

New or little-known Tipulidæ (Diptera).—LXII. Neotropical Species. By CHARLES P. ALEXANDER, Ph.D., F.R.E.S., Massachusetts State College, Amherst, Massachusetts, U.S.A.

ALL species discussed at this time are from Peru, and belong to the vast genus *Limonia* Meigen. They were collected chiefly by Mr. Felix Woytkowski, almost all in the Department of Junin; a few other species were taken by Mr. Pedro Paprzycki, likewise in the Department of Junin, and by Mr. J. Adger Smyth, in the Department of Puno. I am very greatly indebted to these entomologists for their continued interest in saving these fragile flies. All types are preserved in my collection of the Tipulidæ.

Limonia (Dicranomyia) smythiana, sp. n.

General coloration obscure yellow, the mesonotum restrictedly darkened; antennæ with flagellar segments weakly bicolored; thoracic pleura with a conspicuous dark brown longitudinal stripe, more diffuse behind; legs yellow, the femora with a conspicuous brownish black subterminal ring; wings brownish yellow, the veins behind *Sc* with numerous small brown dots to present a sparsely guttate appearance; *m-cu* more than three times its own length before the fork of *M*; male hypopygium with the rostral prolongation of the ventral dististyle bearing two separate spines.

Male.—Length about 10 mm. ; wing 14.5 mm.

Rostrum brownish black ; palpi black. Antennæ with scape and pedicel black, the former sparsely pruinose ; flagellar segments weakly bicoloured, the bases obscure yellow, the tips darkened ; flagellar segments long-oval ; longest verticils a little longer than the segments. Head light brown, restrictedly darkened medially ; anterior vertex relatively wide, nearly three times the diameter of the scape.

Pronotum yellow, narrowly darkened along ventral margins. Mesonotum obscure yellow to brownish yellow, the præscutum with three scarcely indicated darker stripes ; scutal lobes weakly darkened ; lateral margins of mediotergite weakly infuscated. Pleura buffy, with a narrow but conspicuous dark brown stripe extending from the propleura across the anepisternum onto the pteropleurite and pleurotergite, paler and more diffuse behind ; ventral sternopleurite more chestnut-brown. Halteres with stem pale brown, knob slightly more darkened. Legs with the coxæ and trochanters obscure yellow ; femora yellow with a conspicuous brownish-black subterminal ring, the clear yellow tip a little narrower ; tibiæ yellow, the tips very weakly darkened ; tarsi obscure yellow, the terminal segments blackened. Wings (fig. 1) large and ample ; ground-colour brownish yellow, the prearcular field, cell *Sc* and the stigma clearer yellow ; all veins of wing behind *Sc* with scattered small brown spots to present a sparsely guttate appearance ; costa unvariegated ; veins yellow, dark brown in the spotted areas. Venation : *Sc* of moderate length, *Sc*₁ ending a short distance beyond origin of *Rs*, *Sc*₁ long, only a little shorter than *Rs* ; basal section of *R*₄₊₅ arcuated, exceeding one-half *Rs* ; *R*₂ and the short free tip of *Sc*₂ in transverse alignment ; cell 1st *M*₂ short-pentagonal, shorter than vein *M*₃ beyond it ; *m-cu* an unusual distance before the fork of *M*, almost at mid-length of wing and more than three times its own length before the fork.

Abdomen obscure yellow, narrowly darkened laterally, with conspicuous erect white setæ ; hypopygium obscure yellow. Male hypopygium with the dorsal dististyle a short curved rod, the apex obtuse. Ventral dististyle of moderate size, with two subequal rostral spines from

short basal tubercles, the outer spine close to apex of prolongation, the separate inner spine lying more basad. Gonapophyses with the blade broad, the mesal-apical lobe slender.

Hab. Peru (Puno).

Holotype, ♂, Chucuito, Lake Titicaca. altitude 12,000 feet, August 28, 1939 (*J. Adger Smyth*).

I am very pleased to name this fly in honour of Mr. J. Adger Smyth, who collected several species of Tipulidæ in the near vicinity of Lake Titicaca. The venation, especially of the medial and cubital fields, is approached only in the species next described among the now more than one thousand species in the vast genus *Limonia*. This great recession of *m-cu* is paralleled in the genus *Orimarga* Osten Sacken. The male hypopygium of this fly is quite normal for a member of the subgenus, showing no unusual features as might be expected from the nature of the venation.

Limonia (Dicranomyia) perretracta, sp. n.

Most similar to *smythiana* ; general coloration grey, the præscutum patterned with brown and black ; halteres elongate, black, the base of stem and apex of knob paler ; femora obscure yellow, with a narrow, but conspicuous black ring that is almost apical in position ; wings greyish subhyaline, heavily dotted with brown along the veins and in the cells ; inner end of cell 1st M_2 arcuated ; *m-cu* more than twice its length before the fork of *M*.

Female.—Length about 10 mm. ; wing 14 mm.

Rostrum dark brown, sparsely pruinose ; palpi black. Antennæ black throughout ; flagellar segments oval. Head brownish grey ; anterior vertex relatively broad, about two and one-half times the greatest diameter of the scape.

Pronotum dark brown, sparsely pruinose. Mesonotum grey, patterned with darker grey and brown ; præscutum with the usual median stripe darker, especially on anterior half, its posterior third conspicuously bordered by black ; a similar blackened sublateral line at suture, the usual lateral præscutal stripes poorly indicated ; centres of scutal lobes darkened ; scutellum light reddish yellow, darkened medially at base ; postnotum light grey pruinose on cephalic half, blackened behind. Pleura grey,

striped longitudinally with black, especially as a narrow dorsal stripe from the fore coxæ to the anterior margin of the pleurotergite, crossing the anepisternum and pteropleurite; ventral sternopleurite similarly blackened, forming a lower stripe. Halteres long and slender, blackened, the base of stem and apex of knob restrictedly obscure yellow. Legs with the coxæ dark brown; trochanters a little brightened; femora obscure yellow, with a narrow but conspicuous black ring that is nearly apical in position; tibiæ and basitarsi brownish yellow, the tips more narrowly blackened; remainder of tarsi black. Wings greyish subhyaline, heavily dotted with circular brown areas along all veins and in the centres of all cells; stigmal area oval, brownish yellow, similarly variegated with brown dots; cord and outer end of cell 1st M_2 with somewhat larger darkened spots; veins brown, Sc more yellow. Venation: Sc_1 ending just beyond origin of Rs , Sc_2 only a short distance from its tip, lying just basad of origin of Rs ; inner end of cell 1st M_2 strongly arcuated so that $r-m$ is at near mid-length of the cell; $m-cu$ gently sinuous, lying more than twice its length before the fork of M .

Abdomen brownish black, the central portions of the segments paling to obscure yellow, the posterior borders darkened; outer segments more uniformly infuscated. Ovipositor with all valves straight and slender.

Hab. Peru (Junin).

Holotype, ♀, Huasahuasi, Tarma, altitude 2800 metres, April 13, 1940 (*Woytkowski*).

The most similar species is *Limonia* (*Dicranomyia*) *smythiana*, sp. n., likewise from the high mountains of Peru. The present fly differs in all details of coloration of the body, legs and wings, and in the venation.

Limonia (*Dicranomyia*) *anax*, sp. n.

Size large (wing over 11 mm.); general coloration reddish yellow, the præscutum with four dark brown stripes, the intermediate pair narrowly separated by a capillary grey line; scutellum with a dark line on either side of the pale central portion; pleura buffy, with a broad brownish-black longitudinal stripe; halteres with dark brown knobs; legs obscure yellow; wings narrow, yellow, restrictedly patterned with brown; Sc_2 near tip

of Sc_1 ; abdominal tergites dark brown, variegated with yellow; sternites yellow, the lateral borders narrowly darkened; male hypopygium with the ninth tergite conspicuously emarginate; rostrum small, with the spines unequal, separate at base.

Male.—Length about 8–9 mm.; wing 11.5–12.5 mm.

Female.—Length about 11 mm.; wing 13 mm.

Rostrum and palpi black. Antennæ with the scape obscure yellow, darkened outwardly; remainder of organ passing through brown to brownish black; flagellar segments oval, the outer ones long-oval, the verticils subequal in length to the segments; terminal segment about one-fifth longer than the penultimate. Head greyish brown; anterior vertex narrow.

Pronotum buffy, dark brown medially on posterior portion. Mesonotal præscutum reddish yellow, with four distinct dark brown stripes, the intermediate pair separated only by a capillary grey vitta; scutal lobes brownish black, the median area broadly pale; scutellum brownish yellow, traversed by two narrow brownish black lines that converge posteriorly; mediotergite brownish grey. In some specimens the dark lines on the scutellum are more extensive, restricting the pale ground to a narrow central line and to reduced lateral margins; in still other specimens the pale median præscutal vitta is so restricted as to be little apparent. Pleura buffy, with a broad conspicuous brownish-black longitudinal stripe extending from the propleura to the pleurotergite, widest and most intense on the anepisternum; sternopleurite more weakly darkened. Halteres with stem long, obscure yellow, knob dark brown. Legs with the coxæ and trochanters greenish testaceous, the fore coxæ weakly darkened at base; remainder of legs obscure yellow, the outer tarsal segments passing into brown. Wings narrower than usual; ground-colour yellow, restrictedly patterned; a brown seam in axillary region and along more than the basal half of vein Cu ; still narrower dark seams along cord, outer end of cell 1st M_2 , both ends of the yellow stigma, and as a narrow seam on outer portion of vein M ; outer veins more or less distinctly darkened, especially on the veins themselves; costal cell more or less distinctly infumated; veins yellow, darker in the infuscated portions. Venation: Sc_1

ending just before origin of Rs , Sc_2 near its tip; Rs about one-third to one-half longer than the basal section of R_{4+5} ; $m-cu$ a short distance before the fork of M .

Abdominal tergites dark brown, the extreme cephalic-lateral angles and narrow posterior borders of the segments reddish yellow; sternites yellow, the lateral margins narrowly dark brown, broken at posterior borders; hypopygium yellow, the basistyles darker, the ventral

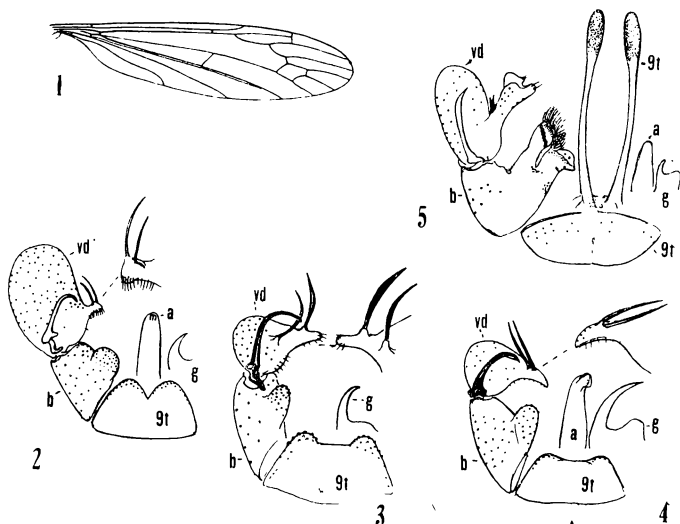


Fig. 1.—*Limonia (Dicranomyia) smythiana*, sp. n.; venation.
 Fig. 2.—*Limonia (Dicranomyia) anax*, sp. n.; male hypopygium.
 Fig. 3.—*Limonia (Dicranomyia) latispina*, sp. n.; male hypopygium.
 Fig. 4.—*Limonia (Dicranomyia) scimitar*, sp. n.; male hypopygium.
 Fig. 5.—*Limonia (Dicranomyia) diura*, sp. n.; male hypopygium.

(Symbols: *a*, aedeagus; *b*, basistyle; *g*, gonapophysis;
t, 9th tergite; *vd*, ventral dististyle.)

dististyle light yellow. Ovipositor with valves long and nearly straight. Male hypopygium (fig. 2) with the ninth tergite, *9t*, conspicuously notched medially, the lobes obtuse. Basistyle, *b*, with the ventro-mesal lobe sub-basal in position, nearly globular in outline. Dorsal dististyle a gently curved rod, the tip subobtuse. Ventral dististyle, *vd*, fleshy, considerably larger than the basistyle;

rostral prolongation small, with two unequal rostral spines, the longest far out near tip of rostrum, which slopes off precipitously beyond it; inner spine about four-fifths as long, the spines distinctly separate at base. Gonapophyses, *g.* with mesal-apical lobe a gently curved pale blade.

Hab. Peru (Junin).

Holotype, ♂, Huasahuasi, Tarma, altitude 2800 metres, April 20, 1940 (*Woytkowski*). *Allotopotype*, ♀, April 24, 1940. *Paratopotypes*, 2 ♂♂, April 10–20, 1940.

Limonia (*Dicranomyia*) *anax* is readily told from all other large-sized regional species of the subgenus by the narrow wings, distinctive body-coloration, and the structure of the male hypopygium. Among the described species it is most similar to *L. (D.) sanctæ-cruzæ* Alexander, of southern Argentina and Chile, but the resemblance is not particularly close.

Limonia (Dicranomyia) ariadne, sp. n.

General coloration dark grey, the præscutum patterned with brown; antennæ black throughout; halteres long, stem yellow, knob dark brown; legs black, the femoral bases paler; wings whitish subhyaline, with a pale brownish-grey reticulated pattern, the individual areas appearing as transverse dashes in all the cells, but with those at mid-length of wing tending to line into almost complete but very narrow bands; *m-cu* close to fork of *M*; male hypopygium with the ventral dististyle small, the two rostral spines long and gently curved, subequal in size.

Male.—Length about 6 mm.; wing 7 mm.

Rostrum grey; palpi black. Antennæ brownish black throughout; flagellar segments oval, of almost uniform size with the exception of the last, which is about one-third longer than the penultimate. Head dark grey.

Pronotum dark grey. Mesonotum grey, the præscutum with brown stripes, including an intermediate pair that are longer and almost confluent, together with short, incomplete lateral areas. Pleura uniformly grey. Halteres relatively long, stem yellow, knob dark brown. Legs with the coxæ dark grey; trochanters obscure yellow; femora brownish black, the bases obscure yellow, most extensive

on the hind pair ; tibiae and tarsi black. Wings whitish subhyaline, with a pale but conspicuous brownish-grey pattern that is reticulately distributed, with narrow transverse dashes in all cells ; at mid-length of wing the individual dashes are in alignment so that almost complete crossbands are formed ; stigma restricted in area ; extreme wing-base yellow ; veins brown, brightened at wing-base. Venation : *Sc* relatively short. *Sc*₁ ending opposite origin of *Rs*, *Sc*₂ far from its tip ; *R*₂ and free tip of *Sc*₂ in transverse alignment ; cell 1st *M*₂ nearly as long as vein *M*₁₊₂ beyond it ; *m-cu* variable in position, in the left wing of type about one-third its length beyond fork of *M*, in the right wing only about one-half this distance.

Abdomen dark grey ; hypopygium dark. Male hypopygium with the caudal border of ninth tergite broadly emarginate, the lobes low and obtuse. Ventral dististyle very small, its area only about one-half that of the basistyle ; rostral prolongation conspicuous, provided with two long curved spines that are subequal in length to the total length of the prolongation, placed close together on the outer third ; spines gently curved, subequal in size. Dorsal dististyle a strongly curved black sickle. Gonapophyses with mesal-apical lobe appearing as a nearly straight blackened spine, the extreme tip out-curved.

Hab. Peru (Junin).

Holotype, ♂, Huacapistana, Tarma, altitude 3600-5400 feet, February 10, 1940 (*Woytkowski*).

Limonia (*Dicranomyia*) *ariadne* is most similar to *L. (D.) trinitatis* Alexander, of Cuba, differing especially in the large size and in the structure of the male hypopygium, where every detail is distinct in the two species.

Limonia (*Dicranomyia*) *latispina*, sp. n.

Size large (wing about 9 mm.) ; general coloration yellowish brown, the præscutum with three darker brownish-grey stripes ; pleura buffy yellow, unmarked ; wings brownish yellow, the more intensely yellow stigma poorly defined ; *m-cu* beyond the fork of *M* ; male hypopygium with the ventral dististyle unusually small, with two separated rostral spines that are conspicuously flattened, blade-like.

Male.—Length about 8–8.5 mm. ; wing 9–9.5 mm.

Rostrum light yellow ; palpi dark brown. Antennæ black ; flagellar segments oval to long-oval, the segments constricted at the incisures, the more basal ones with short pale pedicels ; verticils relatively short ; terminal segment about one-fourth longer than the penultimate. Head buffy grey ; anterior vertex a little wider than the diameter of scape.

Pronotum long, yellowish brown. Mesonotum yellowish brown, the præscutum with three darker brownish grey stripes, the median one slightly split behind, the lateral pair less distinct ; scutal lobes weakly darkened ; posterior sclerites of notum pale yellow. Pleura buffy yellow, unmarked. Halteres dusky, the stem relatively long. Legs with the coxæ and trochanters greenish yellow ; remainder of legs obscure yellow, the terminal tarsal segments darkened. Wings with a brownish-yellow tinge, the stigma poorly indicated, more intensely yellow ; veins pale brown, *Sc* more yellow. Venation : *Sc*₁ ending opposite origin of *Rs*, *Sc*₂ a short distance from its tip ; *m-cu* shortly beyond fork of *M*.

Abdomen long ; tergites brown, basal sternites yellow, the outer segments darkened ; hypopygium yellow. Male hypopygium (fig. 3) with the tergite, *9t*, large, narrowed outwardly, the median area of the caudal border transverse, the lateral angles produced into low setiferous lobes. Basistyle, *b*, long, with a conspicuous simple ventro-mesal lobe. Dorsal dististyle a long curved sclerotized sickle, equal in length to the ventral dististyle. Ventral dististyle, *vd*, unusually small, its area much less than that of basistyle ; rostral prolongation conspicuous, pale, its tip broadly obtuse ; two widely separated rostral spines from low tubercles, both spines conspicuously flattened, the outermost especially so. Gonapophyses, *g*, with the mesal-apical lobe long and conspicuous, only gently curved.

Hab. Peru (Junin).

Holotype, ♂, Huasahuasi, Tarma, altitude 2800 metres, April 3, 1940 (*Woytkowski*). *Paratopotypes*, several ♂♂.

In the structure of the male hypopygium, *Limonia* (*Dicranomyia*) *latispina* is entirely different from other described species. In some respects it suggests forms

like *L. (.D) errabunda* Alexander and *L. (.D.) repentina* Alexander, but is quite distinct.

Limonia (Dicranomyia) scimitar, sp. n.

General coloration grey, the præscutum with a broad, dark brown, median stripe, the lateral stripes reduced; antennæ black throughout; wings with a greyish tinge, the oval stigma pale brown, a little darker than the ground; *Sc* short, *Sc*₁ long, subequal to *Rs* or to the basal section of *R*₄₊₅; male hypopygium with the ventral dististyle small, with two long black rostral spines; mesal-apical lobes of gonapophyses of unusual size, appearing as long sword-shaped blades.

Male.—Length about 5.5–7 mm.; wing 6–7.5 mm.

Rostrum and palpi black. Antennæ black throughout; flagellar segments oval, becoming more elongate outwardly; verticils subequal to the segments. Head brownish grey, the anterior vertex clearer grey, with a median black line; anterior vertex nearly twice the diameter of scape.

Pronotum brown medially, grey on sides. Mesonotum brownish grey, the præscutum with a broad, dark brown, median stripe that does not reach the suture; lateral stripes feebly indicated to almost obsolete, the lateral præscutal borders light grey; scutal lobes darkened, the median area pale; posterior sclerites of notum grey. Pleura grey, the ventral sternopleurite somewhat darker. Halteres dusky. Legs with the coxæ brownish grey; trochanters obscure yellow; remainder of legs dark brown, the tarsi passing into black. Wings with a greyish tinge, the oval stigma pale brown, a little darker than the ground; veins brown. Venation: *Sc* short, *Sc*₁ ending a short distance before origin of *Rs*, *Sc*₂ far from its tip, *Sc*₁ subequal in length to *Rs* or basal section of *R*₄₊₅; *m-cu* shortly before the fork of *M*.

Abdomen dark brown, sparsely pruinose; hypopygium somewhat brightened. Male hypopygium (fig. 4) with the caudal margin of the ninth tergite, *9t*, slightly emarginate, the lateral lobes low to very low. Basistyle, *b*, relatively long, much larger than the ventral dististyle, its ventro-mesal lobe simple. Dorsal dististyle a stout, gently curved rod, the tip acute. Ventral dististyle, *vd*, with the body small, the rostral prolongation long, compressed, with two very long, somewhat flattened

spines, the outermost from a small tubercle, the inner spine at its base, sessile. Gonapophyses, *g*, with the mesal-apical lobe of unusual size, appearing as a long sword-shaped blade that is directed laterad and caudad.

Hab. Peru (Junin).

Holotype, ♂, Huasahuasi, Tarma, altitude 2800 metres, April 10, 1940 (Woytkowski). *Paratopotypes*, several ♂♂, April 10–22, 1940.

Limonia (*Dicranomyia*) *scimitar* superficially resembles *L. (D.) mutata* Alexander, of Mount Roraima, Venezuela, but differs from this, as well as from all other regional species, by the unusual lobes of the gonapophyses of the male hypopygium. The somewhat flattened rostral spines suggest the condition found in *L. (D.) latispina*, sp. n., and the two flies appear to be closely allied.

Limonia (*Dicranomyia*) *diura*, sp. n.

Allied to *divisa*; general coloration reddish brown; halteres very long; wings weakly tinged with brownish yellow, the oval stigma a little darker; *Sc* short, *Sc*₁ long; male hypopygium very complex in structure; ninth tergite on ventral face produced caudad into two long pale rods that are weakly dilated into darkened clubs at their tips; ventro-mesal lobe of basistyle complex; rostral prolongation of ventral dististyle expanded outwardly.

Male.—Length about 6.5–7 mm.; wing 6.8–7 mm.

Rostrum ochreous yellow; palpi black. Antennæ with the scape brownish yellow, pedicel and flagellum black; flagellar segments oval, the terminal one elongate, more than one-half longer than the penultimate. Head brownish grey; anterior vertex wide, the eyes relatively small.

Thoracic notum almost uniformly reddish brown, without distinct markings; pleura more testaceous yellow. Halteres very long, infuscated, the base of stem paler. Legs with the coxæ and trochanters yellow; femora obscure yellow; tibiæ and tarsi passing into dark brown or brownish black. Wings with a weak brownish-yellow tinge, the small oval stigma a little darker brown; prearcular field more yellowish; veins brown, more flavous in the prearcular field. Venation: *Sc* short, *Sc*₁ ending some distance before the origin of *Rs*, *Sc*₂ far from its tip,

Sc_1 alone subequal in length to the arcuated Rs ; cell 1st M_2 small; $m-cu$ about one-half its length before the fork of M .

Abdominal tergites dark brown; sternites yellow; subterminal segments more infuscated; male hypopygium large, blackened on basal portions, the remainder yellow. Male hypopygium (fig. 5) with the tergite, 9t, transverse, the cephalic border more convexly rounded than the caudal margin, black, bordered caudally by pale; from beneath the tergite arise two elongate pale rods that extend caudad beyond all other elements of the hypopygium, at apex each expanded into an elongate-oval blackened club. Basistyle, b , small, the ventromesal lobe very complex, bearing in addition to numerous apical setæ and smaller lateral groups of bristles an oblique row of about seven major setæ on outer lobe and a single bristle of unusual length, being nearly two-thirds the length of the entire lobe. Dorsal dististyle only gently curved, the tip acute. Ventral dististyle, vd , relatively small, its area less than the total area of basistyle; rostral prolongation blackened, irregularly expanded and weakly bilobed at apex; rostral spines small, two in number, placed near base of prolongation. Gonapophyses small, pale; mesal-apical lobe nearly straight. Aedeagus small and simple.

Hab. Peru (Junin).

Holotype, ♂, Huacapistana, Tarma, altitude 3600–5400 ft. March 14, 1940 (Woytkowski). *Paratopotype*, ♂, March 12, 1940.

Limonia (*Dicranomyia*) *diura* is readily distinguished from all described species of the subgenus by the remarkable structure of the male hypopygium. There are now somewhat numerous species in the Neotropical fauna that centre about *divisa*, all more or less similar in general appearance yet differing remarkably in the structure of the male hypopygium. Such species include *L. (D.) boliviana* Alexander, *L. (D.) divisa* Alexander, *L. (D.) filicauda* Alexander, *L. (D.) longiventris* Alexander, and *L. (D.) similissima* Alexander.

Limonia (*Dicranomyia*) *apposita*, sp. n.

Allied to *longiventris*; general coloration of thorax medium brown; halteres very long; wings with a strong

dusky tinge, Sc_1 very long ; male hypopygium with the ventro-mesal lobe of basistyle complex ; rostral prolongation of ventral dististyle long and slender, especially on distal third ; rostral spines on about the basal third, arising from a common tubercle.

Male.—Length about 5.5–6 mm. : wing 6–6.3 mm.

Female.—Length about 6.5 mm. ; wing 7 mm.

Rostrum pale brown ; palpi black. Antennæ black ; flagellar segments oval to elongate. Head brown, passing into greyish brown behind.

Pronotum dark brown. Mesonotum almost uniformly medium brown, the pleura slightly paler. Halteres very long, brownish black ; stem on distal half with long conspicuous setæ. Legs with coxæ and trochanters testaceous yellow ; remainder of legs dark brown to brownish black. Wings with a strong dusky tinge, the oval stigma still darker but inconspicuous ; veins dark brown. Venation : Sc_1 ending about opposite or just beyond the origin of R_s , Sc_2 very far from its tip, Sc_1 alone longer than R_s ; $m-cu$ close to the fork of M .

Abdomen brownish black, the sternites slightly paler. Male hypopygium (fig. 6) with the tergite, 9t, transverse, the caudal margin truncate or virtually so. Basistyle, b , with the ventro-mesal lobe complex, including two expanded lobes, the more basal one wider, margined apically with long setæ, those at distal end of row becoming shorter and more spinous ; outer lobe longer but narrower, pale, tufted, with long curled setæ. Dorsal dististyle a long curved rod, constricted at base, the tip extended into a long straight point. Ventral dististyle, vd , with the prolongation long, the distal third very slender, with a strong seta at the point of narrowing ; rostral spines at near one-third the length of the prolongation, arising from a common basal tubercle. Gonapophyses, g , with mesal-apical lobe short, strongly curved at tip. *Æ*deagus slender, on outer central portion provided with bulbous setoid structures, much as in *malitiosa*, sp. n.

Hab. Peru (Junin).

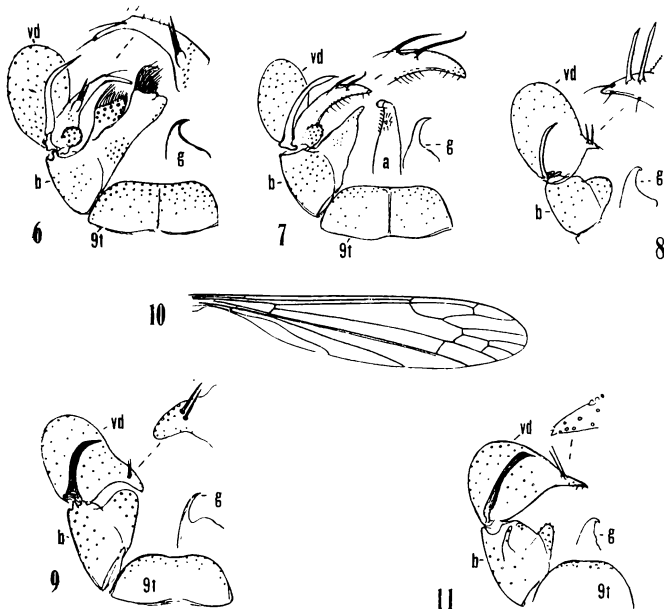
Holotype, ♂, Huacapistana, Tarma, altitude 3600–5400 feet, March 3, 1940 (*Woytkowski*). *Allotopotype*, ♀, March 10, 1940. *Paratopotype*, 1 ♂, February 29, 1940.

Limonia (*Dicranomyia*) *apposita* is quite distinct from other species of the subgenus in South America having

the male hypopygium complex in structure. It is evidently allied to *L. (D.) malitiosa*, sp. n., and *L. (D.) longiventris* (Alexander), yet with the male hypopygium entirely different.

Limonia (Dicranomyia) malitiosa, sp. n.

Allied to *longiventris*; general coloration of thorax yellow, unpatterned; halteres and abdomen elongate; .



- Fig. 6.—*Limonia (Dicranomyia) apposita*, sp. n.; male hypopygium.
 Fig. 7.—*Limonia (Dicranomyia) malitiosa*, sp. n.; male hypopygium.
 Fig. 8.—*Limonia (Dicranomyia) labecula*, sp. n.; male hypopygium.
 Fig. 9.—*Limonia (Dicranomyia) atrostyla*, sp. n.; male hypopygium.
 Fig. 10.—*Limonia (Dicranomyia) submutata*, sp. n.; venation.
 Fig. 11.—The same; male hypopygium.

(Symbols: *a*, ædeagus; *b*, basistyle; *g*, gonapophysis
t, 9th tergite; *vd*, ventral dististyle.)

male hypopygium with the ventro-mesal lobe of basistyle a relatively simple blackened lobe that narrows to the subacute apex; rostral spines from a common plate or

low flange, subappressed; ædeagus toward apex with numerous pale setoid appendages with bulbous ends.

Male.—Length about 7.5 mm.; wing 8 mm.

Rostrum yellow; palpi black. Antennæ black, the scape obscure yellow; basal flagellar segments oval, soon passing into elongate-cylindrical, the verticils shorter than the segments. Head ochreous; anterior vertex relatively wide, about twice the diameter of scape.

Thorax uniformly yellow to brownish yellow, unmarked. Halteres very long and slender, black throughout. Legs with the coxæ and trochanters yellow; femora dark brown, the tips very insensibly paler; tibiæ and tarsi brownish black. Wings with a weak brownish tinge, the oval stigma slightly darker brown; veins dark brown. Venation: Sc_1 ending about opposite origin of Rs , Sc_2 far from its tip, so that Sc_1 alone exceeds Rs ; $m-cu$ near fork of M .

Abdomen elongate; tergites dark brown, sternites yellow. Male hypopygium (fig. 7) with the tergite, $9t$, transverse, the caudal border truncate or nearly so. Basistyle, b , with the ventro-mesal lobe conspicuous, blackened, narrowed to a subacute tip. Dorsal dististyle a gently curved rod, the tip acute. Ventral dististyle, vd , dusky, of moderate size, in total area not greatly different from the basistyle; main body of style loosely joined to the rostral prolongation, the latter a gently curved flattened blade bearing the spines at beyond mid-length; spines arising from a common raised plate or flange, subappressed, the outer one more sinuous; a small setiferous lobe on mesal face of prolongation at base. Gonapophyses, g , with mesal-apical lobe erect, pointed. Ædeagus, a , toward apex with numerous pale setoid appendages that terminate in small bulbous ends.

Hab. Peru (Junin).

Holotype, ♂, Huasahuasi, Tarma, altitude 2800 metres, April 10, 1940 (Woytkowski).

Limonia (*Dicranomyia*) *malitiosa* is still another of rather numerous species that are allied to *L. (D.) longiventris* Alexander, *L. (D.) simillima* Alexander and others, well distinguished from these other forms by the structure of the male hypopygium. The bulbous-tipped setæ of the ædeagus are found in other allied species.

Limonia (Dicranomyia) labecula, sp. n.

General coloration uniformly ochreous, without markings; antennæ with scape yellow, the remaining segments dark brown; legs uniformly yellow; wings very pale yellow, the stigmal darkening reduced to a seam along vein R_2 ; a faint dark seam along cord, best evidenced by a deepening in the colour of the veins; cell 1st M_2 open; male hypopygium with the rostral prolongation of the ventral dististyle very small, pointed at tip; rostral spines two, separate at base.

Male.—Length about 5.5 mm.; wing 6.5 mm.

Rostrum ochreous, pendant, relatively short; palpi brown. Antennæ with the scape yellow, pedicel and flagellum dark brown; flagellar segments oval, the verticils subequal in length to the segments. Head ochreous yellow; anterior vertex relatively wide, about twice the diameter of the scape.

Thorax uniformly ochreous to reddish ochreous, without markings. Halteres uniformly pale yellow, stem short. Legs uniformly yellow, the terminal three tarsal segments dark brown. Wings with a very pale yellow tinge; stigma reduced to a linear seam on R_2 ; a very narrow and restricted dark seam along cord, indicated especially by the darkened veins; remaining veins pale yellow. Venation: Sc_1 ending a short distance before origin of Rs , Sc_2 a great distance from its tip, at near mid-length of cell; Rs nearly straight, almost three times the arcuated basal section of R_{4+5} ; cell 1st M_2 open, both m and the basal section of M_3 atrophied, leaving the distal section of the latter suspended in the membrane; in one wing of the type this last-mentioned element at proximal end curves slightly toward M_{3+4} , indicating the possibility of normal occurrence of this section of the vein, in which case the cell would be open by the atrophy of m ; cell 2nd A wide.

Abdomen yellow, the central portion of tergites narrowly darkened; hypopygium yellow. Male hypopygium (fig. 8) with the basistyle, b , small, its ventromesal lobe simple. Dorsal dististyle a slender, gently curved blade, very gradually narrowed to an acute point. Ventral dististyle, vd , fleshy, much more extensive than the basistyle; rostral prolongation very small, termi-

nating in a subacute sclerotized point ; rostral spines two, of moderate length, slightly separated at bases. In the unique type, one dististyle shows three such spines, and it cannot be affirmed as to whether this is an abnormal or a variable character. Gonapophyses, *g*, with mesal-apical lobe erect, gently decurved at apex.

Hab. Peru (Junin).

Holotype, ♂, Huacapistana, Tarma, altitude 3600–5400 ft., March 12, 1940 (*Woytkowski*).

Limonia (*Dicranomyia*) *labecula* is most similar to *L. (D.) aurantiothorax* Alexander, of northern Panama, which differs in the unpatterned wings and in the distinct venation. In the open cell 1st M_2 the present fly resembles the Chilean *L. (D.) cautinensis* Alexander and *L. (D.) flavaperta* Alexander, both differing in all other respects.

Limonia (*Dicranomyia*) *atrostyla*, sp. n.

Belongs to the *brevivena* group ; general coloration clear grey, the præscutum with four narrow dark brown stripes ; antennæ black throughout ; wings with basal fourth clear light yellow, the outer portion greyish hyaline ; stigma scarcely darker ; cell 1st M_2 open by the atrophy of *m* ; male hypopygium with the tergite and basistyles black, the ventral dististyle abruptly light yellow, contrasting conspicuously ; male hypopygium with apex of rostral prolongation obtusely rounded.

Male.—Length about 4–4.5 mm. ; wing 5–5.5 mm.

Rostrum black, sparsely pruinose ; palpi black. Antennæ black throughout ; flagellar segments short-oval, the outer segments passing to long-oval ; verticils relatively short. Head dark grey.

Thorax clear grey pruinose, the præscutum with four narrow dark brown stripes, the intermediate pair separated only by a capillary line of the ground ; scutal lobes similarly darkened ; scutellum and medio-tergite dark, only slightly pruinose. Pleura dark grey. Halteres with stem yellow, knob dark brown. Legs with the coxæ dark brown, the tips restrictedly yellow ; trochanters yellow ; femora yellow basally, passing into brownish yellow, the tips narrowly dark brown ; tibiæ and basitarsi pale brown, the tips narrowly blackened ; remainder of tarsi

dark brown. Wings with the basal fourth clear light yellow, including the veins; remainder of disk greyish hyaline, deepest in the apical cells; stigma very pale, scarcely darker than the ground; veins brown except as indicated. Venation: Sc very short, Sc_1 ending about two-thirds the length of R_s before the origin of this latter vein, Sc_2 far from its tip; R_s short and arcuated, about one-fourth longer than the basal section of R_{4+5} ; cell 1st M_2 open by the atrophy of m ; $m-cu$ subequal to the distal section of Cu_1 , close to the fork of M .

Abdominal tergites brownish black, the colour including the tergite and the basistyles of the male hypopygium, which contrast strikingly with the pale yellow ventral dististyle; basal sternites obscure brownish yellow. Male hypopygium (fig. 9) with the caudal margin of tergite convexly rounded, the extreme median portion a trifle emarginate. Basistyle, b , small, with large ventro-mesal lobe. Dorsal dististyle a gently curved rod, the long tip acute. Ventral dististyle, vd , of moderate size, its area about equal to the total of the basistyle; rostral prolongation stout, its tip obtuse; rostral spines black, subequal in length, slightly separated at bases. Gonapophyses, g , with mesal-apical lobe long and slender, gently curved.

Hab. Peru (Junin).

Holotype, ♂, Huacapistana, Tarma, altitude 3600–5400 ft., March 7, 1940 (*Woytkowski*). *Paratopotype*, ♂, with the type.

The nearest regional allies are *Limonia* (*Dicranomyia*) *ambigua* Alexander, of southern Chile and Patagonia, and *L. (D.) brevivena torrida* Alexander, of the West Indies, both of which differ in the coloration, details of venation, and the structure of the male hypopygium. The abrupt contrast in colour of the basistyle and ventral dististyle of the male hypopygium is quite different from the condition obtaining in the two species listed.

Limonia (Dicranomyia) submutata, sp. n.

Belongs to the *tristis* group; general coloration dark grey, the præscutum and the scutal lobes patterned with brown; wings with a weak brown tinge, the stigma a little darker; male hypopygium with the caudal margin

of tergite convexly rounded; basistyle with an elongate finger-like lobe on face of basistyle; ventral dististyle relatively large, the outer margin sloping directly to the nearly acute blackened rostrum.

Male.—Length about 5·5–6·5 mm.; wing 6–7 mm.

Female.—Length about 6–6·5 mm.; wing 6·5–7 mm.

Rostrum dark grey; palpi black. Antennæ black throughout; flagellar segments oval, the terminal segment considerably larger than the penultimate. Head grey; anterior vertex narrow.

Pronotum and mesonotum dark grey, the præscutum with a more or less distinct brown median stripe, usually broad and conspicuous; lateral stripes less evident; scutal lobes similarly infuscated. Pleura grey; dorso-pleural membrane obscure yellow. Halteres relatively long, stem light yellow, knob dark brown. Legs with the coxæ brownish testaceous, paler apically; trochanters light yellow; remainder of legs dark brown. Wings (fig. 10) with a weak brown tinge, the small short-oval stigma slightly darker brown; veins brown. Venation: Sc_1 ending a short distance beyond origin of R_s , Sc_2 near its tip; cell 1st M_2 somewhat variable in length, in cases shorter than vein M_{1+2} beyond it, in other specimens subequal to or even longer than this vein; $m-cu$ before fork of M .

Abdomen brownish black, the hypopygium reddish brown. Male hypopygium (fig. 11) with the caudal margin of tergite convexly rounded. Basistyle, b , with the finger-like lobe on face elongate; more distally a group of about four setæ from a slightly developed tubercle. Dorsal dististyle a relatively slender blackened rod, the tip an acute spine. Ventral dististyle, vd , relatively large, the outer margin sloping directly to the nearly acute blackened rostrum; rostral spines separate, but placed very close together, from very small tubercles; spines very slightly unequal in length, the shortest a trifle longer than the rostrum beyond it. Gonapophyses g , with mesal-apical lobe relatively stout.

Hab. Peru (Junin).

Holotype, ♂, Satipo. Jauja, altitude 800–900 metres, January 15, 1940 (*Paprzycki*). *Allotopotype*, ♀, pinned with type. *Paratopotypes*, 20 ♂♀, December 31, 1939, to January 20, 1940.

The nearest regional ally is *Limonia* (*Dicranomyia*) *mutata* Alexander, which differs conspicuously in the structure of the male hypopygium, especially of the ventral dististyle, which has the body very small, the rostral portion correspondingly large and not sloping directly into the margin of the body, as in the present fly. The types of *mutata* were recorded as being from Brazil (Mount Roraima, 1932, *J. G. Myers*), but recent studies by Phelps * show that virtually all biological materials hitherto taken on the summit of Roraima were secured on the Venezuelan portion of the mountain, and should be credited to Venezuela.

Limonia (*Peripheroptera*) *rediviva*, sp. n.

Size large (wing, male, over 10 mm.); entire body polished black, without pruinosity; antennæ, halteres, and legs black throughout; wings with a strong brownish-yellow tinge, the cells of the basal two-fifths clearer yellow; costal vein and adjoining membrane dark brown; R_{1+2} jutting beyond level of R_2 and the free tip of Sc_2 as a long spur; inner ends of cells R_3 , R_5 , and 1st M_2 in transverse alignment.

Male.—Length about 7 mm.; wing 10.5 mm.

Rostrum and palpi black. Antennæ black throughout, short; flagellar segments cylindrical, the terminal segment about one-fourth longer than the penultimate; longest verticils considerably exceeding the segments. Head polished black.

Entire thorax polished black, without pruinosity. Halteres black. Legs black throughout. Wings with a strong brownish-yellow tinge, the cells of the basal two-fifths clearer yellow; the incrassated costal vein and adjacent membrane dark brown; stigmal area not differentiated; veins yellow, those comprising the arculus and anterior cord a trifle darker. Venation: Sc_1 ending opposite origin of R_s , Sc_2 far from its tip, at near mid-distance to arculus; R_s gently arcuated, a trifle longer than the basal section of R_{4+5} ; free tip of Sc_2 and R_2 in transverse alignment or with the former a trifle more

Phelps, William H., "The Geographical Status of the Birds collected at Mount Roraima," Biol. Soc. Venezolana Ciencias Naturales xxxvi. pp 83-95; 6 maps (1938).

basal, with a long spur of R_{1+2} jutting beyond this point ; inner ends of cells R_3 , R_5 , and 1st M_2 in transverse alignment ; cell 1st M_2 long and narrow, subequal to vein M_{1+2} beyond it ; *m-cu* more than one-half its length beyond the fork of M ; prearcular field moderately large ; cell 2nd A narrow, constricted just beyond the interanal cross-vein.

Abdomen entirely polished black.

Hab. Peru (Junin).

Holotype, ♂, Huacapistana, Tarma, altitude 3600–5400 ft., March 3, 1940 (*Woytkowski*).

Limonia (*Peripheroptera*) *rediviva* is entirely different from the other black-bodied species of large physical size, such as *L. (P.) prindlei* Alexander (Ecuador) and *L. (P.) vivas-berthieri* Alexander (Venezuela). The wing-pattern and venational details readily suffice to distinguish the species.

Limonia (*Peripheroptera*) *subamæna*, sp. n.

General coloration dull black ; præscutum yellowish grey, with three polished black stripes that are confluent behind, virtually obliterating the posterior interspaces ; median area of scutum broadly yellowish grey extended caudad on to the base of scutellum ; mediotergite uniformly black ; legs black, the femoral bases narrowly obscure yellow ; wings whitish subhyaline, conspicuously patterned with brown ; cell 1st M_2 unusually long, exceeding vein M_{1+2} beyond it ; abdomen black, the extreme caudal borders of segments weakly pruinose.

Female.—Length about 6.5–7 mm. ; wing 7.5–8 mm.

Rostrum black ; palpi brownish black. Antennæ black throughout ; flagellar segments oval. Head dull black ; anterior vertex relatively wide, about twice the diameter of scape.

Pronotum dull black. Mesonotal præscutum with the ground-colour yellowish grey, with three polished black stripes that are confluent behind, virtually obliterating the posterior interspaces and restricting the ground to the humeral and lateral portions ; scutal lobes polished black, the broad median area yellowish grey, the colour continued caudad on to the base of scutellum ; mediotergite uniformly black. Pleura black ; sternopleurite and meron heavily light grey pruinose ; dorsopleural

membrane dark. Halteres black, the base of stem obscure yellow. Legs with the coxæ and trochanters black; femora black, the bases very narrowly obscure yellow; remainder of legs black. Wings whitish subhyaline, conspicuously patterned with brown, including the stigma, broad seams on cord and outer end of cell 1st M_2 , and a postarcular area in bases of cells R and M ; wing-tip less intensely darkened, extending basad almost to the general level of outer end of cell 1st M_2 ; cell 2nd A extensively infuscated; veins yellowish brown, darker in the clouded areas. Venation: Sc_1 ending opposite origin of Rs , Sc_2 only moderately removed from its tip, at near two-thirds the length of vein; cell 1st M_2 very long, much longer than in *peramaena*, exceeding vein M_{1+2} beyond it.

Abdomen black, the extreme caudal borders of the segments weakly pruinose; genital segment black, the valves of ovipositor horn-coloured.

Hab. Peru (Huanuco).

Holotype, ♀, Piedras Grandes, altitude 3000 metres, November 26, 1937 (*Woytkowski*). *Paratopotype*, ♀, November 30, 1937.

Limonia (*Peripheroptera*) *subamaena* is very similar to *L. (P.) peramaena* Alexander, of Ecuador, differing especially in the details of coloration of the mesonotum and in the wing-venation, as the elongate cell 1st M_2 . In *peramaena* the præscutal black stripes are not confluent behind and the interspaces are distinct to the suture, while the pruinose area of the median scutal region extends caudad over the entire scutellum, further involving the basal half of the mediotergite.

Limonia (*Peripheroptera*) *croceibasis*, sp. n.

General coloration of mesonotum grey, the præscutum with three polished black stripes; pleura heavily grey pruinose, the ventral sternopleurite polished black; halteres with stem yellow, knob brownish black; legs black, the femoral bases narrowly deep yellow: wings with the ground colour pale yellow, the prearcular field light yellow; stigmal area of male conspicuously enlarged, brownish yellow, of female of normal size, brown; cord and outer end of cell 1st M_2 narrowly darkened

Male.—Length about 5.5–6.5 mm.; wing 6.5–8.5 mm.

Female.—Length about 6–6.5 mm. ; wing 6.2–7 mm.

Rostrum and palpi black. Antennæ black throughout ; flagellar segments oval, the longest verticils a little exceeding the segments ; terminal segment longer than the penultimate, the outer end a little pointed. Head brown, the orbits obscure grey.

Pronotum dull black, grey on sides. Mesonotal præscutum yellowish grey, with three polished black stripes, the median one wider ; scutal lobes extensively blackened ; scutellum black, the surface pruinose ; postnotum pruinose, especially on cephalic and central portions. Pleura heavily grey pruinose, the ventral sternopleurite polished black ; ventral portion of anepisternum a trifle polished. Halteres with stem yellow, knob brownish black. Legs with coxæ black, the surface sparsely pruinose ; trochanters black ; remainder of legs black, the femoral bases narrowly but rather conspicuously deep yellow. Wings with the ground-colour pale yellow ; prearcular field light yellow, more extensive and brighter in male ; stigmal area of male conspicuously enlarged, brownish yellow ; costal border, cord, and outer end of cell 1st M_2 narrowly darkened, especially the cord where the veins are slightly thickened ; in female, stigma of normal size, medium brown ; cord and outer end of cell 1st M_2 narrowly darkened ; veins brown, yellow in the prearcular field. Venation : in male, Sc_2 at or before mid-length of Sc ; venation in stigmal area variable ; free tip of Sc_2 in cases some distance before R_2 , in other specimens closer to R_2 , with a short spur of R_{1+2} jutting beyond ; Rs short ; other elements of cord in approximate transverse alignment ; cell 2nd A constricted beyond the interanal cross-vein. In female, Sc_1 ends before origin of the short, arcuated Rs ; stigmal area and prearcular field of the more normal type of *Limonia*.

Abdomen black, the caudal margins of the segments narrowly more pruinose ; hypopygium dark.

Hab. Peru (Junin, Huanuco).

Holotype, ♂, Carpapata, Tarma. Junin, altitude 2600 metres, May 12, 1940 (*Woytkowski*). *Allotopotype*, ♀, May 9, 1940. *Paratypes*, 1 ♂, 1 ♀, Huasahuasi, Tarma, Junin, altitude 2800 metres, April 10–20, 1940 ; 1 ♂, 1 ♀, Piedras Grandes. Huanuco, altitude 3000 metres, September 18 to November 15, 1937 (*Woytkowski*).

Limonia (*Peripheroptera*) *croceibasis* is readily distinguished from other generally similar species by the colour of the body and wings. The most similar forms are *L. (P.) subandina* Alexander, of Argentina, and *L. (P.) angustifasciata* (Alexander), of Venezuela, both of which differ in all details of coloration.

Limonia (*Peripheroptera*) *trimelania*, sp. n.

General coloration of body reddish, with yellow pollen; rostrum obscure yellow; antennæ black throughout; mesonotal præscutum with three polished black areas, the cephalic one involving more than half the entire length of the usual median stripe, the lateral areas smaller; pleura reddish brown; knobs of halteres darkened; femora obscure reddish yellow, the tips blackened; wings with a strong yellow tinge, restrictedly patterned with brown; *Rs* and basal section of R_{4+5} arcuated; abdominal tergites obscure yellow, with a narrow dark brown median stripe that is interrupted at the posterior border of segments.

Female.—Length about 8 mm.; wing 10 mm.

Rostrum obscure yellow; palpi black. Antennæ black throughout; flagellar segments oval to long-oval; terminal segment pointed at apex. Head black, heavily yellowish grey pruinose, the central portion of posterior vertex with a darkened area.

Pronotum reddish. Mesonotal præscutum reddish, with three conspicuous polished black areas, the median one wide and conspicuous, including more than the cephalic half of the stripe, the posterior end paling to reddish; lateral stripes with about the cephalic half blackened, the remainder red; ground areas of præscutum heavily yellow pollinose; posterior sclerites of notum reddish, the scutal lobes a trifle darker; scutellum obscure brownish yellow. Pleura reddish brown, the posterior sclerites and pleurotergite golden yellow pollinose. Halteres with stem yellow, knob dark brown. Legs with coxæ and trochanters reddish yellow; femora obscure reddish yellow, the tips rather narrowly but conspicuously black, on the posterior legs involving about the distal tenth; tibiæ brownish black, the tips and all the

tarsi black. Wings with a strong yellow tinge, restrictedly patterned with brown at arculus, stigma. and, as a very narrow seam, at cord; outer end of cell 1st M_2 not or scarcely darkened; veins brown, more yellowish in the stigmal field, darker at cord. Venation: R_s and basal section of R_{4+5} arcuated; free tip of Sc_2 before the level of R_2 ; cell 1st M_2 long, subequal to vein M_3 beyond it; $m-cu$ just beyond the fork of M ; cell 2nd A slightly constricted beyond the interanal cross-vein.

Abdominal tergites obscure yellow, with a narrow dark brown median stripe that is slightly interrupted at the caudal margins of the segments; basal sternites obscure yellow, those of outer half of abdomen darker; genital segment black, the apex reddened; cerci small and slender.

Hab. Peru (Junin).

Holotype, ♀, Huacapistana, Tarma, altitude 3600–5400 feet, March 4, 1940 (*Woytkowski*).

Limonia (*Peripheroptera*) *trimelania* is closest to *L. (P.) trinigrina* Alexander, of Ecuador, differing in the large size, details of coloration of body and wings, and in the venation. Since the males in the subgenus *Peripheroptera* are invariably larger than the females, the male sex of the present fly should be found to be one of the largest and most striking members of the entire group.

Limonia (Rhipidia) juninensis, sp. n.

Allied to *domestica*; antennal flagellum uniformly darkened; thoracic pleura pale, with two narrow longitudinal dark-coloured stripes; femora yellow, with a relatively narrow, pale brown, subterminal ring; wings with the ground-colour yellow, restrictedly patterned with brown, these areas confined to the vicinity of the veins; stigmal area small; $m-cu$ some distance before fork of M ; male hypopygium with the rostral spines elongate.

Male.—Length about 5 mm.; wing 5.5–5.2 mm.; antenna about 1 mm.

Female.—Length about 6.5 mm.; wing 5.8 mm.

Rostrum and palpi brownish black. Antennæ black, only the apical pedicels of the flagellar segments obscure yellow; basal flagellar segments in male subpectinately

produced on one face, the outer segments elongate oval : in female, flagellar segments more regularly oval, the subpectinate nature not or but slightly evident. Head dark brownish grey.

Pronotum and ground-colour of mesonotum dark reddish brown, the lateral borders broadly, but gradually paler, more greyish brown, this colour including the broad præscutal margins, the lateral portions of scutal lobes, pleurotergite and lateral portions of mediotergite, together with the thoracic pleura underneath the wing-root ; the mesonotum thus shows a darkened median stripe on præscutum, and with the posterior sclerites chiefly dark brown, the median region of scutum and scutellum restrictedly pale. Pleura with the ground-colour pale, with two narrow longitudinal dark brown stripes, the interspaces sometimes darker than the ground. Halteres pale yellow throughout. Legs with coxæ pale yellow, their bases traversed by the ventral dark-coloured pleural stripe, most extensive on fore pair ; trochanters yellow ; femora obscure yellow, with a relatively narrow pale brown subterminal ring, slightly more extensive than the yellow apex ; tibiæ and tarsi yellow, the outer tarsal segments darkened. Wings with the ground-colour yellow, restrictedly patterned with brown, as follows :—Post-arcular ; at mid-length of cell *Sc* ; origin of *Rs* ; fork of *Sc* ; stigma ; a broken band along cord ; outer end of cell 1st M_2 , and conspicuous marginal spots at ends of all longitudinal veins, most extensive on vein 2nd *A*, smallest at tips of veins R_{4+5} and M_{1+2} ; stigmal area small, not ocelliform as in *domestica* ; veins yellow, dark in the patterned areas. Venation : *m-cu* from one-half to three-fourths its own length before the fork of *M*.

Abdomen obscure brownish yellow, the caudal borders of the segments very vaguely darkened ; hypopygium pale. Male hypopygium with the tergite transverse, the caudal margin very gently emarginate. Spines of the rostral prolongation of ventral dististyle very long, approximately equal in length to the entire prolongation, arising close together at near two-thirds the length of the prolongation.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, December 19, 1939 (*Paprzycki*). *Allotopotype*, ♀. *Paratopotype*, 1 ♂.

Limonia (*Rhipidia*) *juninensis* is most similar to *L. (R.) domestica* (Osten Sacken), differing in the small size, uniformly darkened antennæ, distinctive wing-pattern, and in the details of structure of the male hypopygium.