

NOTES ON *ANOPLOMUS BEZZI* AND RELATED GENERA
(DIPTERA: TEPHRITIDAE: CERATITINAE) IN
SOUTHEAST ASIA AND AFRICA

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ABSTRACT. - Southeast Asian species of *Anoplomus* Bezzi, *Ceratitella* Malloch, *Neoceratitis* Hendel (= *Trirhithromyia* Hendel), *Paratrithrum* Shiraki, *Pardalaspinus* Hering (= *Notophysa* Zia and *Ceratitisma* Zia, new synonyms), *Proanoplomus* Shiraki and *Sinanoplomus* Zia are discussed and keyed. *Pardalaspinus* is removed from synonymy. Five species are newly synonymized: *Anoplomus flexuosus* Bezzi (with *A. cassandra* (Osten Saken), revised status), *Notophysa connexa* Zia (with *Pardalaspinus laqueatus* (Enderlein)), *Paratrithrum amamioshimaensis* Shiraki (with *Ceratitella sobrina* (Zia)), *Proanoplomus minor* Hardy (with *Pardalaspinus bimaculatus* (Zia)), *Proanoplomus trimaculatus* Hardy (with *P. yunnanensis* Zia). Seven species are placed in new combinations: *Ceratitella nitida* (Hardy), *C. sobrina* (Zia), *Pardalaspinus bimaculatus* (Zia), *P. cinereofasciatus* (de Meijere), *P. nitidus* (Hardy), *P. vittatus* (Hardy), *Proanoplomus caudatus* (Zia). The African genus *Clinotaenia* Bezzi is discussed, with four species transferred to *Bistrispinaria* Speiser (*B. frigida* (Hering), *B. magniceps* (Bezzi), *B. uranos* (Hering), *B. woodi* (Bezzi), new combinations).

INTRODUCTION

Within the Asian Ceratitinae (*sensu* Hancock, 1986), a small group of genera are characterized by the presence of a dark body, swollen scutellum, white or greyish pubescence on the scutum (sometimes absent) and abdomen, a banded wing pattern and the basal dark area of the wing broken into a series of ill-defined spots and streaks. Seven genera are recognized: *Anoplomus* Bezzi, *Ceratitella* Malloch, *Neoceratitis* Hendel, *Paratrithrum* Shiraki, *Pardalaspinus* Hering, *Proanoplomus* Shiraki and *Sinanoplomus* Zia. The species are rare in collections and very little biological information is available; only the hosts of *Neoceratitis* (Solanaceae) and *Ceratitella* (Loranthaceae) are known. It is likely that other genera also utilize berries or small fruits as larval hosts.

Pardalaspinus has been placed as a synonym of *Proanoplomus* by Hardy (1973) but the different wing pattern type and position of the r-m crossvein suggest that it is distinct. On wing pattern characters, the genera fall into two subgroups: (1), *Anoplomus*, *Proanoplomus*

and *Sinanoplomus*, in which the transverse dark band runs obliquely across r-m crossvein from cell r_1 well beyond cell sc, and (2), *Ceratitella*, *Neoceratitis*, *Paratrithrum* and *Pardalaspinus*, in which this band runs perpendicularly from cell sc, basad of r-m crossvein.

Study of the Asian species in the *Anoplomus* group has shed new light on the African genus *Clinotaenia* Bezzi, previously discussed by Hancock (1985). Typical *Clinotaenia* shares the characteristics of this group, including a third antennal segment that is often slightly produced to a blunt point, and clearly belongs in the *Anoplomus* subgroup. When biological information becomes available, *Clinotaenia* and *Proanoplomus* may be combined. Only the dark-bodied species (*C. anastrephina* Bezzi, *C. atlas* Munro, *C. cedarensis* Munro, *C. grata* (Wiedemann) and *C. inyanga* Hancock) belong in *Clinotaenia*. As suggested by Hancock (1985), the paler, black-spotted species formerly included are transferred here to *Bistrispinaria* Speiser (*B. frigida* (Hering), *B. magniceps* (Bezzi), *B. uranos* (Hering), *B. woodi* (Bezzi); all new combinations). *Bistrispinaria* is characterized by multiple costal bristles above end of vein Sc and a pointed third antennal segment. It belongs in the *Acroceratitis* group of genera, with *B. magniceps* bred from the stems of *Panicum maximum* (Gramineae) (White and Elson-Harris, 1992).

As noted by Korneyev (1994), the Afrotropical genus *Trirhithromyia* Hendel is a synonym of *Neoceratitis*; species of both genera breed in the berries of *Lycium* and other Solanaceae. As a result, the following species also belong in *Neoceratitis*: *N. chirinda* (Hancock), *N. cyanescens* (Bezzi), *N. efflatouni* (Hendel), *N. lycii* (Coquillett), *N. minima* (Bezzi).

With the exception of *Bistrispinaria*, which remains in the tribe Gastrozonini (*sensu* Hancock, 1985), the genera discussed here are referable to the tribe Ceratitini.

Key to *Anoplomus* group of genera in Southeast Asia

1. Mid tibia with 2 strong apical spines; wing band across dm-cu crossvein distinctly broadened posteriorly and directed anteriorly towards subapical band 2
 Mid tibia with 1 strong apical spine; wing band across dm-cu crossvein not distinctly broadened posteriorly and curved anteriorly towards band across r-m crossvein 3
2. Wing with an oblique hyaline transverse band from cells sc plus r_1 to hind margin, basad of r-m crossvein; postpronotal (humeral) bristle absent; 2 pairs of frontal bristles *Anoplomus*
 Wing without an oblique hyaline band basad of r-m crossvein; postpronotal (humeral) bristle present; 3 pairs of frontal bristles *Sinanoplomus*
3. Wing with basal brown area separated from oblique brown band through r-m crossvein by a hyaline band from cells sc plus r_1 to hind margin; r-m crossvein well beyond end of cell sc; 3 pairs of frontal bristles *Proanoplomus*
 Wing with a transverse brown band from cell sc to hind margin, basad of r-m crossvein, with no hyaline band from cells sc plus r_1 ; r-m crossvein below or just beyond cell sc; 1-4 pairs of frontal bristles 4

4. Wing with r-m crossvein before middle of discal cell, below middle of cell sc; face narrow, with antennal grooves distinct and reaching mouth border; 2 pairs of frontal bristles; Asian species with subapical wing band distinct*Neoceratitis*
 Wing with r-m crossvein at or beyond middle of discal cell, below or just beyond apex of cell sc; face broad, with antennal grooves shallow and not reaching mouth border; if 2 pairs of frontal bristles then subapical wing band absent in Asian species5
5. 3-4 pairs of frontal bristles; ocellar bristles well developed; scutum with yellow postsutural and/or dorsocentral prescutellar markings; subapical wing band or streak present; costal band not reaching vein M*Pardalaspinus*
 1-2 pairs of frontal bristles; ocellar bristles weak; scutum without yellow postsutural or dorsocentral markings; subapical wing band absent in Asian species, the costal band reaching vein M at apex6
6. Head with postoccipital region swollen ventrally, more than half width of eye in lateral view; 1 pair of frontal bristles; scutum with pale pubescence formed into longitudinal bands*Paratrithrum*
 Head with postoccipital region not swollen, less than half width of eye; 2 pairs of frontal bristles; scutum with pale pubescence not formed into longitudinal bands*Ceratitella*

SYSTEMATICS

Genus *Anoplomus* Bezzi

Anoplomus Bezzi, 1913: 100. Type-species *A. flexuosus* Bezzi, 1913 (= *Trypeta cassandra* Osten Sacken, 1882), by original designation.

Remarks. - This genus is characterized by the presence of 2 spines on the mid tibia and absence of postpronotal bristles. Three species are included; a fourth, *A. caudatus* Zia, is transferred to *Proanoplomus*. Hosts are unknown.

Key to species of *Anoplomus*

1. Cell sc entirely brown; scutellum yellow with an apical black spot, the 2 lateral spots not visible from above *nigrifemoratus*
 Cell sc mostly pale yellow or hyaline; scutellum with 3 marginal spots visible from above2
2. Costal cell broadly hyaline medially; apex of wing produced, pointed*rufipes*
 Costal cell mostly brown, the hyaline markings small; apex of wing not produced, rounded *cassandra*

Anoplomus cassandra (Osten Sacken), revised status
 (Fig. 1)

Tephritis fasciventris Macquart, 1848: 225, pl. 7; preoccupied by Macquart, 1843. Type-locality Java.
Trypeta cassandra Osten Sacken, 1882: 228, fig. 9. Type-locality Philippines; Hardy, 1974: 158 (as synonym of *A. flexuosus* Bezzi).

Anoplomus flexuosus Bezzi, 1913: 100, pl. 8. Replacement name for *T. fasciventris* Macquart, 1848; new synonym.

Material examined. - THAILAND: 1 female, Thung Luang, nr Chiang Mai, 5.vi.1991, Dang (in Department of Agriculture, Chiang Mai). LAOS: 1 male, Pakkading, Borikhane Province, 100-200 m, 23.iv.1965, J.L. Gressitt (in B.P. Bishop Museum, Hawaii).

Distribution. - India, Thailand (new record), Laos (new record), Philippines, Indonesia (Java).

Remarks. - Hardy (1974) placed *A. cassandra* as a synonym of *A. flexuosus* but the former has nomenclatural priority. This is the most widespread species in the genus.

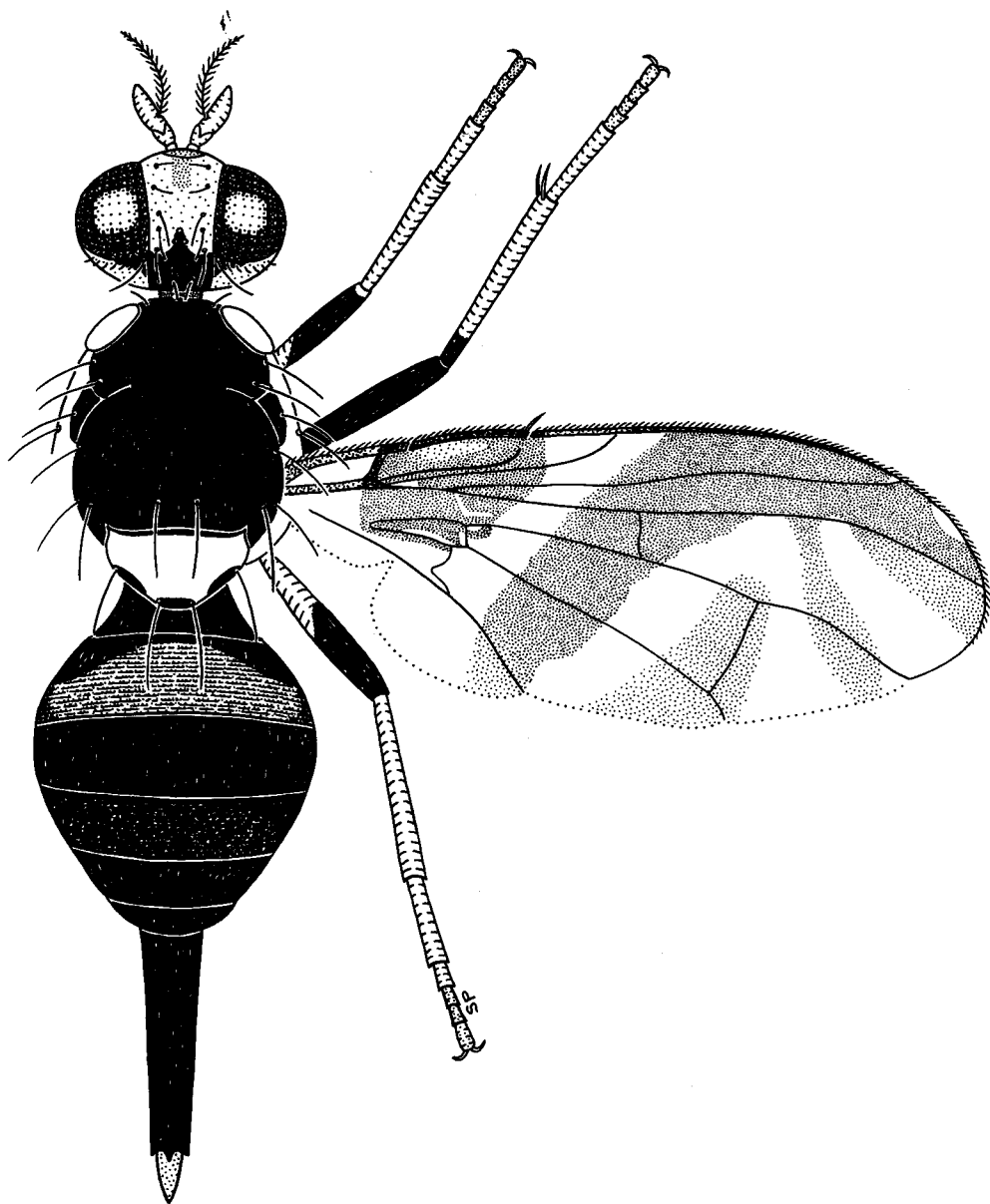


Fig. 1. *Anoplomus cassandra*, female.

***Anoplomus nigrifemoratus* Hardy**

Anoplomus nigrifemoratus Hardy, 1973: 242, pl. 8. Type-locality Ban Van Eue, Laos.

Distribution. - Laos.

***Anoplomus rufipes* Hardy**

Anoplomus rufipes Hardy, 1973: 243, fig. 115. Type-locality Chiangdao, Thailand.

Distribution. - Thailand, Laos.

Genus *Ceratitella* Malloch

Ceratitella Malloch, 1939: 452. Type-species *Ceratitis loranthi* Froggatt, 1910, by original designation.

Remarks. - This genus includes five Australian and three Southeast Asian species (Permkam and Hancock, in press). Larvae develop in the berries of Loranthaceae. Two species included here were placed in *Paratrirhithrum* by Hardy (1973); a third, *P. amamioshimaensis* Shiraki, is placed in synonymy. For a key to all species see Permkam and Hancock (in press).

Key to southeast Asian species of *Ceratitella*

1. Basal transverse brown band of wing reaching posterior margin; antennae with third segment ending in a blunt point *nitida*
Basal transverse brown band of wing not reaching posterior margin; antennae with third segment apically rounded 2
2. Scutum with grey pollinose area continuous across suture except for 2 round black spots before dorsocentral bristles and reaching anterior margin between postpronotal lobes *sobrina*
Scutum with grey pollinose area interrupted by a black band behind suture and not reaching anterior margin *tomentosa*

***Ceratitella nitida* (Hardy), new combination**

Paratrirhithrum nitidum Hardy, 1973: 263, fig. 127. Type-locality Fang, Thailand.

Distribution. - Thailand (Chiang Mai district).

***Ceratitella sobrina* (Zia), new combination**

Ceratitis sobrina Zia, 1937: 177, fig. 20a. Type-locality Sichuan, China.

Paratrirhithrum amamioshimaensis Shiraki, 1968: 54, pl. 21. Type-locality Amami-Oshima Is, Japan; new synonym.

Paratrithrum sobrinum (Zia); Hardy, 1973: 263.

Distribution. - China, Ryukyu Is.

Remarks. - We find the original descriptions and illustrations of the above taxa contain no characters by which to separate them. Shiraki (1968) did not compare his species with that of Zia (1937).

Ceratitella tomentosa (de Meijere)

Carpophthoromyia tomentosa de Meijere, 1914: 207. Type-locality Semarang, Java.

Ceratitella asiatica Hardy, 1967: 130, fig. 1. Type-locality Kahuta, Pakistan; Hardy, 1987: 266 (as synonym).

Ceratitella tomentosa (de Meijere); Hardy, 1987: 266.

Distribution. - Pakistan, Indonesia (Java).

Remarks. - Bred from berries of *Loranthus longiflorus* in Pakistan (Hardy, 1967).

Genus *Neoceratitis* Hendel

Neoceratitis Hendel, 1927: 61. Type-species *Ceratitella asiatica* Becker, 1907, by original designation.

Heoceratitis Hendel, 1927: 20, 215, 217, pl. II. Incorrect original spelling.

Ceratitella (*Trirhithromyia*), Hendel, 1931: 2. Type-species *C. (T.) efflatouni* Hendel, 1931, by original designation.

Trirhithromyia Hendel; Hardy, 1967: 147.

Remarks. - This genus contains one Asian and five African species (Korneyev, 1994), the latter formerly placed in *Trirhithromyia*. The above synonymy is based both on morphological and biological similarity; known hosts of both former genera are the fruits of Solanaceae, including *Lycium* (*N. asiatica*, *N. efflatouni*, *N. lycii*) or *Solanum*, *Lycopersicon* and *Capsicum* (*N. cyanescens*).

Neoceratitis asiatica (Becker)

Ceratitella asiatica Becker, 1907: 291. Type-locality Kurlyk, NE Tibet.

Neoceratitis asiatica (Becker); Hendel, 1927: 61, pl. II; Zia, 1937: 179, pl. IV; Korneyev, 1994: 61.

Distribution. - Northwest China (Tibet), Kazakhstan, Turkmenistan.

Remarks. - Larvae develop in the berries of *Lycium turcomanicum* in Tibet (Woo *et al.*, 1963; White & Elson-Harris, 1992). This species is separable from all others in the genus by the distinct subapical band that broadly crosses vein M, running almost parallel to it, plus the band across dm-cu crossvein narrowly connected to sub-basal transverse band along lower portion only of r-m crossvein.

Genus *Paratrirhithrum* Shiraki

Paratrirhithrum Shiraki, 1933: 137. Type-species *P. nitobei* Shiraki, 1933, by original designation.

Remarks. - This genus contains a single species; others included by Shiraki (1968) and Hardy (1973) are transferred to *Ceratitis*. Hosts are unknown.

***Paratrirhithrum nitobei* Shiraki**

Paratrirhithrum nitobei Shiraki, 1933: 138, pl. IV. Type-locality Arisan, Taiwan.

Paratrirhithrum nitobae; Chen, 1947: 71. Incorrect subsequent spelling.

Distribution. - Taiwan.

Genus *Pardalaspinus* Hering, revised status

Pardalaspinus Hering, 1952: 282. Type-species *Pardalaspis migrata* Hering (= *Ceratitis laqueata* Enderlein), by original designation; Hardy, 1973: 265 (as synonym of *Proanoplomus* Shiraki).

Notophysa Zia, 1964: 48, 53. Type-species *N. connexa* Zia (= *Ceratitis laqueata* Enderlein), by original designation; new synonym.

Ceratitisoma Zia, 1964: 50, 54. Type-species *C. bimaculatum* Zia, by original designation; new synonym.

Remarks. - Six species are included in this genus, most placed in *Proanoplomus* by Hardy (1973, 1988). *Notophysa connexa* Zia and *Proanoplomus minor* Hardy are placed in synonymy. Hosts are unknown.

Key to species of *Pardalaspinus*

1. Scutum with a broad, prescutellar yellow-white medial area 2
 Scutum with prescutellar yellow markings, when present, not united into a broad medial area 4
2. Wing with subapical brown band not joined to costal band *adversarius*
 Wing with subapical brown band joined to costal band 3
3. Notopleural calli yellow; postpronotal lobes yellow on hind margins; wing with apical hyaline indentation reaching vein R₄₊₅ *nitidus*
 Notopleural calli and postpronotal lobes brown to blackish, slightly tinged with yellow; wing with apical hyaline indentation not reaching vein R₄₊₅ *laqueatus*
4. Scutum without yellow prescutellar dorsocentral markings *cinereofasciatus*
 Scutum with a pair of yellow prescutellar dorsocentral markings 5
5. Scutum with postsutural yellow vittae absent; dorsocentral prescutellar markings triangular *bimaculatus*
 Scutum with short postsutural yellow vittae; dorsocentral prescutellar markings linear *vittatus*

***Pardalaspinus adversarius* Hering, revised status**

Pardalaspinus adversarius Hering, 1952: 283. Type-locality Radjamandala, W. Java.

Proanoplomus adversarius (Hering); Hardy, 1973: 266; Hardy, 1988: 108.

Distribution. - Southern Myanmar (Burma), Indonesia (Java).

***Pardalaspinus bimaculatus* (Zia), new combination**

(Fig. 2)

Ceratitisoma bimaculatus Zia, 1964: 50, 54. Type-localities Xishuangbanna (Yunnan) and Hainan Is, China.

Proanoplomus minor Hardy, 1973: 270, fig. 130. Type-locality Chiangdao, Thailand; new synonym.

Material examined. - THAILAND: 2 males, Doi Luong Nat. Park, SE of Chiang Rai, 24.v.1991, D.L. Hancock (in Department of Primary Industries, Brisbane).

Distribution. - Southern China, northern Thailand.

***Pardalaspinus cinereofasciatus* (de Meijere), new combination**

Carpophthoromyia cinereofasciata de Meijere, 1924: 37. Type-locality Tand Andalas, Sumatra.

Proanoplomus cinereofasciatus (de Meijere); Hardy, 1988: 108.

Distribution. - Indonesia (Sumatra, Java), East Malaysia (Sabah).

***Pardalaspinus laqueatus* (Enderlein), revised status**

Ceratitis laqueata Enderlein, 1920: 347. Type-locality Java.

Pardalaspis migrata Hering, 1944: 5, fig. 1. Type-locality "Ost Indien"; Hardy, 1973: 266 (as synonym).

Pardalaspinus migrata (Hering); Hering, 1952: 283.

Pardalaspinus laqueatus (Enderlein); Hering, 1952: 283.

Notophysa connexa Zia, 1964: 49, 53. Type-locality Xishuangbanna, Yunnan, China; new synonym.

Proanoplomus laqueatus (Enderlein); Hardy, 1973: 266.

Material examined. - LAOS: 2 males, Ban Van Eue, Vientiane Province, 11.iv.1965, J.L. Gressitt; 1 male, Pakkading, Borikhane Province, 23.iv.1965, J.L. Gressitt (all in B.P. Bishop Museum, Hawaii).

Distribution. - Southwest China (Yunnan Province), Laos, Vietnam, Indonesia (Java).

Remarks. - Hardy (1973) erroneously recorded the type-locality of *P. laqueata* as Ceylon; later (Hardy 1988) this was corrected to Java, the locality recorded by Enderlein (1920). Hering's (1944) *P. migrata*, described from "Ost Indien", probably came from the "East Indies" (Indonesia) rather than eastern India.

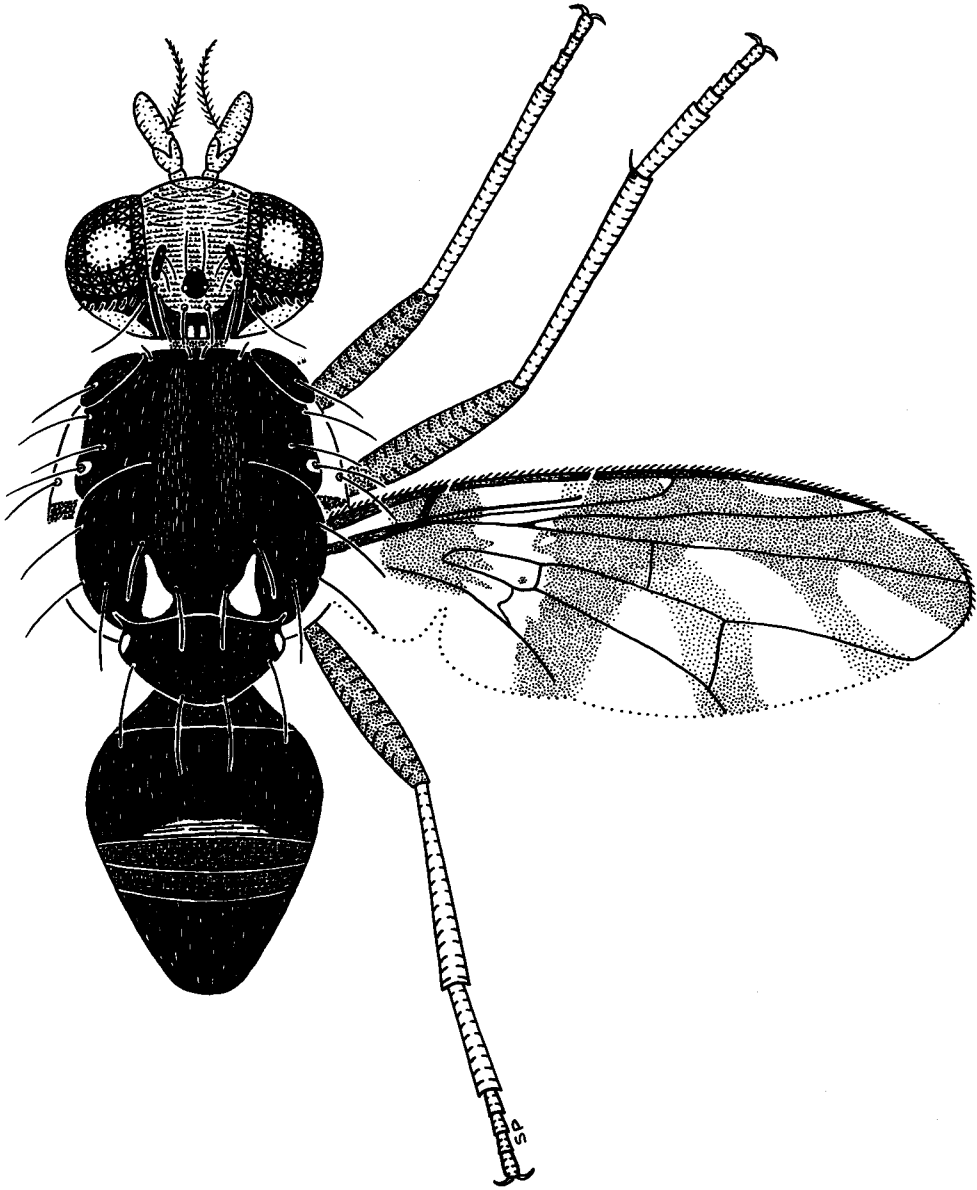


Fig. 2. *Pardalaspinus bimaculatus*, male.

***Pardalaspinus nitidus* (Hardy), new combination**

Proanoplomus nitidus Hardy, 1973: 271, fig. 131. Type-locality Utai Thani, Thailand.

Material examined. - THAILAND: Holotype male, Utai Thani, 8.iv.1965 (in Kasetsart University, Bangkok).

Distribution. - Central Thailand.

***Pardalaspinus vittatus* (Hardy), new combination**

Proanoplomus vittatus Hardy, 1973: 276, fig. 134. Type-locality Kanchanaburi, Thailand.

Material examined. - THAILAND: Holotype female, allotype male, Kanchanaburi, 31.v.1962 (in Kasetsart University, Bangkok).

Distribution. - NE India (Sikkim), Myanmar (= Burma), western Thailand.

Genus *Proanoplomus* Shiraki

Proanoplomus Shiraki, 1933: 127. Type-species *P. japonicus* Shiraki, 1933, by original designation.

Paranoplomus Shiraki, 1933: 131. Type-species *P. formosanus* Shiraki, 1933, by original designation.

Remarks. - This genus contains two Japanese species (*P. japonicus* Shiraki and *P. arcus* Ito), plus 10 southeast Asian species. *P. caudatus* (Zia) is transferred from *Anoplomus* and *P. trimaculatus* Hardy is placed in synonymy with *P. yunnanensis* Zia. Hosts are unknown. Japanese species were discussed and keyed by Ito (1949).

Key to southeast Asian species of *Proanoplomus*

1. Scutellum white or yellow with a black basal band and 3 apical/subapical black spots 2
Scutellum largely black 5
2. Scutum without yellow postsutural vittae; ocellar bristles weak, hair-like *caudatus*
Scutum with short, yellow postsutural vittae; ocellar bristles well developed 3
3. Wing with brown band across dm-cu crossvein connected to transverse band across r-m crossvein *affinis*
Wing with brown band across dm-cu crossvein not connected with band across r-m crossvein 4
4. Apex of costal band broad, extending two-thirds distance between veins R_{4+5} and M ...
..... *cylindricus*
Apex of costal band narrow, extending half distance between veins R_{4+5} and M
..... *yunnanensis*
5. Scutellum with a transverse whitish band on disc, surrounded by black
..... *longimaculatus*
Scutellum black on disc 5
6. Scutum black, without postsutural yellow vittae; postpronotal lobes black 7
Scutum black with short, yellow postsutural vittae; postpronotal lobes yellow 8
7. Wing with subapical brown band free from costal band and band across dm-cu crossvein joined to band across r-m crossvein *spenceri*
Wing with subapical brown band joined to costal band and band across dm-cu crossvein free *nigroscutellata*

8. Wing with brown band across dm-cu crossvein short, ending at vein M.....*intermedius*
Wing with brown band across dm-cu crossvein long, reaching or almost reaching band
across r-m crossvein9
9. Scutum with distinct longitudinal bands of pale pubescence; band across dm-cu crossvein
not broadened posteriorly*omeiensis*
Scutum without distinct bands of pale pubescence; band across dm-cu crossvein broadened
posteriorly *formosanus*

***Proanoplomus affinis* Chen**

Proanoplomus affinis Chen, 1947: 89, fig. 3. Type-locality Tianmushan, Zhejiang, China.

Distribution. - Eastern China (Zhejiang Province).

***Proanoplomus caudatus* (Zia), new combination**

Anoplomus caudatus Zia, 1964: 44, 51. Type-locality Xishuangbanna, Yunnan, China.

Distribution. - Southwest China (Yunnan Province).

***Proanoplomus cylindricus* (Chen)**

Paranoplomus cylindricus Chen, 1947: 91. Type-locality Taiwan.

Proanoplomus cylindricus (Chen); Zia, 1964: 43.

Distribution. - Taiwan.

***Proanoplomus formosanus* (Shiraki)**

Paranoplomus formosanus Shiraki, 1933: 131, pl. III. Type-locality Arisan, Taiwan.

Proanoplomus formosanus (Shiraki); Zia, 1964: 43.

Distribution. - Taiwan.

***Proanoplomus intermedius* Chen**

Proanoplomus intermedius Chen, 1947: 91. Type-locality Shaowu, Fujian, China.

Distribution. - Eastern China (Fujian Province).

***Proanoplomus longimaculatus* Hardy**

Proanoplomus longimaculatus Hardy, 1973: 268, fig. 129. Type-locality Kambaiti, Burma.

Distribution. - Northeast Myanmar (= Burma).

***Proanoplomus nigroscutellatus* Zia**

Proanoplomus nigroscutellatus Zia, 1964: 45, 54. Type-locality Xishuangbanna, Yunnan, China.

Distribution. - Southwest China (Yunnan Province).

***Proanoplomus omeiensis* Zia**

Proanoplomus omeiensis Zia, 1964: 47, 52. Type-locality Omeishan, Sichuan, China.

Distribution. - Western, China (Mt Emei, Sichuan Province).

***Proanoplomus spenceri* Hardy**

Proanoplomus spenceri Hardy, 1973: 273, fig. 132. Type-locality Fyan, Vietnam.

Distribution. - Southern Vietnam.

***Proanoplomus yunnanensis* Zia**

(Fig. 3)

Proanoplomus yunnanensis Zia, 1964: 46, 52. Type-locality Xishuangbanna, Yunnan, China.

Proanoplomus trimaculatus Hardy, 1973: 274, fig. 133. Type-locality Nam Tiene, Laos; new synonym.

Material examined. - THAILAND: 1 male, Jam Mun highland development project, Doi Suthep-Pui, Chiang Mai, 300 m, 19.viii.1991, G.H. Walter (in Department of Primary Industries, Brisbane).

Distribution. - Southwest China (Yunnan Province), Laos, Thailand (new record).

***Proanoplomus* species undetermined**

Proanoplomus formosanus; Hering, 1952: 285 (Java).

Proanoplomus sp. near *japonicus*; Hardy, 1988: 108 (Java).

Remarks. - Three females from Mt Gede and Idjen in Java presumably represent a separate species close to *P. omeiensis* but are in poor condition (Hardy, 1988) and have not been described.

Genus *Sinanoplomus* Zia

Sinanoplomus Zia, 1955: 64, 67. Type-species *S. sinensis* Zia, 1955, by original designation.

Remarks. - This genus resembles *Anoplomus* in having two long spines on the mid tibia; it differs in wing pattern and presence of postpronotal bristles. A single species is included. Hosts are unknown.

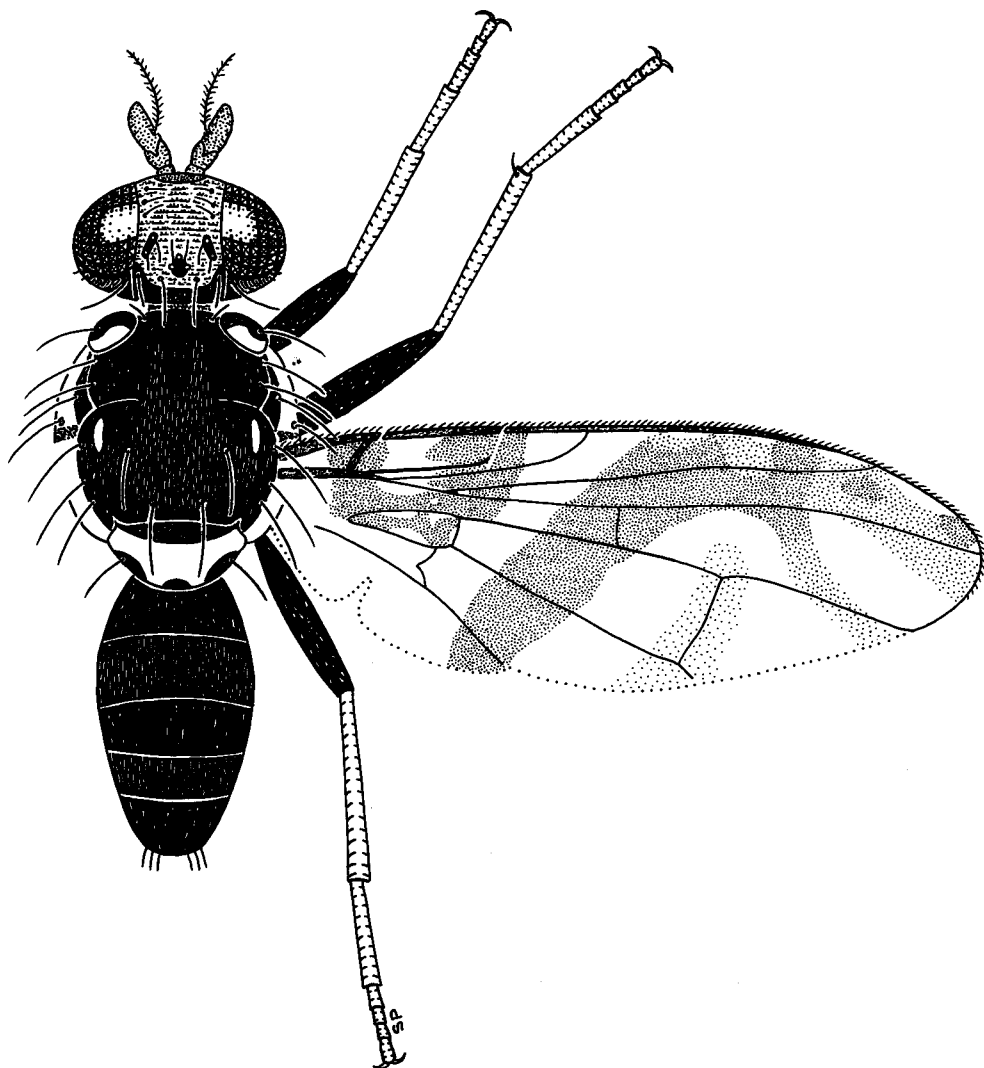


Fig. 3. *Proanoplomus yunnanensis* male.

Sinanoplomus sinensis Zia

Sinanoplomus sinensis Zia, 1955: 64, 68, figs 2-3. Type-locality Guangdong, China.

Distribution. - Southeast China (Guangdong Province).

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