

**ORIENTAL SCIARIDAE (Diptera) I. REDESCRIPTION
AND REVIEW OF SPECIES DESCRIBED BY
EDWARDS AND BRUNETTI¹**

By Wallace A. Steffan²

Abstract: Seventeen Oriental species of Sciaridae described by Edwards and Brunetti are redescribed. New combinations include *Bradysia griseicollis* (Edwards), *B. lamprina* (Edwards), *B. pakkana* (Edwards), *B. subbrunnipes* (Edwards), *B. zygotera* (Edwards), *Chaetosciara tenompokensis* (Edwards), *Schwenkfeldina cameronensis* (Edwards), *S. kinabalwana* (Edwards), *S. lumuensis* (Edwards), and *S. pahangensis* (Edwards).

During the course of a study of Hawaiian Sciaridae, a reexamination of all Oriental species of Sciaridae was found to be essential before the endemic fauna of the Hawaiian Islands could be identified as such. This is the first of a series of papers on redescrptions of Oriental Sciaridae. These descriptions are based on pinned specimens except for *Bradysia radicum* which was slide mounted. The male genitalia of one representative of most species were removed, cleared in KOH and placed in glycerine vials attached to the pin. The genitalia in glycerine are superior to slide mounts since they are not distorted by the pressure of the cover slip and can be examined from all angles.

The value of a thorough study of Oriental Sciaridae to the Hawaiian study is well illustrated by the discovery that *Bradysia radicum* (Brunetti), which has been considered an introduced species in Hawaii, is not the *radicum* of Brunetti. It probably is an introduced species, but at the present time cannot be identified.

All the following species which Edwards did not include in his key to Oriental Sciaridae (1928a) are placed in the appropriate couplets of his key and differentiated from the other species. A revised key to Oriental Sciaridae will be prepared when this study has been completed. Terminology essentially follows Steffan (1966) with some changes as described in Steffan (1968, 1971).

I sincerely thank Mr A. M. Hutson of the British Museum (Natural History) for the loan of these important specimens. I also wish to acknowledge the talents and labors of my former illustrator, Miss Suzanne Keenan and my typist, Mrs Dorothy Hoxie.

***Bradysia asiatica* Steffan** Fig. 1.

Sciara orientalis Brunetti (not Meunier, 1904), 1912, Fauna Br. India, Dipt. Nematocera (1): 135; 1913, *Rec. Ind. Mus.* 8: 149; 1920, *Rec. Ind. Mus.* 17: 20. — Edwards, 1928, *J. Fed. Malay St. Mus.* 14: 24, 41; 1929, *Not. Ent.* 9: 76; 1931, *J. Fed. Malay St. Mus.* 16: 489. — Sasakawa, 1962, *Nat. Life Southeast Asia* 2: 132.

Lycoriella (Lycoriella) orientalis: Frey, 1942, *Not. Ent.* 22: 37.

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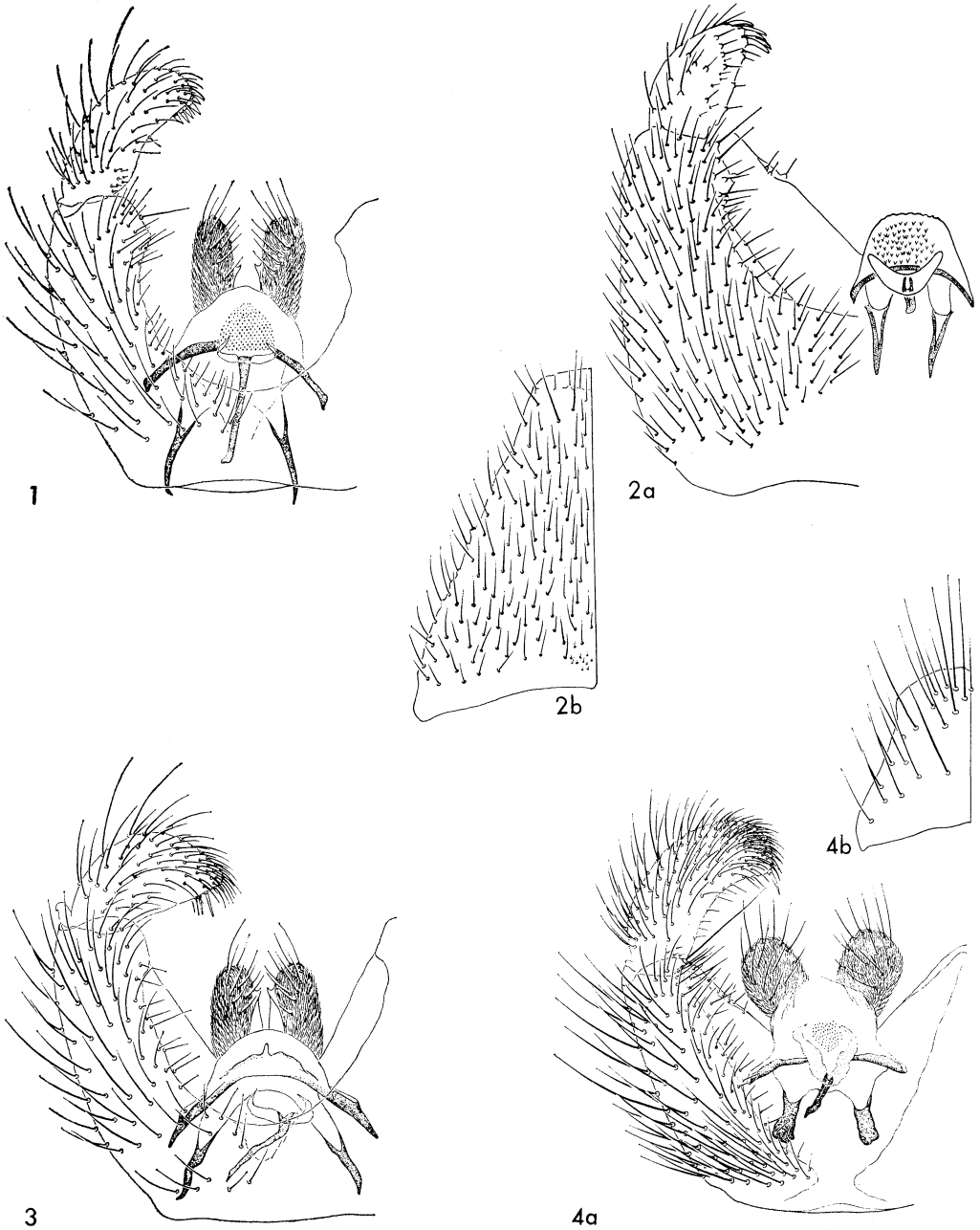


Fig. 1-4. ♂ genitalia: 1, *Bradysia asiatica* Steffan; 2, *Bradysia radicum* (Brunetti), a, ♂ genitalia, b, tergum IX; 3, *Bradysia zygocera* (Edwards); 4, *Chaetosciara pendleburyi* (Edwards), a, ♂ genitalia, b, tergum IX.

Bradysia asiatica Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of The Oriental Region, Univ. Hawaii Press 1: 464.

This is a widespread species in the Oriental region and may have been described under several names. Brunetti (1912) mentions that *orientalis* Brunetti may be identical to his *S. exacta*; however, Edwards (1928a) placed *exacta* in *Phorodonta*, so I would expect that they are different. Edwards (1928a) states that *Sciara microtricha* Edwards closely resembles *orientalis* Brunetti differing in its smaller size and wing venation.

♂. *Head*: Interfacetal hairs abundant, extending well beyond the outer curvature of the facets; median ocellus separated from eye bridge by about 1/2 width of ocellus; eye bridge 3 facets wide. Antenna: flagellomere 4 about $2.3 \times$ as long as wide. Prefrons with 4-5 short pale setae near ventral margin. Clypeus apparently bare. Palpus 3-segmented; 1st with numerous dorsal setae, 1st and 2nd subequal; 3rd about $1-1/2 \times$ as long as 2nd. *Thorax*: Scutum dark brown with brownish pollinose. Acrostichals and dorsocentrals weak, extending the entire length of scutum. Scutellum with about 6 long posterior setae and several shorter ones. Posterior pronotum bare, anterior pronotum with several pale setae, number cannot be determined. *Legs*: Fore leg: length of femur 0.61 mm; tibia 0.65 mm; basitarsomere 0.15 mm; fore tibial comb composed of single row of 5-6 dark setae near base of spur (in 2nd ♂, comb is about $2 \times$ as wide). Hind tibial spurs slightly longer than width of tibial apex. Claws apparently simple. *Wing*: Length 2.4 mm, width 0.96 mm. Posterior veins bare, membrane smoky between anterior veins, becoming paler posteriorly. R-M index 1.3, r-m/bM 0.6, stCu/bM 0.9, C-M index 0.7. Halter dark. *Abdomen*: Terga dark brown with fine pale setae. *Genitalia* (fig. 1): Basimere simple medially. Tergum IX broadly semicircular with scattered setae; tergum X bilobed. Tegmen lightly sclerotized, densely so along basal margin. Genital rod long with light sclerotized apical fork with broad base. Distimere finger-like with patch of 6-7 short stout mesoapical spines.

SPECIMENS EXAMINED: INDIA: 1 ♂, Calcutta, at light, 13.I.1910; 1 ♂, Calcutta, 21. VIII.1909 (both specimens determined by Brunetti).

DISTRIBUTION: Borneo, Burma, Ceylon, E. Pakistan, India, Philippines.

***Bradysia griseicollis* (Edwards), new combination**

Sciara griseicollis Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 240. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of The Oriental Region, Univ. Hawaii Press 1: 471.

In Edwards' key to Oriental Sciaridae (1928a), *griseicollis* would key out near *Sciara conulifera* Edwards (1928) and *Sciara bispinosa* Pettey (1918) (couplet 66). Both of these species will undoubtedly be placed in other genera when the types are redescribed. *S. griseicollis* differs from *conulifera* in the position of the median ocellus; in *conulifera* the ocellus almost contacts the eye bridge, whereas in *griseicollis* it is separated by about the diameter of the ocellus. Also the flagellomeres in *conulifera* are only about $2 \times$ as long as wide vs. $4 \times$ in *griseicollis*. The preapical spines in *conulifera* are on a distinct lobe and in *griseicollis* arise directly from the preapical surface. Edwards (1933) mentions the gray color of the thorax as distinguishing it from other Oriental "*Sciara*;" however, I have seen this character in other species. *S. bispinosa* differs from *griseicollis* in its smaller size, 1.0 mm vs. 2.5-3.5 mm; the shiny black thorax; r-m equal to or slightly longer than bM; and the longer preapical spines on the distimere. *S. conulifera* was described from Malaya and has been recorded from Java. *S. bispinosa* was described from the Philippines.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets, eye bridge 3-4 facets wide; median ocellus 1 ocellar width from eye bridge. Antenna: flagellomeres with distinct but short necks, hairs very dense on distinct tubercles and about 3/4 width, flagellomere 4 about 4× as long as wide. Prefrons with median patch of 4 very long setae. Clypeus with some shorter setae. Palpus with 3 subequal segments, segment 1 with apparent sensory pit and 2 long and 5-6 shorter dorsal and lateral setae. *Thorax*: Scutum dark brown with gray pollinose coating. Dorsocentrals moderately developed becoming longer posteriorly, acrostichals weak. Posterior pronotum bare; anterior pronotum with about 6 long pale setae. *Legs*: Fore leg: length of coxa 0.54 mm; femur 0.80 mm; tibia 0.84 mm; basitarsomere 0.38 mm; fore tibia with distinct unilateral comb composed of 10+ setae separated from tibial vestiture by bare area. Mid and hind tibiae with some enlarged setae. Hind tibia without apical comb; hind tibial spurs equal to or slightly longer than width of tibial apex. *Wing*: Length 2.7 mm, width 0.9 mm. Membrane pale, posterior veins bare, R-M index 2.4, r-m/bM 0.7, stCu/bM 0.8, C-M index 2.4. *Abdomen*: Terga dark brown with long dark setae. Tergum VIII with anterior lateral lobes. *Genitalia*: Basimere simple medially, 3 very long setae on posterior median margin; tergum IX truncate posteriorly with lateral preapical indentation, posterior margin with 6 long dark setae differentiated from other setae and separated from them by bare area; tergum X bilobed with ventrolateral sclerotized extension bearing 2 setae. Tegmen well sclerotized, genital rod slightly inflated basally. Distimere finger-like, with crown of dense short setae and 1 mesoapical and 1 preapical spine directed dorsolaterally, 1-2 smaller spines along dorsolateral angle.

SPECIMENS EXAMINED: BORNEO: 2 ♂♂, 2 ♀♀, Tenompok Pass, near Kinabalu, 1,433 m, 18.III.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

***Bradysia lamprina* (Edwards), new combination**

Sciara lamprina Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 239. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of The Oriental Region, Univ. Hawaii Press 1: 472.

Edwards (1933) indicates that *B. lamprina* is nearer to *Sciara nitulina* Edwards (1931) than any other described Oriental species, differing in the shorter and less pubescent antennae, presence of acrostichal hairs and larger size. I have not seen any specimens of *S. nitulina*, but in comparing the description of *S. nitulina* with *B. lamprina*, there appear to be several more striking differences. In *B. lamprina* the eye bridge is 4 facets wide, the necks of the flagellomeres are 1/4 as long as the flagellomeres proper and the hairs are longer than diameter and r-m is longer than bM.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 3 facets wide, separated by about width of 1 facet. Median ocellus separated from eye bridge by at least width of ocellus. Antenna: flagellomeres with short necks, about 1/7 length, hairs about 1/2 width; flagellomere 4 about 3.5 × as long as wide. Prefrons with 6-7 long pale setae near ventral margin. Clypeus apparently bare. Palpus with 3 subequal segments, 1st with several dorsal setae. *Thorax*: Scutum dark and shining. Acrostichals short, biserial anteriorly, uniserial posteriorly; dorsocentrals mixture of long and short setae, biserial to quadriserial. Posterior pronotum bare, setae on anterior pronotum difficult to discern. *Legs*: Fore leg; length of coxa 0.46 mm; femur 0.80 mm; tibia 0.80 mm; basitarsomere 0.38 mm; fore tibial comb indistinct. Hind tibia with several enlarged ventral setae, comb absent; spurs slightly longer than tibial diameter. *Wing*: Length 3.15 mm, width 0.96 mm. Wing membrane pale, with very short microtrichia. Posterior veins bare; R-M index 1.4, r-m/bM 0.7, stCu/bM 0.7,

C-M index 0.8. Halter dark. *Abdomen*: Terga dark with numerous long setae. *Genitalia*: Basimere simple medially, tergum IX trapezoidal, truncate apically with 4 long setae near apical margin and sparsely scattered setae over remainder of surface; tergum X bilobed. Tegmen well sclerotized along basal margin, moderately sclerotized on remainder; genital rod narrow, apex cannot be clearly seen. Distimere finger-like with 1 stout mesoapical spine surrounded by 4 or 5 shorter but stout setae and numerous short and slender setae.

SPECIMENS EXAMINED: BORNEO: 2 ♂♂, Pakka, Mt Kinabalu, 3,049 m, 21.III.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

***Bradysia pakkana* (Edwards), new combination**

Sciara pakkana Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 243. — Steffan, 1972, *In* Delfinado & Hardy, *Catalog of the Diptera of The Oriental Region*, Univ. Hawaii Press 1: 473.

B. pakkana is apparently closely related to *S. bispinosa* Pettey and *S. conulifera* Edwards, especially in the structure of the distimere. In Edwards' key (1928a) it will key out to these 2 species at couplet 66. The 2 preapical spines of *conulifera* appear to arise from a small lobe which is not present in *pakkana* or *bispinosa*. Flagellomere 4 of *pakkana* is about 3.5 × as long as wide vs. about 2 × as long as wide for *conulifera*. *S. bispinosa* is known from the Philippines and *S. conulifera* from Malaya and Java.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 3 facets wide and in contact; ocelli subequal and about equidistant from eye bridge, less than 1/2 width of ocellus. Antenna: flagellomeres with short but distinct necks, setae on tubercles and about as long as diameter, flagellomere 4 about 3.5 × as long as wide. (Frons distorted; unable to discern setation.) Palpus 3-segmented (further observations cannot be made because of distortion of head). *Thorax*: Scutum brownish. Acrostichals short, dorsocentrals composed of long and short setae. Posterior pronotum apparently bare; anterior pronotum (destroyed by pin). *Legs*: Fore leg: length of coxa 0.26 mm; femur 0.50 mm; tibia 0.69 mm; basitarsomere 0.34 mm; fore tibial comb apparently composed of single row of 4-6 setae. Hind tibial comb apparently undeveloped, spurs distinctly longer than width of tibial apex. Claws simple. *Wing*: Length 2.3 mm, width 0.76 mm. Membrane clear, posterior veins bare. R-M index 1.8, r-m/bM 1.0, stCu/bM 0.8, C-M index 0.75. Halter dark with pale basal section. *Abdomen*: Terga dark. *Genitalia*: Basimere simple medially. Tergum IX trapezoidal, apex truncate with few scattered long seta; tergum X bilobed. Basal arms of tegmen heavily sclerotized; genital rod long, apex with lightly sclerotized U-shaped fork. Distimere short, finger-like with 2 long preapical spines.

SPECIMENS EXAMINED: BORNEO: 1 ♂, 2 ♀♀, Pakka, Mt Kinabalu, 3,049 m, 25.III.1929, H. M. Pendlebury; 1 ♂, same locality, 21.III.1929.

DISTRIBUTION: Borneo.

***Bradysia radicum* (Brunetti) Fig. 2 a, b.**

Sciara radicum Brunetti, 1912, *Fauna Brit. India, Dipt. Nematocera* (1): 139; 1920, *Rec. Ind. Mus.* 17: 21. — Edwards, 1928, *J. Fed. Malay St. Mus.* 14: 22.

Bradysia radicum (in part): Steffan, 1972, *In* Delfinado & Hardy, *Catalog of the Diptera of*

The Oriental Region, Univ. Hawaii Press 1: 464.

There has been considerable confusion about this species ever since Edwards (1928a) identified a Samoan species as *S. radicum*. I have examined cotype material from Brunetti's Calcutta material and Edwards' Samoan specimens. They are not the same. The ♂ terminalia are enlarged, the basimeres being quite large compared to the short distimeres. In this respect, *B. radicum* (Brunetti) is closely related to *B. spatitergum* (Hardy), from which it differs in the armature of the distimere and shape of tergum IX. The type series of *B. radicum* (Brunetti) was reared from rotting lily bulbs.

Most subsequent interpretations of this species (Hardy, 1956, 1960; Steffan, 1969) have been based on Edwards' misidentification. The specimens of *S. radicum* reported from Europe, Fiji, Hawaiian Islands, Marquesas Islands, Micronesia, and Samoa are therefore not *B. radicum* (Brunetti). The identity of these specimens will be discussed in a later publication.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer facets; eye bridge 3 facets wide; ocelli subequal, median ocellus about 1/3 width of ocellus from eye bridge, lateral ocelli farther. *Antenna*: flagellomeres with short but distinct necks, hairs about 1/2 width, few scattered hyaline sensillae present; flagellomere 4 about 2× as long as wide. Prefrons with 3-4 long setae near ventral margin, otherwise obscured. Clypeus apparently bare. Palpus 3-segmented, short, 1st with dorsal seta and patch of dorsal hyaline sensilla; distinct sensory pit absent. *Thorax*: Scutum brownish yellow with darker stripes, indistinct in some specimens, on acrostichal, dorsocentral and supraalar lines. Acrostichals short extending about to wing base; dorsocentrals long, black, uniserial; scutellum with 6 long dark posterior setae, median 4 about 2× as long as 2 lateral setae. Posterior pronotum bare, anterior pronotum with about 6 long setae. *Legs*: Fore leg: length of coxa 0.26 mm; femur 0.34 mm; tibia 0.42 mm; basitarsomere 0.11 mm; fore tibial comb composed of single row of about 6 setae separated from remainder of tibial vestiture; hind tibial comb composed of 6 long marginal setae, hind tibia with row of strong posterior setae along distal 2/3. Claws simple. *Wing*: Length 1.34 mm, width 0.46 mm. Membrane pale, posterior veins bare; R-M index 2.2, r-m/bM 0.6, stCu/bM 0.4, C-M index 0.7. Halter brownish, paler at base. *Abdomen*: Terga brownish. *Genitalia* (fig. 2a): Tergum IX trapezoidal, relatively long, evenly covered with numerous short setae (fig. 2b). Basimeres simple medially, very large in relation to distimeres. Tegmen sclerotized at base. Genital rod short, apical fork apparently very large (cannot be distinguished on slide mount). Distimere short, slightly constricted at apex with 5 stout mesoapical spines, 1 of which is apical and slightly separated from others.

SPECIMENS EXAMINED: INDIA: 2 ♂♂, 1 ♀, Calcutta, bred lily bulbs, I.II.1910, C. Paiva.

DISTRIBUTION: India.

***Bradysia subbrunnipes* (Edwards), new combination**

Sciara subbrunnipes Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 240. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of The Oriental Region, Univ. Hawaii Press 1: 474.

In Edwards' key (1928a) *B. subbrunnipes* comes out near *Lycoriella solita* Walker (couplet 73) differing primarily in the structure of the fore tibial comb; in *subbrunnipes* it is distinctly single-rowed and in *solita* it is composed of a patch of setae. Edwards

(1933) compares it with the European *B. brunnipis* (Meigen), but since the ♂ of *subbrunnipes* is unknown, further comparisons cannot be made.

♀. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 3 facets wide, contiguous; ocelli subequal, median ocellus about width of ocellus from eye bridge, lateral ocelli slightly further. Vertex gray pollinose. Antenna: flagellomeres with very short necks, hairs about 1/2 width; middle segments longer than distal segments; flagellomere 4 about 3× longer than wide. Prefrons with 1 or 2 short setae. Clypeus bare. Palpus 3-segmented, 1st without sensory pit and 1 visible long dorsal setae, 3rd about 1-1/2× as long as 2nd. *Thorax*: Scutum dull brown, pollinose. Acrostichals and dorsocentrals weak but developed all the way. Scutellum with group of 4 moderately long setae on each side of median line. Posterior pronotum bare, anterior pronotum with 5-6 pale setae. *Legs*: Fore leg: length of coxa 0.50 mm; tibia 0.92 mm; basitarsomere 0.57 mm; fore tibial comb composed of single row of 10 or more setae set near base of spur. Hind tibial comb composed of 10 or more long dark setae; spur about 2× as long as width of tibial apex. Claws simple. *Wing*: Length 3.76 mm, width 1.26 mm. Membrane with slight smoky tinge, posterior veins bare; R-M index 1.4, r-m/bM 0.9, stCu/bM 0.7, C-M index 0.7. Halter brown. *Abdomen*: Terga dark brown with scattered pale setae.

SPECIMENS EXAMINED: BORNEO: 1 ♀, Kamborangah, Mt Kinabalu, 2,134 m, 1.VIII. 1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

***Bradysia zygocera* (Edwards), new combination** Fig. 3.

Sciara zygocera Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 241. — Steffan, 1972, *In* Delfinado & Hardy, *Catalog of the Diptera of the Oriental Region*, Univ. Hawaii Press 1: 475.

The holotype and unique specimen of *B. zygocera* had been placed with a series of specimens of *B. griseicollis* and a single ♀ which definitely is not *zygocera* was labeled as the type of *zygocera*. The ♂ described below will therefore be labeled the holotype of *B. zygocera*. It is very distinct in the structure of the flagellomeres and is without a doubt Edwards' type.

In Edwards' key (1928a) it would come out to *Sciara microtricha* Edwards (couplet 76) differing in the very long neck of the flagellomeres.

♂. *Head*: Interfacetal hairs abundant extending well beyond outer curvature of facets; eye bridge 4 facets wide; median ocellus in contact with bridge. Antenna: flagellomeres with very long necks, about 1/3 length of flagellomeres proper, proximal half of neck pale, distal half dark; hairs very long, about 2× width of flagellomeres and recurved near apex; flagellomere 4 about 2.7× as long as wide. Prefrons with numerous very short pale setae. Clypeus bare. Palpi 3-segmented, 1st with 1 long and several shorter dorsal setae, 2nd slightly shorter than 1st, 3rd about 2× as long as 2nd. *Thorax*: Scutum black, moderately shining. Acrostichals and dorsocentrals weak, acrostichals confined to anterior half. Scutellar setae short. Posterior pronotum bare, anterior pronotum apparently bare or with very short pale setae. *Legs*: Fore leg: length of coxa 0.50 mm; femur 0.76 mm; tibia 0.92 mm; basitarsomere 0.61 mm, fore tibial comb composed of single row of 8-10 long setae somewhat separated from remainder of tibial vestiture. Hind tibial comb composed of 7-9 slightly enlarged apical setae, tibia with some slightly enlarged setae, spurs about 1-1/2× as long as width of tibial apex. Claws simple. *Wing*: Length 3.23 mm, width 1.07 mm. Membrane slightly smoky, posterior veins bare; R-M index 1.12, r-m/bM 0.9, stCu/bM 0.8, C-M index 0.5-0.6. Halter dark, knob elongate. *Abdomen*: Terga

dark with moderately long dark setae. *Genitalia* (fig. 3): Tergum IX conical with scattered long setae; tergum X bilobed. Basimeres simple medially. Tegmen with well sclerotized basal band. Genital rod long with broad fork. Distimere relatively straight along mesal margin with dense patch of mesoapical setae and 3-4 thicker subapical setae.

SPECIMENS EXAMINED: BORNEO: Holotype ♂, Kamborangah, Mt Kinabalu, 2,134 m, 27. III.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

Chaetosciara lygropis (Edwards)

Sciara lygropis Edwards, 1928, *J. Fed. Malay St. Mus.* **14**: 30; 1931, *Tijd. v. Ent.* **74**: 274; 1933, *J. Fed. Malay St. Mus.* **17**: 238. — Meijere, 1935, *Tijd. v. Ent.* **78**: 185. — Leefmans, 1936, *Ent. Med. Ned-Ind.* **2**: 14.

Lycoria lygropis: Hennig, 1948, *Larvenformen der Diptera* **1**: 113.

Chaetosciara lygropis: Steffan, 1972, *In Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press* **1**: 465.

Edwards described *C. lygropis* from a large series of ♀♀ collected at various localities in Malaya and Thailand. He subsequently recorded it from Sumatra (1931) and Borneo (1933) postulating that this may be the species recorded from Alahan Pandjang by van der Wulp (1881) as *S. thomae* Linnaeus. Meijere (1935) discussed the Javanese armyworms collected by Leefmans and Betrem at various times in Java. The specimens from Betrem collected at Malang, East Java, were reared and sent to Edwards who identified them as a possible variety of *Sciara lygropis*.

In the series I have examined from the British Museum collection, there was one ♂ from Lumu Lumu, Mt Kinabalu, Borneo. It is not a *lygropis* and Edwards (1933) did not list a ♂ in his collection data. This ♂ keys out near *pendleburyi* Edwards (couplet 35). Edwards (1928a) indicates that *C. lygropis* closely resembles *S. pammela* differing in its smaller size and wing venation; it also differs in the structure of the fore tibial comb. It is difficult to make any further comments concerning its relationship to *pammela* without a comparison of ♂ terminalia.

♀. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets, eye bridge 3 facets wide; median ocellus almost touching edge of eye bridge. Antenna: flagellomeres with short necks, hairs less than 1/2 diameter, dense and pale; flagellomere 4 about 2.3× as long as wide. Prefrons with 8 long setae near ventral margin. Clypeus apparently bare. Palpus with 3 long subequal segments, 1st with 5-6 long dorsal setae. *Thorax*: Scutum dark brown, brownish pollinose with posterior pronotum ochraceous. Acrostichals weak, confined to anterior 1/4; dorsocentrals long, bi-triserial; scutellum with 10 long posterior setae. Posterior pronotum bare, anterior pronotum with patch of 14-18 long dark setae. *Legs*: Fore leg: length of coxa 0.61 mm; femur 1.23 mm; tibia 1.88 mm; basitarsomere 0.88 mm; fore tibial comb composed of small dense patch of dark setae near base of spur. Tibiae with some enlarged scattered setae becoming large and more distinct on mid and hind legs. Tibial comb of hind leg composed of 6 long dark setae; tibial spur about 1-1/2× diameter of tibial apex. Claws simple. *Wing*: Length 5.4 mm, width 1.8 mm. Wing membrane with brownish tinge, posterior veins bare. R-M index 0.9, r-m/bM 2.0, stCu/bM 0.4, C-M index 0.8. *Abdomen*: Terga and sterna dark with long dark setae.

SPECIMENS EXAMINED: MALAYA: Holotype ♀, Jor Camp, Batang Padand, Perak, 549 m,

1.VI.1923, H. M. Pendlebury; 1 ♀, same as holotype except 3.VI.1923 and "nocturnal."

DISTRIBUTION: Borneo, Java, Malaya, Sumatra, Thailand.

Chaetosciara pendleburyi (Edwards) Fig. 4a, b.

Sciara pendleburyi Edwards, 1928, *J. Fed. Malay St. Mus.* 14: 29.

Chaetosciara pendleburyi: Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 465.

♀. *Head*: Interfacetal hairs abundant, extending well beyond the outer curvature of facets; eye bridge 4 facets wide, contiguous; ocelli subequal, median ocellus less than 1/2 ocellar width from eye bridge, lateral ocelli set back about width of ocellus. *Antenna*: flagellomeres with short but distinct necks, hairs dense, about 2/3 width of flagellomeres and apparently set on tubercles; flagellomere 4 about 3.5× as long as wide. Prefrons with about 6 long dark setae on ventral 1/3 and 14 shorter dark setae on median portion. Clypeus with numerous short dark setae. Palpus 3-segmented, long, segments subequal; 1st with 1 long dorsal, 4-5 dorsolateral setae. *Thorax*: Scutum dark with slightly pollinosity. Acrostichals short, biserial, restricted to anterior 1/3; dorsocentrals fairly long, bitriserial. Posterior pronotum bare, anterior pronotum with 7 long dark setae; proepisternum with 12-14 long dark median setae. *Legs*: Fore leg: length of coxa 0.76 mm; femur 1.15 mm; tibia 1.46 mm; basitarsomere 0.69 mm; fore tibial apex with indistinct patch of slightly dense setae near base of spur; hind tibia without apparent comb, spurs slightly longer than width of tibial apex. *Wing*: Length 5.15 mm, width 1.75 mm. Membrane smoky, posterior veins bare; R-M index 0.8, r-m/bM 1.6, stCu/bM 0.6, C-M index 0.8. Halter knob dark, base of stem brownish. *Abdomen*: Terga brown with scattered long black setae.

♂. Flagellomere 4 about 2× as long as wide. Wing length 3.75 mm; R-M index 0.9; r-m/bM 1.5; stCu/bM 0.5; C-M index 0.8. Wing membrane paler. *Genitalia* (fig. 4a): Basimeres simple and weakly sclerotized medially. Tergum IX trapezoidal with numerous long setae (fig. 4b); tegmen sclerotized along base; genital rod short, fork as long as rod. Distimere finger-like, about 2.5× as long as wide, slightly curved with dense setae at rounded apex and single slightly enlarged mesoapical seta.

SPECIMENS EXAMINED: MALAYA: Holotype ♂, 2 ♀♀, No. 4 Camp, Cameron Highlands, 1,463 m, at light, 12.X.1923, H. M. Pendlebury.

DISTRIBUTION: Malaya.

Chaetosciara tenompokensis (Edwards), new combination Fig. 5.

Sciara tenompokensis Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 242. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 474.

Based on the wide eye bridge and short antennae, Edwards (1933) states that *tenompokensis* is closely related to *S. pahangensis* Edwards, but it differs in the position of R₁, in relation to the fork of the Media (R-M index), and structure of the distimere (see *S. pahangensis*).

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 5 facets wide; ocelli subequal, set very close to eye bridge, median less than 1/4 width from eye bridge. *Antenna*: flagellomeres without distinct necks and with very short pale hairs; flagellomere 4 about as long as wide. Prefrons with tuft of 8 long dark setae on ventral half. Clypeus bare. Palpus 3-segmented, short; 1st segment with 3 or 4 long dorsal setae,

sensory pit not evident, 3rd slightly longer than 2nd. *Thorax*: Scutum brown, shining with some dark lines along acrostichal, dorsocentral and supraalar lines; dorsocentral and supraalar lines joined anteriorly. Acrostichals confined to 2 or 4 short setae on anterior 1/3; dorsocentrals strong. Scutellum with pair of long setae on either side of mid line and numerous shorter setae. *Legs*: Fore leg: length of coxa 0.42 mm; femur 0.69 mm; tibia 0.88 mm; basitarsomere 0.42 mm; fore tibial comb composed of ovoid patch of setae near base of spur; hind tibial comb composed of straight line of 6-8 setae, spurs about $1\frac{1}{2}\times$ as long as width of tibial apex. Claws simple. *Wing*: Length 3.19 mm, width 1.19 mm. Membrane smoky; posterior veins bare except for r-m which has setae along entire length; R-M index 1.21, r-m/bM 1.09, stCu/bM 0.4, C-M index 0.8. Halter with long dark knob and yellow base. *Abdomen*: Terga dark brown with numerous dark setae. *Genitalia* (fig. 5): Tergum IX conical with scattered very long setae; tergum X bilobed. Basimeres separated by a weakly sclerotized area medially, with very long submedian, whip-like setae. Tegmen well sclerotized throughout; genital rod short, fork narrow. Distimere ovoid, with 3 long mesoapical spurs and 3-4 long spines around distal and lateral sides of spurs.

SPECIMEN EXAMINED: BORNEO: 1 ♂, Tenompok Pass, nr Mt Kinabalu 1,433 m, 18. III.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

Cornynoptera pammela (Edwards) Fig. 6.

Sciara pammela Edwards, 1928, *J. Fed. Malay St. Mus.* 14: 28.

Cornynoptera pammela (Edwards): Steffan, 1972, *In Delfinado & Hardy*, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 465.

♀. *Head*: Interfacetal hairs abundant, extending well beyond facets; ocelli subequal, in a flattened triangle, median ocellus almost touching eye bridge, lateral ocelli about 1/4 diameter of ocelli from eye bridge; eye bridge 4 facets wide, contiguous. Antenna: flagellomeres with short necks and hairs pale, less than 1/2 diameter; flagellomere 4 about $3\times$ as long as wide. Prefrons with about 12 moderately long, weak, pale setae on ventral 1/3. Clypeus apparently bare. Palpus 3-segmented; 2nd a little shorter than 1st and 3rd; 1st with 4 dorsal setae and numerous dorsal hyaline sensillae. *Thorax*: Scutum dark, pollinose. Acrostichals confined to short double row on anterior 1/3; dorsocentrals in 3-4 rows with mixture of long and short setae becoming very long on posterior 1/3. Scutellum with 10 or more long marginal setae. Posterior pronotum bare, anterior pronotum with about 8 setae along dorsal and posterior margins. *Legs*: Fore leg: length of coxa 0.76 mm; femur 1.53 mm; tibia 2.19 mm; basitarsomere 1.15 mm; fore tibial comb composed of apparently 7 slightly modified setae (difficult to discern on pinned specimen) arranged roughly in a single crescent-shaped row near the base of the spur. Tibiae with numerous enlarged spines. Hind tibial comb composed of only 3-4 dark setae; spurs about $1\frac{1}{2}\times$ diameter of tibial apex. Claws simple. *Wing*: Length 6.9 mm, width 2.5 mm. Membrane smoky, posterior veins except distal 1/2 of r-m without macrotrichia. R-M index 0.76, r-m/bM 3.0, stCu/bM 0.6, C-M index 0.7. Halter black. *Abdomen*: Terga brown with numerous coarse black setae.

♂. Flagellomeres about $2\text{-}2.5\times$ longer than wide. *Genitalia* (fig. 6): Basimeres simple medially with slight membranous separation; tegmen well sclerotized; genital rod short with comparatively large apical fork. Distimere about $2\times$ as long as broad with 2 short mesoapical spines and 1 long preapical seta.

SPECIMENS EXAMINED: MALAYA: Holotype ♂, Cameron Highlands, Tanah Rata, Pahang, at light, 1,372 m, 17.I.1924, M. R. Henderson; 1 ♀, same locality and collector as

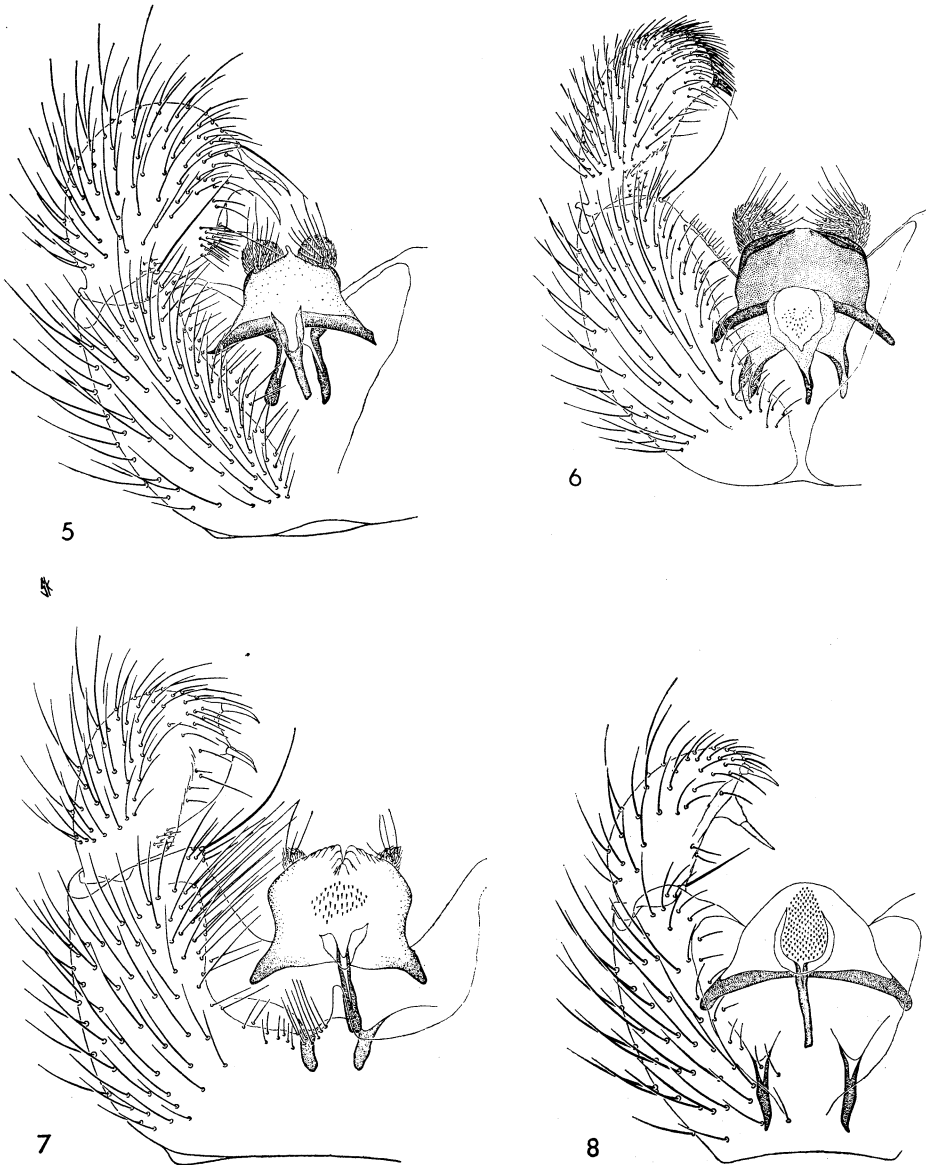


Fig. 5-8. ♂ genitalia: 5, *Chaetosciara tenompokensis* (Edwards); 6, *Corynoptera pamela* (Edwards); 7, *Schwenkfeldina lumuensis* (Edwards); 8, *Sciara jacobsoni* Edwards.

holotype, 31.I.1924; 1 ♀, Cameron Highlands, Gunnong Berumban, Pahang, 1,845 m, H. M. Pendlebury.

DISTRIBUTION: Malaya.

Schwenkfeldina breviantenna Steffan

Sciara saltuum Edwards (not Winnertz, 1868), 1928, *J. Fed. Malay St. Mus.* **14**: 33.

Schwenkfeldina breviantenna Steffan, 1972, In Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press **1**: 469.

Edwards (1928a) states that *S. saltuum* Edwards closely resembles *S. pahangensis* differing in the smaller size, shorter flagellomeres, shorter maxilla, palpal segment 3, longer acrostichals and dorsocentrals and shorter R_5 . Since only the ♀ of *breviantenna* is known, further comparison cannot be made.

♀. *Head*: Interfacetal hairs abundant, extending well beyond facets, eye bridge 5 facets wide, contiguous; ocelli subequal, median ocellus less than 1/2 width from eye bridge, lateral about 1/2 width. *Antenna*: flagellomeres very short without distinct necks, hairs about 1/3-1/2 width; flagellomere 4 slightly shorter than wide. Prefrons with about 12 long setae on ventral median half; clypeus apparently bare. Palpus 3-segmented, 1st with numerous dorsal setae, about 2× as 2nd and 3rd; 3rd is slightly longer than 2nd. *Thorax*: Scutum brownish. Acrostichals moderately developed, biserial; dorsocentral long, uniserial. Scutellum with 6 long posterior setae, median 4 about 2× length of lateral 2. Posterior pronotum bare, anterior pronotum with 6 long scattered setae. *Legs*: Fore leg: length of coxa 0.53 mm; femur 0.84 mm, tibia 0.92 mm; basitarsomere 0.19 mm; fore tibial comb composed of an irregular patch of about 10 or more closely packed setae near base of, spur. Fore, mid and hind tibiae with enlarged setae becoming more abundant on mid and hind tibiae, respectively. Hind tibial comb composed of about 15 closely packed, long, dark setae. Claws simple. *Wing*: Length 3.46 mm, width 1.19 mm. Membrane with slight brownish tinge, posterior veins bare and almost hyaline; R-M index 0.8-0.9, r-m/bM 0.8, stCu/bM 0.2-0.3, C-M index 0.8. Halter knob dark and elongate, stem pale. *Abdomen*: Terga brownish with weak pale setae; sternal setae much longer and darker.

SPECIMENS EXAMINED: MALAYA: 1 ♀, The Gap, Selangor border, Pahang, at light, 823 m, 11.VIII.1923, H. M. Pendlebury.

DISTRIBUTION: Malaya.

Schwenkfeldina cameronensis (Edwards), new combination

Sciara cameronensis Edwards, 1928, *J. Fed. Malay St. Mus.* **14**: 32. Steffan, 1972, In Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press **1**: 470.

Edwards described *cameronensis* from a series of specimens collected at Cameron Highlands, Tanha Rata, Fraser's Hill and Lubok Tamang, Malaya. He notes that it may be Brunetti's *Sciara fratercula*, differing in venation as follows: the median fork of the ♀ *cameronensis* is narrower, almost 5× as long as wide, and R_1 is slightly shorter than R; in *fratercula* the median fork in the ♀ is broader, only 4× as long as wide and R_1 is slightly longer than R. *S. fratercula* is known only from several ♀♀ collected in India and Brunetti (1912) indicated that it might be identical with *Sciara nigripennis* Brunetti. Before the relationships of these species can be clarified, the type material and, preferably, additional topotypic material will have to be examined. This holds true for many of the described Oriental Sciaridae. The following redescription is based on 1 ♂ and 2 ♀♀ from Edwards' type series.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 4 facets wide, contiguous. Antenna: flagellomeres with distinct but short necks, hairs about 1/2-3/4 width, very dense and set in distinct tubercles, flagellomere 4 about 2× as long as wide, flagellomeres becoming longer and narrower distally, 13 about 3× as long as wide. Prefrons with median patch of 10-12 moderate setae. Clypeus apparently bare. Labium short. Palpus with 3 subequal segments, 1st with 1 long and 4-5 shorter dorsolateral setae, several subdistal setae and numerous dorsal hyaline sensillae near middle. *Thorax*: Scutum predominantly reddish brown, shiny with slightly darker lateral spots, yellowish near prescutal suture and edges of posterior pronotum. Acrostichals weak extending about 2/3rds towards scutellum, dorsocentrals moderately developed becoming larger posteriorly. Scutellum enlarged, separated by deep groove with 4 long and numerous shorter posterior setae. Posterior pronotum apparently bare; anterior pronotum with patch of 11 strong setae; proepisternum with 4-5 strong setae. *Legs*: Fore leg: length of femur 0.85 mm; tibia 1.0 mm; basitarsomere 0.58 mm; fore tibial comb composed of dense ovoid patch of setae. Hind tibia with modified apical setae forming a short dark comb; tibia with some enlarged setae along entire length; hind tibial spur slightly shorter than width of tibial apex. *Wing*: Length 3.5 mm, width 1.2 mm. Membrane with brownish tinge. Posterior veins bare; R-M index 0.7, r-m/bM 1.3, stCu/bM 0.5, C-M index 0.8. *Abdomen*: Terga brown with strong, evenly distributed brown setae, sterna VII and VIII with anterior lateral lobes. *Genitalia*: Basimere simple medially; tergum IX truncate posteriorly, with numerous evenly distributed setae; tergum X bilobed. Distimere ovoid with inner angle straight, preapical patch of slightly enlarged setae, mesal area with 2 long and 1 shorter recurved spines directed dorsally and 1 long whip-like seta directed posterad.

♀. Considerably larger (wing, 5.0-5.6 mm) and darker.

SPECIMENS EXAMINED: MALAYA: 1 ♂, No. 4 Camp, Cameron Highlands, Pahang, 1,463 m, at light, 12-15.X.1923, H. M. Pendlebury; 1 ♀, Cameron Highlands, Pahang, 1,463 m, at light, 11.III.1924, H. M. Pendlebury; 1 ♀, Lubok, Tamang, Pahang, 1,067, m, at light, 12.VI.1923, H. M. Pendlebury,

DISTRIBUTION: Malaya.

Schwenkfeldina kinabaluana (Edwards), new combination

Sciara kinabaluana Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 238. — Steffan, 1972, *In Delfinado & Hardy*, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 472.

Edwards (1933) indicates that *S. kinabaluana* would run to *S. fratercula* Brunetti in his 1928 key, differing in its larger size (♀ 7.5 mm vs. 4-5 mm) and dark thoracic setae (pale in *S. fratercula*). The only other comparative characters, the relative shape of fM and length of R₁ and R, mentioned by Edwards in his comparison of *S. cameronensis* and *S. fratercula*, would place *S. kinabaluana* between these two species. In the ♀ of *S. kinabaluana*, fM is 4.6-5.0× as long as wide and R₁ slightly longer than R.

♂. *Head*: Interfacetal hairs sparse, barely extending beyond outer curvature of facets, eye bridge 5 facets wide, not quite in contact; median ocellus about 1/2 ocellar width from eye bridge. Vertex gray pollinose. Antenna: flagellomeres with short but distinct necks, hairs dense about 1/3-1/2 width; flagellomere 4 about 3.3 × as long as wide. Clypeus apparently bare. Palpus 3-segmented, 1st segment with 1 long dorsal seta and 2-3 shorter ones, segments 1 and 2 subequal, 3 about 1-1/2 × as long as 2. *Thorax*: Scutum shining black to reddish-brown. Acrostichals and dorsocentrals well developed. Posterior pronotum bare, anterior pronotum with 5 strong setae. *Legs*: Fore leg: length of coxa 0.76 mm, femur 1.07 mm; tibia 1.46

mm, basitarsomere 0.76 mm; fore tibial comb composed of triangular patch of setae slightly thicker and denser than other tibial setae. Fore, mid and hind tibiae with some enlarged setae along tibial surface becoming more numerous on hind tibia. Hind tibial comb composed of 14-16 short dark setae; hind tibial spur distinctly longer than width of tibial apex. Tarsal claws simple. *Wing*: Length 4.3-4.6 mm, width 1.3-1.6 mm. Membrane smoky but not very dark, posterior veins bare. R-M index 0.9, r-m/bM 0.4, stCu/bM 0.6, C-M index 0.9. Halter dark. *Abdomen*: Terga dark with long dark setae. Sternum VIII with anterior lateral lobes. *Genitalia*: Basimere simple medially with heavier sclerotization at median junction. Tergum IX trapezoidal and truncate apically with numerous relatively evenly distributed setae on posterior half, tergum X bilobed. Distimere comma-shaped with apex narrowed and turned mesad with group of 8-10 stout spines at tip and 2-3 long preapical setae. Tegmen sclerotized basally and laterally, genital rod elongate with equally sclerotized U-shaped apical fork.

♀. Considerably larger, wing length 6.3-7.0 mm.

SPECIMENS EXAMINED: BORNEO: 2 ♂♂, Kamborangah, Mt Kinabalu, 2,134 m, 28.III.1929, H. M. Pendlebury; 1 ♀, Kamborangah, Mt Kinabalu, 2,134 m, 30.III.1929, H. M. Pendlebury; 1 ♀, Lumu Lumu, 1,677 m, 16.IV.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

Schwenkfeldina lumuensis (Edwards), new combination Fig. 7.

Sciara lumuensis Edwards, 1933, *J. Fed. Malay St. Mus.* 17: 242. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 472.

In Edwards' key (1928a) *S. lumuensis* comes out near *S. saltuum* Edwards (= *Scythropochroa breviantenna* Steffan) from which it differs in the position of the median ocellus (in *S. lumuensis* it touches the eye bridge and in *S. breviantenna* it is slightly under 1/2 of ocellar width from eye bridge): also the acrostichals are larger in *S. breviantenna*. There are also some differences in wing venation; in *S. lumuensis* r-m/bM is 1.3 while it is 0.8 in *S. breviantenna*. Edwards (1933) indicates that *S. lumuensis* is closely allied to *S. pahangensis* Edwards from which it differs chiefly in the structure of the distimere; *S. pahangensis* has no mesoapical spines but has 3 long slender submedial spines. Flagellomere 4 in *S. pahangensis* is longer, about 1.7× as long as wide. The ♂ of *S. breviantenna* is unknown.

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 5 facets wide; median ocellus touching eye bridge. Antenna: flagellomeres with very short necks and short pale hairs about 1/5 diameter; flagellomere 4 about as long as wide. Prefrons with 4-6 setae, median 2 longer than others. Clypeus apparently bare. Palpi 3-segmented, 1st with at least 2 long dorsal setae, subequal to 2nd; 3rd slightly longer than 2nd. *Thorax*: Scutum dark, shining. Acrostichals very short, dorsocentrals longer and more numerous, pale. Posterior pronotum bare, anterior pronotum with 3 very long dark setae, propisternum with row of 4 long black setae. *Legs*: Fore leg: length of coxa 0.53 mm; femur 0.84 mm; tibia 0.92 mm; basitarsomere 0.46 mm; fore tibial comb composed of dense triangular patch of ochraceous setae; tibiae with some enlarged setae. Hind tibial comb indistinct; spur distinctly longer than tibial diameter; claws simple. *Wing*: Length 3.07 mm, width 1.03 mm. Posterior veins bare; r-m with macrotrichia, membrane with slight grayish tinge, medial fork pointed basally. R-M index 0.7, r-m/bM 1.3, stCu/bM 0.3, C-M index 0.8. *Abdomen*: Terga dark with long setae, sterna VII and VIII with anterior lateral lobes, setae restricted on posterior margins. *Genitalia* (fig. 7): Basimere complex medially, with long finger-like lobe extending pos-

terad with patch of 10-12 setae on each side of base, ventromesal setae on posterior arm of basimere composed of patch of 10+ long slender setae. Tergum IX short, truncate apically but very wide with long evenly distributed setae; tergum X bilobed. Tegmen well sclerotized, darker at basolateral corners; genital rod long and slender, split apically. Distimere ovoid with 3 strong mesal spurs, 1 mesoapical, other 2 subapical and widely separated.

SPECIMENS EXAMINED: BORNEO: 1 ♂, Lumu Lumu, Mt Kinabalu, 1,677 m, 9.VI.1929, H. M. Pendlebury.

DISTRIBUTION: Borneo.

Schwenkfeldina pahangensis (Edwards), new combination

Sciara pahangensis Edwards, 1928, *J. Fed. Malay St. Mus.* 14: 31; 1931, *J. Fed. Malay St. Mus.* 16: 489; 1933, *J. Fed. Malay St. Mus.* 17: 242. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of The Oriental Region, Univ. Hawaii Press 1: 473.

Edwards (1928a) compares *S. pahangensis* with *Sciara khasiensis* White which was described from a single ♀ from Assam. It differs from *S. khasiensis* in its shorter flagellomeres and smaller median ocellus. *S. pahangensis* is also closely related to *S. lumuensis* (Edwards) differing chiefly in the armature of the distimere. I have not examined the ♂, but according to Edwards' original description and figure, the distimere is broad at the basal half tapering laterally and mesally to a blunt apex with no conspicuous apical or mesoapical setae and with 3 long slender mesal spines projectig anteriorly from a point slightly more than midway from the apex.

♀. *Head:* Interfacetal hairs abundant, extending well beyond outer curvature of facets; eye bridge 5 facets wide; median ocellus distinctly smaller than laterals and separated from eye bridge by width of facet, laterals likewise. Antenna: flagellomeres with short but distinct necks, hairs about 1/3 diameter; flagellomere 4 about 1.7× as long as wide. Prefrons with 9 long black setae on ventral half with numerous shorter setae medially both dorsally and ventrally. Clypeus with 2 median setae. Palpus 3-segmented; 1st with several long dorsal setae; 1st and 2nd subequal; 3rd about 1-1/2× as long as 2nd. *Thorax:* Scutum dark. Acrostichals very short but complete, dorsocentrals long and dark. Scutellum with 4 long posterior setae. Posterior pronotum bare, anterior pronotum with numerous long dark setae. *Legs:* Fore leg: length of coxa 0.69 mm; femur 1.15 mm; tibia 1.30 mm; basitarsomere 0.61 mm; fore tibial comb composed of ovoid patch of pale dense setae. All tibiae with slightly enlarged and elongated scattered setae. Hind tibial comb composed of about 12 long dark setae, spurs about 1-1/2× width of tibial apex. Claws simple. *Wing:* Length 4.7 mm, width 1.5 mm. Membrane relatively pale, posterior wing veins except distal 1/4 of r-m without macrotrichia. R-M index 0.84, r-m/bM 1.5, stCu/bM 0.4, C-M index 0.8. Halter knob dark, base pale. *Abdomen:* Terga dark with numerous short dark setae.

SPECIMENS EXAMINED: MALAYA: 1 ♀, Cameron Highlans, Pahang, at light, 1,463 m, 13.III.1924, H. M. Pendlebury.

DISTRIBUTION: Borneo, Malaya.

Sciara jacobsoni Edwards Fig. 8.

Sciara jacobsoni Edwards, 1931, *Tijdschr. Ent.* 74: 276. — Steffan, 1972, *In* Delfinado & Hardy, Catalog of the Diptera of the Oriental Region, Univ. Hawaii Press 1: 472.

This species is not a *Sciara*, but since I cannot place it at this time, the original combination will be retained. Based on ♂ terminalia, *S. jacobsoni* seems to fit in Lane's (1959) *Pseudosciara*, but the posterior wing veins are bare. Also there is considerable confusion over the use of the name *Pseudosciara*. Schiner (1866) originally proposed this genus for the species *Pseudosciara hirtella* Schiner from Colombia. This species is apparently a Mycetophilid. Kieffer (1898) also proposed the name *Pseudosciara* for another species, *Pseudosciara pictiventris* Kieffer. Berg (1899) recognizing Kieffer's *Pseudosciara* as a preoccupied name, proposed the name *Plastosciara*. Frey (1942) recognized *Pseudosciara* Schiner as a valid genus in Sciaridae and also recognized *Plastosciara* Berg, but gave the type species as *Plastosciara lignicola* Winnertz. Lane (1959) revised the Neotropical "*Pseudosciara*," apparently using Frey's concepts. In addition to Frey's generic characters, Lane's concept of this taxon is based largely on the structure of the male dististyle which "bears a stout mesal seta frequently inserted in a protuberance." It is this character which *jacobsoni* and the species in Lane's "*Pseudosciara*" apparently have in common.

The types of *Pseudosciara hirtella* Schiner and *Pseudosciara pictiventris* Kieffer must be reexamined before the generic concepts of the valid *Pseudosciara* can be clarified. This is one of the many problems involved in any attempt to provide a sound generic classification for the Sciaridae.

In Edwards' key (1928a) *S. jacobsoni* would key out near *Sciara atrifrons* Edwards (couplet 57).

♂. *Head*: Interfacetal hairs abundant, extending well beyond outer curvature of facets, eye bridge 3 facets wide narrowing to 2 at junction; median ocellus about 1/2 ocellar width from eye bridge. *Antenna*: flagellomeres with distinct but short necks, hairs dense and about 2/3 width, flagellomere 4 about 2.7× as long as wide. *Prefrons* wide, with semicircular patch of long pale setae and with row of 4-5 long pale setae along ventral margin. *Clypeus* with some setae. *Palpus* 3-segmented, 1st segment with at least 2 long dorsal setae, 1st and 2nd segments short, 3rd almost 2× as long as 1st and 2nd combined (difficult to see setation and sensory pit, if present). *Thorax*: Scutum dark brownish (Edwards calls it black), anterior angle of posterior pronotum yellowish, dorsocentral hairs short, acrostichals apparently absent; scutellum with 4 long setae (Edwards says 2). Posterior pronotum apparently bare, setation of anterior pronotum difficult to determine. *Legs*: Fore leg: length of coxa 0.34 mm; femur 0.50 mm; tibia 0.61 mm; basitarsomere 0.26 mm; fore tibia with distinct unilateral comb composed of several closely appressed dark setae, apparently separated from tibial vestiture by bare area. Hind tibial comb difficult to see, if present; hind tibial spurs slightly longer than width of tibial apex. Tarsal claws apparently simple. *Wing*: Length 1.9 mm, width 0.8 mm. Membrane light brownish with dense microtrichia, posterior veins bare, R-M index 2.1, r-m/bM 0.6, stCu/bM 1.0, C-M index 0.7. Halter dark brown with yellowish base. *Abdomen*: Terga dark brown with relatively long dark setae. *Genitalia* (fig. 8): Basimere simple medially; tergum IX trapezoidal, with 2-3 long setae and sparsely scattered short setae along lateral margins; tergum X bilobed. Tegmen well sclerotized along basal margin; genital rod long and slender with U-shaped apical fork. Distimere straight on inner margin with stout mesal spine on lobe, apex with dense patch of setae directed mesad with 2 distinctly longer than others.

SPECIMENS EXAMINED: SUMATRA: 2 ♂♂, 1 ♀, Fort de Kock, 1925, E. Jacobson BM1930-538.

DISTRIBUTION: Sumatra.

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