) pallidiseta Malloch, 1935:92 [Australia.

New South Wales: Collary; HT ♂, AM].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].

pallipes (Loew). Afrotropical: Cape Verde Islands. Palearctic: Azores, Bulgaria, Canary Islands, Mediterranean subregion.

Rhicnoessa pallipes Loew, 1865:37 ["Griechenland [Greece]" and "griechischen Inseln"; ST 3 ♂♀, ZMHU].—Becker, 1905b:252 [Palearctic catalog]; 1907a:405 [citation, Tunisia]; 1908:164 [citation, Canary Islands].—Hendel, 1934:45 [key], 50 [citation].—Frey, 1945:81 [citation, Azores]; 1958a:52 [citation, Canary Islands]; 1958b:38 [citation, Cape Verde Islands].—Collin, 1966:28, 32 [key, discussion].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].

Tethina pallipes.—Czerny, 1928:4, 7 [generic combination, key, revision].—de Meijere, 1928:79 [citation].—Séguy, 1934:400 [key, France].—Cogan, 1980:693 [Afrotropical catalog].—Beschovski, 1993:104, 106 [list, illustration of ♂ terminalia]; 1994b:22–25 [review, illustration of ♂ terminalia, Bulgaria].—Munari, 1994:28 [list, Afrotropics].

parvula (Loew). Nearctic: Canada (QB), United States (CA, CT, DE, MA, MD, ME, NC, NJ, NY, RI, VA, WA).

Rhicnoessa parvula Loew, 1869:45 [United States. Rhode Island: New Port County, Newport; ST ♂♀, MCZ].—Hallock and Parker, 1926:3 [citation].—Hendel, 1934:43 [key], 48 [citation].—Melander, 1952:201, 205 [key, citation].

Tethina parvula.—Hendel, 1911:43 [generic combination, misidentification, see *Pelomyiella melanderi* (Sturtevant)].—Sturtevant, 1923:7 [citation].—Johnson, 1925:286 [citation]; 1930:156 [citation].—Vockeroth, 1965:727 [Nearctic catalog]; 1987:1073 [habitus figure].

Rhicnoessa whitmani Melander, 1913:298 [United States. Massachusetts: Barnstable County, Woods Hole; HT ♂, USNM].—Sturtevant, 1923:7 [synonymy].

pictipennis Freidberg and Beschovski. Palearctic: Morocco.

Tethina pictipennis Freidberg and Beschovski, 1996:107 [Morocco. Larache (40 km S); HT ♂, UZMC].

prognatha (Melander). Nearctic: United States (CA).

Rhicnoessa prognatha Melander, 1952:206 [United States. California: San Luis Obispo County, Morro Bay (dunes west); HT ♀, USNM].

Tethina prognatha.—Vockeroth, 1965:728 [generic combination, Nearctic catalog].

quadricephala Freidberg and Beschovski. Palearctic: Egypt.

Tethina quadricephala Freidberg and Beschovski, 1996:108 [Egypt. El Arish; HT ♂, TAU].

saigusai Sasakawa. Palearctic: Japan (Honshu, Hokkaido).

Tethina saigusai Sasakawa, 1986:434 [Japan. Honshu: Kyoto, Kunda Peninula, Shimakage Bay; HT ♂, KPU (234)].—Morimoto, 1989:833 [list, Japan].

seriata (Melander). Nearctic: United States (FL).

Rhicnoessa seriata Melander, 1952:206 [United States. Florida: Dade County, Miami, Matecumba; Collier County, Naples; ST (2♂, 4♀), USNM].

Tethina seriata.—Vockeroth, 1965:728 [generic combination, Nearctic catalog].

setulosa Malloch. Neotropical: Chile (Tarapaea to Antofagasta).

Tethina setulosa Malloch, 1934:454 [Chile. Antofagasta: Tocopilla; HT ♂, USNM].—Foster, 1976b:2 [Neotropical catalog].

Rhicnoessa setulosa.—Hennig, 1937:139 [generic combination, citation].

shalom Freidberg and Beschovski. Palearctic: Israel.

Tethina shalom Freidberg and Beschovski, 1996:109 [Israel. Elat; HT ♂, TAU].

simplex (Collin). Palearctic: Czech Republic, England, Hungary, Slovakia, Spain.

Rhicnoessa simplex Collin, 1966:32 [England. Norfolk: Holme-by-sea; HT ♂, UMO]; 1960:192–193 [misidentified as *Rhicnoessa strobliana* Mercier].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].

Tethina simplex.—Cogan and Dear, 1975:179 [generic combination].—Cogan, 1976:87 [citation, England].—Rald, 1976:115 [key].—Carles-Tolrá, 1992:349 [citation, Spain]; 1994:23 [list, Spain].—Roháček, 1992:130 [as ? *simplex*, Czech Republic and Slovakia].—Beschovski, 1993:104, 106 [list, illustration of ♂ terminalia]; 1994b:24 [review, illustrations of ♂ terminalia and head, Hungary].

soikai Munari. Afrotropical: Senegal.

Tethina soikai Munari, 1981a:141 [Senegal. Rufisque; HT ♂, MCV]; 1994:28 [list, Afrotropics].

sonorensis (Melander). Neotropical: Mexico (BCN, SON).

Rhicnoessa sonorensis Melander, 1952:207 [Mexico. Baja California Norte and Sonora: Rocky Point Marsh; LT ♂ (designated by Foster, 1976b:2), USNM].—Cole, 1969:387 [distribution, diagnosis].

Tethina sonorensis.—Foster, 1976b:2 [generic combination, Neotropical catalog].

spinulosa Cole. Nearctic: California. Neotropical: Mexico (BCN).

Tethina spinulosa Cole, 1923:478 [Mexico. Baja California Norte: Las Animas Bay; HT ♂, CAS (1356)].—Hendel, 1934:41 [citation].—Vockeroth, 1965:728 [Nearctic catalog].—Foster, 1976b:2 [Neotropical catalog].

Rhicnoessa spinulosa.—Melander, 1952:202, 208 [key, generic combination, citation].

steyskali Foster. Nearctic: United States (CA).

Tethina steyskali Foster, 1976a:344 [United States. California: San Luis Obispo County, Pismo Beach; HT ♂, USNM (73639)].

strobliana (Mercier). Palearctic: Denmark, England, France, Germany, Hungary, Italy, Madeira, Poland, Spain.

Rhicnoessa strobliana Mercier, 1923:18 ["Espagne (Algeciras, Alicante), France (côte du Calvados; mare saumâtre à Bénouville, dune de Courseulles, juin-juillet)"; ST (sex ?), MNHN].—Hendel, 1934:45 [key], 50 [citation].—Frey, 1945:81 [citation, Azores]; 1949:36 [citation, Madeira].—Collin, 1960:192–193 [citation, in part]; 1966:27, 30 [key, discussion].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].—Szadziewski, 1983:46 [citation].

Tethina strobliana.—Czerny, 1928:6 [as *Tethina longirostris* (Loew), revision].—Cogan, 1976:87 [generic combination, citation, England].—Rald, 1976:115 [key].—Soós, 1981:134, 136–137 [figures of head and habitus, key, citation]; 1983:312 [citation, Hungary].—Canzoneri et al., 1990:38 [citation, Pelagian Islands].—Beschovski, 1993:104, 106 [list, illustration of ♂ terminalia].

Tethina longirostris of authors, not Loew, 1865 [misidentification].—Collin, 1911:234 [citation, England].—Czerny, 1928:6 [revision].

Rhicnoessa penita Collin, 1966:31 [England. Suffolk: Aldeburgh; HT ♂, UMO]; 1960:192–193 [as *Rhicnoessa strobliana* Mercier].—Soós, 1978:413 [Palearctic catalog]; 1984:110 [Palearctic catalog].—Beschovski, 1993:104 [synonymy].

Tethina penita.—Cogan and Dear, 1975:179 [generic combination].—Cogan, 1976:87 [citation, England].—Rald, 1976:115–116 [key, Denmark, citation].

subpunctata Beschovski. Palearctic: Tunisia.

Tethina subpunctata Beschovski, 1994a:198 [Tunisia. Sousse (15 km N); HT ♂, UMO].

texana (Malloch). Nearctic: United States (TX).

Rhicnoessa texana Malloch, 1913:148 [United States. Texas: Nueces County, Corpus Christi; HT ♀, USNM (15807)].—Hendel, 1934:50 [citation].—Melander, 1952:202, 208 [key, citation].

Tethina texana.—Sturtevant, 1923:7 [generic combination].—Vockeroth, 1965:728 [Nearctic catalog].

thula Sasakawa. Palearctic: Japan (Hokkaido).

Tethina thula Sasakawa, 1986:436 [Japan. Hokkaido: Notsuke-gun, Bekkai Beach; HT ♂, KPU (235)].—Morimoto, 1989:833 [list, Japan].

variseta (Melander). Australasian/Oceanian: Hawaii (Hawaii, Kahoolawe, Kauai, Maui, Oahu). Nearctic: United States (CA).

Rhicnoessa variseta Melander, 1952:209 [United States. California: Los Angeles and Orange Counties, Long Beach, Seal Beach, Huntington Beach, Balboa, and Corona del Mar; ST 19 ♂♀, USNM].

Tethina variseta.—Vockeroth, 1965:728 [generic combination, Nearctic catalog].—Hardy and Delfinado, 1980:378–379 [citation, figures of head, ♂ terminalia, spermathecae; French Frigate Shoal, Hawaii, Kahoolawe, Kauai, Maui, Oahu].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].

willistoni (Melander). Neotropical: West Indies (Jamaica, St. Vincent).

Anthomyza cinerea Williston, 1896:444 [West Indies. St. Vincent; ST 12 (sex ?), BMNH; preoccupied, Loew, 1862].

Rhicnoessa cinerea.—Czerny, 1902:256 [generic combination].

Rhicnoessa willistoni Melander, 1913:298 [new name for *A. cinerea* of Williston, 1896, not Loew, 1862].—Hendel, 1934:51 [citation].—Melander, 1952:201, 209 [key, citation].

Tethina willistoni.—Foster, 1976b:3 [generic combination, Neotropical catalog].

woodi Foster. Nearctic: United States (WA).

Tethina woodi Foster, 1976a:342 [United States. Washington: Pacific County, Ilwaco; HT ♂, USNM (73640)].

xanthopoda (Williston). Nearctic: Bermuda. Neotropical: West Indies (St. Lucia, St. Vincent).

Anthomyza xanthopoda Williston, 1896:445 [West Indies. St. Vincent; ST 3 (sex ?), BMNH].—Czerny, 1902:256 [citation, placement in *Rhicnoessa*].

Rhicnoessa xanthopoda.—Czerny, 1902:256 [generic combination].—Melander, 1913:298 [key]; 1952:202, 209 [key, citation].—Hendel, 1934:51 [citation].

Tethina xanthopoda.—Foster, 1976b:3 [generic combination, Neotropical catalog].—Woodley and Hilburn, 1994:54 [list, Bermuda].

yaromi Freidberg and Beschovski. Palearctic: Spain.

Tethina yaromi Freidberg and Beschovski, 1996:110 [Spain. Almeria, Cabo de Gata; HT ♂, TAU].

Genus *Tethinosoma* Malloch (1 species)

Tethinosoma Malloch, 1930:335. Type species: *Agromyza fulvifrons* Hutton, by original designation.—Harrison, 1959:150 [revision].—D.K. McAlpine, 1967:75 [citation, assigned to Tethinidae].

fulvifrons (Hutton). Australasian/Oceanian: New Zealand.

Agromyza fulvifrons Hutton, 1901:93 [New Zealand. Christchurch (on sea beach); HT ♀, NZAC (formerly in CANT)].

Tethinosoma fulvifrons.—Malloch, 1930:335 [generic combination].—Harrison, 1959:150–151 [revision].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].

Subfamily ZALEINAE D.K. McAlpine

Zalinae D.K. McAlpine, 1982:116. Type genus: *Zale* D.K. McAlpine, 1982 [junior homonym, Hübner, 1818 (Lepidoptera)].

Zaleinae D.K. McAlpine, 1985:81 [new name for Zalinae D.K. McAlpine, 1982]. Type genus: *Zalea* D.K. McAlpine, 1985.

Genus *Suffomyia* Freidberg (1 species)

Suffomyia Freidberg, 1995:448. Type species: *Suffomyia scutellaris* Freidberg, 1995, by original designation.

scutellaris Freidberg. Palearctic: Egypt, Israel.
Suffomyia scutellaris Freidberg, 1995:448 [Egypt. Sinai: Nueiba (10 km N); HT ♂, TAU].

Genus *Zalea* D.K. McAlpine (3 species)

Zale D.K. McAlpine, 1982:108 [preoccupied, Hübner, 1818 (Lepidoptera)]. Type species: *Zale minor* D.K. McAlpine, 1982, by original designation.

Zalea D.K. McAlpine, 1985:82 [new name for *Zale* of D.K. McAlpine, 1982]. Type species: *Zale minor* D.K. McAlpine, 1982, automatic.—Mathis, 1989:670 [Australasian /Oceanian catalog]; 1992:12–13 [catalog].

horningi (Harrison). Australasian/Oceanian: New Zealand.
Tethina horningi Harrison, 1976:143 [New Zealand. Snares Islands: Seal Cove (on supralittoral rocks); figure of wing; HT ♂, NZAC].—Mathis and Sasakawa, 1989:668 [Australasian/Oceanian catalog].
Zalea horningi.—D.K. McAlpine, 1985:82 [generic combination, discussion].—Mathis, 1992:12 [catalog].

major (D.K. McAlpine). Australasian/Oceanian: Australia (NSW).
Zale major D.K. McAlpine, 1982:112 [Australia. New South Wales: Bundeena, Port Hacking; figures of head; HT ♂, AM].
Zalea major.—D.K. McAlpine, 1985:82 [generic combination].—Mathis, 1989:670 [Australasian/Oceanian catalog].—Mathis, 1992:12 [catalog].

minor (D.K. McAlpine). Australasian/Oceanian: Australia (NSW).
Zale minor D.K. McAlpine, 1982:110 [Australia. New South Wales: Sydney Harbour, Vaucluse, Nielsen Park, Bottle and Glass Rocks; figures of wing, ♂ and ♀ terminalia; HT ♂, AM].
Zalea minor.—D.K. McAlpine, 1985:82 [generic combination].—Mathis, 1989:670 [Australasian/Oceanian catalog].—Mathis, 1992:13 [catalog].—Freidberg, 1995:454–455 [discussion].

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