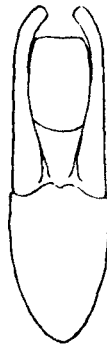


the apex, the median lobe is narrow at the base, progressively wider to half its length, then sub-parallel, the apex transversely truncate; the whole organ is smaller than in any other species seen.

The species is fairly easily recognizable by the regular serial punctures of the elytra becoming distinctly irregular posteriorly close to the suture, and the interstices between

Fig. 10.



Ps. wælbroecki d'Orchymont.

Ædeagus, ventral aspect. $\times 150$.

the punctures here range up to four or five times the diameter of the punctures against twice the diameter of the punctures on the disc. There is a very short, shallow and somewhat indefinite impression at the apex close to the suture forming the sutural stria.

XXXII.—*New or little-known Tipulidæ (Diptera).*—
LXXXI. *Oriental-Australasian Species.* By CHARLES
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THE materials considered at this time are chiefly from New Guinea and Papua where they were collected by Miss L. Evelyn Cheesman and Mr. Harry Hoogstraal; additional species from New Herbrides and the Solomons were taken by Mr. Jean Laffoon and Dr. Robert Staples. The types of the Cheesman materials are preserved in the

British Museum (Natural History); of the other species, in my personal collection. I am greatly indebted to these entomologists for this continued co-operation in making known the Tipulid fauna of this unusually interesting region.

Habromastix luciæ, sp. n.

Mesonotal præscutum obscure yellow with three brown stripes, the median one with a further delicate black line on the cephalic portion; antennæ (male) longer than wing, yellow; wings pale brown, variegated with darker brown areas and cream-coloured spots; *Rs* short; *M*₃₊₄ long, about two-thirds *m-cu*; abdominal tergites yellow, ringed with brown.

Male.—Length about 16mm.; wing 18 mm.; antenna about 21 mm.

Female.—Length about 20 mm.; wing 16 mm.; antenna about 4.5 mm.

Frontal prolongation of head slender, about three-fourths the remainder of head, brown; palpi dark brown; region of nasus with several strong setæ. Antennæ (male) 11-segmented, longer than the body or wing, yellow, the outermost segments darker; flagellar segments very elongate-cylindrical, the more basal ones with long erect slender setæ, with shorter bristles on the upper face; on outer segments the vestiture becomes shorter and stouter; in the female, antennæ shorter and darker. Head dark reddish brown, more yellowed on orbits; vertical tubercle low or lacking.

Pronotum infuscated. Mesonotal præscutum with the restricted ground obscure yellow, with three brown stripes, the median one split by a capillary blackened vitta on about the cephalic fifth; scutum reddish brown; scutellum and mediotergite more buffy, the latter more darkened behind. Pleura and pleurotergite chiefly greyish yellow, the propleura and mesopleura somewhat darker. Halteres yellow, knobs infuscated. Legs with the coxæ buffy yellow; trochanters yellow; femora obscure yellow or brownish yellow, the tips narrowly blackened, more abruptly so in the female; tibiæ yellowish brown, the tips narrowly darker; tarsi passing into black; claws small, simple. Wings with the ground pale brown, variegated with cream-coloured spots and darker

brown areas, the latter including marks in the costal field, the more distinct stigmal darkening, and with about three comparable darkenings along vein *Cu*, chiefly in cell *M*, continuous with the costal darkenings across cells *R* and *M*; cream-coloured areas before cord conspicuous, a little less extensive than the ground; beyond cord a single major pale area, this very extensive, occupying the subterminal part of the wing in the medial field, narrowly broken by seams along the veins; outer half of cell 1st *A* uniformly of the ground colour; a restricted post-stigmal brightening; veins brown. Venation: *Rs* short, a trifle more than one-half R_{2+3} ; R_{1+2} short, oblique, vein R_4 correspondingly long; petiole of cell M_1 nearly twice *m*; M_{3+4} long, as common in the genus, about two-thirds the long oblique *m-cu*, the latter varying in position from shortly before fork of M_{3+4} to just beyond the base of M_4 .

Abdominal tergites yellow, conspicuously ringed with brown, on tergite two at near midlength, on the succeeding segments subbasal to basal in position; sternites more uniformly yellow; in the female, the posterior borders of sternites narrowly ringed with dark. Male hypopygium (as described from the dry type) with the tergite short; basistyle long. Outer dististyle elongate, narrowed outwardly. Inner dististyle slender, the dorsal surface or crest with abundant dense black setæ.

Hab. Papua.

Holotype, ♂, Kokoda, altitude 1200 feet, July 1933 (*L. E. Cheesman*). *Allotype*, ♀, Mafulu, 4000 feet, January 1934 (*L. E. Cheesman*).

This unusually interesting fly is named for Miss Lucy Evelyn Cheesman. It is the first record of any species of the genus in New Guinea, all others being Australian. The fly is most similar to species such as *Habromastix remota* (Walker), *H. terræ-reginæ* Alexander, and others, differing in the length and colour of the antennæ of the male and in the pattern of the body and wings.

Tipula (Acutipula) pedicioides, sp. n.

Size large (wing, male, 25 mm.); mesonotal præscutum and scutellum buffy yellow, the intervening scutum uniformly brown; central part of mediotergite broadly brown, the sides whitened; pleura and pleurotergite variegated with brown, buffy and white; femora yellow,

the tips conspicuously blackened; tibiæ with bases narrowly blackened, followed by a yellow ring that is broadest on the fore legs; remainder of legs darkened; wings light grey and subhyaline, with a conspicuous brown pattern arranged as in the genus *Pedicia*, that is, at costa and cubitus, interconnected along the cord; abdominal tergites dark brown, each with an elongate buffy mark on lateral border; hypopygium with the lobes of the tergite low, truncated; dististyles small and simple.

Male.—Length about 25 mm.; wing 25 mm.; antenna about 3.5 mm.

Frontal prolongation subequal in length to remainder of head, dark brown; nasus elongate, blackened at tip; palpi brownish black. Antennæ (male) short, yellow, the outer six or seven segments very slightly more darkened; verticils elongate. Head brown, posterior orbits narrowly yellowish grey; anterior vertex low.

Pronotum dark brown, sparsely pruinose, restrictedly patterned with darker. Mesonotal præscutum almost uniformly buffy yellow, without pattern excepting the narrowly infuscated humeral border; scutum uniformly brown; scutellum yellow, the parascutella darker; mediotergite broadly brown on central portion, the sides extensively whitened; pleurotergite chiefly silvery white. Propleura and cervical region dark, mesopleura variegated buffy yellow and dark brown, the latter colour appearing as a narrow transverse girdle on the mesepimeron (pteropleurite), extending from beneath the wing root to the sternum; dorsopleural membrane dark brown; metapleural region dark brown with a silvery spot above the hind coxæ. Halteres brownish yellow. Legs with the coxæ grey, the posterior pair more infuscated; trochanters dark brown, the fore pair paler; femora yellow, the tips conspicuously blackened, subequal on all legs, on the posterior pair involving about the distal eighth; tibiæ more narrowly blackened basally, followed by a yellow ring on the proximal half or less, broadest on the fore legs, narrowest on posterior tibiæ, the outer end of the segment gradually passing into dark brown; tarsi dark brown; tibial spur formula 1-2-2; claws (male) toothed. Wings light grey and whitish subhyaline, conspicuously patterned with dark brown, the markings arranged much as in the genus *Pedicia*; cell *C* more brownish yellow, *Sc*

darker; seam over the very oblique cord, at wing base and on proximal half of vein *Cu* broad and conspicuous, the latter completely crossing cell *M* on all but its outer part; stigma and outer radial cells darkened, the areas separated by a white post-stigmal mark; the grey colour includes most of cell *R* and the outer medial field, the latter bordered internally by whitish, this pattern reaching the wing tip at vein R_{4+5} ; dark mark along *Cu* interrupted shortly before the comparable seam at cord, the latter involving *m-cu* and all but the base of cell 1st M_2 ; seam on distal section of vein Cu_1 narrow, more expanded at margin; veins yellow, brown in the patterned fields, whitish subhyaline at cord. Wing outline weakly falcate, the margin of the outer medial field being more or less incised. Venation: *Rs* about one-third longer than R_{2+3} ; R_{1+2} preserved, cell R_2 relatively large, not conspicuously narrowed at base; *m* about two and one-half times the petiole of cell M_1 ; cell 1st M_2 diamond-shaped; cord very oblique; basal section of M_{1+2} longer than the second section; cell 2nd *A* broad.

Abdomen elongate; hypopygium moderately large; tergites dark brown with an elongate buffy mark on lateral borders of segments; sides of basal ring more restrictedly light grey; sternites and hypopygium more uniformly brownish grey. Male hypopygium with the suture between tergite and sternite deep; basistyle small, delimited only by the ventral suture, the lower apical angle produced into a blackened spine. Ninth tergite transverse, the caudal border with two low blackened lobes, the tips obliquely truncated; lobes separated by a smaller U-shaped median notch; margin of lobe near median notch with microscopic roughenings. Outer dististyle broad, the length about one-third more than the greatest width; setæ of moderate length only, scattered over the surface. Inner dististyle relatively small and simple, the beak separated from the large and more heavily blackened lower beak. Eighth sternite not produced, its caudal border unarmed.

Hab. Papua.

Holotype, ♂, Mafulu, 4000 feet, January 1934 (*L. E. Cheesman*).

No similar or allied species is known. The wing pattern is superficially very like that in *Plusiomyia*

gracilis (Walker) and in various species of the genus *Pedicia* Latreille

Tipula (Acutipula) cyclopica, sp. n.

Mesonotal præscutum brownish grey with three reddish-brown stripes that are conspicuously bordered by blackish; antennæ relatively short, flagellum weakly bicoloured; wings moderately broad, infuscated, with a restricted pale pattern; *Rs* subequal to R_{2+3} ; cell 2nd *A* broad; abdomen brownish grey; male hypopygium with the tergite produced into two low rounded lobes; outer dististyle broadly flattened, terminating in a short blackened spine; inner dististyle with the main body an oval yellow disk, the beak short; lower beak large, subglobular in outline, black.

Male.—Length about 22 mm.; wing 17.5 mm.; antenna about 3 mm.

Frontal prolongation approximately equal in length to remainder of head, brown; nasus stout, suberect; palpi brownish black. Antennæ (male) relatively short; scape dark brown, pedicel reddish brown; flagellar segments weakly bicoloured, obscure yellow, the bases more infuscated; flagellar segments short-subcylindrical, the basal enlargement poorly indicated; verticils longer than the segments. Head above dark brown, including the oval elevated vertical tubercle.

Pronotum of the type concealed, on sides silvery pruinose. Mesonotal præscutum with the ground colour brownish grey, with three reddish-brown stripes that are conspicuously bordered by blackish lines, the median stripe vaguely divided by a paler vitta; the broad lateral præscutal border more buffy grey, at end behind the pseudosutural foveæ more blackened; scutal lobes chestnut brown, darker brown behind; scutellum brown, the parascutella more reddish brown; mediotergite reddish brown behind, darker in front and on sides. Pleura of type crushed, variegated with reddish brown and darker brown, the posterior sclerites, with the pleurotergite, more silvery grey pruinose. Halteres relatively long and slender, dark brown. Legs with the fore coxæ reddish brown, the posterior pair darker brown; trochanters brownish yellow; femora obscure brownish yellow to

brown, the tips passing into dark brown; remainder of legs brown to brownish black; tibial spur formula 1-2-2; claws (male) toothed. Wings relatively broad, infuscated, with a restricted pale pattern, as follows: Before and beyond a more darkened spot in cell *Cu* before cord; a small post-stigmal brightening; conspicuous spots in bases of cells M_1 and 2nd M_2 ; a further small marginal spot in cell M_4 ; more restricted pale seams at ends of veins R_{4+5} , M_1 , M_2 and M_3 ; a further pale dot on basal section of vein M_3 ; stigma oval, dark brown; paler brown areas over the anterior cord and *m-cu*; veins brown. Wing veins, excepting *R* and R_1 , glabrous or virtually so; relatively few trichia on distal section of vein R_{4+5} . Venation: *Rs* and R_{2+3} subequal; R_{1+2} pale but preserved; petiole of cell M_1 about two-thirds *m*; *m-cu* at near three-fourths the length of M_{3+4} ; cell 2nd *A* broad.

Abdomen brownish grey, the basal tergites with indications of a darker median stripe or row of spots. Male hypopygium with the caudal margin of tergite produced into two low rounded lobes that are separated from one another by a smaller rounded notch; mesal margins of lobes with abundant short dense spinous setæ, those of the apex and outer portions longer and more normal. Outer dististyle broadly flattened, especially opposite midlength, the apex a short blackened spine. Inner dististyle with the main body an oval yellow disk that is densely clothed with short silken yellow setæ; beak short and relatively slender; lower beak a large subglobular blackened structure; posterior crest of style low, darkened, provided with short coarse setæ.

Hab. Northern Dutch New Guinea.

Holotype, ♂, Mt. Cyclops, altitude 3500 feet, March 1936 (*L. E. Cheesman*).

Superficially the present fly most suggests *Tipula* (*Papuatipula*) *artifex* Alexander, differing in coloration and in the structure of the male hypopygium. The distinctions between the subgenera *Acutipula* Alexander and *Papuatipula* Alexander are not entirely satisfactory, the latter evidently having been derived from the former and representing a highly specialized type, best characterized by modifications in the radial field of the wing.

Tipula (Indotipula) querella, sp. n.

Allied to *vilis*; mesonotal præscutum reddish brown, with four poorly indicated obscure yellow stripes; male hypopygium with the tergal border produced into two blackened lobes, each gradually narrowed outwardly, the tips unequally bilobulate; inner dististyle with the posterior lobe small.

Male.—Length, about 14 mm.; wing, 16 mm.

Female.—Length about 19–20 mm.; wing 16–17 mm.

Frontal prolongation relatively short, yellow, about one-half the remainder of head; nasus very long and slender; palpi obscure yellow. Antennæ with scape and pedicel obscure yellow, flagellum black; flagellar segments (male) strongly incised, as in the group; verticils very long. Head above brownish grey, with a capillary blackish median vitta; vertical tubercle very low to scarcely evident.

Pronotum reddish brown. Mesonotal præscutum reddish brown with four poorly indicated obscure yellow stripes; posterior sclerites of notum brownish yellow, the scutellum clearer yellow. Pleura and pleurotergite yellow, silvery pruinose. Halteres brown, base of stem narrowly yellow, knob dark brown. Legs with coxæ and trochanters yellow; femora dark brown, the bases yellow; tibiæ and tarsi brownish black; legs long and slender; claws (male) toothed. Wings brownish yellow, the prearcular and costal regions more saturated yellow; stigma brown, continued basad as far as vein Sc_1 ; veins brown. Venation: Sc_1 preserved, Sc_2 beyond it longer than in *serritergata*; Rs subequal to R_{2+3} ; $m-cu$ somewhat shorter than the distal section of Cu_1 ; cell M_4 correspondingly narrower than in *serritergata*.

Abdomen dark brown, the basal rings more pruinose, paler; basal tergite more reddish brown; outer sternites yellow; hypopygium and preceding segments blackened. Male hypopygium with the tergite produced into two blackened lobes, gradually narrowed outwardly and unequally bilobulate at tip, the outer angle longer; no evidence of serration of these tergal lobes is evident in the type. Outer dististyle large, expanded outwardly, unequally divided into two lobes by pale membrane. Inner dististyle with the lobule of the beak relatively

short; lobe on face of style near posterior end smaller than in *serritergata*.

Hab. Papua.

Holotype, ♂, Kokoda, altitude 1300 feet, in lower rain forest by river, September 6, 1933 (*L. E. Cheesman*).
Allotype, ♀, altitude 1200 feet, September–October 1933 (*L. E. Cheesman*). *Paratopotype*, ♀, with the allotype.

Although it is very closely allied to *Tipula* (*Indotipula*) *serritergata* Alexander, of north-eastern New Guinea, I believe the present fly to be distinct in the details of structure of the male hypopygium, particularly the tergite and the inner dististyle.

Tipula (*Tipulodina*) *curtissima*, sp. n.

Size medium (wing, male, 15 mm.); wings whitish subhyaline, the stigma and narrow apex with microtrichia, producing darkened clouds; unpatterned parts of wing entirely without microtrichia; *Rs* very short, transverse, only about one-half as long as the basal section of R_{4+5} ; R_{1+2} atrophied; male hypopygium with the basistyle unarmed; inner dististyle simple.

Male.—Length about 15 mm.; wing 15 mm.; antenna about 3.5 mm.

Frontal prolongation short, about one-third the remainder of head, obscure yellowish brown, variegated with darker; nasus long and conspicuous; palpi brownish black. Antennæ with scape obscure brownish yellow, pedicel reddish brown, flagellum brownish black; segments only slightly incised, subcylindrical; verticils of outer face short, less than the segments, on the lower face reduced to spinoid setæ. Head medium brown; anterior vertex relatively narrow, about three times the greatest diameter of the scape; vertical tubercle lacking.

Pronotum medially broadly dark brown, yellowed on sides. Mesonotal præscutum chiefly covered by four nearly confluent brown stripes, the interspaces barely evident; humeral region of præscutum extensively and conspicuously yellow; scutum chiefly brown, the centres of lobes with obscure brownish yellow areas; scutellum dark brown, the parascutella still darker; mediotergite chiefly dark brown with a relatively conspicuous obscure yellow area on either side of the central darkening;

pleurotergite with cephalic half dark brown, posterior part above the root of the halteres conspicuously whitened. Pleura extensively whitened, including a transverse area on the pteropleurite and on adjoining portions of the mesepisternum and dorsal meron; anterior portion of mesepisternum, especially the anapleurite, more infuscated; propleura and adjoining regions chiefly pale; ventral meral region weakly darkened; dorsopleural membrane pale. Halteres brown, knob blackened. Legs with coxæ pale yellow, whitish pruinose, especially the middle pair; trochanters obscure yellow, the outer face slightly infuscated; remainder of legs of type chiefly detached; femora brown, with abundant still darker setæ, the tips conspicuously whitened; tibiæ brown, the tips similarly and more extensively whitened; basitarsi dark, with about the outer fourth whitened; second tarsal segment dark, the tip whitened; outer segments broken; tips of femora with a brush of long black setæ; vestiture of whitened portions of legs white, like the ground, the remaining vestiture black; on tips of tibiæ with a row of black setæ interspersed among the abundant white vestiture. Wings whitish subhyaline, the tip in cells Sc_2 to M_1 , inclusive, infuscated; stigma and a narrow seam over the anterior cord weakly infuscated; veins very delicate, brown; infuscated areas due to the presence of microtrichia, lacking elsewhere on wing. Venation: R_s unusually short, transverse, only about one-half the basal section of R_{4+5} and subequal to $r-m$, all three elements in transverse alignment; R_{1+2} atrophied, R_3 very long, extending parallel to the distal section of R_{4+5} for virtually the entire length, the latter ending beyond the wing-tip; cell M_1 broad, about one-half longer than its petiole; cell 1st M_2 pentagonal, basal section of M_3 and m almost in oblique alignment; $m-cu$ at fork of M .

Abdomen chiefly brown, discoloured in the type. Male hypopygium with the tergite transverse, narrowed outwardly, the caudal border with a very broad and shallow emargination, the lateral lobes very low and rounded. Basistyle not produced. Dististyles simple, the outer style a suboval hairy lobe; inner style a flattened blade, its lower edge nearly straight, provided with long setæ, the upper margin with a deep emargination before the

obtuse-triangular beak ; near apex of style, opposite the beak, with a low darkened flange.

Hab. Solomon Islands.

Holotype, ♂, Mount Austin, Guadalcanal, altitude 1000 feet, November 1944 (*Jean Laffoon*).

The subgenus had not been recorded from the Australasian Region. Among the described Oriental species, the present fly is closest to *Tipula* (*Tipulodina*) *amabilis* Alexander, of Java, and *T. (T.) gracillima* Brunetti, of Ceylon, both of which have a somewhat comparable great reduction in the number of microtricia of the wing surface. In the present fly, *Rs* represents the shortest condition so far found in the entire genus, approximating the condition found in *Scamboneura* and in some Papuan species of *Dolichopeza*.

Limonia (*Thrypticomyia*) *carissa*, sp. n.

Mesonotum dark brown, the lateral præscutal borders more reddened ; terminal tarsal segments snowy white, involving the distal four-fifths of the basitarsi ; wings subhyaline, the outer third vaguely more darkened ; male hypopygium with the setæ of the tergite very restricted, including a compact group of three very long bristles near outer lateral angle ; rostral spines two, rather widely separated, the prolongation long and slender.

Male.—Length about 6–6.5 mm. ; wing 5.5–6.8 mm.

Rostrum and palpi black. Antennæ with scape testaceous, the remainder of organ black ; flagellar segments long-oval, with conspicuous dark-coloured apical necks ; longest verticils unilaterally distributed, approximately twice as long as the segments. Head black, very sparsely pruinose, the front and anterior vertex more heavily so, to appear almost silvery, anterior vertex relatively broad, nearly three times the diameter of the scape.

Mesonotum dark brown, the lateral borders of the præscutum more reddened. Pleura and pleurotergite reddish brown. Halteres blackened. Legs with coxæ reddish brown ; trochanters testaceous yellow ; remainder of legs black, the outer tarsal segments white, involving the distal four-fifths of the basitarsi and the succeeding segments. Wings subhyaline, the outer third very

vaguely to scarcely more darkened; stigma brown, clearly delimited, long-oval; veins brownish black. Venation: Sc_1 ending a short distance beyond origin of R_s , Sc_1 alone from about one-half to nearly two-thirds the length of R_s ; free tip of Sc_2 from two to three times its own length before R_2 ; R_{1+2} preserved as a spur that is about as long as vein R_2 ; inner end of cell R_3 only slightly arcuated, lying just proximad of cell 1st M_2 ; $m-cu$ at one-third to two-thirds the length of cell 1st M_2 .

Abdomen brownish black, sternites a trifle paler. Male hypopygium with the tergite transverse, the caudal margin with a very shallow emargination; lobes low, with unusually few setæ on outer portion, including a close group of three very long but unmodified ones near outer lateral angle and a further more isolated lateral bristle. Basistyle with the ventromesal lobe stout, obtuse at tip, without modified setæ. Ventral dististyle large and fleshy, its area approximately three times that of the basistyle; rostral prolongation long and slender; spines two, from small tubercles, rather widely separated, the innermost on the style, the outer spine at base of the prolongation. Gonapophysis with mesal-apical lobe relatively narrow. Ædeagus with setæ on basal half, including a transverse row of four very strong bristles at near two-thirds the length.

Hab. Dutch New Guinea.

Holotype, ♂, Hollandia, in rain forest, October 20, 1944 (Hoogstraal). *Paratopotype*, ♂.

The most similar species is *Limonia (Thrypticomyia) sparsiseta* Alexander, of the islands of the South-western Pacific. This likewise had the number of setæ of the tergite of the male hypopygium very reduced in number but differs in all further details of the hypopygium, especially the rostral prolongation and its armature.

Limonia (Thrypticomyia) dichæta, sp. n.

Allied to *dichromogaster*; basitarsi with about the proximal third blackened, the remainder of tarsi white; Sc_1 very long, up to three-fourths the length of R_s ; male hypopygium with the tergite transverse, each lateral lobe with several long unmodified setæ; ventral dististyle with the rostral prolongation high, the spines slender,

straight, without basal tubercles ; ædeagus with only two strong setæ.

Male.—Length about 5·5 mm. ; wing 5·8–6·6 mm.

Female.—Length about 5 mm. ; wing 5·5·2 mm.

Rostrum light brown ; palpi darker. Antennæ black throughout ; flagellar segments oval to long-oval, with unusually long, unilaterally distributed verticils in both sexes. Head dark.

Mesonotum light brown, the postnotum and pleura paling to yellow. Halteres with stem brown, knob brownish black. Legs with the coxæ and trochanters yellow ; femora and tibiæ dark brown to brownish black ; basitarsi with about the proximal third blackened, the remainder of tarsi white. Wings with a strong dusky tinge, beyond the whitened prearcular field uniform throughout the length ; stigma darker brown, oval, relatively large ; veins dark brown. Venation : Sc_1 ending opposite origin of R_s , Sc_1 very long, approximately two-thirds to three-fourths R_s , the latter about one-half longer than R_{2+3} ; vein R_2 about three times its length before free tip of Sc_2 ; inner end of cell R_3 moderately arcuated ; $m-cu$ at near one-third to one-half the length of cell 1st M_2 ; cell 2nd A long.

Abdominal tergites dark brown to brownish black, the sternites paler, brownish yellow ; hypopygium brownish black. Male hypopygium with the tergite transverse, the caudal margin with a very shallow V-shaped emargination ; each low lateral lobe with about seven to ten long unmodified setæ. Basistyle with the ventro-mesal lobe stout, not elongate and without modified setæ. Ventral dististyle large, the rostral prolongation high, dark-coloured, at apex extended into a short slender beak ; rostral spines slender, straight, placed near the upper edge of the base of the prolongation without basal tubercles ; spines separated from one another by a distance that is slightly greater than one-half the length of either spine. Gonapophysis with mesal-apical lobe relatively narrow gently curved to the acute tip. Ædeagus with the lateral angles produced caudad into slender spines, near the base with only two strong setæ. In *dichromogaster*, the tergite has a different conformation, each lobe low, with about eleven setæ ; rostral prolongation with the spines shorter and stouter, from basal

tubercles that are placed almost together; base of ædeagus with eight strong setæ arranged in a generally transverse row.

Hab. New Hebrides.

Holotype, ♂, Espirito Santo, Second Channel Area, August 1944 (*Jean Laffoon*). *Allotopotype*, ♀. *Paratopotypes*, 5 ♂♀.

The most similar described species is *Limonia* (*Thrypticomyia*) *dichromogaster* (Edwards), of Tahiti, which differs in the bicoloured abdomen, the venation, and in the details of structure of the male hypopygium, as described above.

Limonia (*Thrypticomyia*) *trifusca*, sp. n.

Mesonotal præscutum pale reddish brown; legs black, the outer two-thirds of basitarsi and the remainder of tarsi snowy white; wings whitish subhyaline, the tip narrowly infuscated; Sc_1 ending opposite origin of R_s , free tip of Sc_2 far before R_2 ; male hypopygium with the caudal margin of tergite with a V-shaped notch; each lateral lobe with a darkened flange bearing three powerful setæ; rostral prolongation of ventral dististyle slender, subpendant, the two spines in a transverse row near base of prolongation.

Male.—Length about 6 mm.; wing 6 mm.

Rostrum and palpi black. Antennæ black throughout; flagellar segments oval to long-oval, with short apical necks and very long unilaterally distributed verticils. Head blackened, sparsely pruinose.

Mesonotum brown, the præscutum pale reddish brown laterally; postnotum darkened medially, the pleurotergite obscure yellow. Pleura obscure yellow, the sternopleurite more infuscated. Halteres blackened, the base of stem restrictedly paler. Legs with the coxæ yellow, the fore pair somewhat darker; trochanters yellow; remainder of legs black, the outer two-thirds to three-fifths of basitarsi and the remaining segments snowy white. Wings whitish subhyaline, the tip narrowly infuscated, the inner edge of darkened portion about at outer end of cell 1st M_2 ; stigma small, still darker brown; veins brownish black. Venation: Sc_1 ending opposite origin of R_s ; free tip of Sc_2 far before R_2 , vein R_1 alone about three times R_2 ; R_{2+3} long, nearly two times R_3 and

subequal to *Rs* ; *m-cu* at near three-fifths to three-fourths the length of cell 1st M_2 , the latter exceeding in length vein M_{2+2} beyond it.

Abdomen, including hypopygium, black. Male hypopygium with the caudal margin of tergite with a V-shaped notch, each lateral lobe terminating in a darkened flange that bears three powerful setæ, with a smaller bristle lying slightly more mesad ; three unmodified setæ near lateral margin of tergite, arranged in a longitudinal series. Basistyle with ventromesal lobe long and slender, constricted near base, without a modified terminal bristle. Ventral dististyle relatively large and fleshy ; rostral prolongation slender, subpendant, the two rostral spines in a transverse row near base of prolongation. Gonapophyses with mesal-apical lobe stout, dark-coloured. Setæ at base of ædeagus rather numerous but unmodified and not in transverse alignment ; apex of ædeagus at each outer angle produced into a slender spine.

Hab. Solomon Islands.

Holotype, ♂, Bougainville, Empress Augusta Bay, altitude 600 feet, December 28, 1944 (*Robert Staples*).

Paratopotype, ♂.

From the other regional species of the subgenus having the tarsi extensively white, including *Limonia* (*Thrypticomylia*) *apicalis* (Wiedemann), *L. (T.) arachnophila* Alexander, and others, the present fly is readily told by the structure of the male hypopygium, particularly the tergite, as described.

Limonia (*Euglochina*) *invocata*, sp. n.

Female.—Length about 5 mm. ; wing 4.5 mm.

Closely allied to *silens* Alexander, differing in the details of coloration and venation.

Rostrum and palpi black. Antennæ black throughout ; flagellar segments oval to long-oval, narrowed at ends. Head brownish grey. Thorax almost uniformly testaceous yellow, the central region of the dorsum a trifle darker. Legs blackened, including about the proximal one-third to two-fifths of the basitarsi, the remainder of tarsi snowy white. Wings with cells beyond cord distinctly more infuscated than the basal ones, producing a dusky wing tip, the stigma only a little darker ; veins stouter than in *silens*. Venation : *Rs* short and strongly arcuated ; free

tip of Sc_2 and vein R_2 in transverse alignment; $m-cu$ about one-third its length beyond the fork of M .

Hab. Dutch New Guinea.

Holotype, ♀, Hollandia, at light rain forest, April 17, 1945 (*Hoogstraal*). *Paratopotypes*, 2 ♀♀.

Limonia (Limonia) alienata, sp. n.

General coloration reddish yellow, the præscutum with a conspicuous black median stripe; wings with a strong brown tinge, the small stigma darker brown; Sc long, Sc_1 ending just before the fork of Rs ; $m-cu$ shortly before the fork of M ; male hypopygium with the caudal margin of tergite broadly notched, the lobes rounded; ventral dististyle complex in structure, the body small, subglobular, bearing a long flattened bladeliike appendage; rostral prolongation about as long but more slender.

Male.—Length about 4.5 mm.; wing 5 mm.

Rostrum and palpi dark brown. Antennæ with scape and pedicel yellowish brown; flagellum broken. Head with the broad front silvery, the remainder of head light grey.

Pronotum brown medially, obscure yellow on sides. Mesonotum reddish yellow, unpatterned except for a conspicuous black præscutal stripe, beginning near cephalic border of sclerite, becoming paler behind, ending before the suture. Pleura and pleurotergite somewhat clearer yellow. Halteres brown, the knobs dark brown. Legs with the coxæ and trochanters yellow; remainder of legs broken. Wings with a strong brownish tinge, the small oval stigma a little darker brown; veins dark brown. Venation: Sc long, Sc_1 ending just before the fork of Rs , Sc_2 a short distance from its tip; Rs long, very gently curved, about one-half longer than basal section of R_{4+5} ; free tip of Sc_2 and R_2 in alignment; cell 1st M_2 small, rectangular, about one-half as long as the distal section of M_{1+2} ; $m-cu$ shortly before the fork of M ; anal veins convergent near their bases.

Abdomen with tergites brownish black, sternites testaceous yellow. Male hypopygium with the caudal margin of tergite with a broad notch, each broadly rounded, with about four setæ back from margin. Basistyle elongate, the ventro-mesal lobe very low and small, subbasal in position. Two dististyles, the dorsal one a

slender, nearly straight rod; ventral dististyle complex, the body a small subglobular structure that bears a long flattened glabrous bladelike extension or appendage; rostral prolongation about as long but much more slender, the tip narrowed. Gonapophysis with mesal-apical lobe elongate, truncated at tip. Aedeagus with apex bilobed.

Holotype, ♂, Hollandia, in rain forest, January 21, 1945 (*Hoogstraal*).

In its general appearance the present fly suggests species such as *Limonia* (*Limonia*) *longeantennata* Alexander and *L. (L.) mouicola* Alexander, differing evidently in the structure of the male hypopygium.

Limonia (*Limonia*) *hebridicola*, sp. n.

Size small (wing 4 mm. or less); general coloration of mesonotum brown or yellowish brown; thoracic pleura dark brown, with a conspicuous silvery white longitudinal stripe; antennæ (male) elongate, about two-thirds as long as body, the apices of the flagellar segments strongly narrowed and glabrous, on outer segments becoming slender petioles; wings with a strong brown tinge, the small oval stigma darker brown; *Sc* short, cell M_2 open by the atrophy of basal section of M_3 ; male hypopygium with apex of tergite emarginate, the lobes only slightly produced; dististyle oval, its rostral prolongation very long and slender, terminating in an acute spinous point; mesal-apical lobe of gonapophysis bidentate at apex.

Male.—Length about 3·3–3·2 mm.; wing 3·8–4 mm.; antenna about 1·8–1·9 mm.

Female.—Length about 3·2–3·3 mm.; wing 4 mm.

Rostrum and palpi black. Antennæ black throughout, in male of unusual length, approximately two-thirds the length of body; flagellar segments long-oval, strongly narrowed at outer end which is restrictedly glabrous, on outer segments the tips further narrowed into slender petioles; remainder of segments covered with a dense pale erect pubescence. In female, antennæ much shorter and more normal, the individual segments oval. Head brownish black, more or less pruinose.

Thoracic dorsum brown or yellowish brown, the posterior sclerites somewhat darker. Pleura dark brown, with a conspicuous silvery white longitudinal stripe extending

from behind the fore coxæ to the base of abdomen. Halteres brownish black, the base of stem narrowly yellow. Legs with coxæ brown; trochanters more testaceous; remainder of legs brownish yellow, the outer tarsal segments somewhat darker; claws small. Wings with a strong brownish tinge, the small stigma darker brown; veins brown. Venation: *Sc* short, *Sc*₁ ending about opposite one-fifth to one-sixth the length of *Rs*, *Sc*₂ exactly opposite this origin; free tip of *Sc*₂ and *R*₂ both pale, in transverse alignment; cell *M*₂ open by the atrophy of basal section of *M*₃; *m-cu* at fork of *M*, subequal in length to distal section of *Cu*₁.

Abdominal tergites black, sternites and bases of hypopygium paler, obscure brownish yellow. Male hypopygium with the tergite narrowed posteriorly, the apex with a small V-shaped emargination; lateral lobes having about the same contour as the notch, somewhat poorly demarked, each with four or five long setæ placed back from margin. Basistyle with ventro-mesal lobe undifferentiated. Dististyle single, the body oval, the subequal rostrum strongly narrowed, terminating in a small acute spine; no rostral spines. Gonapophysis with mesal-apical lobe blackened, unequally bidentate at tip, the lateral point more acute, directed laterad, the small apical point more oval, obtuse. Ædeagus broad, each half strongly notched at apex.

Hab. New Hebrides.

Holotype, ♂, Espirito Santo, Second Channel Area, October 1943–August 1944 (*Jean Laffoon*). *Allotopotype*, ♀, pinned with type. *Paratopotypes*, ♂♀.

Limonia (*Limonia*) *hebridicola* is allied to species such as *L.* (*L.*) *machidai* (Alexander), wide-spread throughout Asia and eastern Europe, differing in the elongate antennæ of the male, open cell 1st *M*₂, and in the details of structure of the male hypopygium.

Limonia (*Limonia*) *dipinax*, sp. n.

Size small (wing, male, about 3.5 mm.); præscutum strongly gibbous, brown; pleura yellow, with a brownish black longitudinal stripe extending from the fore coxæ to the abdomen; legs brown, the tips of the tibiæ and the tarsi paling to brownish yellow; wings with a strong brownish tinge, the oval stigma darker brown; cell *M*₂

open by the atrophy of m ; male hypopygium with the tergite narrowed into two slender glabrous lobes that are separated by a broad U-shaped notch; dististyle single, the prolongation long, ending in an acute point.

Male.—Length about 3 mm.; wing 3.5–3.6 mm.

Rostrum and palpi black. Antennæ black throughout; flagellar segments oval, well separated by apical necks. Head brownish black.

Pronotum brown. Mesonotum with præscutum strongly gibbous, brown, somewhat darker medially; scutellum somewhat more testaceous. Pleura yellow with a brownish black longitudinal stripe extending from the fore coxæ to the abdomen, passing through the base of the haltere, the latter brownish black. Legs with coxæ and trochanters yellow, the fore coxæ darkened; femora brown; tibiae brown basally, paling into brownish yellow, the tarsi of this same colour; claws apparently simple. Wings with a strong brownish tinge, the oval stigma darker brown; veins brown. Venation: Sc_1 ending just beyond mid-length of R_s , Sc_2 some distance from its tip; free tip of Sc_2 and R_2 in transverse alignment, the latter a trifle the longer; inner end of cell R_3 lying far based of other elements of cord; cell M_2 open by the atrophy of m ; $m-cu$ close to fork of M ; anal veins convergent near origin.

Abdomen, including hypopygium, black, the sternites a trifle paler. Male hypopygium with the tergite narrowed, produced into two slender glabrous lobes that are separated by a broad U-shaped notch. Basistyle with ventro-mesal lobe large. Dististyle single, produced into a long curved prolongation that narrows to an acute point, the total length of the prolongation about equal in length to the main body of style; a single very long seta at near one-fourth the length of prolongation, with other smaller bristles beyond. Gonapophysis with mesal-apical lobe stout, its tip obliquely truncate, the edge back from apex with a low flange. Ædeagus stout, the apex obtuse.

Hab. Dutch New Guinea.

Holotype, ♂, Hollandia, at light in rain forest, April 18, 1945 (*Hoogstraal*). *Paratopotypes*, ♂♂, January 14–18, 1945 (*Hoogstraal*).

The most similar regional species is *Limonia* (*Limonia*) *hebridicola*, sp. n., which has cell M_2 of the wings open

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by the atrophy of the basal section of M_3 rather than by the loss of m as in the present fly. The two flies differ further in the coloration and in structure of the antennæ and male hypopygia.

Limonia (Limonia) aureolenta, sp. n.

Size medium (wing, male, 6·8 mm.); general coloration golden-yellow, the mesonotum lined with darker; thoracic pleura with a very conspicuous brown longitudinal stripe; antennæ with basal flagellar segments suboval to transverse, the outer segments with very long verticils; wings with a strong brownish tinge, restrictedly patterned with darker brown; $m-cu$ more than one-half its length beyond the fork of M ; male hypopygium with the rostral prolongation of the ventral dististyle long and slender, the two rostral spines elongate, with truncated tips.

Male.—Length about 6 mm.; wing 6·8 mm.

Rostrum and palpi very reduced, black. Antennæ black throughout; basal flagellar segments suboval or transverse, the outer ones cylindrical to long-cylindrical; verticils of the more proximal segments short and unilaterally distributed, those of the outer segments unusually long and conspicuous, exceeding twice the length of the segments; first flagellar segment with a slender basal petiole; first and succeeding segments with a stout glabrous apical neck, this condition persisting to about the fifth or sixth flagellar segment. Head orange.

Pronotum above golden, darkened on sides. Mesonotum golden-yellow, restrictedly patterned with brown, including conspicuous præscutal borders and continuous narrower brown stripes beginning on the præscutum behind the humeral region, extending caudad across the mesal portion of each scutal lobe, sides of scutellum, and as sublateral lines on the mediotergite. Pleura ventrally pale yellow, with a conspicuous dorsal brown longitudinal stripe, extending from behind the genæ across the propleura, anepisternum, dorsal pteropleurite and ventral pleurotergite to the abdomen, its ventral edge unusually clearcut and more intense, the dorsal edge somewhat paler and merging with the yellow dorsopleural membrane and the sclerites surrounding the wing base. Halteres dark brown. Legs with the coxæ and trochanters pale yellow; remainder of legs brown, the tips of femora,

tibiæ and outer segments of tarsi somewhat more darkened; claws with a slender erect basal spine and a more appressed one just beyond midlength of the inner face. Wings with a strong brownish tinge, restrictedly patterned with darker brown, including the prearcular field and small seams at origin of *Rs*, fork of *Sc*, cord and outer end of cell 1st M_2 ; veins brown. Venation: *Sc* moderately long, Sc_1 ending about opposite midlength of *Rs*, Sc_2 at its tip; free tip of Sc_2 lying just proximad of level of R_2 ; cell 1st M_2 about as long as vein M_{1+2} beyond it; *m-cu* more than one-half its length beyond fork of *M*; vein 2nd *A* sinuous.

Abdominal tergites brownish yellow, the lateral and posterior borders of the segments brownish black, on the sixth and succeeding segments more uniformly blackened; first sternite yellow, succeeding ones more infuscated, with an obscure yellow central vitta that is more narrowed on outer sternites and finally becomes obsolete; outer segments and hypopygium more uniformly brownish black. Male hypopygium with the tergite transverse, its caudal margin truncate or virtually so; caudal third of sclerite with several black setæ. Basistyle elongate, the ventro-mesal lobe conspicuous, simple. Dorsal dististyle a strong slightly curved rod, the tip acute. Ventral dististyle with the body oval, the rostral prolongation long and slender; rostral spines placed at base of face of prolongation, long and slender, their tips truncated. Gonapophysis with mesal-apical lobe pale, long and straight, the apex more or less cultriform; lateral edge of apophysis restrictedly blackened.

Hub. Solomon Islands.

Holotype, ♂, Mount Austen, Guadalcanal, altitude 1000 feet, November 1944 (*Jean Laffoon*).

Limonia (*Limonia*) *aureolenta* is allied to certain Oriental species, particularly *L. (L.) calianensis* Alexander, of the Philippines, differing from these forms in the coloration of the body and wings and in the details of structure of the male antennæ and hypopygium.

Limonia (*Limonia*) *laffooniana*, sp. n.

General coloration of the entire body orange; rostrum very reduced; legs black, the fore femora restrictedly yellow at bases; wings strongly petiolate, very strikingly

patterned with whitish fenestrate areas on a blackened ground; abdomen orange, the basal rings of the intermediate tergites glabrous and polished; male hypopygium with the dorsal dististyle present; rostral prolongation a long gently curved yellow blade without rostral spines.

Male.—Length about 7 mm.; wing 9.5 mm.; antenna about 1.9 mm.

Rostrum very reduced, yellowish brown; palpi reduced, black. Antennæ with scape whitish, pedicel abruptly black, flagellum uniformly black; basal flagellar segments nearly globular, with short apical stems, the outer segments passing through oval to elongate-oval; terminal segment about one-fourth longer than the penultimate, slender, pointed at tip; verticils unilaterally distributed, exceeding the segments in length. Head orange; anterior vertex broad, approximately four times the diameter of the scape.

Thorax yellowish orange, unpatterned, the central portion of the præscutum somewhat more intensely orange; setæ of præscutum black, sparse, but relatively long and conspicuous. Halteres black, the base of stem restrictedly yellow. Legs with the coxæ orange; trochanters yellow; remainder of legs black, the fore femora restrictedly yellow at bases; claws with long strong basal spines and a delicate appressed one at near midlength. Wings very conspicuously patterned, the ground brownish black, with large whitish subhyaline fenestrate areas in most cells, distributed as follows: At arculus; in cell *R* at end of the basal petiole; a tiny spot in cell 2nd *A*; a nearly complete band before origin of *Rs*, extending from vein *R* to the posterior margin but interrupted by the uniformly darkened cell *Cu*₁; in cell *R*₁ near base and again near outer end, the latter produced behind across cell *R*₃ to vein *R*₄₊₅; two smaller spots in outer half of cell *R* below *Rs*; major areas in outer ends of each of cells *M* and *Cu*; beyond cord with further spots in cell *R*₃ near outer end, two in cell *R*₅, one at centre of cell 1st *M*₂; an irregular mark in cells 2nd *M*₂ and *M*₃ and a still larger spot in cell *M*₄; apical margin in outer ends of radial cells paling to brown; veins dark brown, even in the whitened areas. Wings unusually petiolate, the stem extending to some distance beyond the arculus. Venation: *Sc*₁ ending about opposite the fork of *Rs*, *Sc*₂

at its tip; *Rs* strongly arcuated; inner end of cell R_3 lying far basad of the other elements of the cord; R_2 lying about its own length beyond the free tip of Sc_2 ; cell 1st M_2 longer than vein M_{1+2} beyond it; *m-cu* close to the fork of M , longer than the distal section of Cu_1 ; cell 2nd A small; both anal veins arcuated.

Abdomen orange, the basal rings of the intermediate tergites highly polished and nacreous, those of segments three and four broadest, on the succeeding segments becoming gradually narrower; sternites orange-yellow; hypopygium chiefly yellow, the basistyles light brown. Male hypopygium with the tergite transverse, the caudal margin gently emarginate; lobes very low, with about a dozen long black setæ on each. Basistyle with the ventro-mesal lobe large, its apex cap-like, narrowed and slightly more sclerotized. Dorsal dististyle yellow, straight, the apex strongly curved, narrowed to an acute point. Ventral dististyle with the body relatively small, less than the ventro-mesal lobe of basistyle, with scattered elongate setæ and abundant delicate setulæ; rostral prolongation a long gently curved yellow blade, the apex subobtusate; a few scattered setulæ at apex and a single powerful seta on outer margin at near midlength but without rostral spines. Gonapophyses broad, the mesal-apical lobe slender, gently curved.

Hab. Solomon Islands.

Holotype, ♂, Mount Austen, Guadalcanal, altitude 1000 feet, November 1944 (*Jean Laffoon*).

I am most pleased to name this striking fly for the collector, Mr. Jean Laffoon, who has added materially to our knowledge of the Diptera of the Pacific Theatre. The species is entirely different from those previously described. Superficially it more resembles various species of the subgenus *Dapanoptera* Osten-Sacken, but the subgeneric reference here given is correct.

Orimerya (Orimerya) spiloptera, sp. n.

Anterior portion of thoracic notum yellow, the posterior half, with the pleura, black; knobs of halteres infuscated; wings narrow, whitish subhyaline, with a restricted pale brown pattern; Sc_1 ending about opposite midlength of *Rs*; R_{1+2} very short; *r-m* in approximate transverse alignment with the basal section of M_{1+2} ; abdomen

bicoloured, the broad bases of the segments yellow, the narrower apex brown.

Sex?—Wing 4·8 mm.

Rostrum dark brown; palpi brownish black. Antennæ, the scape and pedicel dark brown, flagellum brownish yellow; flagellar segments short-cylindrical, with short verticils; antennæ broken beyond the eleventh segment. unusually long for a member of this genus, if complete and bent backward extending nearly to the wing root, Head black.

Pronotum and cephalic portion of præscutum yellow, the posterior half of the latter, especially on the sides, conspicuously blackened; remainder of notum paler, brown or brownish black. Propleura yellow, the remainder of pleura polished black. Halteres with stem white, knob infuscated. Legs with the coxæ and trochanters yellow; remainder of legs broken. Wings narrow, whitish subhyaline, the base and narrow costal border yellow; a restricted pale brown pattern, as follows: Origin of *Rs*, cord, fork of M_{3+4} , *m-cu* and a more diffuse wash near the wing-base; veins pale brown, darker in the patterned areas, yellow in the costal and prearcular fields. Macrotrichia on the veins beyond cord, excepting *Cu*. Venation: *Sc* short, Sc_1 ending about opposite midlength of *Rs*, the latter angulated at origin; R_{1+2} very short to virtually lacking; R_{2+3} just less than twice R_2 ; basal section of R_{4+5} arcuated, lying a little proximad of *r-m*, the latter in approximate transverse alignment with the basal section of M_{1+2} ; M_{3+4} subequal to or a little shorter than vein M_4 ; *m-cu* opposite base of *Rs*.

Abdomen elongate, conspicuously bicoloured, the broad bases of the segments yellow, the remainder, including the distal third or more, brown; abdomen broken at the sixth segment.

Hab. Dutch New Guinea.

Holotype, Sex? Hollandia, at light in rain forest, January 21, 1945 (*Hoogstraal*).

The only other Australasian members of the subgenus that have the wings patterned are *Orimarga* (*Orimarga*) *joana* Alexander, of New South Wales, and *O. (O.) pictula* Edwards, of the Kei Islands and New Guinea. Both of these differ markedly in the venation and in the quite different wing pattern.

Orimarga (Orimarga) soluta, sp. n.

General coloration brownish grey, the præscutum without clearly defined stripes; wings yellowish grey, veins very pale; macrotrichia of veins very sparse; R_{1+2} about one-half R_2 ; R_{2+3} short, approximately one-half longer than R_2 ; $m-cu$ opposite one-third the length of Rs .

Female.—Length about 4.5 mm.; wing 3.8 mm.

Rostrum black, sparsely pruinose; palpi black. Antennæ with the scape and pedicel black, the former pruinose; flagellum broken. Head grey; anterior vertex broad.

Pronotum brown. Mesonotum brownish grey, without clearly defined stripes. Pleura and pleurotergite reddish brown, sparsely pruinose. Halteres uniformly pale. Legs with the coxæ reddish brown, trochanters more testaceous; legs long and slender, the femoral bases a trifle brighter. Wings yellowish grey, unpatterned, the prearcular and costal fields clearer yellow; veins very pale brown. Macrotrichia of veins very sparse, beyond the cord restricted to scattered series on the outer third of veins R_3 , R_{4+5} , M_{1+2} and M_3 . Venation: Sc_1 ending about opposite two-thirds the length of Rs , the latter angulated at origin; R_{1+2} about one-half R_2 ; R_{2+3} short, about one-third to one-half longer than R_2 ; basal section of R_{4+5} long, nearly square at midlength; $r-m$ nearly in transverse alignment with the subequal basal section of M_{1+2} ; M_{3+4} nearly equal in length to vein M_4 ; $m-cu$ about opposite one-third the length of Rs ; cell 2nd A relatively broad.

Abdomen uniformly brownish black. Ovipositor with the cerci small and slender, gently upcurved to the acute tips; hypovalvæ ending about on a level with the cerci.

Hab. Dutch New Guinea.

Holotype, ♀, Hollandia, at light in rain forest, November 28, 1944 (*Hoogstraal*).

Of the various species of *Orimarga* so far made known from the Australasian Region, the present fly is quite distinct from all other forms so far discovered in New Guinea. Among other species it is closest to *Orimarga (Orimarga) toala* Alexander, from the mountains of central Celebes, a larger form with the venational details distinct. Unfortunately the males of both of these species are still unknown.

Epiphragma (Eupolyphragma) staplesi, sp. n.

Mesonotum in front obscure yellow, the posterior sclerites and the pleura more blackened; femora yellow with two broader darkened rings; vestiture of legs including elongate scattered scales interspersed among the setæ; wings brown, variegated with darker brown and obscure yellow areas; male hypopygium with the tergite very reduced; interbase a strong rod, at and near tip with two erect spines; outer dististyle hairy.

Male.—Length about 7–8 mm.; wing 7·5–8·5 mm.

Female.—Length about 10 mm.; wing 9·5 mm.

Rostrum black; palpi black, the basal segment obscure yellow. Antennæ relatively short; scape and pedicel brownish yellow; basal three segments of flagellum yellow, remaining segments black; all flagellar segments distinctly separated, without fusion; outer segments becoming long-cylindrical, the verticils relatively short and inconspicuous. Head grey, the orbits more infuscated; occiput paling to yellow.

Pronotum narrow, brownish yellow. Mesonotal præscutum and scutum obscure yellow, the cephalic border of the former restrictedly more blackened; scutellum and postnotum dark, with a yellow pollen. Pleura and pleurotergite chiefly blackened, restrictedly patterned with paler, more pollinose areas. Halteres long, stem brownish yellow, knob brownish black. Legs with the coxæ black, the fore pair variegated with brownish yellow at near midlength; trochanters yellow; femora yellow with two broad darker rings, the outer one subterminal, the more basal one broader but ill-defined, on the proximal half of the segment; tibiæ and tarsi light yellow; vestiture of legs with elongate flattened scales interspersed among the normal setæ. Wings with a strong brownish tinge, variegated with darker brown and obscure yellow areas; costal border clearer yellow; the darker marks are at the ends of the longitudinal veins, larger in the radial field and over 2nd *A*; a major dark area at origin of *Rs*; other seams at arculus, along cord, outer end of cell 1st *M*₂ and at fork of *M*₁₊₂; the yellow spottings are scattered over the surface, usually alternating with the darker areas, as described; veins brown, yellow in the brightened areas. Venation: *Sc*₁ ending opposite fork of *R*₂₊₃₊₄, *Sc*₂ at its tip; supernumerary cross-veins in cell

C varying in number up to seven; R_{2+3+4} fully two to three times $r-m$; petiole of cell M_1 subequal to or longer than m ; $m-cu$ about its own length or less beyond the fork of M .

Abdomen with tergites brownish yellow to brown, sternites more yellowed; hypopygium brownish yellow. Male hypopygium with the ninth tergite very reduced, its position chiefly occupied by the large membranous proctiger. Interbase appearing as a strong rod, at and near tip with two spines placed at right angles to the axis, the lower spine longer and broader. Outer dististyle hairy, terminating in a single recurved point; inner style longer.

Hab. Solomon Islands.

Holotype, ♂, Bougainville, Empress Augusta Bay, altitude 650 feet, December 31, 1944 (*Robert Staples*).

Allotopotype, ♀, altitude 600 feet, December 28, 1944.

Paratopotypes, 2♂♂, one each with the allotype and holotype.

I am very pleased to name this interesting fly for the collector, Dr. Robert Staples, to whom I am greatly indebted for numerous Tipulidæ from Bougainville Island. This is the most easterly known species of the subgenus, the others being from Celebes and the Philippines. Among the somewhat numerous Philippine species, the fly is closest to *Epiphragma* (*Eupolyphragma*) *crenulata*, Alexander, differing conspicuously in the structure of the male hypopygium. For a discussion of the subgenus (as *Polyphragma* Alexander), a paper by the writer may be consulted*.

XXXIII.—*New Pintaliine Cixiidæ, Kinnaridæ and Tropiduchidæ from the Lesser Antilles (Homoptera: Fulgoroidea)*. By R. G. FENNAH.

THE first species of pintaliine Cixiidæ to be recorded from the West Indies was *Flata variegata* described by Fabricius from material from an unspecified island. In 1881 Lethierry examined a species of *Pintalia* from Guadeloupe which he referred to the South American *pictipennis* Stål,

* Philippine Journ. Sci., xlix. pp. 257-262, pl. 4, figs. 44-60 (1932).