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Lepidoptera: Pterophoridae

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Abstract—The Micronesian fauna of Pterophoridae (Lepidoptera) comprising 11 species belonging to 2 subfamilies is presented. Ten species among them are redescribed or illustrated based on about 200 specimens. One species, *Lantanophaga pusillidactyla* has been introduced to several islands to control the weed *Lantana camara*. A key to the species is provided.

Introduction

The Micronesian Pterophoridae, commonly called airplane moths, or plume moths, have not been well studied, probably due to a paucity of material. Only 4 species have been previously recorded from the area. Hori (1936) recorded *Deuterocopus socotranus* and *Megalorhipida defectalis* from Saipan and Palau. Monzen (1951) listed *Sphenarches anisodactylus* in his list of the Bonin Islands insect fauna based on the record of Hori (1950). This is, however, an erroneous citation since Hori (1950) did not mention the Bonin Islands for the distribution of this species. The second species, *D. socotranus*, recorded by Hori (1936) is referred to *D. planeta* in the present paper. Nakane (1970) listed *S. anisodactylus* from the Bonin Islands. *Lantanophaga pusillidactyla* (Walker) was introduced to Pohnpei in 1948 and then to Palau from Pohnpei in 1960 for biological control of *Lantana camara* (Schreiner 1990). This species was found on Yap in 1987–1988 (Muniap-

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pan 1990), and distributed on all islands of the Mariana and Caroline Islands where *Lantana* was present except Aguijan of the Mariana Islands (Denton et al. 1991a, b).

In the present paper, 10 species belonging to 2 subfamilies are redescribed or illustrated based on about 200 specimens preserved in the Bishop Museum and other institutions in addition to the one previously recorded species. Three species examined here were reared from host plants, but possess no biological data. The present paper provides distributional data of the family in Micronesia with morphological notes.

The following symbols indicate museums in which specimens are deposited: Bishop (Bishop Museum), KU (Kyushu University), USNM (United States National Museum), and YU (Yamaguchi University). We are indebted to the authorities of these institutions and Mr. A. Kawabe who kindly gave the Bonin Islands material to the first author (KY).

Distribution

From the standpoint of distribution (Table 1), several features of the Micronesian species may be noted: (1) *Sphenarches anisodactylus* and *Megalorhipida defectalis* are the most dominant species among the Micronesian Pterophoridae. These species are widely distributed, both in Micronesia and outside that region. (2) Three species of the genus *Pterophorus* are found in Micronesia, though two of these are known from only one island. The genus is also dominant in Polynesia (Yano 1963b), which indicates that this advanced group (Yano 1990, Gielis 1993) shows greatest distribution in the Pacific area. (3) Among the island groups, Guam and Palau have the richest fauna of the family. This is to be expected because these islands are the largest (Guam) and topographically most diverse (Palau) in Micronesia. In contrast, the Bonin Islands show a poor fauna comprising only one species, *S. anisodactylus*. Saipan, the second largest island of Micronesia, also has *M. defectalis* and *L. pusillidactyla*. More species are expected to occur on these islands, especially on Saipan. (4) No species are known to be endemic to Micronesia, as would be expected. (5) Three species, *Platyptilia farfarella*, *Sphenarches anisodactylus* and *Oidaematophorus hirosakianus*, are mainly Palearctic species which suggests less Palearctic migration into the area occurred in comparison with the greater influx from the Oriental region.

There appear to be no extensive collections of Micronesian Microlepidoptera, especially Pterophoridae; consequently more species are expected to be found. Among those expected are: *Ochyrotica breviapex* Gielis and *Cosmoclostis* species, especially *C. lamprosema* Fletcher.

Systematics

Key to Micronesian species of Pterophoridae

- | | | |
|-------|---|-----------------------------|
| 1. | Forewing trifold..... | <i>Deuterocopus planeta</i> |
| | Forewing bifid..... | 2 |
| 2(1). | Lobe 2 of hindwing with 3 veins and lobe 3 with 1 vein..... | 3 |

Table 1. Distribution of Micronesian Pterophoridae.

	Micronesian Island Groups											Other regions		
	Bonin	Saipan	Timian	Rota	Guam	Palau	Yap	Chuuk	Pohn- pei	Kosrae	Wake I.		Mar- shall	Gilbert Is.
Platyptiliinae														
1. <i>Deuterocopus planeta</i>						X								Oriental, Australian
2. <i>Platyptilia farfarella</i>					X			X	X					Palaearctic
3. <i>Lantanophaga pusillidactyla</i>		X	X	X	X	X	X	X	X	X				Oriental, Neotropical
4. <i>Nippoptilia minor</i>						X								Palaearctic
5. <i>Sphenarches anisodactylus</i>	X				X	X		X	X	X				Cosmopolitan
6. <i>Exelastis pumilio</i>					X	X								Oriental, Ethiopian, Nearctic
7. <i>Megalorhipida defectalis</i>		X		X	X	X					X	X	X	Oriental, Australian, Ethiopian, Nearctic, Neotropical
Pterophorinae														
8. <i>Oidaematophorus hirosakianus</i>					X									Palaearctic
9. <i>Pterophorus niveodactyla</i>						X								Oriental, Australian
10. <i>Pterophorus denticulata</i>						X								Oriental
11. <i>Pterophorus suffiata</i>					X				X	X				Palaearctic, Oriental, Australian

1591

Yano et al.: Pterophoridae (Airplane Moths)

present specimen differs from the original description and the figure given by Fletcher (1910) in the following characters: the suffused stripes and transverse bands on the abdomen are obscure in this specimen. *D. socotranus* is not known to occur in Micronesia.

2. *Platyptilia farfarella* (Zeller)

Figs. 1, 7

Platyptilus farfarellus Zeller, 1867: 334.

Platyptilia gonodactyla, Hori (nec Denis et Schiff.), 1934: 120.

Platyptilia farfarella, Yano, 1963: 107, figs. 3c, 4g, 28–31; Inoue, 1982: 406, pl. 49, fig. 1.

Platyptilia (Platyptilia) farfarella, Hannemann, 1977: 42, fig. 7.

Male and female. Length of forewing: 6.2–7 mm. Wing length is shorter than that of Japanese specimens, but markings are similar. Black scales or scale tufts of inner margins of forewing and lobe 3 of hindwing are less distinct in Micronesian specimens.

Male genitalia. Tegumen thick and broad, parallel-sided in dorsal view, concave in posterior portion mid-dorsally. Vinculum short and narrow; saccus poorly developed. Uncus strongly curved downwards, with several dorso-lateral setae, apical 1/3 abruptly narrowed and constricted laterally. Anal tube indistinct. Valvae symmetrical, long, with numerous scale-like setae on inner surface; sacculus broad and extending to near apex, with short setae throughout; harpe absent. Phallus long and curved, with coecum penis and basal process stout; vesica without cornutus. Juxta well developed, with two pairs of narrow arms of which lateral one has a process and a few setae inside.

Specimens examined:

MARIANA IS.: 10♂, Guam, Commander Marianas' Hill, iii. 1949, K. L. Maehler (USNM).

FEDERATED STATES OF MICRONESIA: 6♂, 1 ex (abd. missing), Truk, Moen, 0–100 ft, 31. vii. 1948, Townes, at light (USNM); 1♂, Truk, Toloas-Erin, 14. xi. 1937, T. Esaki (KU); 1♂, Ponape, Matalanim-Nipit, 12. i. 1938, T. Esaki (KU); 4♂, Ponape, Matalanim, 11. i. 1938, T. Esaki (KU); 1♂ 1♀, Ponape, Paliker-Ronkiti, 17. vii. 1939, T. Esaki (KU); 3♀, Ponape, Kolonia-Paliker, 16. vii. 1939, T. Esaki (KU); 1♂, Ponape, 6 mi E Colonia, low elev., 13. xii. 1976, J. F. G. & T. M. Clarke (USNM); 1♂, *ibid.*, xii. 1976, J. F. G. & T. M. Clarke (USNM).

Distribution: Japan, Micronesia, Europe.

The male genitalia of a specimen from Guam agree with the Palearctic specimens, though the caudal margin of the vinculum is slightly different as shown in Fig. 7B (cf. Fig. 28a in Yano 1963a). The Micronesian specimens examined are identified at present as *P. farfarella*.

3. *Lantanophaga pusillidactyla* (Walker)

Oxyptilus pusillidactylus Walker, 1864: 934; Bigot, 1964: 159.

Platyptilia tecnidion Zeller, 1877: 468, pl. 6, fig. 162.

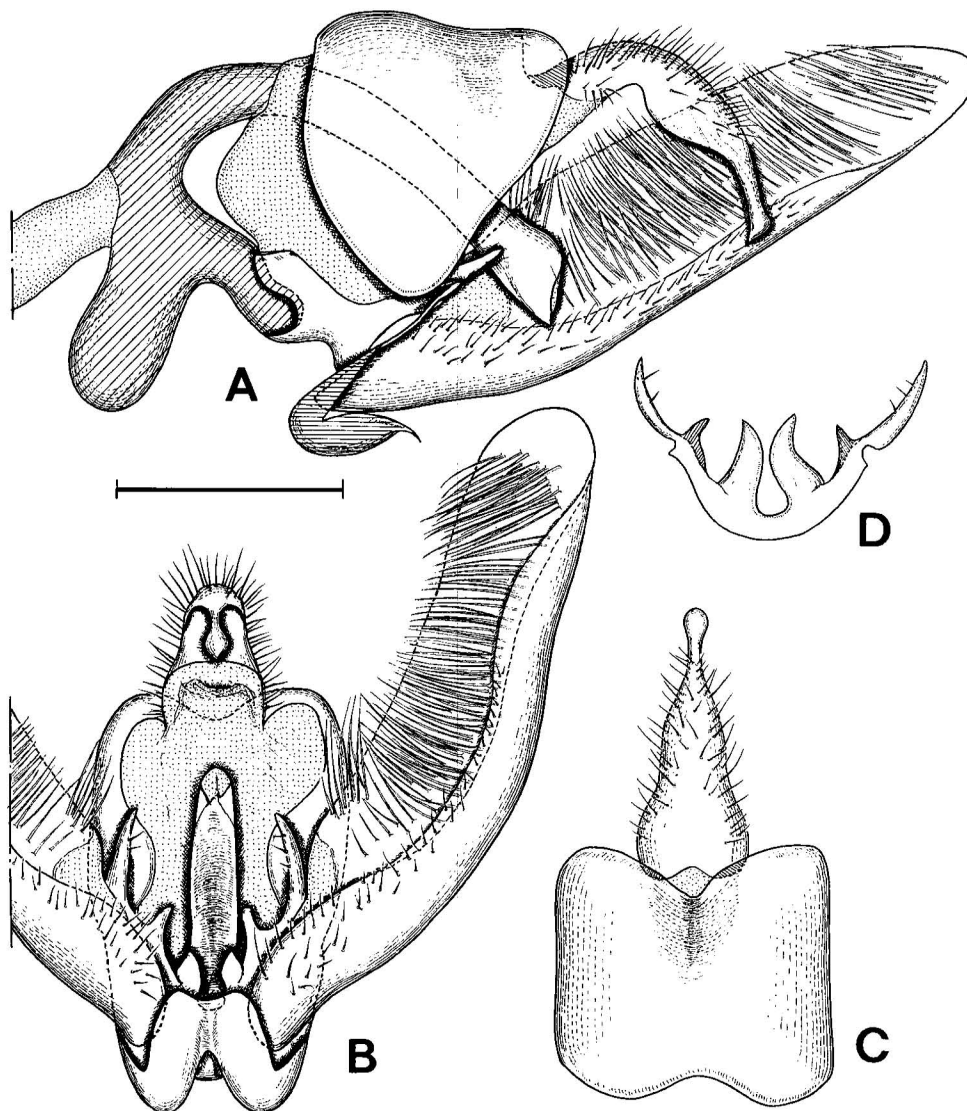


Figure 7. Male genitalia of *Platyptilia farfarella* (Zeller). A. Lateral view, left valva removed; B. ventral view; C. tegumen and uncus, dorsal view; D. juxta, ventral view. Scale: 0.25 mm.

Platyptilia hemimetra Meyrick, 1886: 18.

Platyptilia lantana Busck, 1914: 103.

Platyptilia lantanadactyla Amsel, 1952: 66, fig.

Lantanophaga pusillidactyla, Zimmerman, 1958: 402, fig. 336; Landry & Gielis, 1992: 8, figs. 3, 20, 31.

Platyptilia pusillidactyla, Fletcher, 1909: 13, pl. A, fig. 2; Yano, 1963: 853, 867.

Distribution: Micronesia, India, Sri Lanka, Solomon Is., Hawaiian Is., West Indies, Reunion, Seychelles.

This is the most widely distributed species in Micronesia, partially through artificial introduction since this species is a biological control agent of a serious weed, *Lantana*. No specimens of this species, however, were found in the present material.

4. *Nippopectia minor* Hori Figs. 2, 8, 9

Nippopectia minor Hori, 1933: 68, 70, fig. 4; Yano, 1961: 76, figs. 3, 4E, pl. 18, fig. J; Yano, 1963: 143, figs. 57–59; Inoue, 1982: 408, pl. 49, fig. 17.

Stenopectia minor, Inoue, 1955: 116; Esaki, 1957: 91, pl. 16, fig. 507.

Male and female. Length of forewing: 3.6 mm. Both lobes of forewing with basal part pale yellowish brown with scattered brown scales; lobe 1 sometimes without such paler color at base; cilia along distal 1/2 of posterior margin of lobe 1 mixed with whitish cilia before apex, but not dark brown as in *minor* Hori; abdomen with a large brown patch at base on dorsum; the patch covers most of dorsal part of the segment 1 and anterior part of segment 2; rest of segment 2 and segment 3 pale yellowish brown on dorsum; segment 4 distinctly brownish; the rest of abdomen pale yellowish brown. Brown patch at base of abdomen sometimes covers entire segment 2 of dorsum. Brown scale tuft of lobe 3 of hindwing distinct, but not occurring on anterior margin in specimens examined.

Male genitalia. Vinculum of the specimen examined more weakly incised centrally than that of the Japanese specimen (Yano 1961).

Female genitalia. Ostium bursae and ductus bursae of the specimen examined narrower and longer, respectively, than those of the Japanese specimen; corpus bursae with a pair of small signa.

Specimens examined:

PALAU: 1 ♂, 1 ex (abd. missing), Palau, Koror, Koror 1., 13. v. 1957, C. W. Sabrosky (USNM); 2 ♀, 1 ex (abd. missing), *ibid.*, 25. iv. 1957, C. W. Sabrosky (USNM); 2 ♀, *ibid.*, 27. iv. 1957, C. W. Sabrosky (USNM).

Distribution: Japan, Micronesia.

The present specimens differ from the Japanese ones in the following characters as well as the characters of genitalia described above: wing length is shorter; brown scale tuft of lobe 3 of hindwing less distinct; brown markings on dorsum of abdomen more distinct. These differences, however, are slight, and it should be identified as *minor*.

5. *Sphenarches anisodactylus* (Walker) Fig. 3

Oxyptilus anisodactylus Walker, 1864: 934; Adamczewski, 1951: 328, pl. 18, figs. 47, 48, 50, 53.

Sphenarches synophrys Meyrick, 1886: 17.

Sphenarches caffer Fletcher (nec Zeller), 1909: 21 (partim); Fletcher, 1921: 9 (partim).

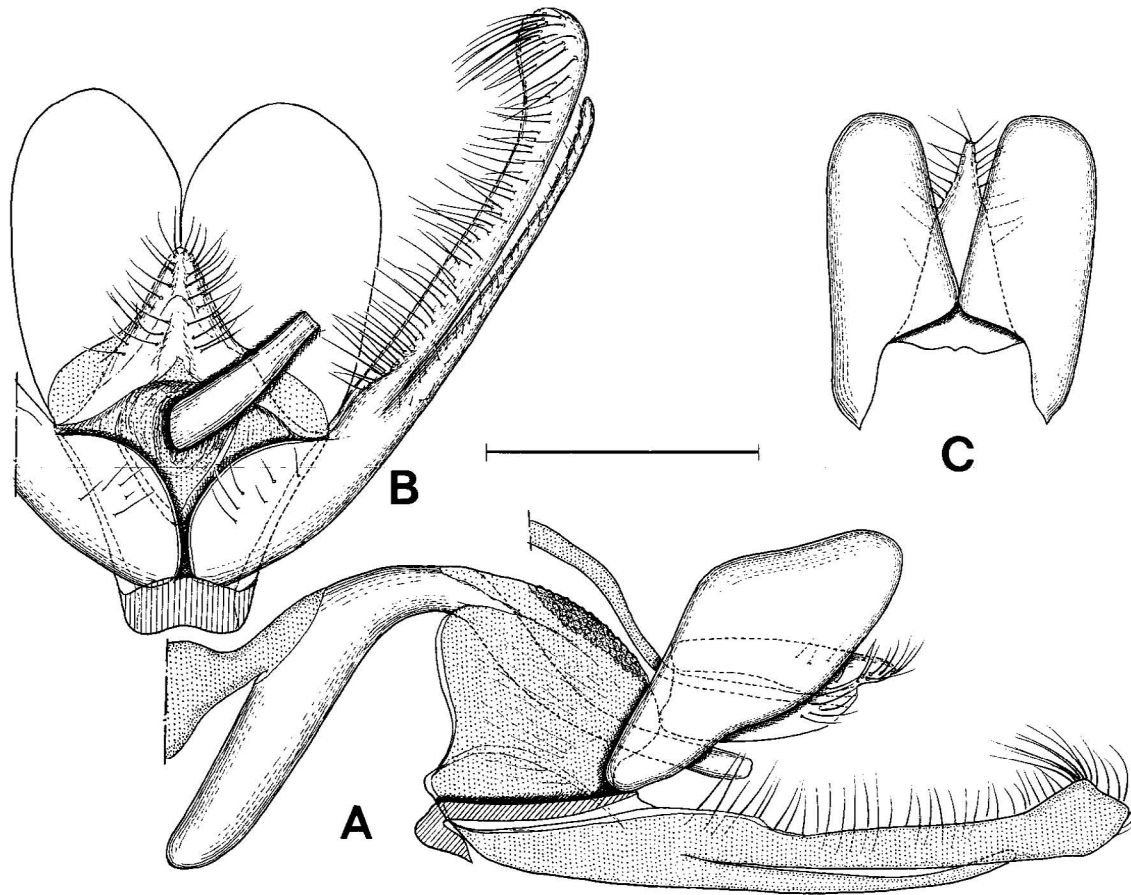


Figure 8. Male genitalia of *Nippoptilia minor* Hori. A. Lateral view; B. ventral view, removed apical portion of left valva; C. tegumen and uncus, dorsal view. Scale: 0.25 mm.

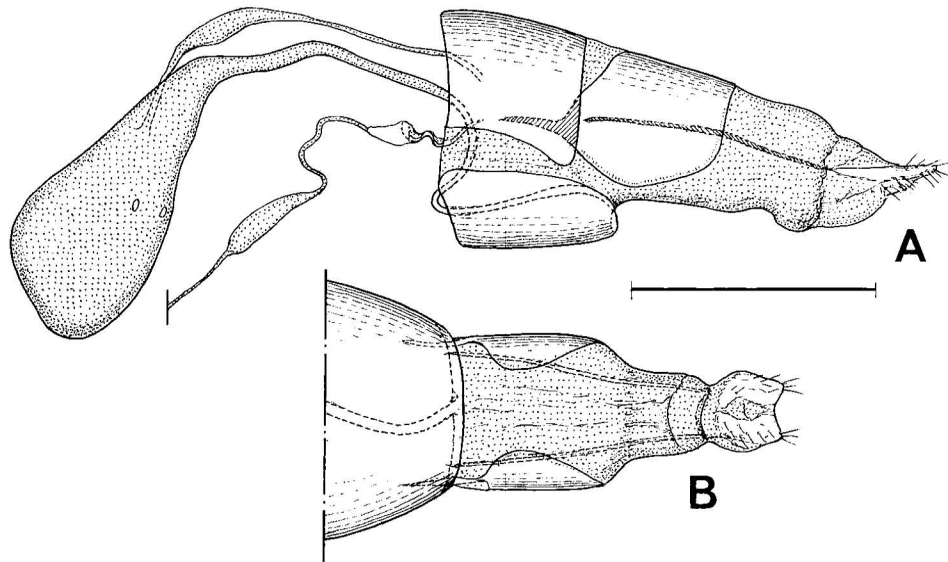


Figure 9. Female genitalia of *Nippoptilia minor* Hori. A. Lateral view; B. 8th to 10th abdominal segments, ventral view. Scale: 0.5 mm.

Sphenarches anisodactylus, Adamczewski, 1951: 328, pl. 18, figs. 47, 48, 50, 53;
 Yano, 1963: 146, figs. 3e, 60–63; Inoue, 1982: 409, pl. 49, fig. 18.
Pterophorus diffusalis Walker, 1864: 945.

Specimens examined:

BONIN IS.: 2 ♂, Omura, Chichijima, 18. xi. 1972, Y. Kusui (YU); 1 ♂, *ibid.*, 27. iv. 1973, Y. Kusui (YU); 1 ♀, *ibid.*, 10. vii. 1973, Y. Kusui (YU); 1 ex (abd. missing), Okimura, Hahajima, 1. vii. 1973, Y. Kusui (YU).

GUAM: 3 ♂ 1 ♀, Guam, 24. i. 1939, R. G. Oakley, ex Pigeon peas (USNM); 1 ♀, *ibid.*, 24. ii. 1939, R. G. Oakley, ex Pigeon peas (USNM); 2 ♂ 1 ♀, Guam, Barrigada, 14. vi. 1936, O. H. Swezey, ex *Passiflora* (USNM); 1 ♂ 2 ♀, *ibid.*, 14. vi. 1936, O. H. Swezey, ex *Passiflora* (Bishop).

PALAU: 1 ♂, Palau, Yap, Tomil-Maki, 10. ix. 1939, T. Esaki (KU); 1 ex (abd. missing), Peliliou, Akarokuru-Garukorn, Ashiasu-Garudoroko, 28. ii. 1938, T. Esaki (KU); 1 ♂, Palau, Korror [Koror], 29. i. 1938, T. Esaki (KU); 1 ♀, *ibid.*, 22. vii. 1946, Townes (USNM); 1 ♂ 2 ♀, *ibid.*, 27–28. iv. 1957, C. W. Sabrosky (USNM); 1 ♀, *ibid.*, 2. v. 1957, C. W. Sabrosky (USNM); 1 ♂, *ibid.*, 17. v. 1957, C. W. Sabrosky (USNM); 2 ♂ 1 ♀, Palau, Arakabesan I., 28. iv. 1957, C. W. Sabrosky (USNM); 2 ♀, Palau, Malakal Isl., 17. v. 1957, C. W. Sabrosky (USNM); 1 ♂, Palau, Babelthuap, Ngarhelong, 6–8. v. 1957, C. W. Sabrosky (USNM).

FEDERATED STATES OF MICRONESIA: 1 ♀, Truk, Moen, 0–100 ft, 31. vii. 1948, Townes, at light (USNM); 1 ♀, Ponape, Nipit, 20. vii. 1939, T. Esaki (KU); 1 ♂, Ponape, Kolonia-Paliker, 16. vii. 1939, T. Esaki (KU); 1 ♀, *ibid.*, 29. xii. 1937, T. Esaki (KU); 1 ex (abd. missing), Ponape, Paliker-Kolonia, 16. i. 1938,

T. Esaki (KU): 1 ♂, *ibid.*, 30. xii. 1937, T. Esaki (KU); 1 ♀, Ponape, Kolonia-Nat, 19. xi. 1937, T. Esaki (KU); 3 ♂ 1 ♀ 1 ex (abd. missing), Ponape, Colonia, i. 1953, J. F. G. Clarke, reared from *Lantana* (USNM); 1 ♀, *ibid.*, 6. i. 1953, J. F. G. Clarke (USNM); 2 ♂, Ponape, So of Napponmal, 11. i. 1953, J. F. G. Clarke (USNM); 1 ♀, Ponape, Lukop, 8. i. 1953, J. F. G. Clarke (USNM); 1 ♂, Ponape, 6 mi E Colonia, low elev., 12. xii. 1975, J. F. G. & T. M. Clarke (USNM); 1 ♀, Kusaie, Malem, 14. xii. 1937, T. Esaki (KU).

Distribution: Japan, India, Sri Lanka, Thailand, Micronesia, Solomon Is., New Hebrides, Australia, West Indies, South America, West Africa, Madagascar.

This cosmopolitan species is reported for the first time from the Mariana and Caroline Islands in addition to the Bonin Islands, previously reported. Some specimens were reared from Pigeon peas, *Lantana* and *Passiflora*. This is one of the most widely distributed Pterophoridae among the Micronesian species, together with *Megalorhipida defectalis*.

6. *Exelastis pumilio* (Zeller)

Figs. 4, 10, 11

Mimeseoptilus pumilio Zeller, 1873: 324.

Marasmarcha liophanes Meyrick, 1886: 19.

Exelastis pumilio, Bigot, 1962: 87.

Marasmarcha pumilio, Meyrick, 1928: 491; Clarke, 1986: 19–21, figs. 15, 274c.

Stenoptilia pumilio, Meyrick, 1913: 28.

Male genitalia. Tegumen moderate in width, concave mid-dorsally. Vinculum very short and narrow; saccus extended anteriorly, strongly constricted laterally to form a flat plate. Uncus wide and long triangular, bifurcated in apical 1/2. Anal tube concealed below tegumen and uncus, sclerotized ventrally. Valvae symmetrical, large, with base narrow, then enlarged to apex, inner surface with a series of 7 to 8 stout and curved spines medially; sacculus flat and short; harpe undeveloped. Phallus rather long and straight; coecum penis undeveloped, vesica without cornutus. Juxta represented as a narrow and weak plate below phallus.

Female genitalia. Ostium bursae wide. Ductus bursae slender and membranous, with a distinct ring-shaped sclerite. Corpus bursae broad, evenly membranous, scattered with numerous spinuous scorbination. Ductus seminalis broad from proximal end of corpus bursae. Spermathecal gland ends as wide swollen pouch. Eighth tergum short, without apophysis anterioris. Intersegmental membrane between 8th and 9th–10th segments protruded dorso-posteriorly. Papilla analis small, with several setae; apophysis posterioris almost as long as 7th tergum.

Specimens examined:

GUAM: 13 ♂, Guam, Commander Marianas' Hill, iii. 1949, K. K. Maehler (USNM); 1 ♂, Guam, Tepungan, 8. vi. 1936, ex corn field, O. H. Swezey (USNM); 2 ♂ 2 ♀ 1 ex (abd. missing), Guam, Apra Hgts., 2. i—3. ii. 1959, N. L. H. Krauss, at light (Bishop).

PALAU: 1 ♀, Palau, Korror [Koror], Korror [Koror]-Arabaketsu, 3. iv. 1938, S. Murakami (KU); 1 ♀, *ibid.*, 5. v. 1938, S. Murakami (KU); 1 ♀, Palau, Koror, Koror I., 1. v. 1957, C. W. Sabrosky (USNM).

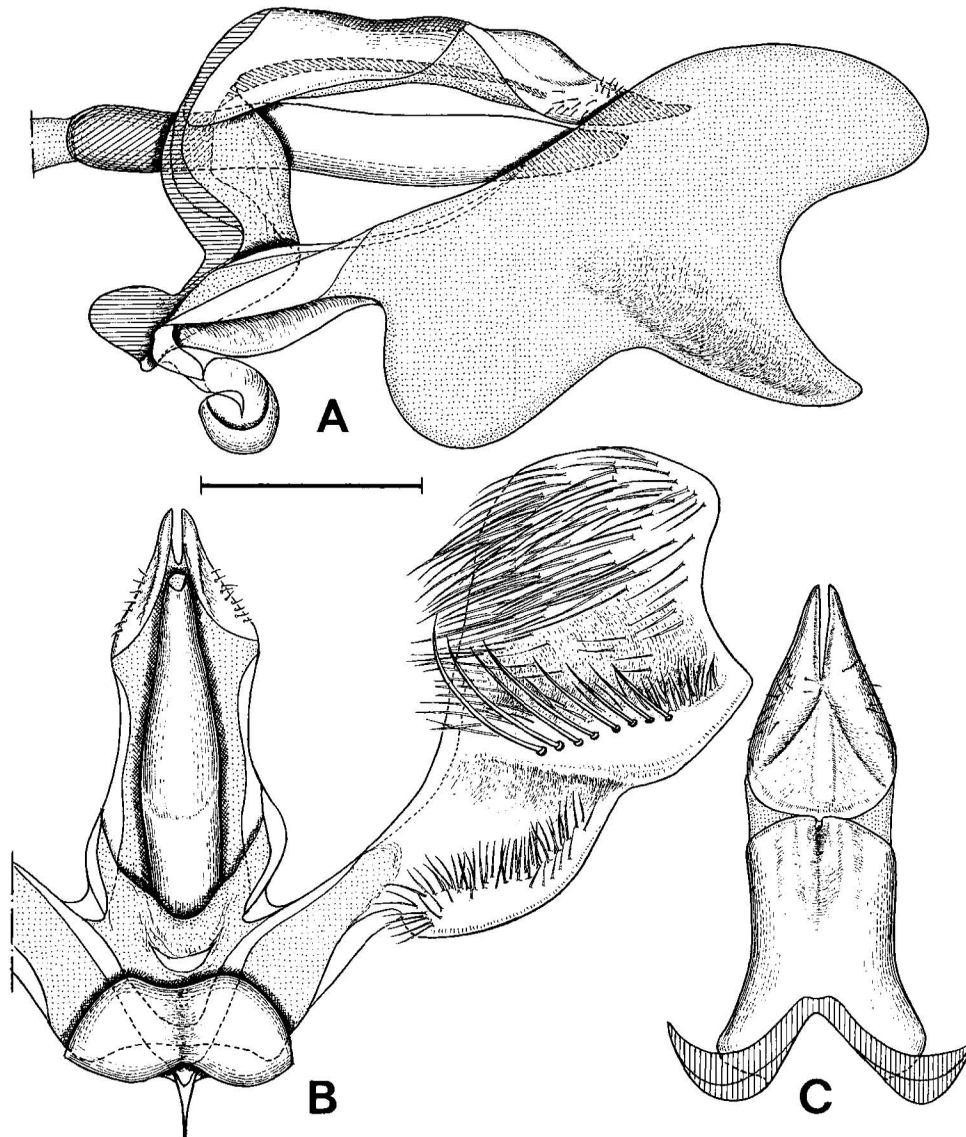


Figure 10. Male genitalia of *Exelastis pumilio* (Zeller). A. Lateral view; B. ventral view; C. tegumen and uncus, dorsal view. Scale: 0.25 mm.

Distribution: Ryukyus, Taiwan, China, India, Sri Lanka, Borneo, Micronesia, Bismarck Is., Solomon Is., Society Is., Austral Is., Samoa, Marquesas Is., North America, Africa.

Twenty-one specimens were collected from Guam and Palau. Judging from the known distribution, this species may be expected from more islands in Micronesia.

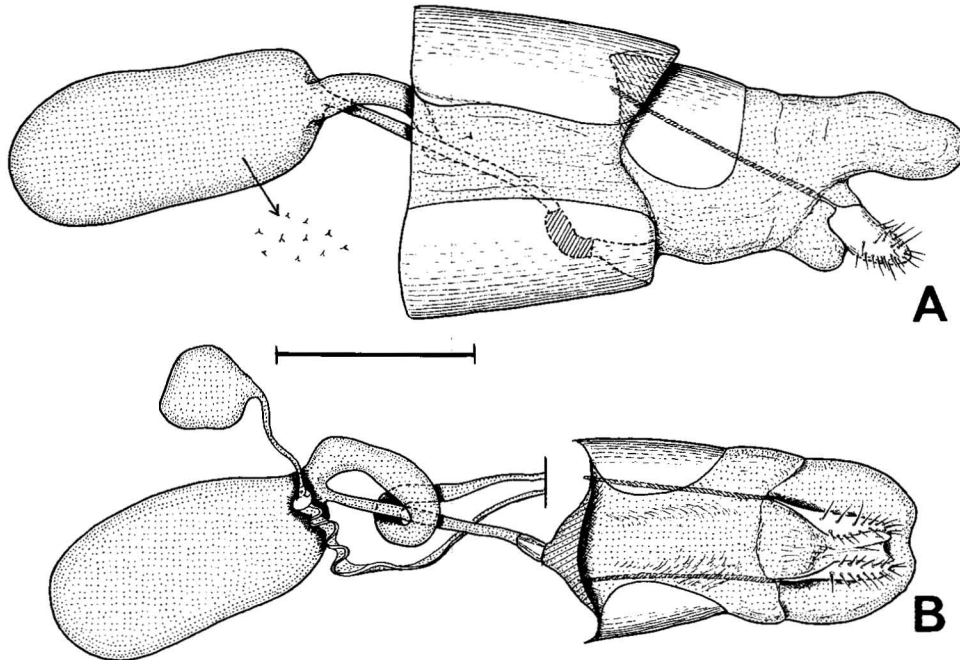


Figure 11. Female genitalia of *Exelastis pumilio* (Zeller). A. Seventh to 9–10th segments, lateral view; B. ditto, except for 7th removed, ventral view. Scale: 0.5 mm.

7. *Megalorhipida defectalis* (Walker)

Fig. 5

Pterophorus defectalis Walker, 1864: 943.

Pterophorus congrualis Walker, 1864: 943.

Pterophorus oxydactylus Walker, 1864: 944.

Aciptilia hawaiiensis Butler, 1881: 408.

Trichoptilus ochrodactylus Fish, 1881: 142.

Trichoptilus centetes Meyrick, 1886: 16.

Trichoptilus compsochares Meyrick, 1886: 16.

Trichoptilus ralumensis Pagenstecher, 1900: 239.

Megalorhipida palaestinensis Amsel, 1935: 293, pl. 10, fig. 27, pl. 17, fig. 54, pl. 18, figs. 79–80.

Trichoptilus defectalis, Meyrick, 1913: 4; Yano, 1963: 855, 870.

Megalorhipida defectalis, Zimmerman, 1958: 397, fig. 332; Landry & Gielis, 1992: 6.

Specimens examined:

MARIANA IS.: 6 ♂ 1 ex (abd. missing), Saipan, 20. viii. 1944, D. G. Hall (Bishop); 3 ♂ 8 ♀, Rota, Teteto-Tatacho-Sonson, 5. xi. 1937, T. Esaki (KU); 1 ♂, Rota, Teteto, 8. xi. 1937, T. Esaki (KU). GUAM: 3 ♂ 6 ♀ 1 ex (abd. missing), Guam, Orote Pen., 2. viii. 1936, O. H. Swezey, ex *Boerhaavia* (Bishop); 1 ♂ 1 ♀, ibid., 28. viii. 1936, O. H. Swezey, ex *Boerhaavia* (Bishop); 1 ♂ 2 ♀, 1 ex (abd.

missing), Guam, Barrigado, 28. viii. 1936, O. H. Swezey, ex *Boerhaavia* (Bishop); 1 ♂, Guam, Mt. Alifan, 21. v. 1936, O. H. Swezey (Bishop); 1 ex (abd. missing), Guam, Commander Marianas' Hill, iii. 1949, K. L. Maehler (USNM); 1 ♀, Guam, Pt. Oca, 25. vi. 1945, G. E. Bohart & J. L. Gressitt, light trap (USNM).

WAKE I.: 1 ♂, Wake Islet, 5. v. 1959, Y. Oshiro, *Boeiliaia* under *Tournefortia* forest (Bishop); 1 ♀, *ibid.*, v. 1959, Y. Oshiro, *Boeiliaia* under *Tournefortia* forest (Bishop); 1 ♀, Peale Islet, xi. 1957, N. L. H. Krauss (USNM).

MARSHALL IS.: 1 ♂ 1 ♀, Eniwetok Atoll, Japtan Is., 27. viii. 1956, L. D. Tuthill (Bishop).

GILBERT IS.: 1 ♂, Kuria A., 18–20. xi. 1964, B. D. Perkins, Malaise trap (Bishop); 2 ♀, S. Tarawa Atoll, Bikenibeu, 18. i. 1972, P. D. Manser, Rf. *Scaevola frutescens* leaves (USNM).

The following material recorded by Hori (1936) was examined here in addition to the above specimens.

NORTHERN MARIANA IS., 1 ♂, Saipan, 11. iv. 1933, T. Sakimoto (KU); 3 ♂ 2 ♀, *ibid.*, 18. iv. 1933, T. Sakimoto (KU); 6 ♂ 5 ♀, PALAU, Peliliou, Ashiasu, 6. iii. 1936, T. Esaki (KU); 4 ♂ 4 ♀, *ibid.*, 8. iii. 1936, T. Esaki (KU).

Distribution: Taiwan, China, India, Sri Lanka, Thailand, Micronesia, New Guinea, Solomon Is., Australia, Hawaiian Is., North & South America, Africa.

This species is widely distributed in the Micronesian island groups. It is the only species known from the Marshall and Gilbert Islands and from Wake Island.

Boerhaavia repens from India and Sri Lanka (Fletcher 1909, 1921) and *B. diffusa* from Hawaii (Zimmerman 1958) were recorded as the host plants of this species before. Some specimens of the present material were obtained from *Boerhaavia* on Guam.

Subfamily Pterophorinae

8. *Oidaematophorus hirosakianus* (Matsumura)

Pterophorus hirosakianus Matsumura, 1931: 1056, no. 2073.

Oidaematophorus lienigianus, Yano (nec Zeller), 1963: 170, fig. 77.

Leioptilus lienigianus, Inoue (nec Zeller), 1982: 410, pl. 49, fig. 25.

Male and female. Length of forewing: 6.2–7 mm. Wing length is shorter than that of Japanese specimens (8–10 mm). Wings of present material paler than that of Japanese specimens which has dark brown scales scattered over wing. This may be due to the condition of the present material.

Specimens examined:

GUAM: 5 ♂ 1 ♀, Guam, Commander Marianas' Hill, iii. 1949, K. L. Maehler (USNM).

Distribution: Japan, Europe, India, Sri Lanka, Micronesia, New Guinea, Africa.

This species is one of the commonest plume-moths in Japan, and has been reported under the name of *O. lienigianus* (Zeller). Gibeaux and Picard (1992)

mentioned that the Japanese specimens differ from *lienigianus* Zeller and should be treated as *hirosakianus* Matsumura. Gielis (1993) listed *hirosakianus* in the genus *Hellinsia*. He described the forewing venation of *Hellinsia* as Cu1 from near middle of distal M3 and Cu2 from near cell, while Cu1 from angle of cell and Cu2 from cell for the genus *Oidaematophorus*. According to this character, *hirosakianus* belongs to *Oidaematophorus*, not *Hellinsia*.

9. *Pterophorus niveodactyla* (Pagenstecher)

Aciptilia niveodactyla Pagenstecher, 1900: 240; Yano, 1963: 856.

Alucita niveodactyla, Meyrick, 1938: 504.

Male and female. Length of forewing: 8–9 mm. Wings whitish without dark brown dots. Legs whitish. Abdomen slightly tinged with pale yellow.

Specimens examined:

PALAU: 1 ♀, Palau, Babeldaob, Ngiwal-Ngarard, 16. viii. 1939, T. Esaki (KU); 1 ♂, Palau, Babelthuap, Ngarhelong, v. 1957, C. W. Sabrosky (USNM).

Distribution: Taiwan, China, India, Sri Lanka, Malaya, Java, Sumatra, Philippines, Borneo, New Guinea, Micronesia, Bismarck Is., Solomon Is., Australia.

Though no species of *Pterophorus* had previously been recorded from Micronesia, this and following 2 species of *Pterophorus* have been collected from the area.

10. *Pterophorus denticulata* (Yano)

Aciptilia denticulata Yano, 1963: 864, figs. 7–8.

Female. Length of forewing: 9 mm. Following characters seen in the present material differ from the original description given by Yano (1963b): small greyish brown dots on costa of forewing indefinite, only the first one before middle visible; the second one at 5/7 indefinite.

Specimens examined:

PALAU: 1 ♀, Palau, Koror, v. 1953, J. W. Beardsley, light trap (USNM); 1 ♀, *ibid.*, v. 1953, J. W. Beardsley, light trap (Bishop).

Distribution: New Guinea, Micronesia.

This species was described from New Guinea, and no other previous records were known.

11. *Pterophorus suffiata* (Yano)

Figs. 6, 12, 13

Aciptilia suffiata Yano, 1963: 200, figs. 4e, 94–96.

Pterophorus suffiata, Inoue, 1982: 412, pl. 49, fig. 39.

Male genitalia. Intersegmental membrane between 8th and 9th segments with a tuft of scales extending posteriorly. Tegumen asymmetrical, long and slender by incurvation of anterior margin in V-shape, left side longer than the right. Vinculum long and narrow, with saccus poorly developed. Uncus narrow, curved