

Oriental Lauxaniidae (Diptera) Part 2

Fauna of the Lauxaniidae of Viet Nam

MITSUHIRO SASAKAWA*

Abstract : The Vietnamese fauna of lauxaniid flies is studied for the first time. Of the 75 species ascertained, 34 species are new to science and 40 species are newly recorded. A new subgenus, *Notiosapromyza*, of the genus *Sapromyza* is described. Keys to the species of the genera *Minettia*, *Sapromyza* and *Homoneura* are given. Male genitalia are illustrated for all new species. Additionally, three species of *Homoneura* are recorded from Cambodia for the first time.

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Key words : Taxonomy, Diptera, Lauxaniidae, Viet Nam, new species, newly recorded species

The present paper deals with the Vietnamese fauna of the lauxaniid flies based upon the specimens collected by myself and Dr. Y. Yoshiyasu in the northern part of country in June 1999 and by the staff of the Bishop Museum, Honolulu, in 1960 and 1961. It consists of 75 species (21 species belong to the Lauxaniinae and 54 to the Homoneurinae), of which 34 species are new to science : 1 species belongs to the genus *Chaetolauxania*, 1 to *Minettia*, 7 to *Sapromyza*, and 25 to *Homoneura*.

Only three species, *Sciasmomyia meijerei* Hendel (1907), *Trigonometopus (Tetroxyrhina) tinctipennis* de Meijere (1924) and *Homoneura (Homoneura) trypetoptera* (Hendel, 1908), have been known to occur in Viet Nam (Shewell, 1977). Forty species are newly recorded herein from Viet Nam. It is represented the dominancy of the genus *Homoneura* in Viet Nam as well as the other Oriental countries.

Abbreviations: Abbreviations for certain setae or bristles, wing vein indices, leg segments, and abdominal segments are followed after my previous papers (1992, 1998). Collector's names are abbreviated to the initials, excepting the data of new species: J. G. -J. L. Gressitt, R. L. -R. E. Leech, L. Q. -L. W. Quate, M. S. -M. Sasakawa, N. S. -N. R. Spencer, C. Y. -C. M. Yoshimoto, Y. Y. -Y. Yoshiyasu.

Type depositories: The holotypes of new species collected by myself and Y. Yoshiyasu are deposited in the collection of the Osaka Museum of Natural History (Nagai Park, Osaka 546-0034), and those based on specimens borrowed from the Bishop Museum (Honolulu, Hawaii 96817-0916) are preserved in the Bishop collection.

Subfamily Lauxaniinae

1. *Steganopsis pupicola* de Meijere

Steganopsis pupicola de Meijere, 1910: 146.

A female specimen examined differs from the male type as follows: third antennal segment darkened on apical one-third (1/2 in male); katepisternum with dorsal margin before base of *stpl* white (entirely blackish brown in male); wing 1.7 mm in length, with costal margin pale brown (blackish brown in male); all tibiae pale brown and fore tibiae darkened on distal end, mid and hind tibiae each with a yellowish ring above dark distal apex; fore tarsus with second

* Professor Emeritus, Kyoto Prefectural University, Kyoto, 606-8522 Japan.

to fifth segments broader than those of mid and hind tarsi.

Specimen examined. 1 ♀, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.).

Distribution. Ceylon, Java, Viet Nam. New to Viet Nam.

2. *Melanopachycerina leucochaeta* (de Meijere)

Pachycerina leucochaeta de Meijere, 1914: 236.

This is the type-species for the genus, and is characterized by the long ocellar bristles, glossy black and ventrally broadened parafrontalia, a pair of whitish gray-dusted stripes just laterad of *dc*-rows, yellowish mid and hind tibiae and tarsi except for distal segments, and presence of two long posteroventral bristles on fore femur.

Specimen examined. 1 ♀, Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961 (N. S.).

Distribution. Java, Viet Nam. New to Viet Nam.

3. *Pachycerina decemlineata* de Meijere

Pachycerina decemlineata de Meijere, 1914: 236.

This species is characterized by the five pairs of dark brown, narrow stripes on testaceous mesoscutum (lateralmost stripe before or behind transverse suture is short), and two brown stripes on thoracic pleura.

Specimens examined. 1 ♀, Tam Dao, Vinh Phu, 18. VI. 1999 (M. S.); 3 ♂ & 17 ♀, Sa Pa, Lao Kai, 20-21. VI. 1999 (M. S.).

Distribution. Java, Viet Nam, Nepal. New to Viet Nam.

4. *Pachycerina flaviventris* Malloch (Fig. 1)

Pachycerina flaviventris Malloch, 1929: 20.

This shiny, testaceous species is distinct in having the ten narrow vittae on scutum (outermost postsutural vitta absent as in the type specimen, but two brown pleural vittae along dorsal margins of anepisternum and katepisternum rather distinct), four rows of *acr*, and absence of spots on protandrium, and asymmetric sclerites of aedeagus.

The dorsal longest hair on arista is as long as the width of third segment; wing is more yellow-tinged along costa than elsewhere as in *P. sexlineata* de Meijere (1914); fore femur is pale brown in an oval form before apex of outer side (*not* black).

Protandrium with T7 slightly shorter than T6, bearing distinct marginal setae; T8 semicircular and separated from T7 on lateral side, bearing short marginal setae. Surstylus separated from epandrium, elongated and incurved; aedeagus consists of two sclerites which are asymmetric in shape and membranous lobe between them; aedeagal apodeme very short.

Specimens examined. 2 ♂, Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961 (N. S.); 1 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961 (N. S.).

Distribution. Philippines, Viet Nam. New to Viet Nam.

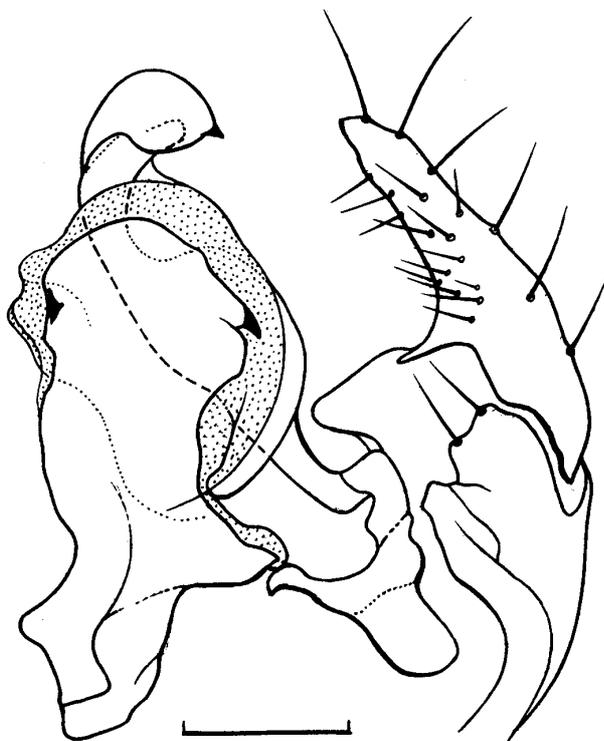


Fig. 1. Male genitalia of *Pachycerina flaviventris* Malloch, ventral view.

5. *Cerataulina nigrifrons* Malloch (Fig. 2A)

Cerataulina nigrifrons Malloch, 1927: 102.

The male specimens examined are small: 2.7-3.3 mm in body length and 2.8-2.9 mm in wing length, and pale: frons glossy brown (*not* black); face glossy black; palpus brown; mesoscutum dark brown, without black vittae; postpronotal lobe and pleura except for katepisternum paler than scutum; fore tibia and tarsus brown.

Eye with a small but distinct V-shaped emargination laterad of velvety black mark between antenna and eye and above level of antennal base; first antennal segment twice as long as the second and slightly shorter than the third, with one or two ventral setae before apex; arista feathered, slightly longer than whole length of antenna (30:27); f_1 with four long pv ; pd on t_3 ; weaker than that on t_1 .

Protandrium narrow, ring-like. Epandrium distinctly elongated as a pair of ventral processes which are extended anteriorly beyond anterior margin of S4, sparsely setulose; hypandrium somewhat inverted V-shaped; aedeagus rod-like, 150 μ m long.

Specimens examined. 1 ♂, Ninh Hoa, N. of Nha Trang, 28. XI. 1960 (C. Y.); 1 ♂, Dai Lanh, N. of Nha Trang, 30. XI. 1960 (C. Y.); 1 ♂, Ban Me Thuot (500 m), 20-24. XII. 1960 (C. Y.).

Distribution. Sumatra, Viet Nam. New to Viet Nam.

6. *Parapachycerina cuneifera* (Kertész) (Fig. 2B)

Lauxania cuneifera Kertész, 1913: 96.

This small, testaceous yellow species is characterized by: black ocellar triangle with base longer than sides and close to vertex, and connected with black oval marking on dorsal part of occiput; pvt growing inside of the marking; third antennal segment brown from base on outer side to insertion of arista, narrowed apically and rounded on tip;

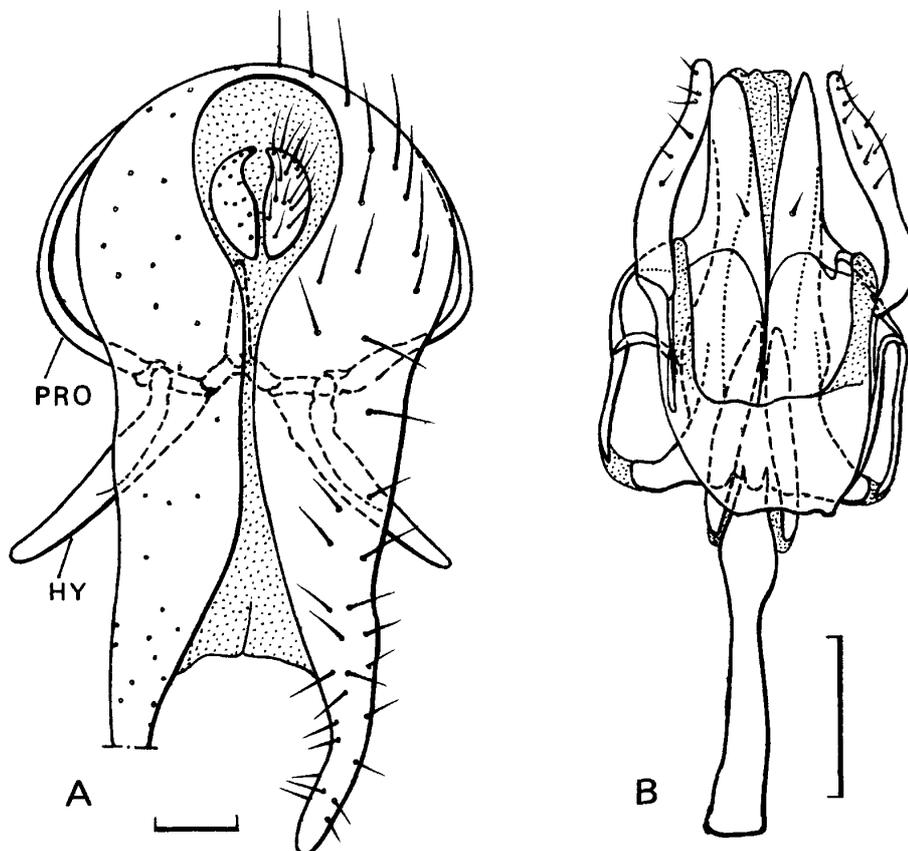


Fig. 2. Male genitalia of *Cerataulina nigrifrons* Malloch (A) and *Parapachycerina cuneifera* (Kertész)(B). A, posterior view; B, ventral view; HY, hypandrium; PRO, protandrium.

arista with dorsobasal longest hair as long as length of third segment (about twice as long as wide); scutum with a pair of brown stripes which are connected indistinctly with each other almost behind level of second *dc* and extended to scutellum; T2-5 with a brown median stripes which are narrower than stripe on scutellum; wing hyaline, 2.5-3.0 mm long; f_1 with two long *pv*, f_2 with 6(5)-7 *a*; t_2 with a row of 9-10 *p* and one spur.

Protandrium ringed but sternite horizontal. Epandrium with surstylus claw-like; cercus black; hypandrium U-shaped, broadened basally; pregonite long, sparsely setulose; aedeagus with lateral sclerites extended ventrally on ventral two-fifths and each with a setula.

Specimens examined. 5 ♂ & 3 ♀, 22 km S. of Nha Trang, 20-26. XI.1960 (C. Y.).

Distribution. Formosa, Viet Nam. New to Viet Nam.

7. *Chaetolauxania platystylis* n. sp. (Fig. 3)

Male. Testaceous; face, gena and postgena, pleura and legs yellowish; ocellar triangle black; head very sparsely whitish dusted; arista brown; thorax whitish gray dusted; scutum mat, with a pair of pale brown oval spots before bases of short *prs* and a pair of faint brown narrow stripes along lateral margins just dorsad of postpronotal lobes (humeri) and along *sa*-lines; scutellum yellowish posteromesally and along margins, and with a pair of faint brown lateral stripes just inside of *sc*-bases; katapisternum with a black round spot at anterior dorsal corner; abdomen brown, very sparsely pollinose.

Frons wider than long, twice as wide as eye, slightly diverging ventrally; frontalia laterally with several setulae on about line of lower *or*; parafrofrontalia with ventral part slightly projecting above eye in profile; *or* two, subequal; *oc* short, nearly two-fifths length of *or*; eye as high as broad; gena broad, two-thirds of eye height; *pm* five; face almost flat; antenna with first segment subequal to the second in length and with two dorsal setulae on apex, third segment suboval and 2.4 times as long as wide; arista pubescent; palpus with an apical seta longer than others.

Mesoscutum with 1+2 *dc*, two sparse rows of *acr*, *prsc* approximately twice as long as *acr*, *prs* shorter than *prsc*; *stpl* one. Wing: C-index 3.7, r-m at middle of discal cell, 4V-index about 2.0, 5V-index 0.23. Legs: f_1 with four *pv*; all

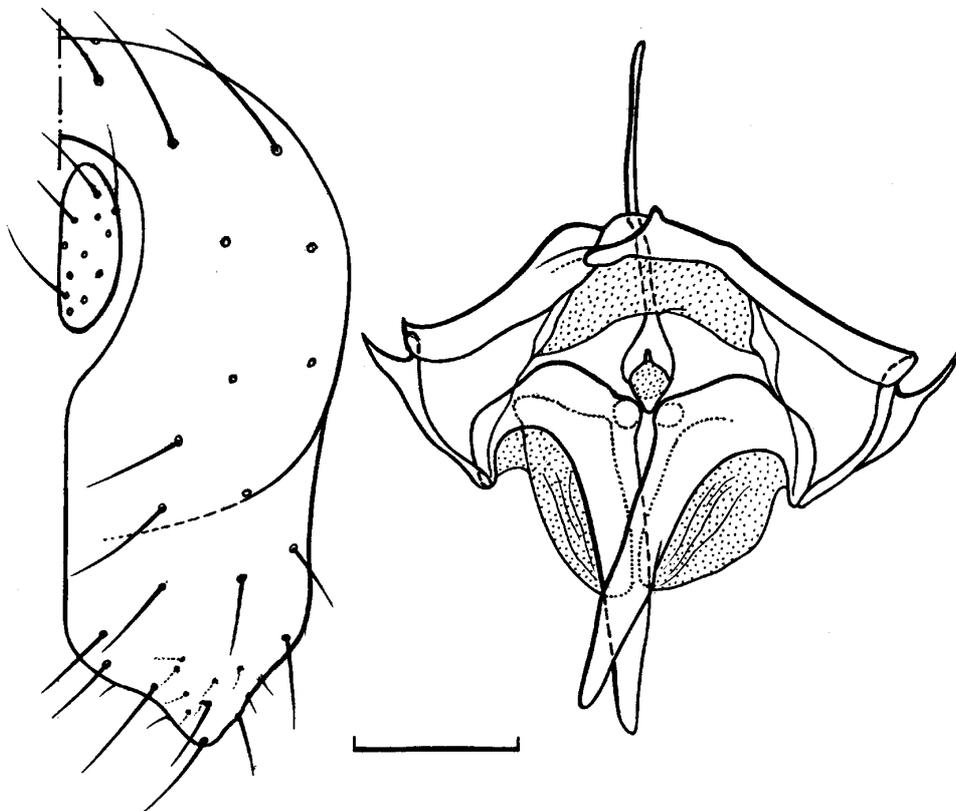


Fig. 3. Male genitalia of *Chaetolauxania platystylis* n. sp. (holotype). Epandrium, posterior view; genitalia, ventral view.

tibiae with *pd*, t_2 with one long and t_3 with one short spur, respectively.

Protandrium semicircular when viewed from rear, wider than epandrium in dorsal side. S4-6 quadrate, each 1.3-1.6 times as wide as long, S4 about one-half length of S6. Epandrium with surstylus broad, projected ventrally; hypandrium shallow V-shaped; pregonite largely membranous; aedeagus consists of a pair of ventral processes and membranous lobes laterally; aedeagal apodeme narrow but long.

Body length 2.7 mm, wing length 3.0 mm.

Female. Unknown.

Holotype male (OMNH-TI 139), Sa Pa, Lao Kai, 20. VI. 1999, M. Sasakawa; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen.

Distribution. Viet Nam.

Discussion. This species is related to *C. sternopleuralis* Kertész, known from Formosa, in having a pair of blackish spots in front of lateral transverse suture, but its scutum is testaceous and is not provided with a pair of submedian blackish vittae on its entire length. Also, it is characterized by the short ocellar bristles, long third antennal segment, dense and short peristomal setae, faint brown stripe along lateral margin of scutum, one long sternopleural bristle and broad surstylus, differing from *sternopleuralis*.

8. *Melinomyia flava* Kertész

Melinomyia flava Kertész, 1915: 500.

See Sasakawa (1997), p. 34.

Specimen examined. 1 ♂, Dalat (1500 m), 29. IV. -4. V. 1960 (L. Q.).

Distribution. Formosa, Viet Nam, Japan. New to Viet Nam.

9. *Protrigonometopus maculifrons* Hendel

Protrigonometopus maculifrons Hendel, 1938: 3.

The male exactly agrees with the female in the original description externally except for the following coloration: postpronotal lobe dark as well as mesoscutum, notopleuron faintly paler than that; pleura brown, anepisternum obliquely yellow on dorsal margin (about one-third as high as its height) above base of *mspl* and katepisternum dark testaceous on ventral two-thirds; halter yellow, with knob blackened on tip; legs testaceous, distal segments of tarsi faintly tinged with brown; epandrium testaceous; wing length 3.6-3.9 mm.

Specimens examined 2 ♂, Sa Pa, Lao Kai, 20. VI. 1999 (M. S.).

Distribution. China, Viet Nam. New to Viet Nam.

Genus *Minettia* Robineau-Desvoidy

This is the second large genus in the Oriental Region, and most of the species belong to the subgenus *Frendelia* Collin (1948). No species has hitherto been known from Viet Nam, but four species are recorded here, of which one is new to science.

Key to Vietnamese species of *Minettia*

1. Face with a pair of rounded swellings on ventrolateral sides subgenus *Frendelia* 2
 - Face without swellings ventrally subgenus *Minettia* *imparispinosa* n. sp.
2. Abdomen black 3
 - Abdomen testaceous *rufiventris* (Macquart)
3. Hind tibia with *pd* *fuscofasciata* (de Meijere)
 - Hind tibia without *pd* *quadriscopiosa* Malloch

10. *Minettia (Frendelia) rufiventris* (Macquart) (Fig. 4A)

Lauxania rufiventris Macquart, 1848: 228.

This large, brownish black species is characterized by the testaceous abdomen, brownish gray-dusted mesoscutum with four undusted vittae, darkened base of wing (3.9-4.5 mm long) and black knob of halter.

Male genitalia: Protandrium ringed, tergite with a row of short setae along dorsocaudal margin, sternite narrow and horizontal; epandrium densely setose; surstylus narrow, clavate, projected back- and inward, minutely pointed on dorsal apex; hypandrium inverted U-shaped; aedeagus long, membranous ventrally but composed of a dorsal plate and two pairs of narrow lateral and one central sclerites: dorsal plate expanded laterally and provided with a pair of distal spines, lateral sclerite consists of dorsal and ventral pointed processes: dorsal one simple as in central sclerite and ventral one serrated on ventrodistal part.

Specimens examined. 1 ♂, Di Linh (1200 m), 22-28. IV. 1960 (L. Q.); 2 ♂ & 1 ♀, Fyan (900-1000 m), 11. VII. -9. VIII. 1961 (N. S.); 1 ♀, 17 km S. of Di Linh (1300 m), 6-13. X. 1960 (C. Y.).

Distribution. Java, Sunda, India, Viet Nam, Philippines, Formosa. New to Viet Nam.

11. *Minettia (Frendelia) fuscofasciata* (de Meijere) (Fig. 4B)

Lauxania fuscofasciata de Meijere, 1910: 125.

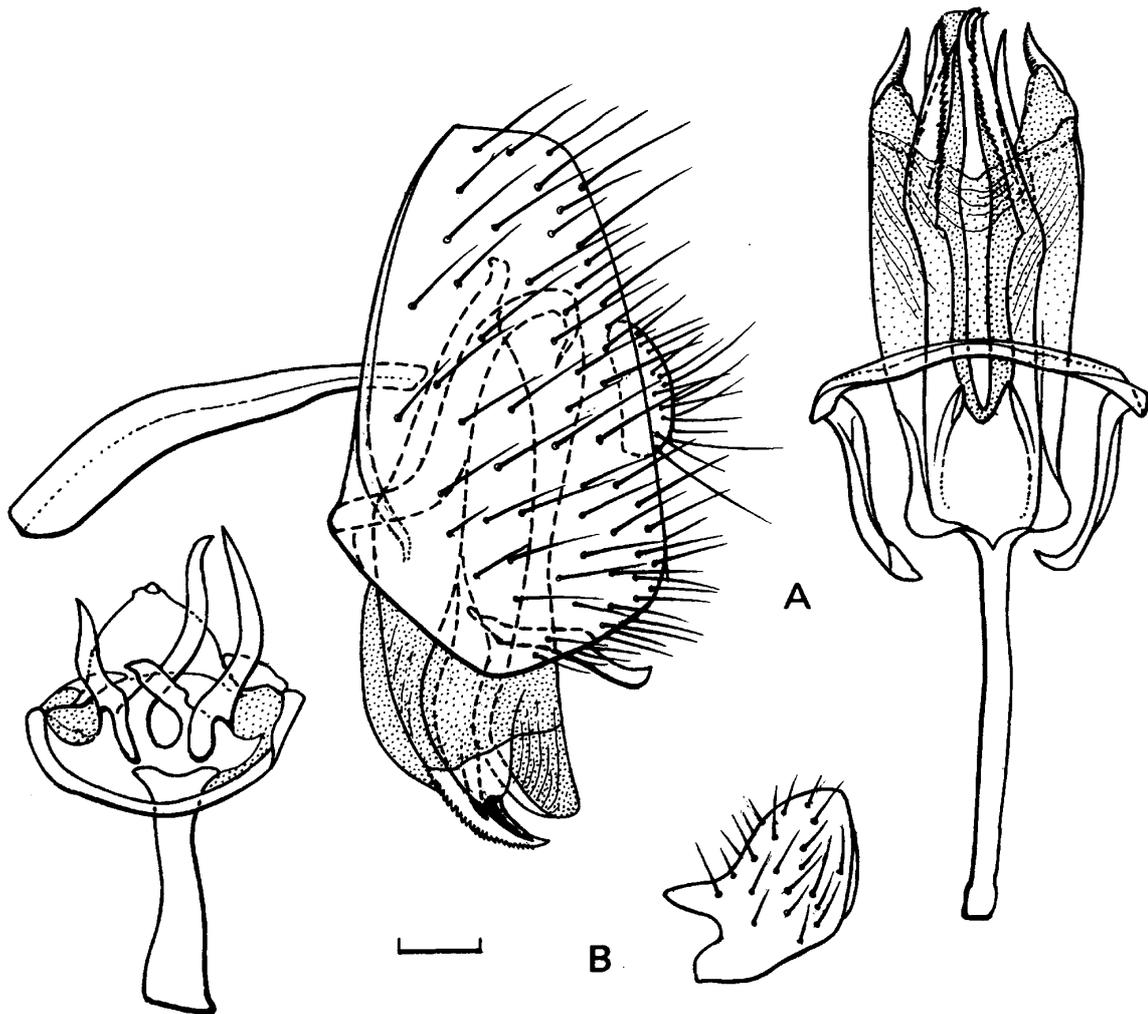


Fig. 4. Male genitalia of *Minettia (Frendelia) rufiventris* (Macquart)(A) and *M. (F.) fuscofasciata* (de Meijere)(B), right surstylus, outer view; hypandrium and aedeagus, ventral view).

This small, blackish species is characterized by the darkened base of wing, a pair of black stripes between *dc*-rows on gray-dusted mesoscutum, presence of *pd* on hind tibia, bifurcate surstylus and a pair of biforked horns on aedeagus.

Specimens examined. 1 ♂, Ban Me Thuot (1500 m), 16-18. V. 1960 (L. Q.); 1 ♀, Mt Lang Bian (1500-2000 m), 19. V. -8. VI. 1961 (N. S.); 1 ♂ & 1 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961 (N. S.); 2 ♂, Fyan (900-1000 m), 11. VII. -9. VIII. 1961 (N. S.); 1 ♂, Ban Me Thuot (500 m), 20-24. XII. 1960 (L. Q.).

Distribution. Java, Formosa, Viet Nam. New to Viet Nam.

12. *Minettia (Frendelia) quadrispinosa* Malloch

Minettia quadrispinosa Malloch, 1927: 166.

This black species is characterized by the plumose arista, brown third antennal segment, a pair of blackish median vittae between *dc*-rows on densely gray-dusted mesoscutum when viewed from front, whitish pruinose margin of scutellum, dark brown base of wing, and by absence of *pd* on *t*₃.

Specimens examined. 2 ♀, Tam Dao, Vinh Phu, 18. & 25. VI. 1999 (M. S. & Y. Y.); 1 ♀, Sa Pa, Lao Kai, 23. VI. 1999 (M. S.).

Distribution. Formosa, Viet Nam. New to Viet Nam.

13. *Minettia (Minettia) imparispinosa* n. sp. (Fig. 5)

Male & female. Testaceous, sparsely whitish dusted but face and abdomen more sparsely dusted; parafrofrontalia weakly shining; antenna with third segment more or less darkened distally, arista brown excepting base; palpus sometimes narrowly brown on tip; mesoscutum mat but subshining when viewed from behind; abdomen subshiny; tibiae and tarsi yellowish. Wing hyaline, faintly tinged with brownish yellow, not darkened at base; halter yellow.

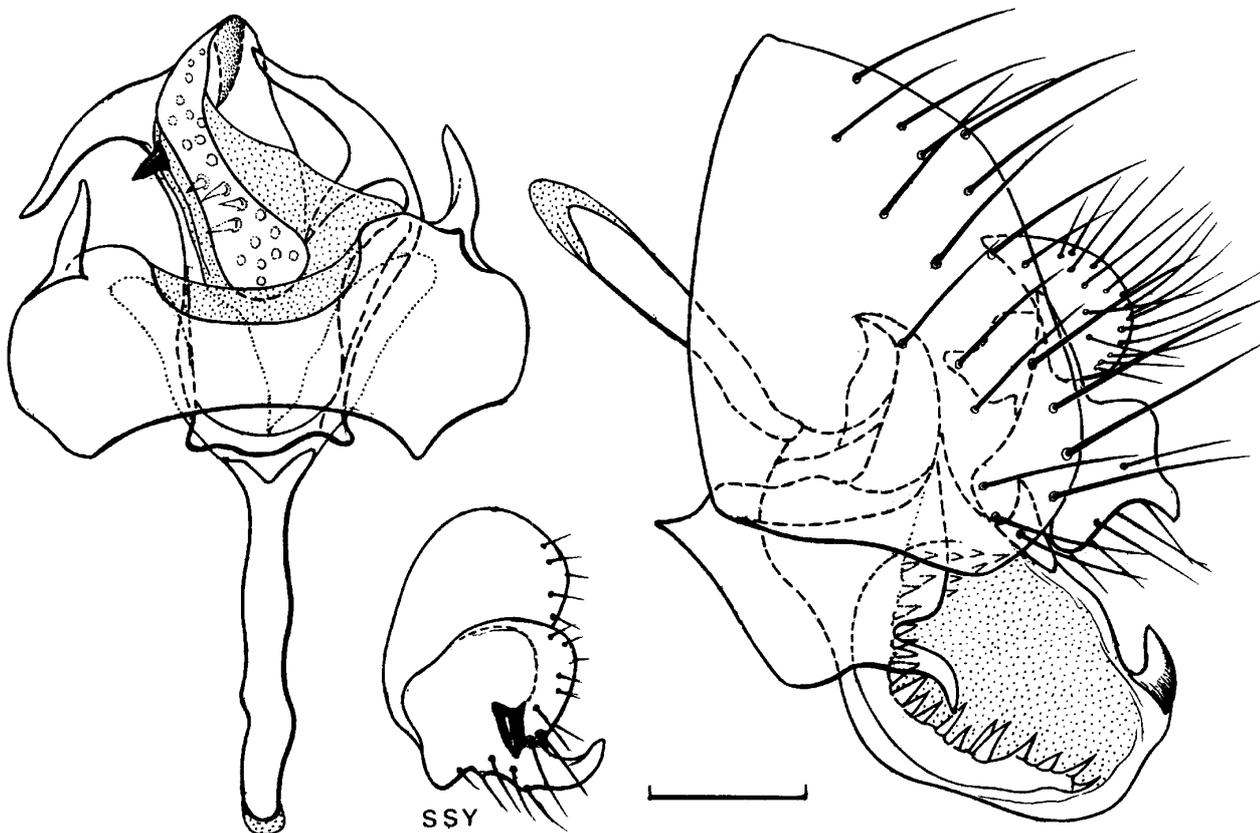


Fig. 5. Male genitalia of *Minettia (Minettia) imparispinosa* n. sp. (paratype). SSY, surstylus, inner view.

Frons wider than long, 1.3-1.5 times as wide as eye, slightly diverging ventrally; parafrontalia slightly projecting above eye in profile; lower *or* two-thirds or subequal to the upper; *oh* 3-4, two hairs below lower *or*; *oc* subequal to upper *or*; eye 1.4 times as high as broad; gena narrow, one-eighth of eye height; *pm* 7-8, short; face flat, without ventral elevation; third antennal segment about twice as long as wide, slightly narrowing apically; arista short-plumose, with dorsal longest hair slightly less than two-thirds as long as width of third segment.

Mesoscutum with 0+3 *dc*, 6-8 rows of *acr*; first *dc* short, about two-thirds length of the second; distance between transverse suture and first *dc* slightly longer than that between first and second *dc*; *prsc* longer than first *dc*; *ia* long; *ipa* about two-thirds of *opa*; *stpl* two, anterior one slender. Wing: C-index 3.7-4.7, r-m almost at middle of discal cell, 4V-index 1.6-1.8, 5V-index 0.2. Legs: f_1 with four *pv*, f_2 with 4-5 *a*; t_2 with one spur; all tibiae with *pd*, strongest on t_2 and weakest on t_3 .

Protandrium ringed, tergite as long as epandrium in dorsal side, bearing several setae on posterior margin; sternite very narrow and short, not formed a complete bridge. Male S4-6 trapezoidal, S4 and 5 2.6 times as wide as long, S6 twice as wide as long. Epandrium rather broad; surstylus separated from epandrium, large lobate, with two processes directed ventrally and mesally; hypandrium broadened laterally; pregonite black; aedeagus laterally with black thorn-like processes and ventrally with many short spine-like processes on a curved median sclerite.

Body length 3.2-3.4 (holotype) mm, wing length 3.4-3.5 (holotype) mm.

Holotype male (BISHOP No. 16416), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 4 ♂ & 10 ♀, same data as in holotype.

Distribution. Viet Nam.

Diagnosis. This species is unique in having the lobate surstylus with two processes, and asymmetric lateral sclerites with black thorn-like processes and spinose ventral sclerite of the aedeagus, thus differing from all the known Oriental species.

Etymology. The specific name refers to the imparity of thorn-like processes on the aedeagus.

Genus *Sapromyza* Fallén

Sapromyza is the largest genus in the Oriental Lauxaniinae. Eight species are known to occur in Viet Nam at present, of which seven species are new to science. New subgenus *Notiosapromyza* is described below.

Key to Vietnamese species of *Sapromyza*

1. Mesoscutum with a presutural *ia* bristle or anepisternum with a bristle in addition to *mspl* 2
 - Mesoscutum and anepisternum without additional bristles as noted above subgenus *Sapromyza* Fallén 5
2. Mesoscutum with a presutural *ia*; anepisternum with *mspl* only subgenus *Notiosapromyza* n. 3
 - Mesoscutum without *ia*; anepisternum with a long bristle in addition to *mspl* subgenus *Xenosapromyza* Malloch *cinctipes* (de Meijere) 3
3. Mesoscutum with *prsc* only; aedeagus very long *longimentula* n. sp.
 - Mesoscutum with 1-2+3 long *acr* in addition to *prsc* 4
4. Mesoscutum blackish brown, with two dark vittae; fore and mid femora largely brown *pellopleura* n. sp.
 - Mesoscutum testaceous, with four brown vittae; legs largely testaceous *quadridentata* n. sp.
5. Thorax and abdomen black, slightly grayish or brownish dusted 6
 - Thorax and abdomen testaceous 7
6. Mesoscutum with a pair of long *acr* in addition to *prsc*; fore femur without ctenidium. *acrostichalis* n. sp.
 - Mesoscutum with *prsc* only; fore femur with ctenidium along anterior ventral margin *ctenophora* n. sp.
7. Mesoscutum six-spotted; scutellum with two brown lateral spots *sexmaculata* n. sp.
 - Mesoscutum five-vittate; scutellum brown on disk *septemnotata* n. sp.

14. *Sapromyza (Xenosapromyza) cinctipes* (de Meijere)

Lauxania (Sapromyza) cinctipes de Meijere, 1910: 125.

Sapromyza (Xenosapromyza) cinctipes: Malloch, 1929: 30.

A female specimen is provided with a long anterior ventral bristle in addition to *mspl* which is directed backward and only a little downward (*not* directed downward as stated by Malloch, 1929). Third antennal segment is entirely brown (*not* yellowish apically in the original description), and wing length is 3.2 mm. Also, the following characteristics will be added: frons gray dusted except for black-spotted base of *or*, face dorsally and gena whitish gray dusted; mesoscutum with four narrowly gray-dusted stripes at both ends of median brownish vittae and four gray-dusted round spots before and behind transverse suture, of which anterior two just mesad of black oval spots above *prs* and posterior two just anterolaterad of anterior *dc*; pleura with gray-dusted bands along ventral margin of anepisternum and dorsal margin of katapisternum distinct; r-m situated at basal one-third of discal cell, ultimate section of M_1 about 1.3 times length of penultimate.

Specimen examined. 1 ♀, Tam Dao, Vinh Phu, 26. VI. 1999 (M. S.).

Distribution. Java, Viet Nam. New to Viet Nam.

Subgenus *Notiosapromyza* n. subgen.

Diagnostic characters: Easily recognized by the presence of a presutural *ia*-bristle situated close to line between *prs* and first *dc*, and usually 1-2+3 long *acr*-bristles in addition to *prsc*.

This chaetation is similar to that of the genus *Mettinia* Stuckenberg (1971), but a postsutural true *ia*-bristle is absent in the species of *Sapromyza (Notiosapromyza)*.

Type-species: *Sapromyza (Notiosapromyza) quadridentata* n. sp.

15. *Sapromyza (Notiosapromyza) longimentula* n. sp. (Fig. 6)

Male. Testaceous; head very sparsely whitish dusted; frons with a median brown stripe ventrad of black ocellar triangle; parafacialia yellowish, densely pruinose; antenna with first segment brown, second segment brownish black, third segment brown dorsally, being about one-half as long as its whole length and one-half as wide as its width; arista brown; palpus brownish black except for base; mesoscutum with three brown vittae, median one between bases of *prsc*, lateral two just laterad of *dc*-rows; other vittae on pleura same as in *quadridentata*; scutellum with a median brown stripe ending before posterior margin; T3-5 each with a pair of blackish round spots (largest on T5). Wing hyaline, faintly tinged with brownish yellow; halter yellowish. Legs testaceous, all knees narrowly brown.

Frons as long as wide, nearly 1.3 times as wide as eye, parallel-sided, sparsely setulose on ventrolateral margin; parafacialia slightly projecting above eye in profile; lower *or* shorter than the upper; *oc* subequal to lower *or* in length; eye oval, slightly higher than wide (1.1-1.3 : 1); face flat, with median carina linear and low on dorsal one-third of facial height; gena narrow, approximately one-eighth eye height; *pm* 5-6, very short; antenna with first segment slightly shorter than the second, third segment twice as long as wide, narrowing apically, rounded on tip; arista short-haired, with ventral longest hair about one-half as long as width of third segment.

Mesoscutum with 0+3 *dc* (first *dc* very short and close to the second), about eight rows of *acr*, only *prsc* long (most of bristles missing). Wing: C-index 3.6-3.8, r-m at middle of discal cell, 4V-index 1.8-2.0, 5V-index 0.26-0.3. Legs: f_1 with three long *pv*, without ctenidium; f_2 with 5-8 *a*; f_3 with a preapical *ad*; t_2 with one long spur; all tibiae with *pd*.

Protandrium horseshoe-shaped. S6 one and a half times as wide as long, with emargination on posterior one-third. Epandrium broadened ventrally; surstylus projected ventrocaudally, setose; hypandrium narrow U-shaped; pregonite with two teeth on tip, spinulose on membranous part; aedeagus very long, with lateral sclerites divergent posteriorly, bearing a tooth at each inner base; aedeagal apodeme 1.25 times as long as aedeagus.

Body length 3.2-3.7 (holotype) mm, wing length 3.0-3.5 (holotype) mm.

Female. Unknown.

Holotype male (BISHOP No. 16420), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 2 ♂, same data as in holotype.

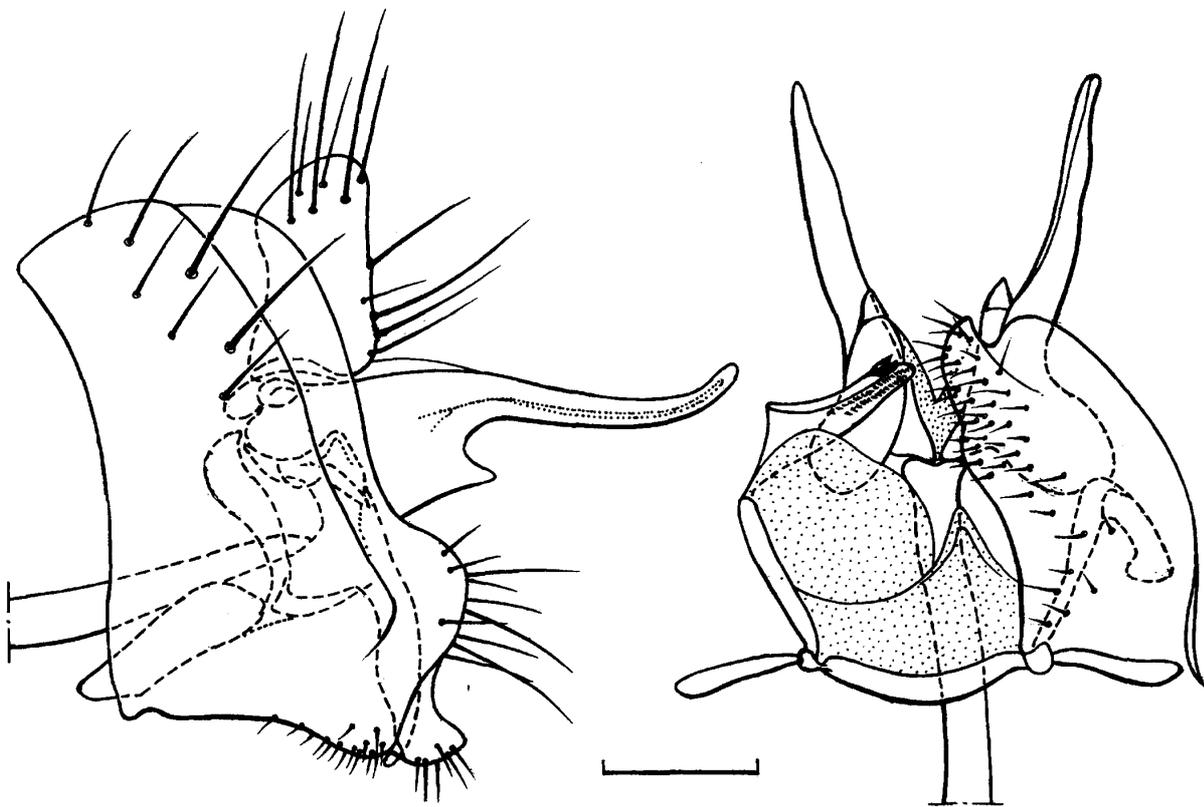


Fig. 6. Male genitalia of *Sapromyza (Notiosapromyza) longimentula* n. sp. (paratype).

Distribution. Viet Nam.

Diagnosis. This species is distinctive in having the three-vittate mesoscutum, two-spotted posterior tergites of abdomen and divergent long sclerites of aedeagus. It is distinguishable easily from *S. (N.) quadridentata* n. sp.

Etymology. The specific name is from the Latin, meaning 'long penis'.

16. *Sapromyza (Notiosapromyza) pellopleura* n. sp.

Female. Head testaceous; frontalia with a pair of brown lateral stripes inside of parafrontalia; ocellar triangle brownish black; face with brown transverse band, which is broadened laterally and about one-third as high as facial height, above ventral margin; antenna with first and second segments black, third segment testaceous but apical two-thirds brown; arista brown; palpus black. Thorax blackish brown; mesoscutum with a pair of blackish vittae along median rows of *acr*, densely grayish dusted, with lateral side laterad from middle line between *dc*- and *sa*-lines pale brown, transverse suture and postpronotal lobe to base of wing through notopleuron pale brown, *dc*-lines indistinctly brownish; scutellum pollinose brown except for testaceous margin, but apical *sc* growing on brown area. Wing hyaline, very faintly tinged with brownish yellow; halter testaceous. Legs testaceous; fore and mid femora brown except for apices (more than two-thirds of femoral length), hind femur brown except for pale lateroventral part before dark apex. Abdomen testaceous, grayish dusted, T1 and 2 each with a pair of blackish lateral bands posteriorly, T3-6 each with a median black stripe and a pair of black posterior bands laterally which are projected anteriorly in a form of triangle (as high as tergal length) on both ends.

Frons slightly wider than long, about 1.4 times as wide as eye, almost parallel-sided; frontalia sparsely setulose inside of lower parafrontalia; parafrontalia linearly but distinctly below base of lower *or* projecting above eye in profile (*or* missing); eye 1.2 times as high as wide; gena one-eighth eye height; *pm* five, very short; face flat; antenna with first segment as long as the second, third segment 1.4 times as long as wide, very slightly narrowed and rounded apically; arista thrice as long as third segment, longer than eye height, distinctly pubescent.

Mesoscutum with 0+3 *dc*, first *dc* close to suture, six rows of *acr* anteriorly, of which median 1+3 pairs long (posterior 2 pairs detectable by pits) in addition to *prsc*; presutural *ia* distinct. Wing: C-index 4.0, r-m before middle

of discal cell, 4V-index 1.4, 5V-index 0.2. Legs: f_1 with four long *pv* and without ctenidium, f_2 with five *a*; t_2 with one long spur; all tibiae with *pd*.

Body length 3.7 mm, wing length 3.7 mm.

Male. Unknown.

Holotype female (BISHOP No. 16421), Mt. Lang Bian (1500-2000 m), 19.V. -8. VI. 1961, N. R. Spencer.

Distribution. Viet Nam.

Discussion. This species differs from *S. (N.) longimentula* n. sp. and *quadridentata* n. sp. by the fuscous thorax, and black median fasciae and posterior bands on the posterior tergites of testaceous abdomen.

Etymology. The specific name is from the Greek, meaning 'dusky pleura' of the thorax.

17. *Sapromyza (Notiosapromyza) quadridentata* n. sp (Fig. 7)

Male. Pale testaceous; frontalia with a pair of brown lateral vittae running along parafontalia from beside ocellar triangle to end of parafrontalia; ocellar triangle black, extending posteriorly to about level of *pvt* as brown stripe; face and gena yellowish; antenna with first segment dark brown, the second brownish black, the third tinged with brown except for base narrowly testaceous and more darkened along apical margin; arista brown; palpus brownish black except for base; mesoscutum with four brown vittae: median two on *acr*-lines ending before scuto-scutellar suture, lateral two on *ia*-setulae lines and interrupted at transverse suture; pleura less vittate, one from postpronotal lobe to base of wing through ventral margin of notopleuron, short one from middle of anepisternum to base of *mspl* and very small spot at anterior margin of anepimeron, a third along dorsal margin of katepisternum before base of anterior *stpl*; scutellum with a pair of brown vittae inside apical *sc*-line; T2 with posterior margin pale brown, T3-5 each with dark brown posterior band but interrupted at central line, broadened mesally in a form of triangle but distinctly narrowed laterally; T6 only with a pair of median triangles. Wing hyaline, faintly tinged with brownish yellow; halter yellowish. Legs testaceous, tarsi slightly darker than others, all knees narrowly brown.

Frons almost as wide as long, 1.5 times as wide as eye, almost parallel-sided, very sparsely setulose at middle; parafrontalia slightly projecting above eye and forming obtuse angle with face; lower *or* shorter than the upper; *oc* subequal to lower *or* in length; eye round oval, slightly higher than broad; gena about one-fourth eye height; *pm* four,

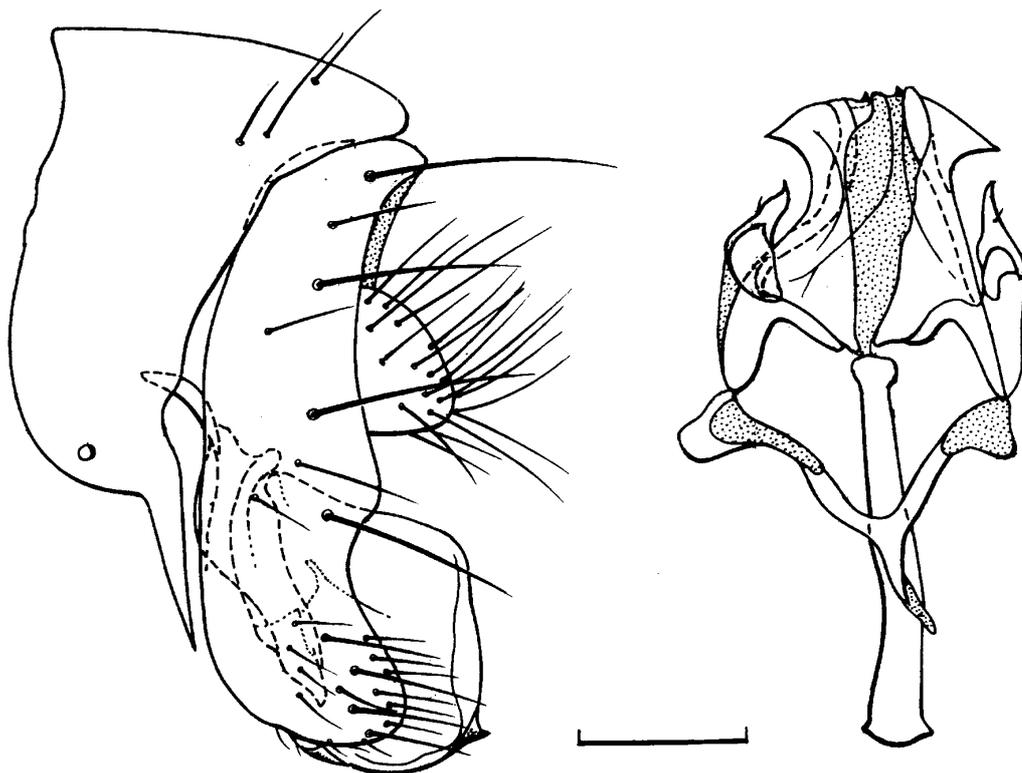


Fig. 7. Male genitalia of *Sapromyza (Notiosapromyza) quadridentata* n. sp. (paratype).

a few setulae on parafacial ridge above vibrissal angle; face flat, linearly visible beyond parafacialia in profile; antennal grooves very shallow excepting both sides of dorsal low carina; two ventralmost postgenal setae distinctly longer than other postgenal setae; antenna with first and second segments short, subequal in length, third segment about 1.3 times as long as wide, rounded on tip, arista slightly longer than eye height, pubescent (pubescence subequal to whitish file on third segment in length).

Mesoscutum with 0+3 *dc*, first *dc* more close to suture than to the second, 2+3 distinct *acr* in two rows in addition to *prsc*, a presutural *ia* less than one-half of *prs*; *prpl* and *mspl* each one, anterior *stpl* shorter than the posterior. Wing: C-index 4.0, r-m at about middle of discal cell, 4V-index 1.75-1.9, 5V-index 0.24-0.26. Legs: f_1 with three long *pv*, without ctenidium; f_2 with 4-5 *a*, f_3 with a preapical *ad*; t_2 with one long spur; all tibiae with *pd*.

Abdomen with four pairs of strong marginal bristles on T3 and 4, and shorter ones on T5 and 6 and on only sides of T1+2; S4-6 each quadrate, S5 slightly longer than wide, S6 1.2 times as long as wide. Protandrium distinctly longer than epandrium, but extremely narrowed below spiracle, not annular, with several posterior setae. Epandrium sparsely setose; surstylus broad lobate, setose, without spine; hypandrium Y-shaped; pregonite with apex slightly curved outwardly and pointed on tip; aedeagus with two pairs of large teeth before apex and minute ones on apices of lateral sclerites; aedeagal apodeme longer than aedeagus.

Body length 3.3-3.5 (holotype), wing length 3.4 (holotype) mm.

Female. Similar to male, but abdominal marginal bristles on sides of T1+2 long and in a dense row of 5-6 pairs on T3 and 4; body length 3.6 mm, wing length 3.5 mm.

Holotype male (BISHOP No. 16419), Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961, N. R. Spencer. Paratypes: 1 ♂, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961, Spencer; 2 ♀, same data as in holotype.

Distribution. Viet Nam.

Diagnosis. This species is characterized by the mesoscutum with four brown vittae and long 2+3 *acr*, posterior tergites of abdomen with dark posterior bands, and the aedeagus with distinct or minute teeth on lateral sclerites.

Etymology. The specific name is from the Latin, meaning 'four teeth' on the aedeagus.

18. *Sapromyza (Sapromyza) acrostichalis* n. sp. (Fig. 8A)

Male & female. Black; frons strongly shining, with ventral margin testaceous; parafacialia, gena and face bluish white dusted; antenna testaceous, first segment entirely and third segment dorsally and apically distinctly darkened; thorax sparsely brownish dusted, subshining; abdomen shiny, very sparsely pollinose; legs tinged with brown, all tibiae brown but yellowish at bases and first (-second) tarsal segment yellow and distal segments pale testaceous. Wing hyaline, faintly tinged with brown; halter yellow to testaceous.

Frons wider than long, 1.4-1.6 times as wide as eye, parallel-sided; parafacialia with ventral part slightly projecting beyond eye in profile; lower *or* subequal to or slightly shorter than the upper; *oc* slightly shorter than lower *or*; eye slightly higher than wide (16 : 14); gena about one-sixth eye height; face flat; antennae separated at bases in a distance of about diameter of first segment, third segment twice as long as wide; arista short-haired, with hair approximately one-fifth as long as width of third segment.

Mesoscutum with 0+2 *dc*, six sparse rows of *acr*, of which one pair situated behind level of anterior *dc* long (slightly shorter than *prsc* which is subequal to anterior *dc* in length); *stpl* one. Wing: C-index 4.0-4.4, r-m slightly before middle of discal cell, 4V-index 1.3, 5V-index 0.1-0.13. Legs: f_1 with 3-5 long *pv* and without ctenidium; t_2 with one spur; *pd* on t_3 weaker than those on the others.

Protandrium horseshoe-shaped, thrice as long as epandrium in dorsal side, with a few irregular rents on ventrocaudal part. Male S6 slightly more than twice as wide as long and with an excavation on posterior one-fifth, S4 and 5 each more than thrice as wide as long. Epandrium narrow, sparsely setose; surstylus black, separated from epandrium, about 1.5 times as long as height of epandrium, projected ventrally and slightly curved ventrally below constriction; hypandrium transverse, broadened at both lateral ends; pregonite long, with an apical seta; aedeagus membranous ventrally, with numerous spinulae; aedeagal apodeme three-fourths length of aedeagus.

Body length 4.3 (holotype)-4.8 (female) mm, wing length 3.8 (holotype)-4.5 (female) mm.

Holotype male (BISHOP No. 16417), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer (left third antennal segment missing). Paratypes: 1 ♀, Di Linh (Djiring), 22-28.IV.1960, L. W. Quate; 4 ♀, Dalat (1500 m), 29. IV. -4. V.

1960, Quate; 5 ♀, 6 km S. of Dalat, 9. VI. -7. VII. 1961, Spencer; 6 ♂ & 20 ♀, same data as in holotype; 1 ♂, Blao (Balao) (500 m), 14-21.X.1960, C. M. Yoshimoto; 1 ♀, Dalat (1550 m), 11. IX. 1960, J. L. Gressitt.

Distribution. Viet Nam.

Discussion. In the coloration of body and wing, this species is similar to *S.(S.) fasciatifrons* (Kertész), known from Formosa, but this species is large, and is provided with the sparse rows of *acr* and a pair of long posteriormost ones (derivation of specific name) in addition to long *prsc*, while in *fasciatifrons* wing length is 2.6-3.1 mm, and *acr* are arranged in eight to ten rows and only *prsc* is long. The long surstylus and pregonite of the male genitalia are distinctive.

19. *Sapromyza (Sapromyza) ctenophora* n. sp. (Fig. 8B)

Male & female. Black; frons and occiput sparsely whitish pollinose; face, ventral part of parafrontalia, parafacialia and ventral postorbit bluish white dusted; thorax brownish gray dusted; abdomen subshiny, sparsely pollinose; all tibiae dark yellowish brown but yellowish distally and tarsi except for distal two segments also yellowish. Wing hyaline, very faintly yellowish-tinged; halter testaceous.

Frons slightly wider than long or eye, diverging ventrally; parafrontalia linearly projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* as long as lower *or* but slender; eye 1.2 times as high as wide; gena one-ninth eye height; *pm* 4-6, short; face flat; third antennal segment twice as long as wide; arista plumose, with dorsal longest hair longer than width of third segment.

Mesoscutum with 0+3 *dc*, first *dc* very close to suture, eight rows of *acr* anteriorly but six sparse rows behind level of second *dc*, *prsc* weaker than first *dc*; anterior *stpl* shorter than the posterior. Wing: C-index 3.0-3.3, r-m at middle of discal cell, 4V-index 1.7-2.0, 5V-index 0.19-0.23. Legs: *f*₁ with ctenidium cephaloventrally and three long *pv*, *f*₂

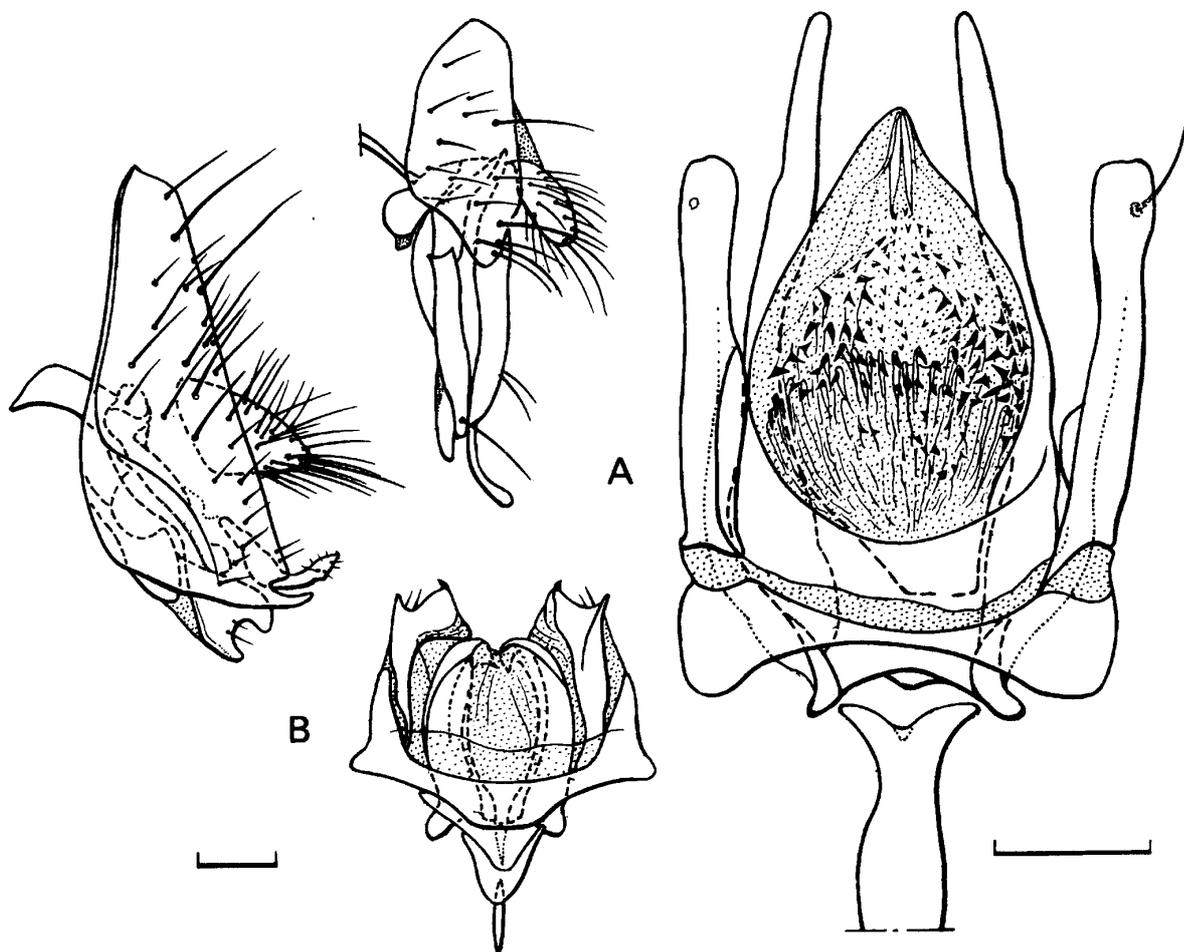


Fig. 8. Male genitalia of *Sapromyza (Sapromyza) acrostichalis* n. sp. (A, paratype) and *Sapromyza (S.) ctenophora* n. sp. (B, paratype).

with 5-7 a ; t_2 with one long and one short spurs; all pd on tibiae distinct.

Protandrium horseshoe-shaped, thrice as long as epandrium in dorsal side. Male S6 subquadrate, twice as wide as long, S5 1.8 times as wide as long. Epandrium strongly broadened ventrally, with short processes on ventrocaudal part; surstylus separated from epandrium, with distal process setulose; hypandrium U-shaped; pregonite broadened and shortly bifurcated distally, with two setae; aedeagus membranous ventrally, with lateral sclerites well-developed and curved mesally at distal ends; aedeagal apodeme slender.

Body length 3.0-3.4 (3.1 in holotype) mm, wing length 2.9 (holotype)-3.3 mm.

Holotype male (BISHOP No. 16418), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer (left wing broken and many bristles missing). Paratypes: 2 ♂ & 3 ♀, same locality but 1200 m, and same date as in holotype; 1 ♂, Blao (Balao)(600 m), 14-21.X.1960, C. M. Yoshimoto; 1 ♀, M'Drak, E. of Ban Me Thuot, 8-9. XII. 1960, Yoshimoto.

Distribution. Viet Nam.

Discussion. This species is related to *S. (S.) albocincta* (de Meijere), known from Java, in the presence of fore-femoral ctenidium, but is easily separated from that by its colorations of mesoscutum, wing and abdomen: in *albocincta*, mesoscutum with two submedian white-dusted vittae, wing with both cross veins slightly clouded, and abdominal T3(4)-6 with a yellowish central line.

Etymology. The specific name refers to the fore femoral 'ctenidium'.

20. *Sapromyza (Sapromyza) sexmaculata* n. sp. (Fig. 9A)

Male. Testaceous, very sparsely whitish dusted; ocellar triangle black; antenna and palpus testaceous, arista blackish brown except for base; mesoscutum with a pair of large dark brown lateral spots between base of sa and dc -lines and a pair of brown median ones between bases of posterior dc and $prsc$, and with or without a pair of small pale brown lateral spots on anterior gibbosity; postpronotal lobe with a small brown spot at base of h ; scutellum with dark brown lateral spot between bases of two sc ; abdomen shiny, more or less tinged with brown except for T1-2, epandrium and sternites. Wing hyaline, brown-clouded around both cross veins; tegula brown; halter testaceous yellow. Legs testaceous.

Frons wider than long, about twice as wide as eye; parafrontalia projecting above eye in profile, bearing two or , of which lower one about three-fifths length of the upper; oc longer than lower or ; eye almost as high as wide; gena about one-fifth eye height; pm 4-5, short; face flat; third antennal segment 1.4 times as long as wide; arista short-haired, with dorsal longest hair about two-fifths as long as width of third segment.

Mesoscutum with 0+2 dc , six rows of acr , $prsc$ short and about one-third length of posterior dc ; $stpl$ one. Wing: C-index 2.7-3.1, r-m at or slightly before middle of discal cell, 4V-index 2.0-2.5, 5V-index 0.28-0.34. Legs: f_1 without ctenidium and with three pv ; t_2 with one long spur; t_3 with a short spur, all tibiae with pd .

Protandrium semicircular in caudal view, with four marginal setae. S4-6 each quadrate, about twice as wide as long. Epandrium small, with four to five pairs of marginal setae; surstylus narrower than epandrial length, incurved, with 21-23 black setae which are directed inward; hypandrium Y-shaped; pregonite long, weakly bifurcate on tip and bearing a seta; aedeagus ending in a form of brush-pencil.

Body length 2.6-2.8 (holotype) mm, wing length 2.4-2.8 (2.6 in holotype) mm.

Female. Differs only from male in the coloration as follows: antenna, especially first and second segments, slightly tinged with brown; mesoscutum usually with a pair of brown stripes laterad of median acr -rows, which begin from level of anterior lateral spots and reach to posterior median spot in longest ones but variable in length, anterior lateral spot on gibbosity always present, other spots on scutum and scutellum larger than those in male. Body length 2.3-3.0 mm, wing length 2.5-3.1 mm.

Holotype male (OMNH-TI 140), Tam Dao, Vinh Phu, 25. VI. 1999, M. Sasakawa. Paratypes: 2 ♂ & 10 ♀, same locality, 25-26. VI. 1999, Sasakawa & Y. Yoshiyasu.

Distribution. Viet Nam.

Diagnosis. Among the known Oriental species, this new species is the most easily recognized by the six-spotted mesoscutum (derivation of specific name, although a pair of dark vittae are present anteriorly in females). The brush-like spines on aedeagus are distinctly longer than those of *S. (S.) acrostichalis* n. sp. and *septemnotata* n. sp.

21. *Sapromyza (Sapromyza) septemnotata* n. sp. (Fig. 9B)

Male & female. Testaceous; head sparsely but gena densely whitish pollinose; face, gena and postgena yellowish; ocellar triangle black; frontalia with pale brown triangle before ocellar triangle extending toward its ventral margin, faintly brown-tinged linearly at boundary between parafrontalia and parafacialia laterad of antennal base; first and second antennal segments, arista and palpus black, third antennal segment with blackish triangle on dorsoproximal part which is one-half width of segment at base and dorsal length along margin; thorax grayish dusted; scutum mat, with five brown vittae, of which median one between four median rows of *acr* ending at level of *prsc*, sublateral ones between *dc* and *ia*-setulae lines extending posteriorly to level of *pa*, lateral ones from postpronotal lobes to wing bases along ventral margin of notopleura, and katapisternum with pale one along dorsal margin; scutellum pale brown except for lateral margin before base of apical *sc*; abdomen darker than scutum, sparsely pollinose, subshiny, without markings. Wing hyaline, very faintly tinged with brownish yellow anteriorly, slightly clouded around m-cu; halter pale testaceous. Legs testaceous.

Frons wider than long, 1.8 times as wide as eye, parallel-sided, sparsely with minute setulae above ventral margin; parafrontalia projecting above eye in profile; lower *or* $2/5-1/2$ length of the upper; *oc* about 1.5 times length of lower *or*; eye as high as wide; gena about one-fifth eye height; *pm* 4-5; face flat; third antennal segment 1.3-1.5 times as long as wide; arista short-haired, with dorsal longest hair about one-half as long as width of third segment.

Mesoscutum with 0+2 *dc*, six rows of *acr* before level of anterior *dc*, of which central two rows extending

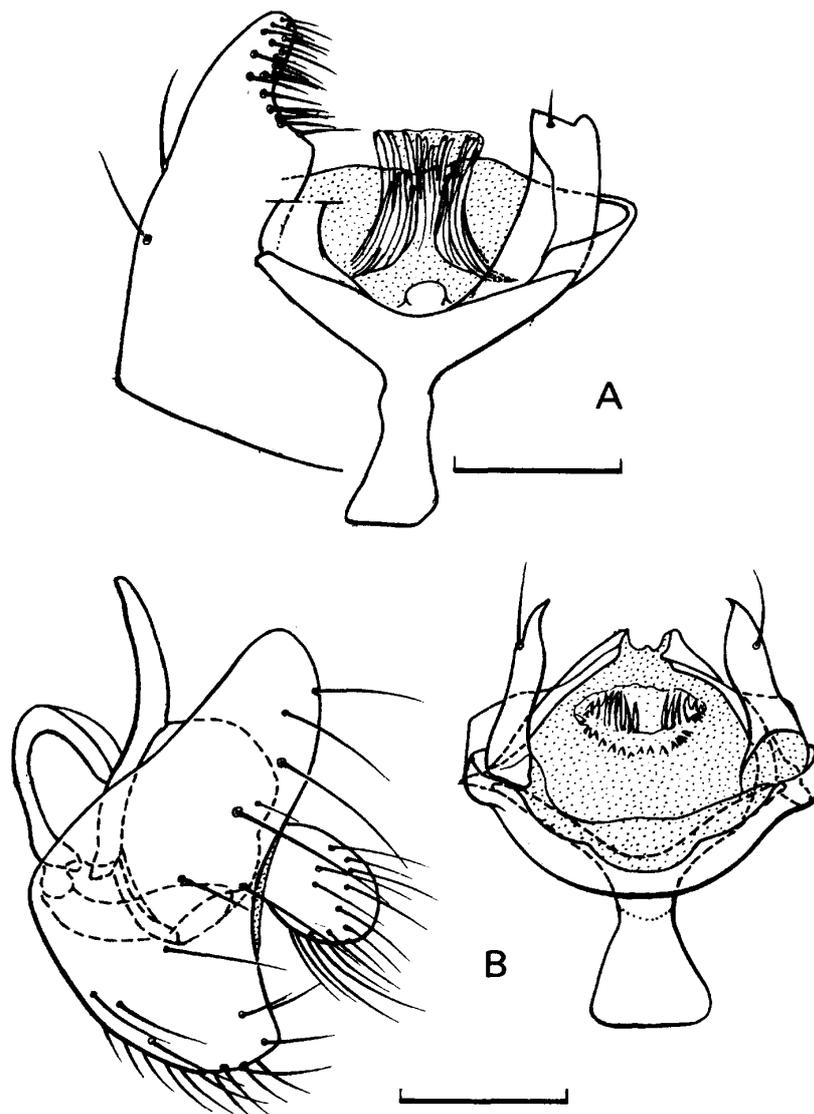


Fig. 9. Male genitalia of *Sapromyza (Sapromyza) sexmaculata* n. sp. (A, paratype) and *Sapromyza (S.) septemnotata* n. sp. (B, paratype).

posteriorly before *prsc*; *stpl* one. Wing: C-index 3.0-3.6, r-m slightly before or at middle of discal cell, 4V-index 2.1-2.2, 5V-index 0.33-0.37. Legs: f_1 with three *pv*, all tibiae with *pd*, t_2 with one long spur, t_3 with one short spur.

Protandrium semicircular in posterior view. Male S6 quadrate, twice as wide as long, S5 slightly narrower than S6, S4 1.7 times as wide as long. Epandrium broadened ventrally; surstylus densely setose on inner apical part; hypandrium semicircular in outline; pregonite pointed apically, with a seta before tip; aedeagus with lateral sclerite narrow, with a spinose hole before end of ventral membranous part; aedeagal apodeme with long arms posteriorly.

Body length 2.3-2.6 (holotype) mm in male and 2.4-3.0 in female, wing length 2.6-2.8 (2.7 in holotype) mm in male and 2.6-2.9 in female.

Holotype male (OMNH-TI 141), Sa Pa, Lao Kai, 20. VI. 1999, M. Sasakawa. Paratypes: 2 ♀, same data as in holotype; 4 ♂ & 4 ♀, Tam Dao, Vinh Phu, 25-26. VI. 1999, M. Sasakawa & Y. Yoshiyasu.

Distribution. Viet Nam.

Discussion. This species is separated from *S. (S.) zebra* (Kertész, 1913), known from Formosa, by the dark markings on the head, thorax and abdomen. In *zebra*, the frontalia and face are provided with brown vertical and horizontal stripes, respectively; parafacialia with a brown round spot at level of antennal base, anepisternum with brown vitta cross at middle, and abdominal tergites with blackish spots at middle and on lateral sides.

Remarks. One male from Tam Dao is provided with two median stripes between *dc*-lines (one median vitta divided into two).

Etymology. The specific name refers to seven stripes on the scutum and katepisternum.

Subfamily Homoneurinae

22. *Cestrotus flavoscutellatus* de Meijere

Cestrotus flavoscutellatus de Meijere, 1910: 142.

This species is distinct in having a pair of black, triangular markings laterad of frontal hump, a pair of dark brown spots on transverse suture and a large subtrapezoidal marking on posterior one-third of yellowish pollinose mesoscutum, and well-patterned wing.

Remarks. The coloration of Vietnamese specimen examined quite fit well the original description except for the dark color of all femora, which are brownish black on basal two-thirds to three-fourths as shown in the description of subsp. *nigrofemoratus* Hendel (1920).

Specimens examined. 10 ♂ & 13 ♀, Tam Dao, Vinh Phu, 25-26. VI. 1999 (M. S.); 1 ♀, Tam Dao, 26.VI.1999 (Y. Y.).

Distribution. Formosa, Java, Viet Nam, Nepal. New to Viet Nam.

23. *Prosopophorella yoshiyasui* n. sp. (Fig. 10, A)

Female. This is the third species of the genus, and is easily distinguishable from *P. buccata* (de Meijere, 1910), known from Java, by the coloration of thorax, wing pattern and length, and absence of the median process on lower margin of face.

Head testaceous; frontalia brownish black, with V-shaped cleft just before level of lower *or*, extending posteriorly onto occiput as brown narrow stripe; parafacialia with blackish triangle laterad base of antenna and pale brown stripe below eye before base of a long ventral postgenal seta; face with median swelling and ventrolateral parts pale brown; antenna with first and second segments black, third segment testaceous but brownish apically; palpus testaceous.

Thorax brown; scutum with pollinose testaceous lines: median one faint and linear, lateral ones along *dc*- and *ia*-setula-lines which are fused just behind transverse suture and at posterolateral corner of scutum but one line before suture broadest, inner lateral one swollen mesad of second *dc*; postpronotal lobe testaceous centrally, *h* arising from pale area; pleura densely whitish gray dusted except for dorsocaudal triangular area; scutellum with caudal margin testaceous. Abdomen black, sparsely brownish dusted, weakly shining. Wing brownish trifasciate and spotted around r-m, with subhyaline apical spots on cells R_3 and R_5 ; halter yellow. Legs testaceous, mid and hind coxae brown, fore femur dark brown except for both ends, mid and hind femora with brownish ventral striae, all tibiae with dark brown

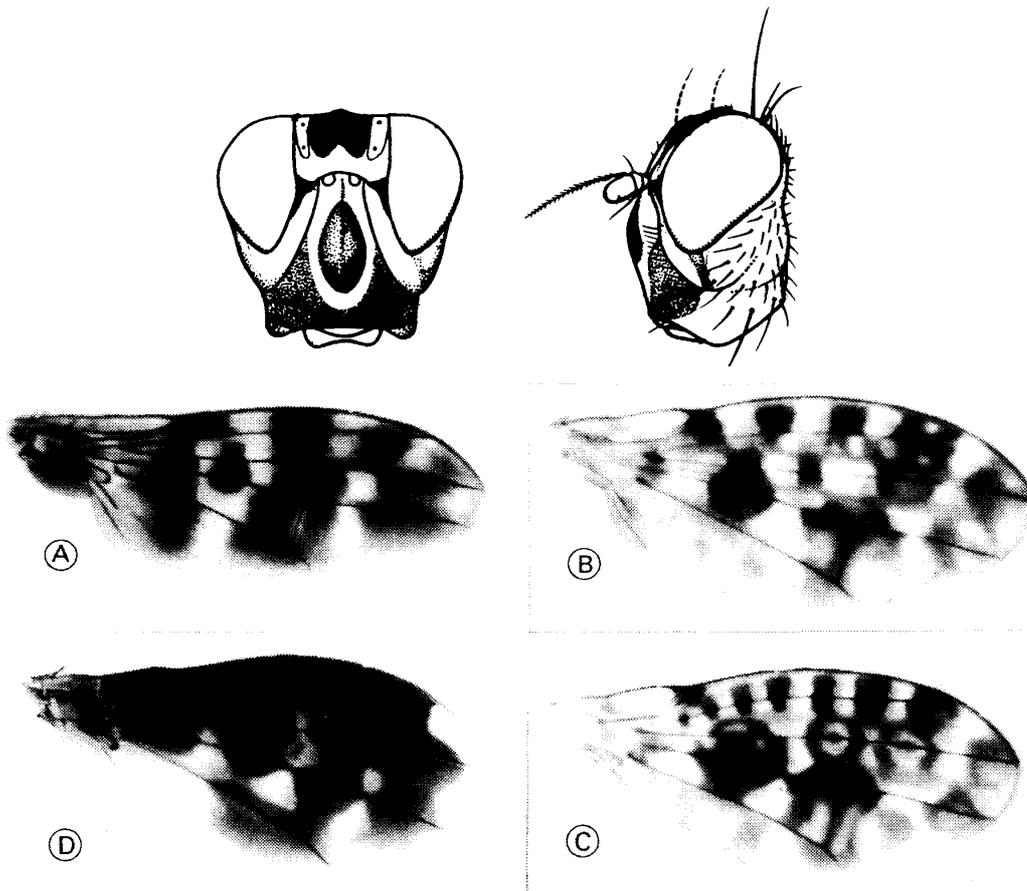


Fig. 10. Head of *Prosopophorella yoshiyasui* n. sp., frontal and lateral views (holotype) and wings of *P. yoshiyasui* (A), *Homoneura* (*H.*) *nubecula* n. sp. (B), *H. (H.) subnubecula* n. sp. (C) and *H. (H.) interrupta* n. sp. (D).

subbasal and apical rings.

Frons as long as wide, about one and a half times as wide as eye, almost parallel-sided; frontalia slightly swollen mesally as well as ocellar triangle, sparsely setulose ventrally (*oc* and *or* missing); parafrontalia with ventral part slightly projecting beyond eye in profile; parafacialia broad, with 9-10 setulae laterad of face; eye slightly higher than broad, narrowed ventrally and very sparsely hairy; face sparsely whitish dusted, median swelling broad and highest at middle, weakly shining; epistome very slightly projected ventrally at middle; gena very broad, nearly three-fourths eye height; third antennal segment oval, about one and a half times as long as wide; arista slightly longer than eye height, short-haired, with dorsal longest hair about one-fifth as long as width of third segment; palpus broad clavate.

Mesoscutum with 0+3 *dc*, six rows of *acr*, long *prsc*, short *prs* (less than one-half of *h*). Wing: C-index 3.0, r-m beyond middle of discal cell, 4V-index 2.0, 5V-index 0.17. Legs: f_1 with ctenidium of about twenty spinules, one long *pv* and two long *pd*; t_2 with two spurs, *pd* on t_2 stronger than those on t_1 and t_3 .

Body length 5.4 mm, wing length 4.9 mm.

Male. Unknown.

Holotype female (OMNH-TI 142), Tam Dao (930 m), Vinh Phu, 25. VI. 1999, Y. Yoshiyasu.

Distribution. Viet Nam.

Discussion. This species is easily distinguishable from *P. buccata* and *iriomotensis* Sasakawa (1998), known from the Ryukyus, Japan, by its large size, median swelling on face, and coloration of the mesoscutum, wing and legs.

Etymology. The species is named after the collector of the holotype, Dr. Y. Yoshiyasu, Kyoto Pref. Univ.

24. *Phobeticomyia lunifera* (de Meijere)

See Sasakawa (1987), p. 7.

Specimens examined. 3♂ & 3♀, Fyan (900-1000 m), 11. VII. -9. VIII. 1961 (N. S.).

Distribution. Ceylon, India, Nepal, Java, Thai, Viet Nam, Philippines. New to Viet Nam.

Genus *Homoneura* van der Wulp

The specific diversity in the genus *Homoneura* in Viet Nam is represented extremely among the known genera. It consists of one species belonging to the subgenus *Chaetohomoneura*, fifteen to subgenus *Neohomoneura*, and thirty-five to subgenus *Homoneura*: twenty-four species are new to science and twenty-six are recorded from Viet Nam for the first time.

Key to the subgenera of Vietnamese *Homoneura*

1. Mid tibia with a row of several strong bristles on posterior surface 2
 – Mid tibia without differentiated posterior bristles *Homoneura* v. d. Wulp
 2. Mesoscutum with two supra-alar bristles (*sa*) *Chaetohomoneura* Malloch
 – Mesoscutum with one *sa* *Neohomoneura* Malloch

Subgenus *Chaetohomoneura* Malloch

25. *Homoneura (Chaetohomoneura) semibrunnea* (de Meijere)

Lauxania semibrunnea de Meijere, 1915: 91.

The specimens examined have the brownish black face and palpus, subshiny black abdomen, 0+3 *dc* and long anterior *sa* (about two-thirds length of the posterior) on the mesoscutum, long wing (5.5-6.2 mm in length), and the hypandrium with basal apodeme distinctly emarginated at base. S6 is only a little longer than wide, but broadened distally, with a shallow emargination (about one-fifth of sternal length) on posterior margin; S4 and 5 are each quadrate and 1.3 times as wide as long. Other characters are shown in my previous paper.

Specimens examined. 4♂ & 4♀, Fyan (900-1200 m), 11. VII. -9. VIII. 1961 (N. S.); 1♂ & 1♀, Blao (Balao, 500 m), 14-21.X.1960 (C. Y.).

Distribution. Sumatra, Borneo, Viet Nam. New to Viet Nam.

Subgenus *Neohomoneura* Malloch

The subgenus *Neohomoneura* consists of thirty Oriental species. Thirteen new species from Viet Nam are described below, and two more species: *H. (N.) honesta* (Kertész) and *incompleta* Malloch are newly recorded from Viet Nam, and the former is also recorded from Cambodia for the first time.

It is characterized by the plesiomorphic states of the morphological characters: presence of a row of posterior bristles on mid tibia and dense rows of acrostichals, long wing, annular or ventrally elongate protandrium, and well-developed hypandrium.

PHYLOGENY. The plesiomorphic states of color character in the subgenus *Neohomoneura* were inferred to be as follows (other character states shown in the subgenus *Homoneura* by Sasakawa, 1992): wing spot or marking quite absent, and mesoscutum blackish brown.

The *setiventris*- and *limbata*-groups have clear wing, and the former is characterized by the fuscous mesoscutum and the latter by the testaceous one. The species with the maculate wing consist of *paroeca*-, *caudata*-, *honesta*- and *orientalis*-groups which are characterized by the dark apical markings remote from or ending nearly at apices of veins in the first two groups, and extending to apices of veins in the *honesta*-group, and connecting with the costal cloud in cell R₁ in the *orientalis*-group, respectively.

Key to the Oriental species of *Homoneura* (*Neohomoneura*)*

1. Wing yellowish hyaline, without marking 2
- Wing with conspicuous brown markings 5
2. Thorax blackish brown 3
- Thorax testaceous 4
3. Mesoscutum entirely fuscous, with a broad central gray-dusted vitta; anepisternum with a gray-dusted vitta across middle (Philippines) *setiventris* Malloch
- Mesoscutum with lateral side brownish yellow, without gray-dusted vitta and also on anepisternum (Java) *lugubris* (de Meijere)
4. Mesoscutum and abdominal tergites each with a median black vitta; *oc* reduced to microscopic setulae (Malaya, Borneo, Sumatra) *limbata* (Walker)
- Mesoscutum with a pair of fuscous vittae between lines of *dc* and *sa*; pleura with two black spots on upper part of anepisternum and on anterior dorsal part of katepisternum; *oc* long (Ceylon) *yerburyi* Malloch
5. Wing with a distinct fuscous mark anteriorly, apically or posteriorly 22
- Wing markings usually spotted on apices of veins and around cross veins 6
6. Cross veins r-m and m-cu each with brown spot or stripe-like marking (Viet Nam) *diphylla* n. sp.
- Cross vein r-m without trace of dark spot but m-cu clouded 7
7. Some of apical markings terminate before apices of veins 8
- Apical markings entirely extend to extreme apices of veins 14
8. Apical marking on R₄₊₅ fused with the one on R₂₊₃ and usually narrowly separated from the one on M₁ 9
- Apical markings on R₂₊₃, R₄₊₅ and M₁ roundish, quite isolated (Formosa) *nigronotata* (Kertész)
9. Apical marking on R₄₊₅ with basal extremity beyond that of marking on R₂₊₃, running obliquely toward marking on M₁ 10
- Apical marking on R₄₊₅ with basal extremity before or close on that of marking on R₂₊₃ 11
10. Posterior abdominal tergites each with a dark median stripe in addition to dark posterior margin; protandrium ringed; surstylus elongate, projected inwardly at apex (Viet Nam) *caudata* n. sp.
- Posterior tergites darkened only along posterior margins; protandrium horseshoe-shaped; surstylus conical, bearing a minute tooth apically (Viet Nam) *apodemata* n. sp.
11. Apical marking on R₄₊₅ distinctly remote from apex 12
- Apical marking on R₄₊₅ almost extending to apex of vein 13
12. Hind tibia with an usual *pd*; T4-6 without median spots; cercus with usual setae; surstylus conical (Formosa) *paroeca* (Kertész)
- Hind tibia with a very long *pd*; T4-6 each with a dark median triangle posteriorly; cercus with long setae; surstylus lobate (Viet Nam) *longiseta* n. sp.
13. Wing 5.0-6.3 mm in length; cercus with short setae; surstylus not separated from epandrium, projected triangularly in lateral view (Viet Nam) *turbida* n. sp.
- Wing 4.7 mm long; cercus with long setae on ventral apex; surstylus separated from epandrium, short, with apex curved anteriorly (Viet Nam) *dolabrifera* n. sp.
14. Apical marking on R₄₊₅ with basal extremity beyond that of marking on R₂₊₃ 15
- Apical marking on R₄₊₅ with basal extremity at same vertical level of that on R₂₊₃ 18
15. Abdomen largely dark brown; apical marking on R₂₊₃ one-half length of the vein (Sumatra, Borneo, Malaya) *intereuns* (Walker)
- Abdomen largely testaceous; apical marking on R₂₊₃ less than one-half length of the vein 16
16. T2(3)-5 with dark posterior margins; surstylus projected lobately, without apical process 17
- T3-6 each with a dark round spot at middle; surstylus with two spine-like processes on tip (Viet Nam) *mediomaculata* n. sp.

* Not included *H. (N.) bengalensis* (Macquart) and *circumfusa* (Wiedemann).

17. T2-5 with only posterior margins darkened, T6 testaceous; aedeagus without lateroproximal processes (Viet Nam) *clavigera* n. sp.
 — T3-6 with anterior and posterior margins darkened; aedeagus with processes at bases of lateral sclerites (Viet Nam) *lateriloba* n. sp.
18. Apical markings on R_{2+3} and R_{4+5} with basal extremities beyond level of m-cu 19
 — Apical markings on R_{2+3} and R_{4+5} with basal extremities at same vertical level of m-cu 20
19. T2-5 with dark posterior margins; surstylus protrudent but without projection (Viet Nam) *pollex* n. sp.
 — T4-6 each with a dark median stripe in addition to dark posterior margin on T2-5; surstylus with two projections (Viet Nam) *bigibba* n. sp.
20. T4-5(6) each with a brown spot at middle 21
 — T2-5(6) each distinctly darkened along posterior margin and T5(6) each with a triangular spot in center (Viet Nam) *subhonesta* n. sp.
21. Proepisternum haired in center (Burma) *indica* Malloch
 — Proepisternum bare in center (Formosa, Thai, Malaya, Viet Nam, Cambodia) *honesta* (Kertész)
22. Wing with costal or apical part brown 23
 — Wing with anterior margin white, broadly brown on posterior part but not extending to base or to apex (Borneo) *albicosta* Malloch
23. Wing faintly tinged with brownish yellow, with brown costal marking in cell R_1 in addition to apical marking 24
 — Wing brown-tinged and distinctly darkened on apical half (Viet Nam) *nebulosa* n. sp.
24. Cross vein r-m with a spot-like brown mark (Sumatra) *limbifera* (de Meijere)
 — Cross vein r-m without trace of brown spot 25
25. Costal marking begins distinctly beyond apex of R_1 26
 — Costal marking extends from apex of R_1 to wing tip 27
26. Costal marking begins distinctly beyond level of r-m; small subtriangular clear spots between apices of R_{2+3} and R_{4+5} and also between apices of R_{4+5} and M_1 (Sumatra, Viet Nam) *incompleta* Malloch
 — Costal marking begins almost at level of r-m; no clear spots in apical marking (Philippines) *macgregori* Malloch
27. Dark cloud on m-cu widely separated from costal and apical markings (Sumatra) *karnyi* Malloch
 — Dark cloud on m-cu connected with costal and apical markings (Java, Sumatra, Borneo, Malaya) *orientalis* (Wiedemann)

26. *Homoneura* (*Neohomoneura*) *diphylla* n. sp. (Fig. 11)

Male. Testaceous, slightly whitish dusted, but dorsal part of frons, parafacialia, scutum and scutellum more distinctly pruinose; arista black; abdomen subshiny, T4-6 each with brown median spot which is suboval in form, but small or obscure on T4. Wing hyaline, very faintly tinged with yellowish brown, with pale brown markings: apical ones on apices of R_{2+3} , R_{4+5} and M_1 which are extended to extremities of veins and separated narrowly from each another, suboval marking on R_{2+3} about one-sixth length of the vein, that on R_{4+5} about two-fifths length of ultimate section of vein and its basal extremity only a little beyond that of marking on R_{2+3} , and that on M_1 very pale and about one-half length of ultimate section of vein, and narrow spot- and stripe-like markings over both cross veins, respectively; halter with knob fuscous partly.

Frons as wide as long or eye, slightly divergent ventrally; frons very sparsely setulose on lateral side; parafrofrontalia with ventral part slightly projecting beyond eye in profile; eye 1.3 times as high as wide; gena about one-seventh eye height; *pm* nine, short; face flat, with antennal grooves shallow; third antennal segment nearly twice as long as wide; arista plumose, with dorsal longest hair subequal to width of third segment in length (*oc* and *or* missing, but detectable by pits).

Mesoscutum with 0+3 *dc*, ten rows of *acr* but eight sparse rows behind level of second *dc* (most of bristles missing). Wing: C-index 3.7, r-m slightly beyond middle of discal cell, 4V-index 1.3, 5V-index 0.14 (both wings broken at apices). Legs: f_1 with 3-4 *pv*, f_2 with six *a*; t_2 with a row of eight or eleven *p* and three spurs in addition to short one, all tibial *pd* distinct.

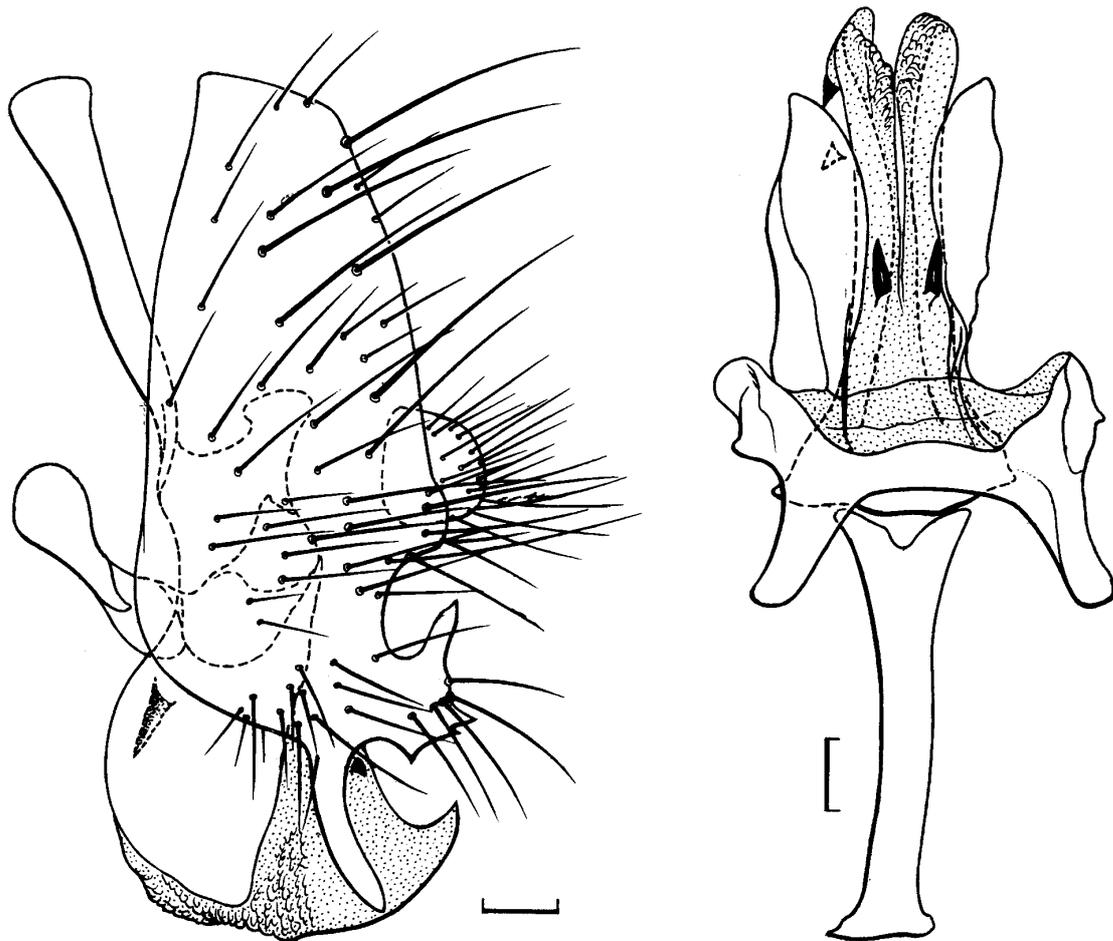


Fig. 11. Male genitalia of *Homoneura (Neohomoneura) diphylla* n. sp. (holotype).

Protandrium horseshoe-shaped, longer than epandrium but distinctly narrowed ventrally, with two to three pairs of short marginal setae on dorsal side. S6 slightly wider than long, slightly broadened distally and with a shallow emargination on posterior margin; S4 and 5 quadrate, 1.4 and 1.7 times as wide as long, respectively. Epandrium large, densely setose; surstylus consists of caudal and ventral processes as shown in the figure; hypandrium short H-shaped; pregonite broad leaf-like; aedeagus membranous ventrally, sclerotized dorsally in two sclerites which are pointed dorsally on apices and provided with two pairs of teeth before apices.

Body length 6.5 mm, wing length 6.3 mm.

Female. Unknown.

Holotype male (BISHOP No. 16422), Di Linh (Djiring, 1200 m), 22-28. IV. 1960, L. W. Quate; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen.

Distribution. Viet Nam.

Diagnosis. This large testaceous species is unique in having the dark markings over both cross veins in addition to three apical markings at wing tip, and the male genitalia with distinctly projecting surstylus and short H-shaped hypandrium, thus differing from all the known Oriental species.

Etymology. The specific name is from the Greek, meaning 'two leaves' and refers to a pair of leaf-like broad pregonites.

27. *Homoneura (Neohomoneura) caudata* n. sp. (Fig. 12)

Male & female. Testaceous; head sparsely grayish dusted, frontalia with a pair of brownish stripes inside of parafrontalia; ocellar triangle pale brown; third antennal segment slightly tinged with brown apically, arista black excepting base; scutum and scutellum more densely grayish dusted than pleura; T2-6 each with posterior margin distinctly black (1/4-1/2 as long as tergal length except for T2, rarely disappears on T6), T3-5 with anterior margin

brown (sometimes quite lacking in females), T3(4)-6 each with brown median stripe connected with both anterior and posterior dark margins. Wing hyaline, faintly tinged with yellowish brown anteriorly, with pale brown markings on apex of R_{2+3} and before apices of R_{4+5} and M_1 which are either connected with or separated from each another, and suboval marking on R_{2+3} about one-fifth length of the vein, as long as that on R_{4+5} and usually slightly longer than that on M_1 , arranged obliquely as a whole toward posterodistal part, and over m-cu; halter testaceous.

Frons as wide as long, slightly wider than eye, diverging ventrally; frontalia setulose; parafrontalia projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* subequal to lower *or* in length; eye 1.3 times as high as wide; gena 1/8-1/7 eye height; *pm* 9-11, short; face flat, strongly carinate between bases of antennae; third antennal segment twice as long as wide; arista plumose, with dorsal longest hair as long as width of third segment.

Mesoscutum with 0+3 *dc*, nine to ten rows of *acr*, *prsc* longer than first *dc*, posteriormost *ia* longer than other postsutural ones, posterior *sa* one-third length of the anterior. Wing: C-index 3.7-4.2, r-m before middle of discal cell, 4V-index 1.05-1.25, 5V-index 0.15-0.17. Legs: f_1 with four *pv*, f_2 with 5-6 *a*; t_2 with a row of 5-6 *p* and three spurs, *pd* on t_3 subequal to that on t_1 in length.

Protandrium ringed, dorsally as long as epandrium, with a seta above spiracle, bridge distinct, sternite projected vertically at both ends of bridge. Male S6 as long as wide, S4 and 5 each only a little longer than wide. Epandrium setose sparsely; surstylus projected distinctly and incurved apically; hypandrium H-shaped but divergent distally; pregonite long and with a seta at base; aedeagus membranous ventrally except for basal part, with lateral sclerite bearing two teeth pointed posteriorly and laterally.

Body length 5.9-7.0 (6.6 in holotype) mm, wing length 5.4-6.7 (6.0 in holotype) mm.

Holotype male (BISHOP No. 16405), Fyan (1200 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 4 ♂ & 1 ♀, Mt. Lang Bian (1400-1500 m), 19. V. -8. VI. 1961, N. R. Spencer; 4 ♂ & 1 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961, Spencer; 3 ♂ & 9 ♀, same date as in holotype; 1 ♀, 22 km S. of Nha Trang, 20-26. XI. 1960, C. M. Yoshimoto.

Distribution. Viet Nam.

Diagnosis. The wing pattern of this species is characteristic in the oblique arrangement of three apical markings with same size. The coloration of abdominal tergites is specific as well as in *H. (N.) lateriloba* n. sp., but the wing apical markings are quite different from each other.

Etymology. The specific name refers to the projecting surstylus (appendage).

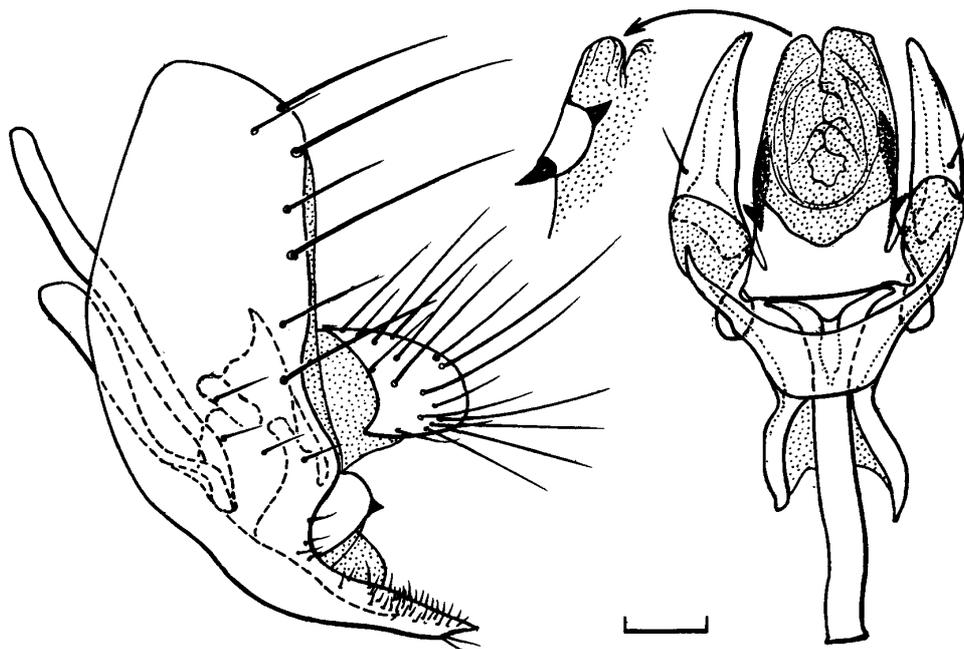


Fig. 12. Male genitalia of *Homoneura (Neohomoneura) caudata* n. sp. (paratype).
Dorsal apex of aedeagus is shown.

28. *Homoneura (Neohomoneura) apodemata* n. sp. (Fig. 13)

Male. Testaceous, sparsely whitish dusted but parafacialia and scutum posteriorly distinctly pruinose; ocellar triangle brown-tinged; arista dark brown excepting base; T2-5 with posterior margins darkened. Wing hyaline, very faintly tinged with brownish yellow, with brown markings: suboval marking on apex of R_{2+3} slightly longer than one-fifth of the vein, markings on R_{4+5} and M_1 not extended to apices of veins, marking on R_{4+5} one-third length of ultimate section of the vein, slightly longer than that on R_{2+3} and with its basal extremity slightly beyond that of marking on R_{2+3} , marking on M_1 paler and one-half length of ultimate section of the vein, and round spots on both extremities of cross vein m-cu with very narrow stripe over vein between these spots.

Frons almost as wide as long or eye, slightly diverging ventrally; frontalia sparsely setulose on lateral sides; parafrontalia slightly projecting above eye in profile; lower *or* shorter than the upper; *oh* three; *oc* subequal to lower *or* in length; eye 1.6 times as high as wide; gena one-eighth eye height; *pm* 9-10, short; face flat, with dorsal carina between bases of antennae broad; third antennal segment twice as long as wide; arista plumose, with dorsal longest hair longer than width of third segment (left antenna missing).

Mesoscutum with 0+3 *dc*, eight rows of *acr*, *prsc* slightly longer than first *dc*, posteriormost *ia* only a little longer than other postsutural *ia*-setulae; posterior *sa* two-fifths of anterior *sa*. Wing: C-index 3.8, r-m before middle of discal cell, 4V-index 1.05, 5V-index 0.15. Legs: f_1 with 4-5 *pv*, f_2 with five *a*; t_2 with a row of 7-8 *p* and three spurs, *pd* on t_3 weaker than that on t_1 .

Protandrium horseshoe-shaped, as long as epandrium in dorsal side, not narrowed ventrally and in ventral margin about one-half as long as dorsal length. S4-6 each quadrate, 1.4 times as wide as long. Epandrium narrowed below the middle; surstylus short conical in lateral view, with a minute tooth on tip; hypandrium somewhat V-shaped; pregonite pointed on tip; aedeagus membranous ventrally, with two pairs of teeth on lateral sclerites; aedeagal apodeme very short.

Body length 6.5 mm, wing length 6.2 mm.

Female. Unknown.

Holotype male (BISHOP No. 16406), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen.

Distribution. Viet Nam.

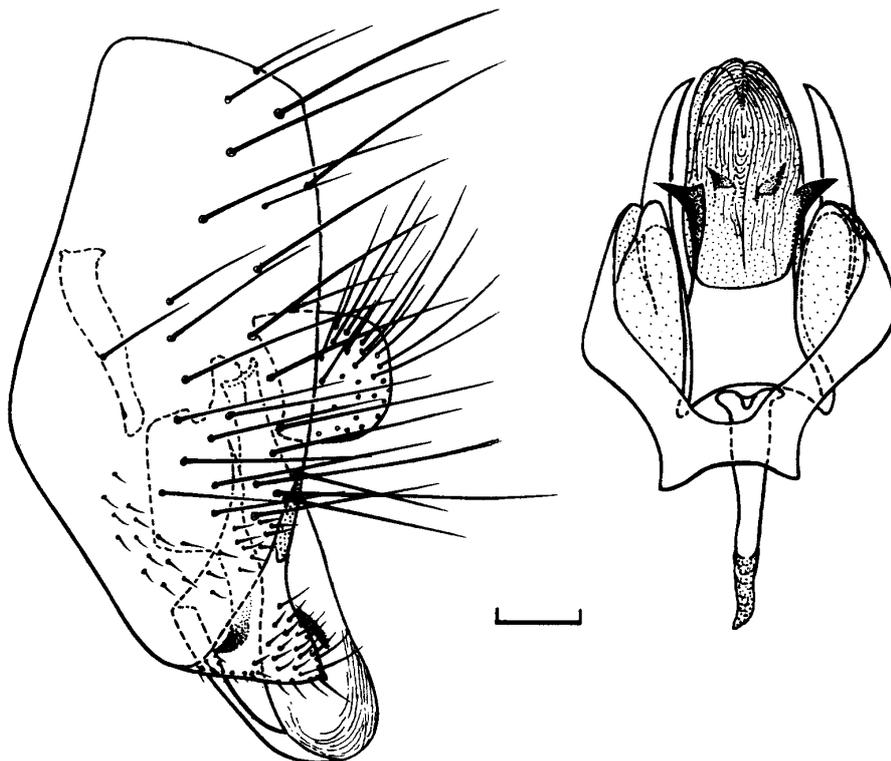


Fig. 13. Male genitalia of *Homoneura (Neohomoneura) apodemata* n. sp. (holotype).

Discussion. This species is easily distinguishable from *H. (N.) caudata* n. sp. with similar wing pattern by its structures of male genitalia except for the aedeagus as shown in the key.

Etymology. The specific name refers to the short aedeagal apodeme.

29. *Homoneura (Neohomoneura) longiseta* n. sp. (Fig. 14)

Male & female. Testaceous, sparsely whitish dusted; parafrofrontalia, scutum and abdomen very weakly shining when viewed from side; ocellar triangle centrally and third antennal segment distally slightly tinged with brown; arista black except for base; T2-5 with posterior margins dark brown, usually obscure on T6, T4-6 each with a pale brown small median triangle which is connected with dark posterior margin (triangle on T4 small or rarely indistinct). Wing hyaline, very faintly tinged with brown, with brown markings: apical ones on apex of R_{2+3} and before apices of R_{4+5} and M_1 , suboval marking on R_{2+3} one-fifth length of the vein, that on R_{4+5} 1/4-1/3 length of ultimate section of the vein, fused with the former anteriorly and its basal extremity before or close on that of marking on R_{2+3} , and the smallest one on M_1 1/4-1/3 length of ultimate section of the vein and well separated from wing margin and usually separated from marking on R_{4+5} , and a band-like marking over m-cu; halter testaceous. Legs pale testaceous excepting tarsi.

Frons slightly wider than long, 1.3-1.4 times as wide as eye, slightly diverging ventrally; frontalia sparsely setulose below level of upper *or*; lower *or* about four-fifths length of the upper; *oc* subequal to lower *or* in length but much slender; eye one and a half times as high as wide; gena narrow, about one-tenth eye height; *pm* 8-10, short; face flat; third antennal segment twice as long as wide; arista plumose, with dorsal longest hair longer than width of third

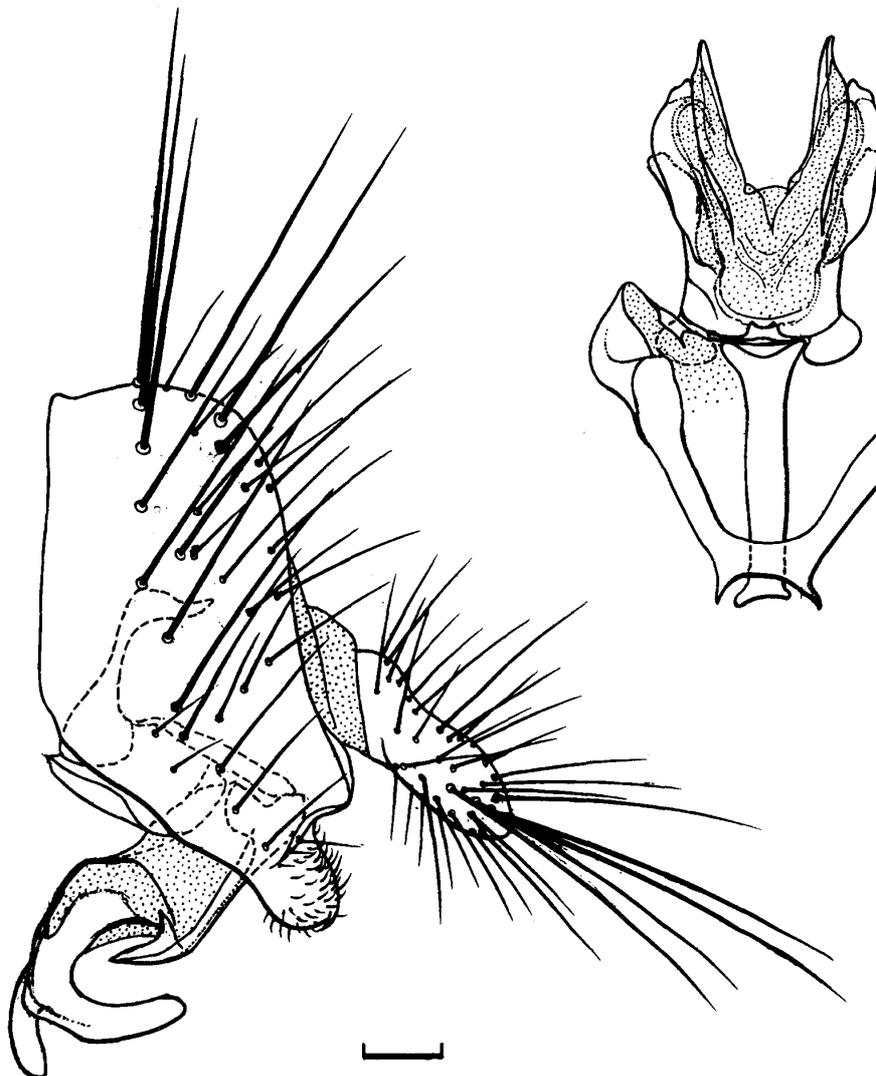


Fig. 14. Male genitalia of *Homoneura (Neohomoneura) longiseta* n. sp. (paratype).

segment.

Mesoscutum with 0+3 *dc*, first *dc* nearer to suture than to second *dc*, eight rows of *acr*, *prsc* slightly longer than first *dc*, posteriormost *ia* longer and sometimes more than twice length of other postsutural *ia*-setulae. Wing: C-index 3.4-3.6, r-m before middle of discal cell, 4V-index 1.1-1.2, 5V-index 0.13-0.16. Legs: f_1 with four long *pv*, f_2 with 5-6 *a*; t_2 with a row of 3-5 *p* and three long and one short spurs, all tibiae with *pd*, of which *pd* on t_2 stout, that on t_3 extremely long and 2-2.5 times length of *pd* on t_1 .

Protandrium ringed, dorsally 1.3 times as long as epandrium, sternal sclerites extended vertically in short length at both ends of bridge, with about three pairs of dorsal setae before posterior margin. S4-6 each nearly twice as wide as long, bearing 4-5 long setae along lateral margin, of which 3-4 setae subequal to posterior marginal setae on tergites. Epandrium with very long setae dorsally; surstylus lobate, setulose, with a claw-like spine dorsoapically; cercus with very long setae distally; hypandrium V-shaped; pregonite short conical; aedeagus with lateral sclerite trifurcated as shown in the figure.

Body length 4.8 (holotype)-5.3 mm, wing length 4.5 (holotype)-5.1 mm.

Holotype male (BISHOP No. 16403), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 13 ♂ & 2 ♀, same data as in holotype.

Distribution. Viet Nam.

Diagnosis. This species is distinctive in the presence of several long setae on the epandrium and cercus, and a long preapical posterodorsal seta on the hind tibia.

Remarks. Preapical spot on R_{4+5} is variable in size, that is, it is subequal to apical marking on R_{2+3} in length (holotype) or 1.3-1.5 times (mostly) as long as that on R_{2+3} .

Etymology. The specific name refers to the long setae on the cercus and hind tibia.

30. *Homoneura (Neohomoneura) turbida* n. sp. (Fig. 15)

Male. Testaceous; parafacialia and postgena whitish pruinose; ocellar triangle brown; thorax brownish gray-dusted (densely on scutum); abdomen sparsely dusted, subshining, T2(3)-5 with posterior margins distinctly brownish black, T4-6 each with brownish median triangle connected at base with dark posterior margin and not extended to anterior margin of tergite. Wing hyaline, faintly tinged with brown, with brown markings on apices of R_{2+3} , R_{4+5} and M_1 , and over m-cu: suboval markings on R_{4+5} and M_1 narrowly separated from extreme apices of veins, the former with its basal extremity almost in vertical line with basal extremity of the one on R_{2+3} and the latter almost as long as the one on R_{2+3} and usually fused indistinctly with the one on R_{4+5} ; halter testaceous.

Frons almost as long as wide, slightly wider than eye, slightly diverging ventrally; frontalia sparsely setulose laterally and ventrally; parafrofrontalia projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* subequal to upper *or* in length; eye about 1.4 times as high as wide; face flat but carinate between bases of antennae; *pm* 10-12, short; third antennal segment about twice as long as wide; arista plumose, with dorsal longest hair longer than width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr* (10 rows before transverse suture), *prsc* longer than first *dc*, posteriormost *ia* about twice as long as other postsutural *ia*-setulae, posterior *sa* less than one-half length of the anterior. Wing: C-index 3.8-4.0, r-m before middle of discal cell, 4V-index 1.15-1.2, 5V-index 0.16-0.17. Legs: f_1 with four long *pv*, f_2 with 5-7 *a*; t_2 with a row of 5-9 *p* and three spurs, *pd* on t_3 weaker than that on t_1 .

Protandrium ringed, without sternal processes ventrally, with one or two setae above spiracle. S4-6 quadrate, slightly shorter than wide. Epandrium sparsely setose; surstylus triangular in lateral view, pointed apically, with short setae; hypandrium H-shaped but divergent distally, with basal apodeme broader than the distal; pregonite long, pointed apically; aedeagus largely membranous on ventral side excepting base, with two pairs of teeth on lateral sclerites.

Body length 5.7-6.0 (holotype) mm, wing length 5.0-6.3 (5.7 in holotype) mm.

Female. Unknown.

Holotype male (BISHOP No. 16404), Fyan (900-1000 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 10 ♂, same data as in holotype; 1 ♂, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961, Spencer.

Distribution. Viet Nam.

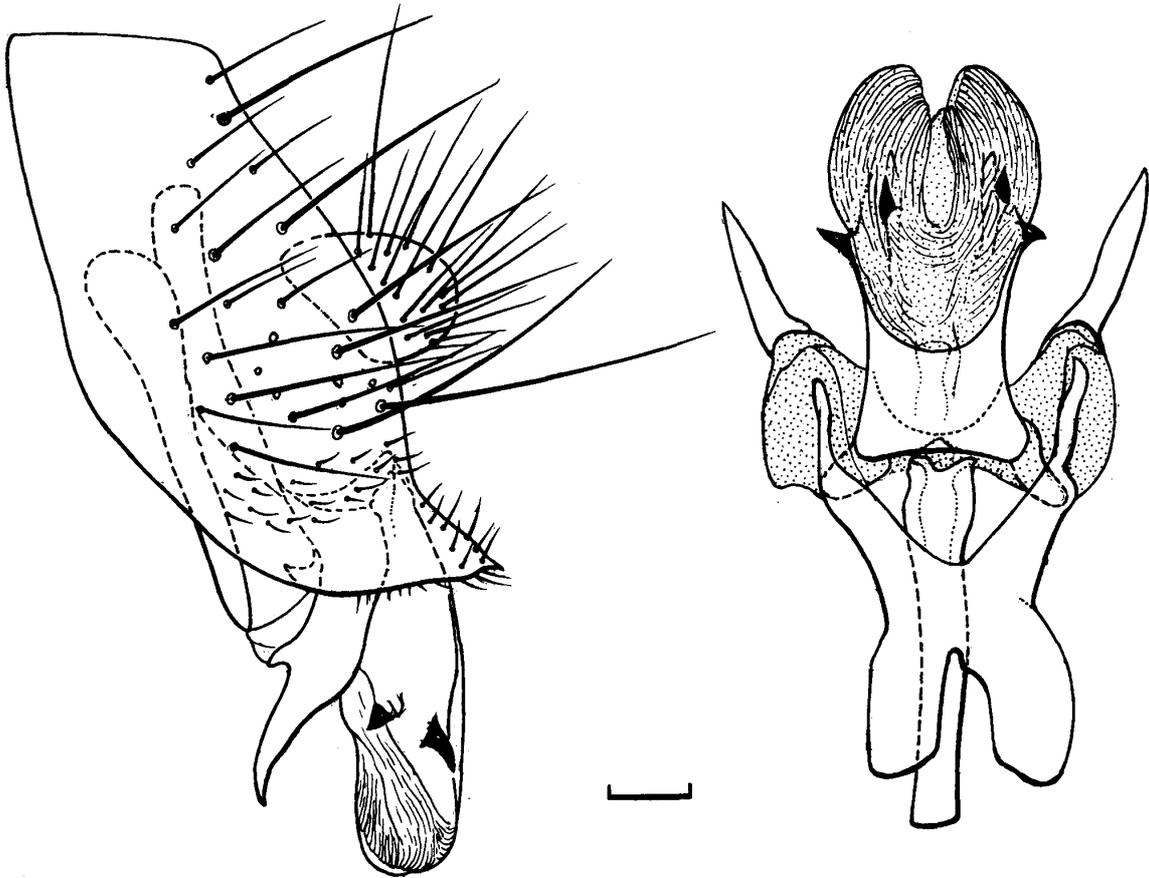


Fig. 15. Male genitalia of *Homoneura (Neohomoneura) turbida* n. sp. (paratype).

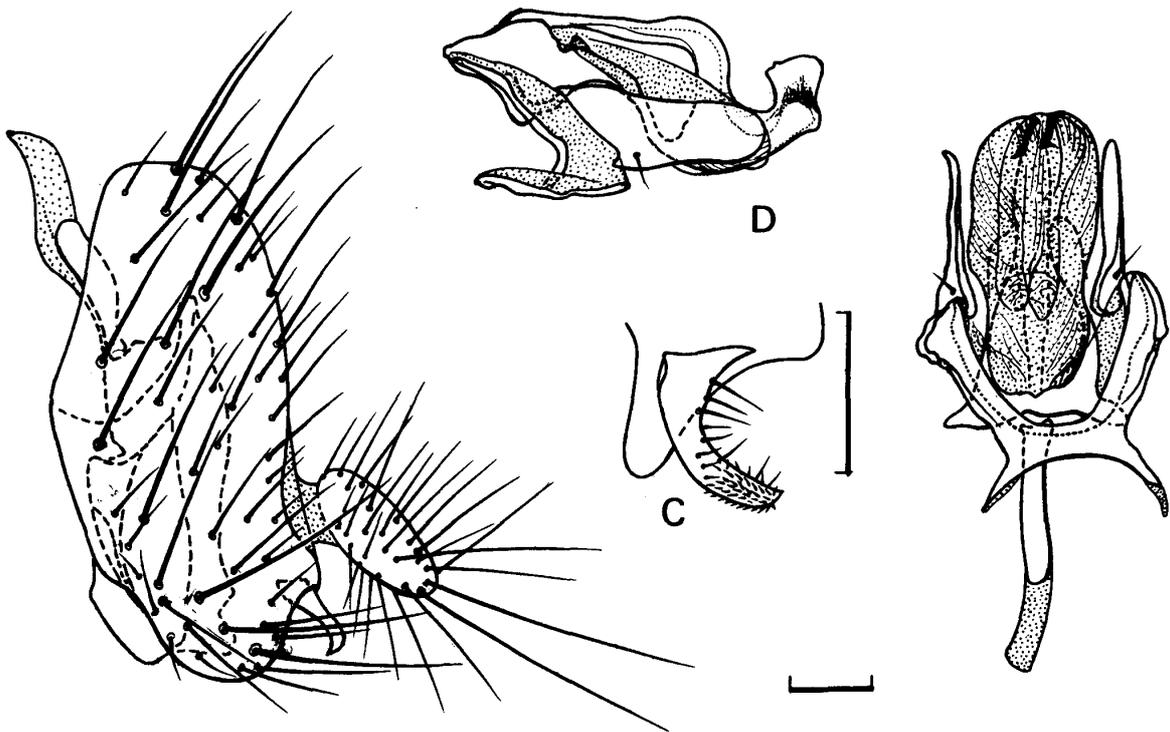


Fig. 16. Male genitalia of *Homoneura (Neohomoneura) dolabrifera* n. sp. (holotype).
C, surstylus, inner posterior view; D, aedeagus, lateral view.

Discussion. The wing pattern of this new species bears somewhat resemblance to that of *H. (N.) paroeca*, but it is larger than *paroeca*, and its coloration of posterior abdominal tergites and the shape of surstylus are distinctive: in *paroeca*, the posterior margins of tergites are sometimes narrowly black and the surstylus is not pointed apically (Kertész, 1915, fig. 16).

Etymology. The specific name refers to the confusion with the related species in the wing markings.

31. *Homoneura (Neohomoneura) dolabrifera* n. sp. (Fig. 16)

Male. Testaceous; frontalia with a pair of brownish stripes laterally; face paler, parafacilia, gena and postgena yellowish, sparsely whitish dusted; arista black except for base; thorax sparsely whitish dusted, scutellum pale brown except for margin, katapisternum and legs paler, distal three segments of tarsi slightly brown-tinged; abdomen subshiny, T2-5 each with posterior margin brownish black, T4-6 each with a median stripe. Wing very faintly tinged with yellowish brown, with three brown suboval markings on apices of R_{2+3} , R_{4+5} and M_1 : the one on R_{2+3} about one-fourth length of the vein and fused with the one on R_{4+5} , the ones on R_{4+5} and M_1 ended slightly before wing margin, and the former about two-fifths length of ultimate section of vein, with its basal extremity before that of marking on R_{2+3} , and the latter very pale, about one-half length of ultimate section of vein, and a brown band over m-cu; halter testaceous.

Frons almost as wide as long or eye, almost parallel-sided; frontalia with minute setulae; parafrontalia slightly projecting above eye margin in profile; lower *or* slightly shorter than the upper; *oc* subequal to lower *or* in length; eye 1.4 times as high as wide; gena one-eighth eye height; *pm* 7-8; face flat; third antennal segment scarcely twice as long as wide; arista plumose, with dorsal longest hair slightly longer than width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr*, posteriormost *ia* twice as long as length of other *ia*-setulae, posterior *sa* 1/3-1/2 length of the anterior. Wing: C-index 4.0, r-m before middle of discal cell, 4V-index 1.2, 5V-index 0.17. Legs: f_1 with four *pv*, f_2 with 5-6 *a*; t_2 with a row of 4-5 *p* and three long and one short spurs, *pd* on t_3 shorter than those on t_1 and t_2 .

Protandrium ringed but narrowly separated at middle of horizontal sternite, twice as long as epandrium in dorsal side, distinctly narrowed above sternite, with setulae in two to three rows on dorsocaudal margin. S4-6 each quadrate, slightly wider than long. Epandrium densely setigerous, swollen ventrally; surstylus short and narrow; cercus with long seta distally; hypandrium somewhat H-shaped but basal apodeme very short, distal apodemes bifurcated, respectively; pregonite lobate, with a short seta at base; aedeagus with an ax-like process on tip of lateral sclerite; aedeagal apodeme about one-half length of aedeagus.

Body length 5.0 mm, wing length 4.7 mm.

Female. Unknown.

Holotype male (OMNH-TI 143), Tam Dao, Vinh Phu, 26. VI. 1999, M. Sasakawa; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen.

Distribution. Viet Nam.

Discussion. This species is similar to *H. (N.) longiseta* n. sp. in having the long setae on the cercus, but quite different from the latter in the wing markings as shown in the key. The male genitalia of *dolabrifera* are distinctive, differing from those of *turbida* n. sp.

Etymology. The specific name refers to the aedeagus which is shaped like an ax on tip.

32. *Homoneura (Neohomoneura) mediomaculata* n. sp. (Fig. 17)

Male & female. Testaceous; parafacialia, gena and postgena paler; parafrontalia weakly shining; parafacialia silvery-white pruinose; face, thorax and abdomen sparsely whitish dusted; third antennal segment slightly brownish apically, arista black except for brown base; abdomen weakly shining, T3-6 with dark spots at center, not extended to posterior margins of tergites, of which those on T3 and 4 brown and suboval in form and those on T5 and 6 black and subcircular. Wing tinged with brownish yellow, especially on anterior part, with brown apical markings confined to apices of R_{2+3} , R_{4+5} and M_1 , fused with each another: marking on R_{2+3} about one-fourth length of the vein, that on R_{4+5} two-fifths as long as ultimate section of vein and with its basal extremity slightly beyond vertical level of that of the

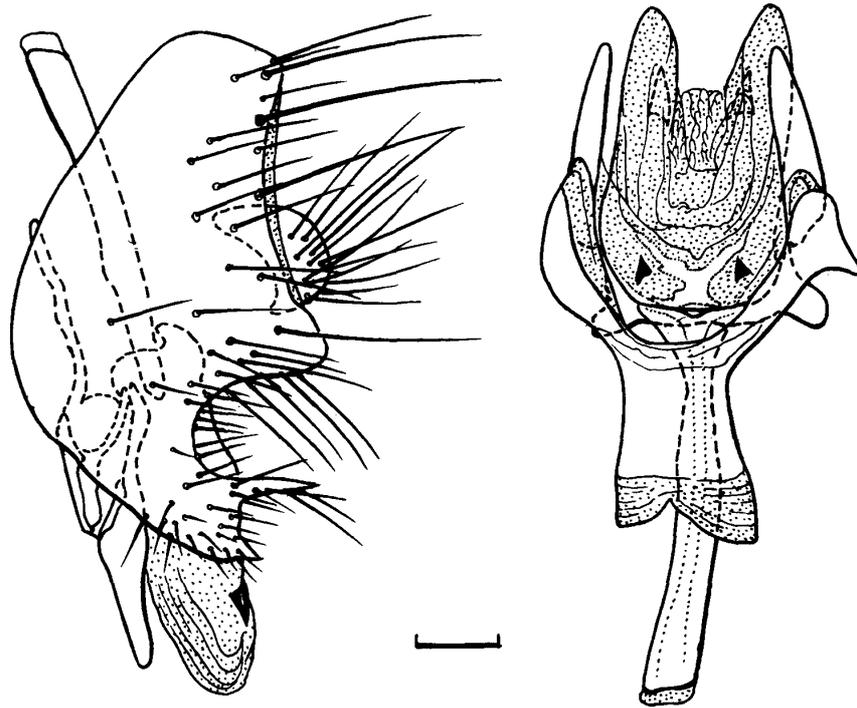


Fig. 17. Male genitalia of *Homoneura* (*Neohomoneura*) *mediomaculata* n. sp. (paratype).

one on R_{2+3} , that on M_1 about three-fifths length of ultimate section of the vein, and with brown spots on both extremities of m-cu which is very narrowly clouded around vein at middle; halter yellow.

Frons almost as wide as long or eye, slightly diverging ventrally; lower *or* slightly shorter than the upper; *oc* slightly shorter than lower *or*; frontalia setulose on lateral and ventral parts; one *oh* below upper *or* rather distinct; eye 1.3 times as high as wide; gena one-ninth eye height; *pm* 11-13, short; face flat; third antennal segment twice as long as wide, gradually narrowing apically; arista plumose, with dorsal longest hair longer than width of third segment.

Mesoscutum with 0+3 *dc*, first *dc* situated slightly close to suture than to the second, ten irregular rows of *acr*, *prsc* longer than first *dc*, *ipa* subequal to *opa* in length, posterior *sa* one-third length of the anterior, posteriormost *ia* as long as posterior *sa*; anterior *stpl* about one-half of the posterior. Wing: C-index 4.0-4.2, r-m before middle of discal cell, 4V-index 1.05-1.1, 5V-index 0.14-0.16. Legs: f_1 with 4-5 *pv*, f_2 with 6-7 *a*; t_2 with a row of 6-7 *p*, and three long and one short spurs, *pd* on t_3 weaker than that on t_1 .

Protandrium ringed, but short sternal sclerite below both ends of bridge curved mesally but not connected with each other, with dorsal apodeme less than one-half as long as protandrium, ventral bridge very short. Male S5 and 6 almost quadrate, only a little wider than long. Epandrium distinctly excavated above surstylus which is provided with two spine-like processes; hypandrium Y-shaped, broad and less-sclerotized at base; pregonite black, without seta; aedeagus with a pair of long spines before dorsal tip and a pair of short ones at ventral base; aedeagal apodeme longer than aedeagus.

Body length 5.5-6.0 (holotype) mm, wing length 5.0 (holotype)-5.3 mm.

Holotype male (BISHOP No. 16409), Dai Lanh, N. of Nha Trang, 30. XI. -5. XII. 1960, C. M. Yoshimoto. Paratypes: Viet Nam- 1 ♂, Karyu Danar (200 m), 13-28. II. 1961, N. R. Spencer; 1 ♂, Dalat (1500 m), 29. IV. -4. V. 1960, Yoshimoto; 1 ♀, Fyan (900-1000 m), 11. VII. -9. VIII. 1961, Spencer; 1 ♂, Ap Hung-Lan, 21 km NW. of Di Linh (1100 m), 29. IX. -5. X. 1960, Yoshimoto; 1 ♀, 15 km NW. of Phan Rang, 8-16. XI. 1960, Yoshimoto; 1 ♀, 22 km S. of Nha Trang, 20-26. XI. 1960, Yoshimoto; 2 ♂ & 1 ♀, same data as in holotype; 1 ♂, Ban Me Thuot (500 m), 20-24. XII. 1960, Yoshimoto. Cambodia- 1 ♂, Sem Reap, 10. III. 1968, M. D. Delfinado; 1 ♂, Damrey Phong, 14-16. IV. 1961, Spencer.

Distribution. Viet Nam, Cambodia.

Discussion. The wing pattern of this new species, especially the marking on apex of R_{4+5} , is intermediate between that of *H. (N.) honesta* (Kertész) and *intereuns* (Walker) in size. Also, the coloration of abdominal tergites is

similar to that of *honesta*, but the male genitalia of *mediomaculata* are distinctive in the shapes of surstylus, aedeagus and protandrium.

33. *Homoneura (Neohomoneura) clavigera* n. sp. (Fig. 18A)

Male. Testaceous; parafacialia, gena and postgena yellowish and whitish dusted; ocellar triangle pale brown; arista black except for base; mesoscutum more densely whitish gray dusted than on pleura, postpronotal lobe yellowish; abdomen subshiny, T1-2 yellowish laterally, T2-5 with posterior margins broadly brownish black, T6 with posterior margin linearly brown or not. Wing hyaline, faintly tinged with yellowish brown, with brown markings on apices of R_{2+3} , R_{4+5} and M_1 , fused with each another: marking on R_{2+3} 2/7-3/8 length of the vein and slightly beyond vertical level of m-cu, that on R_{4+5} about one-half length of ultimate section of vein and its basal extremity slightly beyond vertical level of that of the one on R_{2+3} , that on M_1 three-fifths length of ultimate section of vein; clear triangular spots between apical ends of two markings along wing margin distinct or obscure; brown band over m-cu; halter testaceous.

Frons as long as wide, slightly wider than eye, slightly diverging ventrally; frontalia setulose laterally and ventrally; parafrontalia slightly projecting above eye in profile; lower *or* four-fifths length of the upper; *oc* subequal to lower *or*; eye 1.4-1.5 times as high as wide; gena 1/8-1/9 eye height; *pm* 9-11, short; face carinate between bases of antennae; third antennal segment twice as long as wide, gradually narrowing apically; arista plumose, with dorsal longest hair about one and a half times as long as width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, *prsc* longer than first *dc*, posteriormost *ia* nearly twice length of postsutural *ia*-setulae, posterior *sa* less than half of anterior *sa*. Wing: C-index 3.5-4.0, r-m before middle of discal cell, 4V-index 1.25-1.35, 5V-index 0.15-0.16. Legs: f_1 with five *pv*, f_2 with 5-6 *a*, t_2 with a row of 6-7 *p* and three spurs in addition to a short one, *pd* on t_3 weaker than that on t_1 .

Protandrium ringed, longer than epandrium in dorsal side, with a seta above spiracle, bridge not complete and separated at middle, ventral sternal processes at both ends of bridge only one-fourth length of bridge. Epandrium broadened ventrally, sparsely setose dorsally, with surstylus produced near anteroventral corner, separated from epandrium at base and hairy; hypandrium H-shaped, with both apodemes narrow; pregonite clavate; aedeagus well-sclerotized laterally and with a pair of minute teeth at middle of ventroproximal sclerite.

Body length 5.5-6.2 (6.0 in holotype) mm, wing length 5.2 (holotype)-5.6 mm.

Female. Unknown.

Holotype male (BISHOP No. 16410), Fyan (1200 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 11 ♂, same data as in holotype; 1 ♂, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961, Spencer.

Distribution. Viet Nam.

Discussion. Apical markings on wing are somewhat similar to those of *H. (N.) intereuns* (Walker) in outline, but suboval spot on R_{2+3} is about one-third length of the vein and that on R_{4+5} one-half length of ultimate section of the vein (in *intereuns* 1/2 and 3/5, respectively). The male genitalia of *clavigera* are distinctive in the shape of surstylus and structure of aedeagus which is similar to that of *orientalis* (Wiedmann) (Sasakawa, 1992, fig. 8), quite differing from those of *intereuns*.

Etymology. The specific name refers to the clavate shape of surstylus or pregonite.

34. *Homoneura (Neohomoneura) lateriloba* n. sp. (Fig. 18B)

Male. Testaceous; head sparsely whitish dusted, parafacialia densely whitish pruinose; scutum more densely brownish white dusted than pleura; ocellar triangle brown; abdomen weakly shining, T2 with dark posterior margin, T3-5 with brown to blackish anterior and posterior margins broadly which are connected with each other by a median dark fascia, but anterior dark band not extended to lateral sides of tergites, T6 almost entirely dark brown; protandrium and epandrium testaceous. Wing hyaline, faintly tinged with brownish yellow, with pale brown suboval markings on apices of R_{2+3} , R_{4+5} and M_1 , fused indistinctly with each another or separated from each other: marking on R_{2+3} one-fifth length of the vein, that on R_{4+5} longest, about two-fifths length of ultimate section of vein but its basal extremity beyond that of the one on R_{2+3} ; that on M_1 pale, about three-fifths length of ultimate section of vein

and subequal to that on R_{2+3} in length; two clear spots in a form of subtriangle along wing margin between apical ends of two markings; brown spots on both extremities of m-cu distinct but very narrowly clouded around vein at middle; halter with knob darkened apically.

Frons almost as long as wide, slightly wider than eye, slightly diverging ventrally; frontalia sparsely setulose on lateral and ventral parts; parafrontalia linearly projecting above eye in profile; lower *or* only a little shorter than the upper; *oc* slightly shorter than lower *or*; eye about 1.4 times as high as wide; gena about one-seventh eye height; *pm* 10-11, short; face carinate between bases of antennae, with median part distinctly raised and beyond parafacialia vertically in profile; third antennal segment 1.8 times as long as wide; arista plumose, with dorsal longest hair distinctly longer than width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, posteriormost *ia* slightly longer than other *ia*-setulae, posterior *sa* nearly one-third of the anterior. Wing: C-index 3.8-4.1, r-m before middle of discal cell, 4V-index 1.1-1.2, 5V-index 0.15-

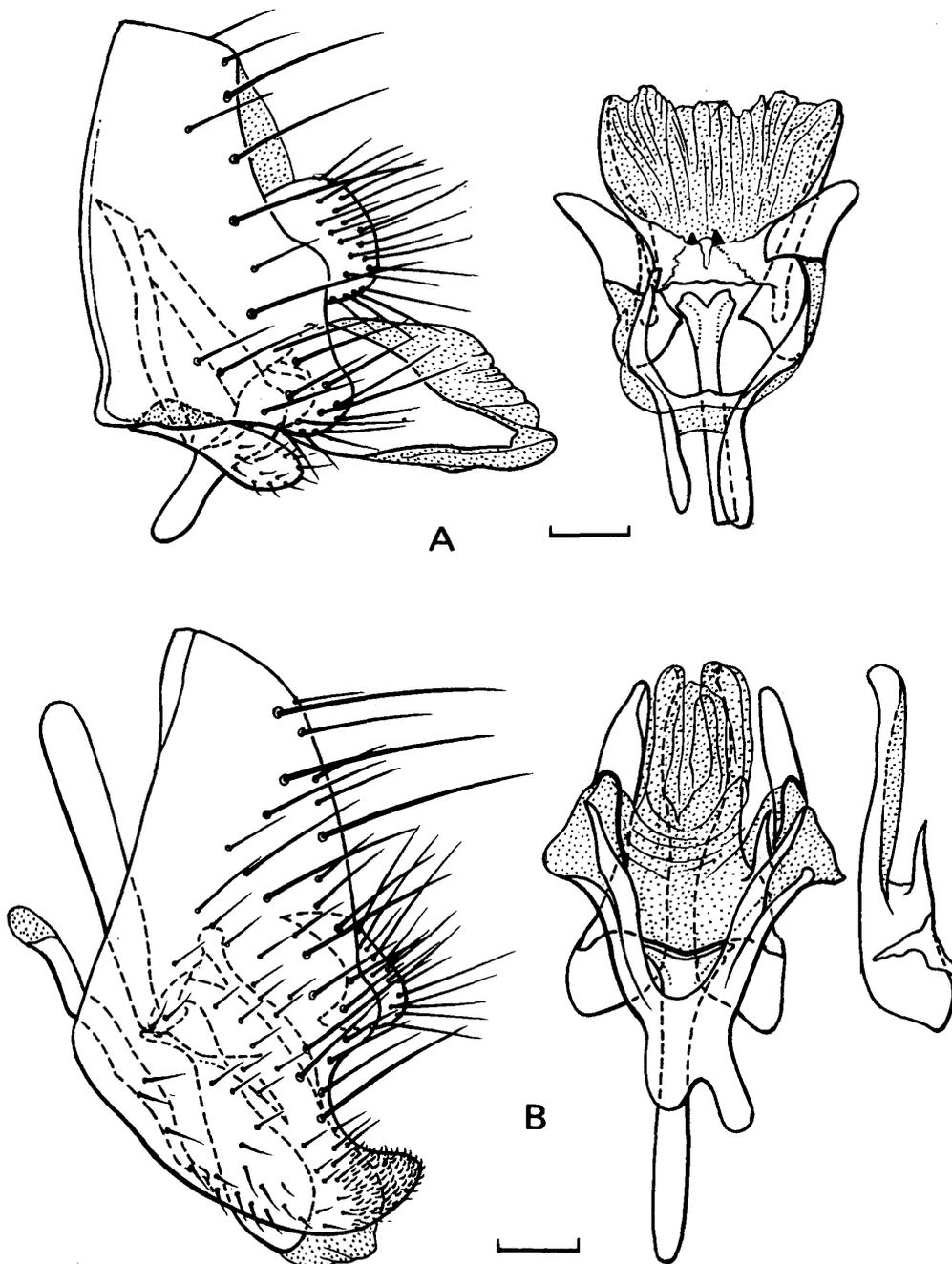


Fig. 18. Male genitalia of *Homoneura (Neohomoneura) clavigera* n. sp. (A, paratype) and *H. (N.) lateriloba* n. sp. (B, paratype; aedeagus, ventral and lateral views).

0.16. Legs: f_1 with five pv , f_2 with 5-6 a ; t_2 with a row of 6-7 p and three (rarely 4) spurs, pd on t_3 weaker than that on t_1 .

Protandrium ringed, slightly longer than epandrium in dorsal side, with bridge broader than V-shaped sternite, bearing a seta above spiracle. Epandrium broadened ventrally, rather densely setose, with surstylus projected posteriorly and minutely setulose apically; hypandrium H-shaped, but basal apodemes extremely shorter than divergent distal ones; pregonite spatulate; aedeagus with a pair of processes, which are bifurcate apically, at base of lateral sclerites, and membranous ventrally.

Body length 6.2 (holotype)-7.0 mm, wing length 6.3 (holotype)-7.0 mm.

Female. Unknown.

Holotype male (BISHOP No. 16411), Fyan (1200 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 4 ♂, same data as in holotype, but 900-1000 m.

Distribution. Viet Nam.

Diagnosis. This species is unique by having the transversally and longitudinally darkened abdominal tergites and a pair of processes at base of lateral aedeagal sclerites.

Etymology. The specific name refers to the lateral projections at base of the aedeagus.

35. *Homoneura (Neohomoneura) pollex* n. sp. (Fig. 19A)

Male. Testaceous, slightly whitish dusted, parafacialia along eye margin and occipital setulose area distinctly pruinose; arista black; scutum mat; abdomen subshiny, T2-5 each with black posterior margin. Wing faintly tinged with brown, but distinct anteriorly, with brown suboval markings on apices of R_{2+3} , R_{4+5} and M_1 , almost fused with each another: marking on R_{2+3} nearly one-fourth length of the vein, that on R_{4+5} about 2/5 length of ultimate section of vein and its basal extremity at same level of that on R_{2+3} , that on M_1 nearly half of ultimate section of the vein, and brown band over m-cu; clear triangles between apical ends of two adjacent markings along wing margin distinct or indistinct; halter testaceous. Legs with distal three segments of tarsi slightly brown-tinged.

Frons as long as wide or eye, slightly diverging ventrally; frontalia sparsely setulose on lateral and ventral parts; parafrontalia linearly projecting above eye in profile; lower or only a little shorter than the upper; oc as long as lower or ; eye 1.4 times as high as wide; gena 1/8-1/6 eye height; pm ten, short; face flat, weakly carinate between bases of antennae; third antennal segment 1.5-2 times as long as wide; arista plumose, with dorsal longest hair longer than width of third segment.

Mesoscutum with 0+3 dc , ten rows of acr , posteriormost ia more than twice length of other postsutural ia -setulae, posterior sa about one-third length of the anterior. Wing: C-index 3.8 (3.7-4.0), r-m before middle of discal cell, 4V-index 1.25, 5V-index 0.15-0.16. Legs: f_1 with five pv , f_2 with 5-6 a ; t_2 with a row of 5-7 p and three spurs in addition to a short spur, all pd on tibiae distinct.

Protandrium ringed, as long as epandrium in dorsal side, with sternite narrow and horizontal in caudal view or slightly convex ventrally in a form of semicircle, bearing a seta above spiracle. S4-6 each subquadrate, with swollen lateral margins, as long as wide or only a little longer than wide. Epandrium distinctly excavated above surstylus which is projected posteriorly and setulose densely on tip; hypandrium Y-shaped, weakly sclerotized at base; pregonite truncated apically, with a minute spine on dorsal tip; aedeagus membranous ventrally and with a pair of small teeth on basal sclerite, lateral sclerite well-developed; aedeagal apodeme almost as long as aedeagus.

Body length 5.7 (holotype)-7.0 mm, wing length 5.6 (holotype)-6.5 mm.

Female. Unknown.

Holotype (OMNH-TI 144), male, Tam Dao, Vinh Phu, 26. VI. 1999, M. Sasakawa. Paratypes: 2 ♂, same data as in holotype; 1 ♂, Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961, N. R. Spencer.

Distribution. Viet Nam.

Discussion. This species is similar to *H. (N.) bigibba* n. sp. in the wing marking, but its abdominal marking and male genitalia are quite different from those of the related species as shown in the key.

Remarks. A male paratype specimen has a small apical spot on R_{4+5} , so that, its basal extremity is situated beyond that of spot on R_{2+3} .

Etymology. The specific name refers to the surstylus projected posteriorly in a form of thumb.

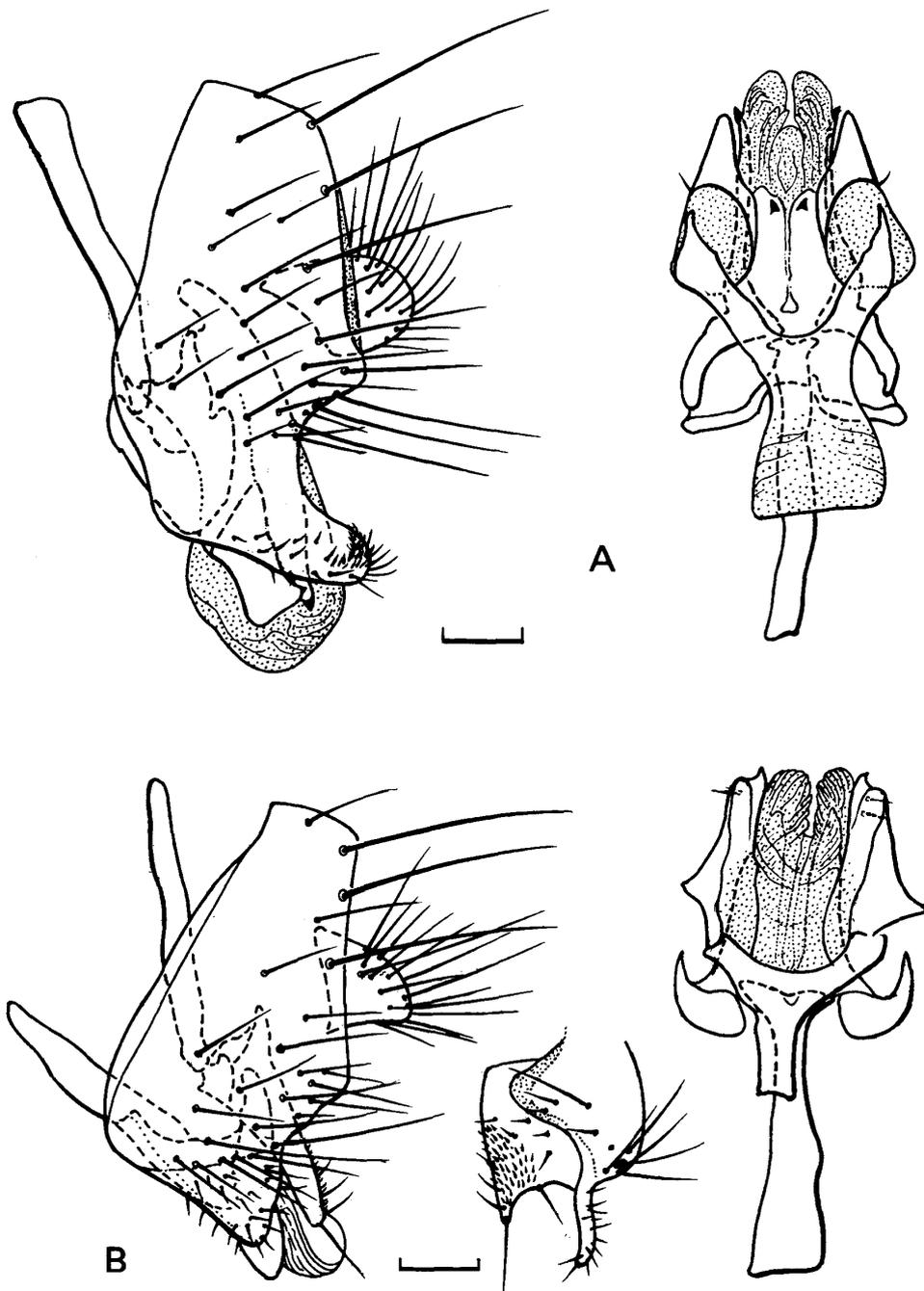


Fig. 19. Male genitalia of *Homoneura (Neohomoneura) pollex* n. sp. (A, paratype) and *H. (N.) bigibba* n. sp. (B, paratype; surstylus, inner view).

36. *Homoneura (Neohomoneura) bigibba* n. sp. (Fig. 19B)

Male. Testaceous, whitish dusted but sparsely pruinose on parafrontalia, thoracic pleura and abdomen; ocellar triangle more or less brownish; T2-5 with posterior margins brownish black, T4-6 each with a median stripe which is expanded triangularly to posterior margin but usually not extended through whole length of tergite on T4 and rarely T3 also with a median stripe which is not expanded posteriorly. Wing hyaline, faintly tinged with brown, with brown markings: apical one fused with each another on apices of R_{2+3} , R_{4+5} and M_1 , basal extremities of spots on R_{2+3} and R_{4+5} at same vertical level and beyond level of m-cu, marking on R_{2+3} 2/7 length of the vein, that on R_{4+5} one-half length of ultimate section of the vein, that on M_1 about one-half length of ultimate section of the vein; halter pale testaceous.

Frons as wide as long, about 1.2 times as wide as eye, very slightly diverging ventrally; frontalia sparsely setulose on lateral side; parafrontalia linearly projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* as long as lower *or*; eye 1.2-1.4 times as high as wide; gena about one-eighth eye height; *pm* 9-10, short; face flat, with

carina between bases of antennae rather broad; third antennal segment twice as long as wide; arista plumose, with dorsal longest hair about one and a half times as long as width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, *prsc* longer than first *dc*, posteriormost *ia* about twice as long as other *ia*-setulae, posterior *sa* nearly one-half length of the anterior, *opa* subequal to *ipa*. Legs: f_1 with 4-5 *pv*, f_2 with 4-6 *a*; t_2 with a row of 6-7 *p* and three spurs, t_3 with *pd* distinctly shorter than that on t_1 .

Protandrium ringed, longer than epandrium, with sternite quadrate, less-sclerotized and almost as high as dorsal length of tergite, with a pair of short setae dorsally and a short seta above spiracle. S4-6 each quadrate, as long as wide. Epandrium broadened ventrally, with three pairs of long setae on dorsocaudal margin; surstylus with two projectins of which inner one rod-like in lateral view but subtriangular in caudal view (both almost connected with each other at base), with a long seta on tip, and outer one subtriangular in lateral view and sparsely setulose; hypandrium Y-shaped, short; pregonite broadened basally, somewhat pointed on inner apex, with one or two short setae near dorsal apex; aedeagus membranous ventrally, with dorsal sclerite well-developed; aedeagal apodeme as long as aedeagus.

Body length 5.5 (holotype)-6.2 mm, wing length 4.7 (holotype)-6.1 mm.

Female. Unknown.

Holotype male (BISHOP No. 16408), Fyan (900-1000 m), 11. VII. -9. VIII.1961, N. R. Spencer. Paratypes: 35 ♂, same data as in holotype; 1 ♂, Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961, Spencer.

Distribution. Viet Nam.

Remarks. Clear triangles along wing margin between apices of two adjacent markings are either exhibited as in *pollex* n. sp. or quite not.

Etymology. The specific name refers to the two projections of surstylus.

37. *Homoneura* (*Neohomoneura*) *subhonesta* n. sp. (Fig. 20)

Male & female. Testaceous; head with frons more or less darker and postgena paler, whitish dusted, most noticeably so on face, parafacialia and postgena; parafrontalia slightly shining; arista black excepting base; thorax sparsely whitish dusted, scutum subshining when viewed from front; abdomen subshiny, very sparsely dusted, T2-5 (male) and -6 (female) with posterior margins distinctly darkened and especially in a form of triangle in each center of T5 (male) or 5-6 (female). Wing hyaline, very faintly tinged with brown, with brown apical markings: the ones on R_{2+3} and R_{4+5} with their basal extremities at a same vertical level or slightly beyond that of m-cu and extending to apices of veins, the one on R_{2+3} about one-third length of the vein, the one on R_{4+5} slightly more than one-half of ultimate section of the vein, the one on M_1 two-thirds length of ultimate section of the vein; anterior spot on m-cu band sometimes as long as the own length of cross vein; halter and legs yellowish, distal two to three segments of tarsi slightly darkened.

Frons as long as wide, only a little wider than eye, almost parallel-sided; frontalia with many setulae, which are subequal to *oh* in length, below level of upper *or*; parafrontalia projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* equal to lower *or* in length; eye 1.3 times as high as wide; gena 1/8-1/6 eye height; *pm* 8-9, of which 1-2 on vibrissal angle longer than others; face flat; third antennal segment about 1.7 times as long as wide, narrowing apically; arista plumose, with dorsal longest hair 1.3 times as long as width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, *prsc* subequal to first *dc*, *ipa* subequal to *opa*, posterior *sa* only a little less than one-third length of the anterior. Wing: C-index 3.6-3.8, r-m before middle of discal cell, 4V-index 0.9-1.2, 5V-index 0.14-0.16. Legs: f_1 with 4(-5) *pv*, f_2 with 5-6 *a*; t_2 with a row of 5-7 *p* and three long and one short spurs, all tibiae with *pd*.

Protandrium ringed, with a narrow bridge ventrally. Male S4 trapezoidal, wider than long; S5 wider than long, with V-shaped caudal emargination; S6 pear-shaped, distinctly longer than wide. Epandrium with surstylus projected ventromesally; hypandrium H-shaped but basal apodeme broadly united at middle and distinctly divergent posteriorly; pregonite narrow and hooked apically, postgonite with a few setulae near apex; aedeagus with lateral sclerite well-developed, bearing a tooth; aedeagal apodeme shorter than aedeagus.

Body length 4.6-5.5 (5.0 in holotype) mm, wing length 4.8-5.2 (5.0 in holotype) mm.

Holotype male (BISHOP No. 16407), Fyan (1200 m), 11. VII. -9. VIII. 1961, N. R. Spencer. Paratypes: 5 ♂ & 4 ♀,

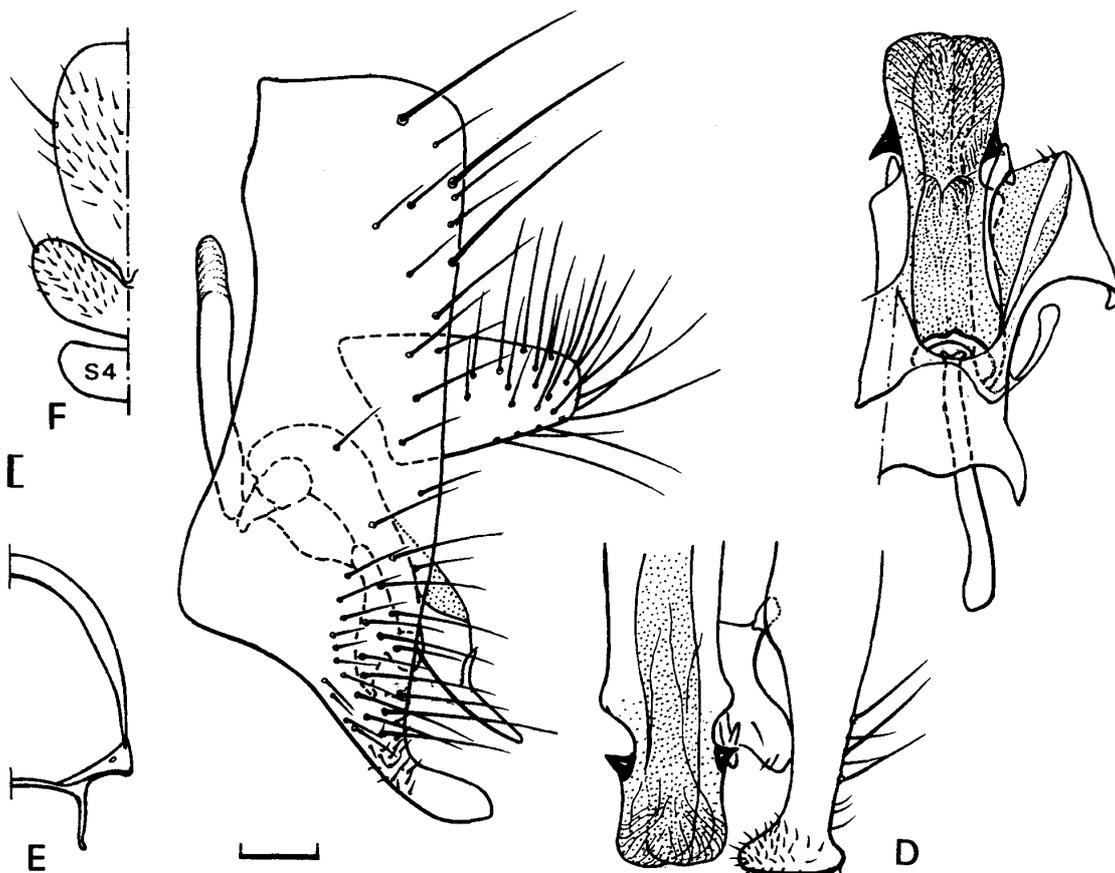


Fig. 20. Male genitalia of *Homoneura* (*Neohomoneura*) *subhonesta* n. sp. (paratype). D, ventral part of surstylus and aedeagus, posterior view; E, left half of protandrium, anterior view; F, left halves of S4-6.

same data as in holotype.

Distribution. Viet Nam.

Discussion. The wing pattern of this new species is similar to that of *H. (N.) honesta* (Kertész), but the male genitalia, especially structures of the surstylus, aedeagus and gonites, are quite different from those of *honesta* (Sasakawa, 1992, fig. 6).

38. *Homoneura* (*Neohomoneura*) *honesta* (Kertész)

See Sasakawa (1992), p. 145.

Specimens examined. Viet Nam- 1 ♂, Nha Trang, 17-26. XI. 1960 (C. Y.). Cambodia- 1 ♂ & 1 ♀, 10 km E. of Siem Reap, 10-11. III. 1968, D. E. Hardy.

Distribution. Formosa, Thai, Malaya, Viet Nam, Cambodia. New to Viet Nam and Cambodia.

39. *Homoneura* (*Neohomoneura*) *nebulosa* n. sp. (Fig. 21)

Male. Testaceous; frontalia with a pair of brownish broad stripes laterally (more darkened dorsally); face, parafacialia and postgena paler; arista black; thorax with scutum and scutellum more tinged with brown, sparsely grayish dusted; abdomen brown (T1 and 2 sometimes testaceous), mat, each tergite darkened posteriorly and narrowly black along posterior margin; protandrium and epandrium testaceous, cercus brown. Wing tinged with brown, distinctly brown on apical half except for posterior margin; halter testaceous. Legs testaceous, two or three distal segments of mid and hind tarsi more or less brown-tinged.

Frons as wide as long, slightly wider than eye, parallel-sided; frontalia with very sparse minute setulae; parafrofrontalia linearly projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* subequal to lower *or* in length; eye one and a half times as high as wide; gena 1/8-1/7 eye height; *pm* 8-10; third antennal segment 1.7 times as long as wide; arista rather loosely plumose, with dorsal longest hair slightly longer than width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, *prsc* longer than first *dc*, posterior *sa* nearly one-half of the anterior. Wing: C-index 3.1-3.2, r-m before middle of discal cell, 4V-index 1.15, 5V-index 0.19. Legs: f_1 with four *pv*, f_2 with 6-7 *a*; t_2 with a row of 4-5 *p* and two or three spurs, *pd* on t_3 as long as that on t_1 .

Protandrium almost as long as epandrium in dorsal side but distinctly narrowed ventrally, sternite projected downward. S6 twice as wide as long, with emargination on caudal one-sixth; S5 one and a half times as wide as long, S4 1.4 times as wide as long. Epandrium with two pairs of strong dorsal setae; cercus rather long; surstylus consists of two processes, of which posterior one with a patch of sensory setulae on tip; hypandrium U-shaped but with basal apodeme short and ill-sclerotized; pregonite lobate in lateral view and with a seta at base; aedeagus simple, with lateral sclerites well-developed, membranous ventrally excepting base; aedeagal apodeme short.

Body length 4.4 (holotype)-4.7 mm, wing length 3.7 (holotype)-4.0 mm.

Female. Unknown.

Holotype male (OMNH-TI 145), Tam Dao, Vinh Phu, 26. VI. 1999, Y. Yoshiyasu. Paratype male, same data as in holotype.

Distribution. Viet Nam.

Diagnosis. This species is unique by the smoky wing and the presence of two processes on the surstylus.

Etymology. The specific name refers to the smoky wing.

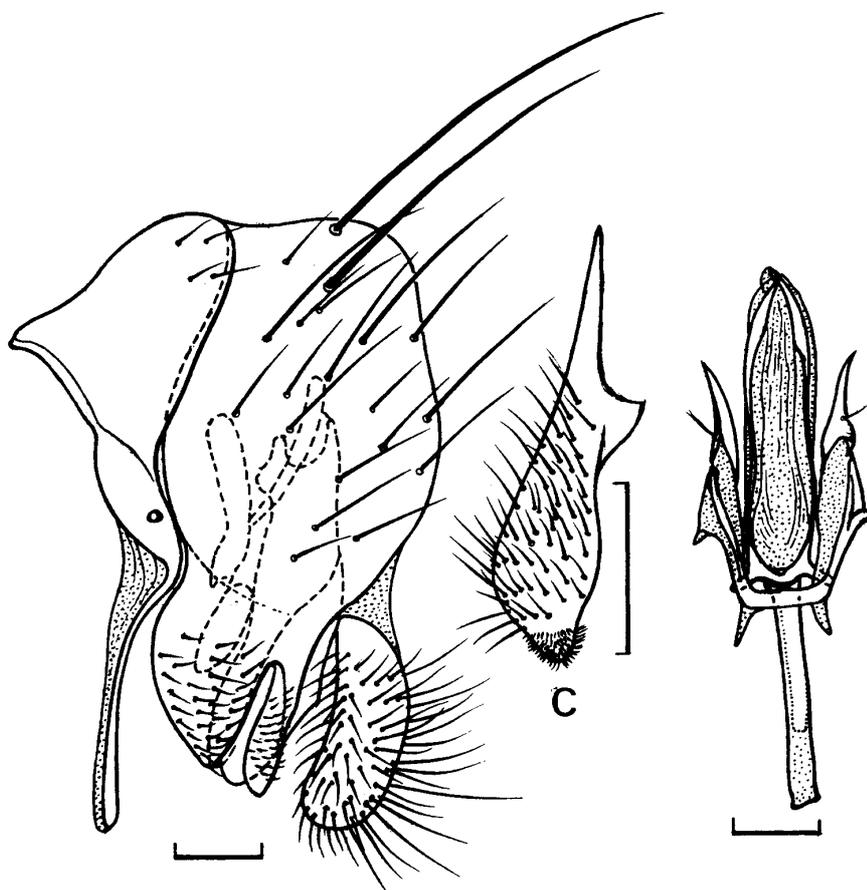


Fig. 21. Male genitalia of *Homoneura* (*Neohomoneura*) *nebulosa* n. sp. (paratype).
C, posterior surstylus, inner view.

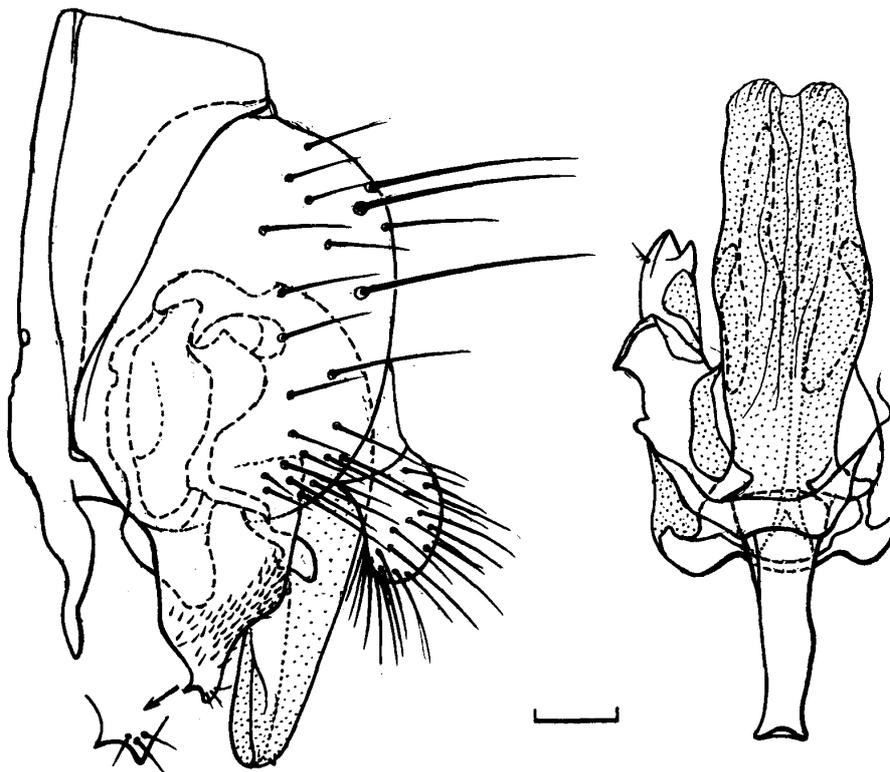


Fig. 22. Male genitalia of *Homoneura (Neohomoneura) incompleta* Malloch.

40. *Homoneura (Neohomoneura) incompleta* Malloch (Fig. 22)

Homoneura (Neohomoneura) incompleta Malloch, 1927: 108.

This species was described by a female collected at Fort de Kock, Sumatra. The female wing coloration collected at Tam Dao, North Viet Nam, fits well with that of the original description, but the male has the apical brown marking which is usually broader than that of female: the costal cloud begins at basal 1/4 to 1/3 between levels of R_1 -termination and cross vein m-cu. Also, the wings are small, that is, 4.97 (4.5-5.2) mm long in males and 5.15 (4.3-5.7) in females; a small subtriangular clear mark on costa between apices of R_{2+3} and R_{4+5} (Malloch, 1927) is indistinct or lacking, and that between apices of R_{4+5} and M_1 quite absent.

The male genitalia are characterized as follows: protandrium with ventral bridge as in *orientalis* (Sasakawa, 1992, fig. 8); epandrium well-extended ventrally and surstylus shortly bifurcated on tip; hypandrium simple; pregonite bifurcated apically, with a setula; postgonite narrow; aedeagus rather long, membranous ventroapically.

Specimens examined. 7 ♂ & 6 ♀, Tam Dao, Vinh Phu, 25-26. VI. 1999 (M. S. & Y. Y.).

Distribution. Sumatra, Viet Nam. New to Viet Nam.

Subgenus *Homoneura van der Wulp*

This is the largest subgenus in the genus *Homoneura* in the Oriental Region. In Viet Nam it is represented in occurrence by thirty-five species, of which eleven species are new to science. Most of the species belong to the second group with apomorphic character states (Sasakawa, 1992).

Key to the Vietnamese species of *Homoneura (Homoneura)*

- | | |
|--|----|
| 1. Thorax and abdomen largely yellow to testaceous | 2 |
| — Thorax entirely or largely brown to black | 28 |
| 2. Wing hyaline or with cross vein m-cu slightly clouded | 3 |
| — Wing with quite evident dark marking | 16 |

3. Arista pubescent 4
 — Arista plumose 5
4. Mesoscutum with 1+5 long *acr*; T5 with three dark spots; protandrium horseshoe-shaped; surstylus denticulate distally *undulata* n. sp.
 — Mesoscutum with 0+3(4) long *acr*; T5 with two spots; protandrium ringed; surstylus with an apical spine *philippinensis* Malloch
5. Hind tibia with *pd* 6
 — Hind tibia without *pd*; third antennal segment black on apical half; mesoscutum with dark spot on scutoscutellar suture *demeijerei* Malloch
6. Third antennal segment bicolor 7
 — Third antennal segment unicolor 9
7. Mesoscutum brownish-vittate centrally, with eight rows of *acr*; *oc* short; surstylus minutely bifid on tip; aedeagus spinose *parvibifida* n. sp.
 — Mesoscutum not vittate, with six rows of *acr*; *oc* long; surstylus unguiform; aedeagus without spines 8
8. Third antennal segment brown on apical one-third of its length; surstylus not separated from epandrium, projected at ventrocaudal corner of epandrium *unguiculata* (Kertész)
 — Third antennal segment brown on apical one-third and ventral one-half; epandrium lobate ventrally and surstylus separated from epandrium *affinis* Malloch
9. Abdomen with some black spots or stripes on T5 or T5-6 10
 — Abdomen without distinct spots 13
10. Wing with cross veins slightly clouded 11
 — Wing not clouded at all 12
11. Protandrium ringed; surstylus bidentate ventrally and spinulose along apical margin *conspicua* n. sp.
 — Protandrium horseshoe-shaped; surstylus claviform, not dentate but spinulose *serristylis* n. sp.
12. T5 with a pair of spots; protandrium horseshoe-shaped; surstylus indistinct *forcipata* (Kertész)
 — T5-6 each with two pairs of spots; protandrium ringed; surstylus well projected posteriorly - *signata* (v. d. Wulp)
13. Mesoscutum with six rows of *acr* 14
 — Mesoscutum with 8-10 rows of *acr* *sauteri* Malloch
14. Lower *or* one-half length of the upper; wing clear, 2.2-2.3 mm long; protandrium horseshoe-shaped; surstylus small *lucida* (de Meijere)
 — Lower *or* over one-half of the upper; wing with anterior margin pale brown, 2.7-3.5 mm long; protandrium ringed; surstylus elongate 15
15. Arista microscopically pubescent; surstylus projected ventrally; hypandrium U-shaped; aedeagus with lateral and ventral sclerites *grahami* Malloch
 — Arista plumose; surstylus projected posteriorly; hypandrium H-shaped; aedeagus with lateral sclerites only *laticosta* (Thomson)
16. Mesoscutum brown-vittate 17
 — Mesoscutum without vittae 20
17. Wing with a dark spot on R₄₊₅ beyond crossvein r-m and connected with subapical spot on R₂₊₃; basal spot on R₂₊₃ connected anteriorly with dark spot around apex of R₁ and posteriorly with large round spot on r-m *striatifrons* (de Meijere)
 — Wing with two spots on R₄₊₅ beyond r-m in addition to apical one of the vein 18
18. Wing with costal margin hyaline from spot between apices of Sc and R₁ to apical spot on R₂₊₃; mesoscutum with six faint vittae; surstylus projected from cephalo-ventral part of epandrium *vittigera* n. sp.
 — Wing with costal margin almost entirely brown between apices of R₁ and R₂₊₃; surstylus indistinct or projected from caudoventral part of epandrium 19
19. Mesoscutum octovittate; epandrium testaceous, with surstylus projected posteriorly and unidentate *strigata* (de Meijere)
 — Mesoscutum and scutellum whitish pruinose between dark stripes on *dc*- and apical *sc*-lines; epandrium black, surstylus indistinct; pregonite long, almost as long as aedeagal length *discoalbata* Sasakawa

20. Wing hyaline, with dark markings 21
 — Wing largely brown, with hyaline round or triangular spots 27
21. Third antennal segment unicolor 22
 — Third antennal segment black on apicoventral one-third to one-half of its length *quiquenotata* (de Meijere)
22. Wing with three brown fasciae across the wing at levels of r-m, m-cu and apex of R_{2+3} *trivittata* Sasakawa
 — Wing without dark fasciae 23
23. Wing with one or two dark spots on R_{4+5} beyond r-m in addition to apical large one 24
 — Wing without spot on R_{4+5} except for preapical one at same level of apical spot on R_{2+3} *cornuta* n. sp.
24. Wing 7.0-7.5 mm long, r-m not clouded, a small spot at middle between levels of both cross veins
 *grandis* (Kertész)
 — Wing 3.3-3.9 mm long, distinctly clouded around r-m 25
25. Wing with a spot on R_{4+5} at middle and connected with preapical spot on R_{2+3} ; epandrium with a pair of processes
 just above long surstyl *vietnamensis* n. sp.
 — Wing with two spots on R_{4+5} beyond r-m 26
26. Wing with spots on R_{4+5} circular or rectangular; legs yellowish; surstylus very short, claw-like *nubecula* n. sp.
 — Wing with spots on R_{4+5} eyespot-like; mid and hind femora brown; surstylus well-projected *subnubecula* n. sp.
27. Wing with a small hyaline spot close against each side of m-cu near extremity; femora yellow, each with brown
 preapical ring; epandrium with two pairs of long marginal setae, surstylus hooked *trypetoptera* (Hendel)
 — Wing without hyaline spot on each side of m-cu; femora brown excepting apices yellow; epandrium with three
 pairs of long marginal setae and densely setigerous along ventral margin, surstylus slender *picta* (de Meijere)
28. Abdomen entirely black 29
 — Abdomen entirely or partly yellow to testaceous 32
29. Scutellum uniformly brownish gray dusted 30
 — Scutellum conspicuously gray dusted on apical one-third *piliseta* Malloch
30. Mesoscutum densely pollinose; epandrium with two short processes on cephaloventral margin
 *protuberans* n. sp.
 — Mesoscutum shiny, very sparsely pollinose; epandrium projected ventrally as a knob 31
31. Prescutellar acrostichals (*prsc*) well-developed; scutellum entirely black *signatifrons* (Kertész)
 — *Prsc* subequal to other *acr* in length; scutellum with apex broadly brownish yellow *ornatifrons* (Kertész)
32. Wing hyaline 33
 — Wing dark brown except for apical and caudal margins, with three hyaline complete or interrupted fasciae
 *interrupta* n. sp.
33. Frons, center of mesoscutum and scutellum densely whitish gray dusted as a median vitta *discoglauca* (Walker)
 — Frons bicolored, mesoscutum and scutellum not whitish-vittate, pollinose all over 34
34. Abdominal T1-5 brownish black, T6-9 yellow *immaculata* (de Meijere)
 — T1-9 yellow but T3-5 with blackish bands posteriorly *fasciventris* Malloch

41. *Homoneura (Homoneura) undulata* n. sp. (Fig. 23)

Male & female. Testaceous; gena, postgena and legs except for distal segments of tarsi yellowish; head and thorax very sparsely whitish dusted; parafrotaia weakly shining; mesoscutum subshiny; abdomen shiny, T5 with three blackish oval spots, of which central one longer than lateral ones and extending throughout whole length of tergite; cercus in male testaceous but dark brown in female. Wing hyaline, very faintly tinged with yellow, without marking.

Frons narrower than long, almost as wide as eye; frontalia sparsely hairy on lateral and ventral parts; upper and lower *or* subequal; *oc* about one-half length of upper *or*; face flat, with antennal grooves shallow; eye 1.3-1.4 times as high as wide; gena 1/7 in male to 1/9 in female as high as eye; *pm* 3-4; 7-9 setulae along anterior ventral margin of parafacialia; third antennal segment 1.3 times as long as wide; arista minutely pubescent.

Mesoscutum with 0+3 *dc*, eight rows of *acr*, of which 1+5 pairs in median rows stronger than others but anterior five setae gradually decreasing the length anteriorly and the posteriormost seta just before level of second *dc* slightly shorter than *prsc* which is subequal to first *dc*, *ipa* slightly shorter than *opa*. Wing: C-index 4.1-4.3, r-m before

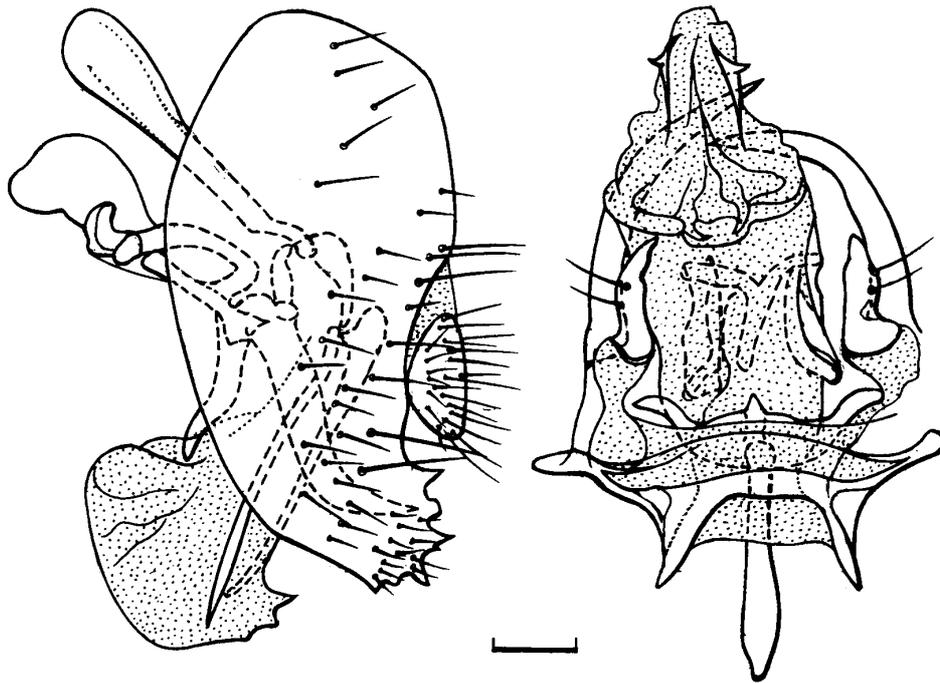


Fig. 23. Male genitalia of *Homoneura (Homoneura) undulata* n. sp. (paratype).

middle of discal cell, 4V-index 1.4-1.5, 5V-index 0.16-0.17. Legs: f_1 with 3-4 *pv*, f_2 with 4-5 *a*; t_2 with two long and one short spurs, all tibiae with *pd*.

Protandrium horseshoe-shaped, almost as long as epandrium, as wide as T5, with a row of marginal setae and a row of setulae before that. Male S4-6 each subrectangular, S4 and 5 each twice as wide as long, S6 1.6 times as wide as long, each with two pairs of long caudolateral setae. Epandrium with surstylus curved mesally and irregularly denticulate distally; hypandrium H-shaped, pregonite with two setae, postgonite very long and curved mesally; aedeagus largely membranous, with narrow sclerites at dorsal base and lateral side, with a pair of small teeth before apex; aedeagal apodeme distinctly shorter than aedeagus.

Body length 3.5 (holotype)-4.0 (female) mm, wing length 3.3-3.6 (holotype) mm.

Holotype male (BISHOP No. 16412), Ninh Hoa, N. of Nha Trang, 28. XI. 1960, C. M. Yoshimoto. Paratypes: 1 ♂ & 2 ♀, same data as in holotype; 2 ♂ & 4 ♀, Dai Lanh, N. of Nha Trang, 30. XI. -5. XII. 1960, Yoshimoto.

Distribution. Viet Nam.

Discussion. This new species is similar to *H. monticola* (de Meijere), *notativentris* Malloch and *philippinensis* Malloch, in the presence of rather strong pairs of postsutural *acr* in addition to *prsc*, and in having the pubescent arista. It differs, however, from *monticola* by the number of spotted abdominal tergites, from *notativentris* and *philippinensis* by the presence of presutural pair of rather strong *acr*. The undulate surstylus (derivation for specific name) and the presence of pre- and post-gonite are distinctive.

42. *Homoneura (Homoneura) philippinensis* Malloch

Homoneura philippinensis Malloch, 1929: 68.

A male examined has the long wing (2.7 mm in length) and a pair of small black spots on posterior margin of T6 in addition to those on T5.

Protandrium is ringed, with a small, quadrate sternite ventrally and a pair of short posterior setae. Male genitalia are characterized as follows: epandrium with surstylus subquadrate in lateral view, bearing a distinct but short spine, which is incurved, at anterior ventral corner and many setae on outer surface; hypandrium V-shaped, pregonite very long (well-illustrated by Malloch, fig. 56), two-thirds length of aedeagus, narrow horn-like, with two setae at middle; aedeagus simple, with lateral sclerite narrow, aedeagal apodeme only a little shorter than aedeagus.

Specimen examined. 1 ♂, Nha Trang, 17-26. XI. 1960 (C. Y.).

Distribution. Philippines, Malaya, Viet Nam. New to Viet Nam.

43. *Homoneura (Homoneura) demeijerei* Malloch

See Sasakawa (1992), p. 169.

Specimens examined. 1 ♂, Tam Dao, Vinh Phu, 26. VI. 1999 (M. S.); 5 ♀, N. of Nha Trang, 30. XI. -5. XII. 1960 (C. Y.).

Distribution. Malaya, Viet Nam, Sumatra. New to Viet Nam.

44. *Homoneura (Homoneura) parvibifida* n. sp. (Fig. 24)

Male. Testaceous; frons subshiny, ocellar triangle brownish black; third antennal segment with apex and ventral margin (apical 1/5-1/3 and ventral 1/2 of the length) brownish black; arista black; thorax sparsely gray dusted but pleura more sparsely dusted and subshining; scutum with a faint brown median stripe which begins at middle between anterior margin of scutum and transverse suture, about one-third as wide as distance between *dc*-rows, but broadened and darkened posteriorly, wider than distance between two *prsc* before scuto-scutellar suture, and moreover extends to scutellum as a pale median stripe or obscured; abdomen sparsely grayish dusted, T3-6 darker than thorax, T3-5 each with a faint median vitta; surstylus blackened apically; cercus brownish black. Wing very faintly tinged with brownish yellow, immaculate; halter pale testaceous.

Frons wider than long, 1.3-1.5 times as wide as eye, almost parallel-sided; parafrontalia linearly or not projecting above eye in profile; lower *or* three-fourths length of the upper which is shorter than height of head; *oc* short, about one-fourth length of upper *or*; eye 1.3 times as high as wide, weakly emarginated on posterior ventral part above ventral margin; gena nearly one-seventh eye height; *pm* 5-6; face vertically flat; third antennal segment 1.7 times as long as wide, narrowed apically; arista plumose, with dorsal longest hair 1.5 times as long as width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr* ending behind level of second *dc* and becoming very sparse into about four rows, *prsc* three-fifths length of first *dc*. Wing: C-index 3.2-3.3, r-m at or slightly beyond middle of discal cell, 4V-index 1.05-1.3, 5V-index 0.15. Legs: *f*₁ with two long *pv*, *f*₂ with 5-6 *a*; *t*₂ with one long and 1-2 short spurs; *pd* on

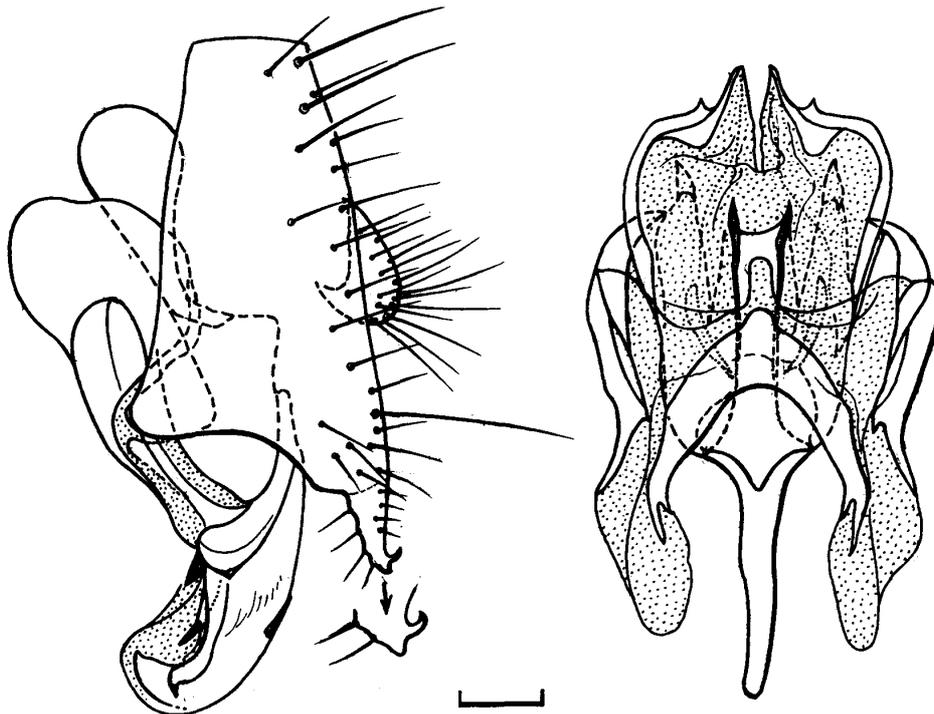


Fig. 24. Male genitalia of *Homoneura (Homoneura) parvibifida* n. sp. (paratype).

t_1 and t_3 weak.

Protandrium ringed, with cephalodorsal apodeme narrow and as long as dorsal length of protandrium, and a seta above spiracle. S6 quadrate, 1.4 times as wide as long, S4 and 5 each slightly smaller than S6, 1.5 times as wide as long. Epandrium with short setae except for a ventral bristle; surstylus short and minutely bifid on tip; hypandrium V-shaped; pregonite pointed apically and incurved; aedeagus with lateral sclerite curved ventrally, three pairs of distinct or minute spines, aedeagal apodeme shorter than aedeagus.

Body length 4.0-4.2 (holotype) mm, wing length 4.0-4.2 (holotype) mm.

Female. Unknown.

Holotype male (OMNH-TI 146), Tam Dao (930 m), Vinh Phu, 25. VI. 1999, M. Sasakawa. Paratype male, same data as holotype.

Distribution. Viet Nam.

Discussion. This species is characterized by the short ocellar bristles and normal *or*, and is separated from *H. (H.) maculifera* (de Meijere, 1914) by its one vitta on the mesoscutum. It is somewhat similar to *H. (H.) biroi* (Kertész, 1900), known from New Guinea, in the markings on scutum and abdominal tergites, but is recognized by its small size and clear wing.

Etymology. The specific name refers to the minutely bifid surstylus.

45. *Homoneura (Homoneura) unguiculata* (Kertész)

See Ikeuchi and Sasakawa (1978), p. 2, as *japonica* Czerny; Sasakawa and Ikeuchi (1982), p. 494.

Specimens examined. 4 ♂ & 2 ♀, N. of Nha Trang, 30. XI. -5. XII. 1960 (C. Y.); 2 ♂, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.).

Distribution. Ceylon, Viet Nam, China, Formosa, Japan; U.S.A. (immigrant). New to Viet Nam.

46. *Homoneura (Homoneura) affinis* Malloch

See Sasakawa (1992), p. 161.

Specimens examined. 1 ♀, Dalat (1500 m), 29. IV. -4. V. 1960 (L. Q.); 1 ♀, Mt Lang Bian (1500-2000 m), 19. V. -8. VI. 1961 (N. S.); 2 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961 (N. S.).

Distribution. Malaya, Viet Nam, Borneo, Philippines. New to Viet Nam.

47. *Homoneura (Homoneura) conspicua* n. sp. (Fig. 25A)

Male & female. Testaceous but scutellum and legs paler and abdomen more or less darker, sparsely whitish dusted; ocellar triangle and arista brown; occiput distinctly pruinose on ventral half; mesoscutum and abdomen weakly shining when viewed from side; T4 with a pair of blackish sublateral bands which are oblong transversally along posterior margin of tergite, T5 and 6 each with a black median stripe and a pair of lateral ones along lateralmost margins of tergite (all extending throughout the whole length of tergite). Wing hyaline, slightly brownish around both cross veins; halter testaceous yellow.

Frons wider than long, about 1.4 times as wide as eye, slightly diverging ventrally; parafrofrontalia slightly projecting above eye-margin in profile; lower *or* 2/3-3/4 length of the upper; *oh* minute, 3-4; *oc* slightly longer than lower *or*; eye 1.3 times as high as wide; gena narrow, about one-ninth eye height; uppermost seta of *pm* (5-6) extremely longer than the others; face flat; third antennal segment nearly one and a half times as long as wide; arista plumose, with dorsal longest hair longer than width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr*, *prsc* slightly longer than first *dc*, posteriormost *ia* about one and a half times as long as other postsutural *ia*-setulae, *ipa* slightly shorter than *opa*. Wing: C-index 3.4-3.5, r-m at or slightly before middle of discal cell, 4V-index 1.5-1.8, 5V-index 0.16-0.17. Legs: f_1 with four *pv*, f_2 with 5-6 (rarely 7 in females) *a*, t_2 with three spurs, all tibiae with *pd*.

Protandrium ringed, slightly longer than epandrium in dorsal side, but distinctly narrowed ventrally, without dorsal apodeme; sternite very narrow, weakly sclerotized and V-shaped in posterior view. Male S4-6 each slightly wider than long. Epandrium setose posteriorly and ventrally; surstylus projected backward, with one dorsoapical and three short ventral projections, of which ventrodistal one spinulose; hypandrium Y-shaped, broad basally; pregonite absent; postgonite black, pointed distally, without seta; aedeagus with lateral sclerite broad, bifurcate apically and with a pair of claw-like processes at dorsobasal end of median sclerites; aedeagal apodeme shorter than aedeagus.

Body length 3.5(male)-3.7(female)(3.6 in holotype) mm, wing length 3.6-3.7 (holotype) mm.

Holotype male (BISHOP No. 16413), Karyu Danar (200 m), 13-28. II. 1961, N. R. Spencer. Paratypes: 6♂ & 4♀, same data as in holotype.

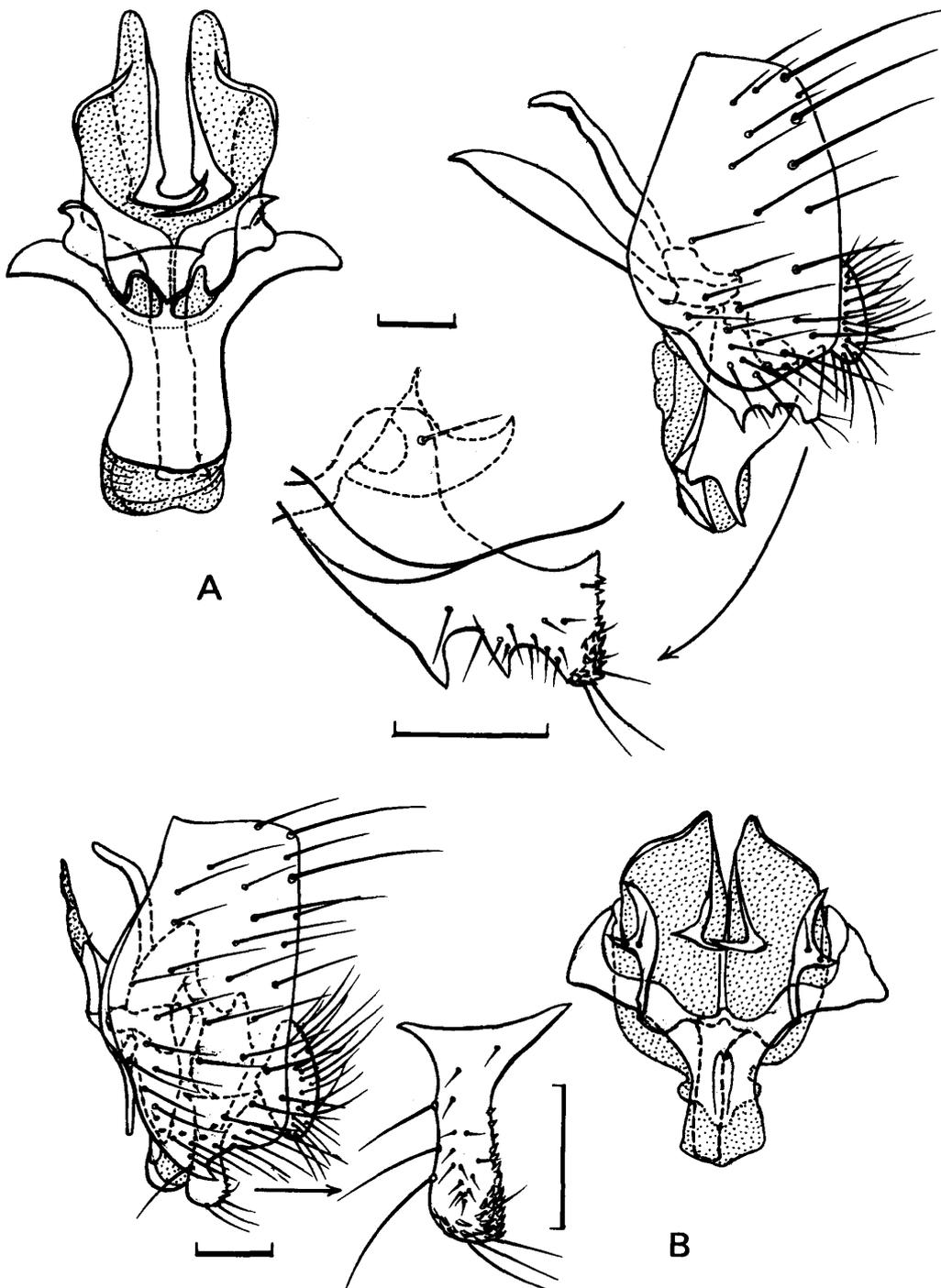


Fig. 25. Male genitalia of *Homoneura (Homoneura) conspicua* n. sp. (A, paratype) and *H. (H.) serristylis* n. sp. (B, holotype).

Distribution. Viet Nam.

Discussion. This species is related to *H. (H.) mediosignata* (Frey) in the T5 and T6 centrally spotted, and cross veins faintly clouded, and in the shape of protandrium and hypandrium, but is distinct in having two spots on T4, minutely serrate and distinctly dentate surstylus, conical postgonite, and a pair of claw-like processes at dorsal base of the aedeagus.

Etymology. The specific name refers to the 'prominent' ventral teeth on the surstylus.

48. *Homoneura (Homoneura) serristylis* n. sp. (Fig. 25B)

Male & female. This testaceous new species differs from *conspicua* n. sp. only in number of dark spots on the fifth abdominal tergite and the structures of male genitalia: T5 is quinque-spotted, that is, median and lateral stripes which are similar to those of *conspicua* in addition to a pair of sublateral transverse bands which are smaller than those on T4.

Protandrium is horseshoe-shaped, slightly longer than epandrium. Male S6 is 1.3 times as wide as long and with a shallow emargination posteriorly; S4 and 5 each 1.5 times as wide as long. Epandrium is rather densely setigerous on ventral side and is provided with a dentate process; surstylus is short claviform and projected downward, spinulose distally; postgonite with two setae at base; aedeagus is broadly membranous on its dorsoproximal part and with lateral sclerite is narrow and not furcate before apex; other characters are same as in *conspicua*.

Body length 3.4-3.6 (holotype) mm, wing length 3.5-3.8 (holotype) mm.

Holotype male (BISHOP No. 16414), M'Drak, E. of Ban Me Thuot (4-600 m), 8-19. XII. 1960, C. M. Yoshimoto; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen. Paratypes: 1 ♂ & 4 ♀, same data as in holotype.

Distribution. Viet Nam.

49. *Homoneura (Homoneura) forcipata* (Kertész)

See Sasakawa (1992), p. 174.

Specimens examined. 3 ♀, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.); 2 ♂, Ban Me Thuot (500 m), 20-24. XII. 1960 (C. Y.).

Distribution. Malaya, Viet Nam, Formosa. New to Viet Nam.

50. *Homoneura (Homoneura) signata* (van der Wulp)

See Sasakawa (1992), p. 198.

Specimens examined. Viet Nam- 1 ♂, 30 km NW. of Pleiku (300 m), 10. V. 1960 (L. Q.); 2 ♂, Di Linh (Djiring), 27. IX. -14. X. 1960 (C. Y.); 2 ♂ & 3 ♀, Blao (Balao)(500 m), 14-21. X. 1960 (C. Y.); 7 ♂ & 11 ♀, S. of Nha Trang, 17-26. XI. 1960 (C. Y.); 18 ♂ & 6 ♀, Karyu Danar (200 m), 13-28. II. 1961 (N. S.); 2 ♀, Fyan (900-1000 m), 11. VII.-9. VIII. 1961 (N. S.). Cambodia- 1 ♂ & 2 ♀, Damrey Phong, 14-16. IV. 1960 (N. S.).

Distribution. Malaya, Thai, Viet Nam, Cambodia, Sumatra, Borneo, Philippines. New to Viet Nam and Cambodia.

51. *Homoneura (Homoneura) sauteri* Malloch

See Sasakawa (1992), p. 196.

Specimens examined. 1 ♂ & 5 ♀, Fyan, 11. VII. -9. VIII. 1961 (N. S.); 2 ♀, Tam Dao, Vinh Phu (930 m), 17 & 26. VI. 1999 (M. S. & Y. Y.).

Distribution. Malaya, Viet Nam, Borneo, Formosa. New to Viet Nam.

52. *Homoneura (Homoneura) lucida* (de Meijere)

See Sasakawa (1992), p. 183.

Specimens examined. 1 ♀, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.); 25 ♂ & 11 ♀, Karyu Danar (200 m), 13-28. II. 1961 (N. S.).

Distribution. Malaya, Viet Nam, Java, Philippines, India, Ceylon. New to Viet Nam.

53. *Homoneura (Homoneura) laticosta* (Thomson)

See Sasakawa (1992), p. 181.

Specimens examined. 1 ♂, 10 km E. of Ban Me Thuot (570 m), 11. V. 1960 (L. Q.); 1 ♀, Ban Me Thuot (500 m), 16-18. V. 1960 (L. Q.); 1 ♂ & 1 ♀, Dak Song, 76 km SW. of Ban Me Thuot (870 m), 19-21. V. 1960 (L. Q.); 1 ♀, Nha Ho, 14 km N. of Phan Rang, 15. XI. 1960 (J. G.); 1 ♀, Dai Lanh, N. of Nha Trang, 30. XI. -5. XII. 1960 (C. Y.); 1 ♂ & 2 ♀, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.); 1 ♀, Karyu Danar, 13-28. II. 1961 (N. S.).

Distribution. Malaya, Thai, Viet Nam, Java, Borneo, Philippines; Solomon Is. New to Viet Nam.

54. *Homoneura (Homoneura) grahami* Malloch (Fig. 26A)

Homoneura grahami Malloch, 1929: 81.

This small (3.2-3.5 mm in wing length), testaceous species is similar to *laticosta* in the wing markings, that is, brownish along anterior margin and faded away at or beyond R_{4+5} and both cross veins slightly clouded. Arista of *grahami* is microscopically pubescent, and the male genitalia are characterized as follows: protandrium ringed, about twice as long as epandrium in dorsal side, but narrowed ventrally, with a pair of short marginal setae; bridge linear; sternite characteristically projected ventrally in an oval form and with a pair of short processes before end. Epandrium with surstylus long; hypandrium U-shaped; pregonite ill-sclerotized, with a short filament and one or two minute teeth before apex, postgonite darkened, slightly curved anteriorly; aedeagus with two pairs of sclerites on lateral and ventral sides.

Specimens examined. 1 ♂ & 1 ♀, Sa Pa, Lao Kai, 17. VI. 1999 (M. S.).

Distribution. China, Viet Nam. New to Viet Nam.

55. *Homoneura (Homoneura) striatifrons* (de Meijere)

See Sasakawa and Ikeuchi (1982), p. 480.

Specimens examined. 1 ♀, 30 km NW. of Pleiku (300 m), 10. V. 1960 (L. Q.); 2 ♂ & 2 ♀, Fyan (1200 m), 7. & 11. VII. -9. VIII. 1961 (N. S.).

Distribution. Java, Viet Nam, Japan (Ryukyus). New to Viet Nam.

56. *Homoneura (Homoneura) vittigera* n. sp. (Fig. 26B)

Male & female. Testaceous; frontalia with a pair of faint brown vittae on lateral sides; parafacialia and postgena very sparsely whitish dusted; third antennal segment faintly brownish excepting basal one-third; arista dark brown; palpus yellowish; thorax sparsely grayish dusted, scutum with six faint brown vittae when viewed from behind: median pair between *dc*-rows and extending between median three *acr*-rows, one pair along *dc*-rows very narrow, and one pair between *dc*- and *sa*-rows behind transverse suture; T4-6 (male) and -7 (female) each with a median blackish vitta and narrowly darkened along extreme lateral margins. Wing faintly tinged with brownish yellow and with brown spots: cell Sc with apical part pale brown, apical spot on R_{2+3} one-fourth length of the vein, apical one on R_{4+5} smaller than that on R_{2+3} , and apical one on M_1 three-fifths length of ultimate section of vein but gradually

obscure toward apex, two spots on R_{4+5} between large one on r-m and apical one, the second one connected with apical spot on R_{2+3} , spot on anterior extremity of m-cu as long as apical one on R_{4+5} and faintly brownish on posterior part around cross vein; halter testaceous.

Frons as wide as long, 1.2 (female)-1.3 (male) times as wide as eye, parallel-sided; frontalia with minute setulae sparsely on lateral sides; parafrota linearly projecting above eye in profile; lower *or* slightly shorter than the upper; *oc* one-half length of lower *or*; eye 1.2 times as high as wide; gena 1/7 (female)-1/6 (male) of eye height; *pm* 7-8; face flat; third antennal segment one and a half times as long as wide, narrowing apically; arista short-haired, with dorsal longest hair one-half (female) or a little less than half (male) as long as width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr* (rarely 10 rows in female), 2-3 setulae before base of *sa*. Wing: C-

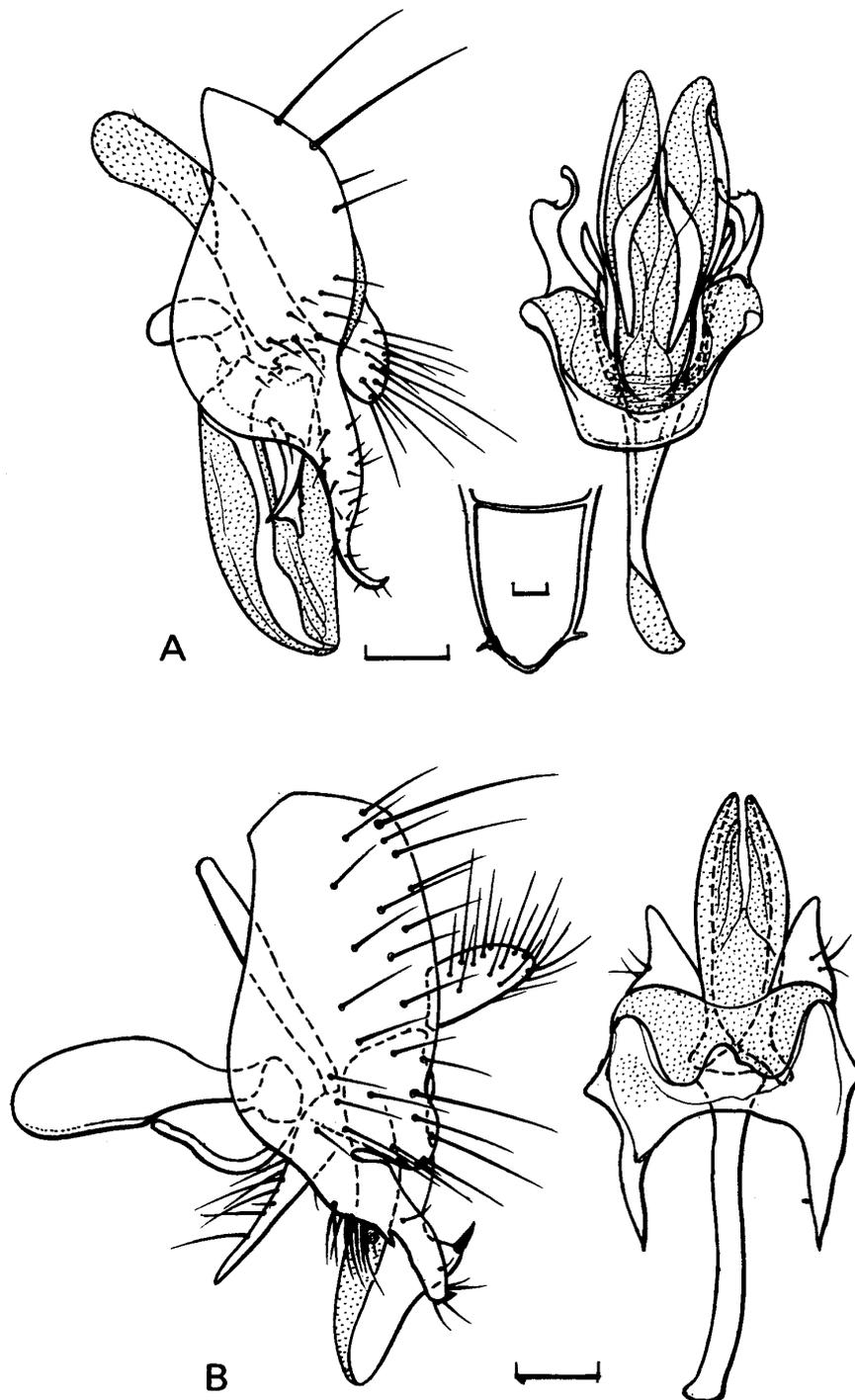


Fig. 26. Male genitalia of *Homoneura (Homoneura) grahami* Malloch (A, with ventral part of protandrium) and *H. (H.) vittigera* n. sp. (B, holotype).

index 2.6-2.7, r-m slightly before middle of discal cell, 4V-index 1.1-1.3, 5V-index 0.13. Legs: f_1 with three *pv*, f_2 with 5-6 *a*; t_2 with two long and one short spurs; *pd* on t_3 in male slightly shorter than that on t_1 , while subequal in female.

Protandrium horseshoe-shaped, 1.6 times as long as epandrium in dorsal side, distinctly narrowed at level of spiracle, with cephalodorsal apodeme one-half as long as its dorsal length, bearing a row of eight posterior setae marginally and a seta below spiracle. Male S4-6 each subquadrate and 1.3 times as wide as long. Epandrium with surstylus projected caudoventrally, pointed on dorsal tip and with a tooth ventrally; hypandrium H-shaped, with basal apodeme very broad in lateral view; pregonite long, with several setae; aedeagus with a spine on dorsal side of lateral sclerite.

Body length 4.4 (holotype, female)-4.5 mm, wing length 3.8-4.0 (female)(3.7 in holotype) mm.

Holotype male (OMNH-TI 147), Tam Dao, Vinh Phu (930 m), 26. VI. 1999, Y. Yoshiyasu; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen. Paratypes: 2 ♀, same data as in holotype.

Distribution. Viet Nam.

Discussion. This species is similar to *H. (H.) subvittata* Malloch (1927) in the coloration of body and wing markings, but its size is small (6 mm in *subvittata*), apical suboval spot on M_1 is as long as that on R_{2+3} , and round spot is distinctly situated only on anterior extremity of m-cu. The male genitalia of *vittigera* are distinctive: surstylus is projected beyond caudoventral apex of epandrium and provided with a tooth, pregonite is long and setose, aedeagus is provided with only one spine (see genitalia characters of *subvittata* by Sasakawa, 1992, fig. 38).

Etymology. The specific name refers to the 'vittate' mesoscutum and posterior abdominal tergites.

57. *Homoneura (Homoneura) strigata* (de Meijere)

See Sasakawa (1992), p. 201.

Specimens examined. 6 ♂ & 4 ♀, M'Drak, E. of Ban Me Thuot, 8-19.XII.1960 (C. Y.).

Distribution. Malaya, Viet Nam, Java, Borneo. New to Viet Nam.

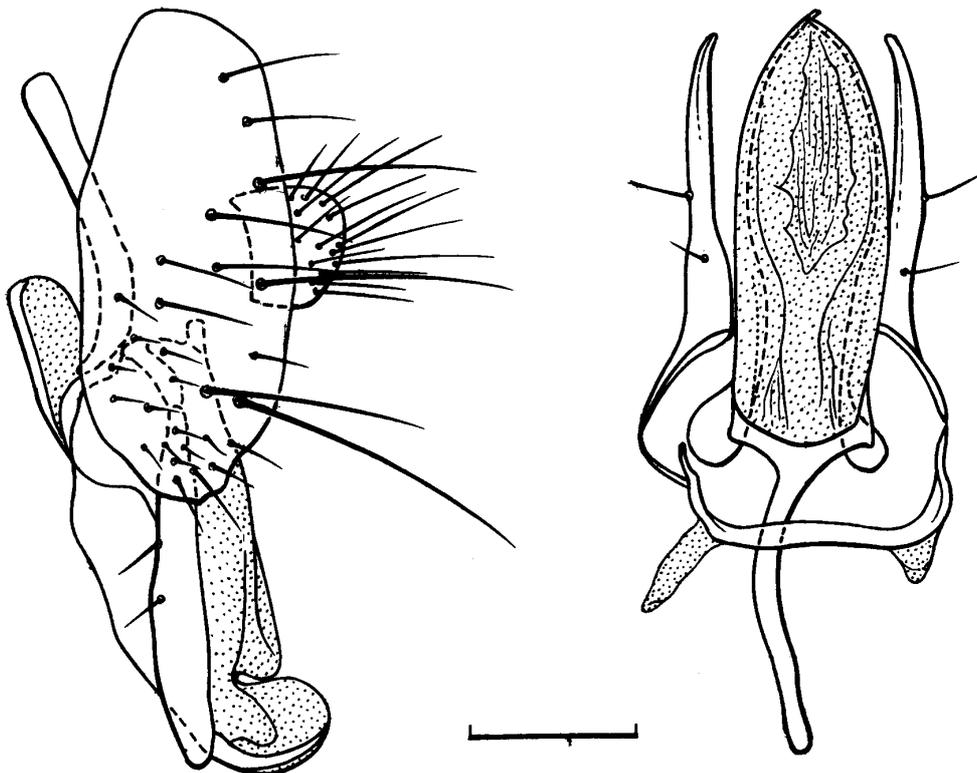


Fig. 27. Male genitalia of *Homoneura (Homoneura) discoalbata* Sasakawa.

58. *Homoneura (Homoneura) discoalbata* Sasakawa (Fig. 27)

Homoneura (H.) discoalbata Sasakawa, 1992: 171.

This species was described by a female collected at Kepong, Malaysia. The male differs from the female in the following points: palpus black except for base; wing 3.3 mm long, costal marking pale before apex of Sc and before apical marking on R_{2+3} ; f_2 with 7-8 a . Male genitalia: Protandrium horseshoe-shaped, as long as epandrium in dorsal side; epandrium small, black, with a long seta above ventral margin, without surstylus but indistinctly sinuate along ventral margin; hypandrium U-shaped; pregonite long, clavate and with two setae; aedeagus simple, with lateral sclerite well-developed and membranous between sclerites; aedeagal apodeme slightly shorter than aedeagus. S4-6 each quadrate and almost as long as wide.

Specimen examined. 1 ♂, Tam Dao, Vinh Phu, 17. VI. 1999 (M. S.).

Distribution. Malaya, Viet Nam. New to Viet Nam.

59. *Homoneura (Homoneura) quiquenotata* (de Meijere)

See Sasakawa (1992), p. 194.

Specimens examined. 2 ♂ & 3 ♀, Tam Dao, Vinh Phu, 25. VI. 1999 (M. S.); 1 ♀, Fyan (1200 m), 11. VII. -9. VIII. 1961 (N. S.); 1 ♀, M'Drak, E. of Ban Me Thuot, 8-19. XII. 1960 (C. Y.).

Distribution. Malaya, Viet Nam, Java, Borneo. New to Viet Nam.

60. *Homoneura (Homoneura) trivittata* Sasakawa

See Sasakawa (1992), p. 205.

Specimens examined. 2 ♀, Fyan (900-1000 m), 11. VII. -9. VIII. 1961 (N. S.).

Distribution. Malaya, Viet Nam, Borneo. New to Viet Nam.

61. *Homoneura (Homoneura) cornuta* n. sp. (Fig. 28)

Male. Testaceous; head and thorax sparsely whitish dusted; frontalia slightly brown-tinged on lateral sides, with a brown crescent marking along ventral margin; parafacialia and postgena pale; arista black; scutum and scutellum with lateral side paler, the former mat; abdomen subshiny, very sparsely pollinose, T5 and 6 each with a median triangular vitta; legs with distal two or three segments of tarsi slightly brown-tinged. Wing hyaline, faintly tinged with brownish yellow, with brown spots: quadrate one on apex of R_{2+3} , circular ones far before apices of R_{4+5} (spot on same level of that on R_{2+3}) and M_1 (slightly laterad of spot on R_{4+5}), over r-m and on both extremities of m-cu; spots on M_1 and posterior extremity of m-cu pale; halter pale testaceous.

Frons as wide as long, only a little wider than eye, parallel-sided; frontalia with minute setulae sparsely on lateral sides; parafrontalia slightly projecting above eye in profile; *oc* and lower *or* slightly shorter than upper *or*; eye 1.4 times as high as wide; *pm* 8-9; face flat; third antennal segment 1.7 times as long as wide; arista plumose, with dorsal longest hair as long as width of third segment.

Mesoscutum with 0+3 *dc*, ten rows of *acr*, *prsc* subequal to first *dc*, three setulae before base of *sa*. Wing: C-index 3.5, r-m beyond middle of discal cell, 4V-index 1.6-1.8, 5V-index 0.12-0.13. Legs: f_1 with 4-5 *pv*, f_2 with 5 *a*; t_2 with two spurs; *pd* on t_3 subequal to that on t_1 .

Protandrium horseshoe-shaped, slightly shorter than epandrium in dorsal side, with a few pairs of short marginal setae dorsally. Epandrium with two processes, which are directed downward and backward, in addition to long surstylus; hypandrium ill-developed excepting on postero-lateral ends; pregonite long, bifurcated apically; aedeagus with lateral sclerites well-developed, broad and upturned on tips; aedeagal apodeme very short.

Body length 6.0 mm, wing length 6.3 mm.

Female. Unknown.

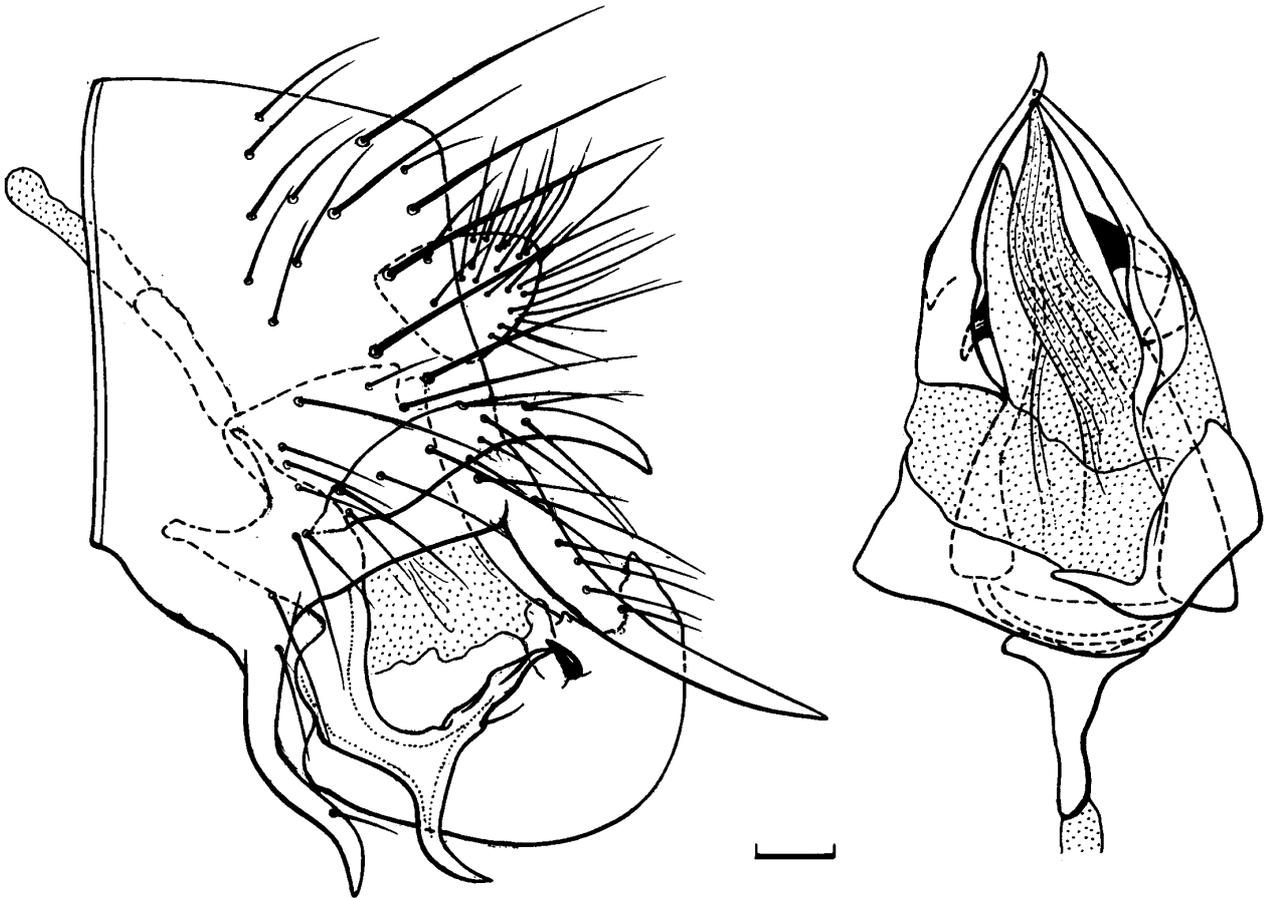


Fig. 28. Male genitalia of *Homoneura (Homoneura) cornuta* n. sp. (holotype).

Holotype male (OMNH-TI 148), Tam Dao, Vinh Phu, 26. VI. 1999, M. Sasakawa; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen.

Distribution. Viet Nam.

Diagnosis. The male genitalia of this species are distinctive in the surstylus long, the epandrium with two ventral processes, and the pregonite bifurcate apically.

Discussion. *H. (H.) spinulosa* Sasakawa (1992), known from Malaya and Borneo, has also two ventral processes on epandrium in addition to claw-like surstylus, but belongs to the different species-group in the coloration of abdominal tergites and wing markings.

Etymology. The specific name refers to three pairs of long horn-like processes on the epandrium and a pair of furcate pregonites.

62. *Homoneura (Homoneura) grandis* (Kertész)

Lauxania (Minettia) grandis Kertész, 1915: 529.

This testaceous species is recognizable by the short-haired arista, long wing (7-7.5 mm long) tinged with brown and with r-m clear but m-cu distinctly clouded, a small round spot, which is situated at middle between levels of both cross veins, on R_{4+5} , and apical spots on R_{2+3} , R_{4+5} and M_1 slightly separated from each another.

Specimen examined. 1 ♀, Tam Dao, Vinh Phu, 26. VI. 1999 (M. S.).

Distribution. Formosa, Viet Nam. New to Viet Nam.

63. *Homoneura (Homoneura) vietnamensis* n. sp. (Fig. 29)

Male & female. Testaceous; ocellar triangle black; face, gena and postgena yellowish; third antennal segment

slightly tinged with brown excepting base; arista brown; palpus yellow; thorax and abdomen shiny, very sparsely whitish dusted; T3-6 (T4-6 in female) with brown median fasciae which are not extended to posterior margin of each tergite; legs yellowish, distal segments of tarsi more or less brown-tinged indistinctly. Wing hyaline, very faintly tinged with yellow anteriorly, with six brown spots: R_{2+3} with preapical spot, which is connected with a spot at middle of R_{4+5} (just beyond level of m-cu), round apical spots on R_{4+5} and M_1 , and spots around r-m and m-cu (each spot somewhat constricted at middle); halter yellow.

Frons about twice as wide as eye; parafrontalia projecting beyond eye in profile; lower *or* slightly shorter than the upper; *oc* one-half length of lower *or*; occiput with a patch of brown setulae at base; gena one-fourth eye height; *pm* 7-9, short; face flat; third antennal segment ovoid, 1.5 times as long as wide; arista short-haired, with dorsal longest hair 1/5-1/4 as long as width of third segment.

Mesoscutum with 0+3 *dc*, six rows (8 rows anteriorly) of *acr*, *prsc* shorter than first *dc*; *stpl* two, anterior one very weak. Wing: C-index 3.0, r-m at middle of discal cell, 4V-index 1.4, 5V-index 0.1. Legs: f_1 with three *pv*, f_2 with 4-5 *a*; all tibiae with *pd*.

Protandrium ringed, with a narrow bridge just above sternite which is very weakly sclerotized, as long as epandrium in dorsal side and with several setae along posterior margin; epandrium with a pair of long processes, which are projected ventrally, sparsely hairy on dorsal side and minutely pointed on tip, just above surstyli; surstylus well-projected posteriorly, setose densely; hypandrium shallow U-shaped; pregonite with long setae; postgonite absent; aedeagus sclerotized laterally, membranous ventrally, with apodeme nearly one-half of aedeagal length.

Body length 3.6-3.8 (holotype) mm, wing length 3.8-4.0 (holotype) mm.

Holotype male (OMNH-TI 149), Sa Pa, Lao Kai, 20. VI. 1999, M. Sasakawa; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen. Paratypes: 2 ♀, same locality as in holotype, but on 23. VI. 1999.

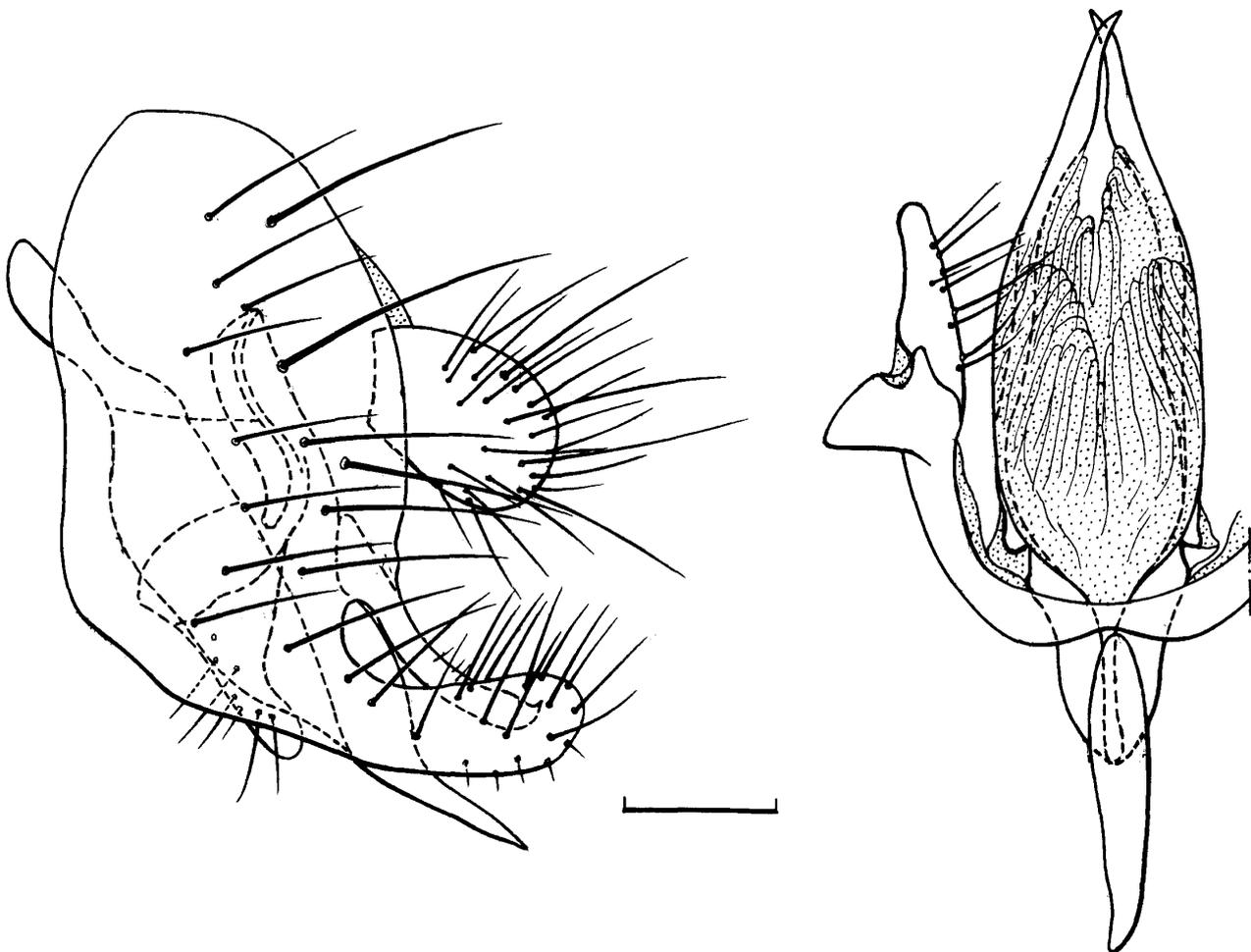


Fig. 29. Male genitalia of *Homoneura (Homoneura) vietnamensis* n. sp. (holotype).

Distribution. Viet Nam.

Discussion. This species with the short-haired arista and spotted wing pattern is easily separated from *H. (H.) bicuspis* Sasakawa (1992), known from Malaya, by its clear apex of R_{2+3} , a pair of processes on caudoventral side of epandrium in addition to well-developed surstyli and setose pregonites.

64. *Homoneura (Homoneura) nubecula* n. sp. (Figs. 10,B & 30)

Male & female. Testaceous; frontalia with a pair of brown stripes inside of para-frontalia, ocellar triangle and occiput brown, parafrontalia with a brown triangular spot laterad of antennal base, face linearly blackish along lateral margin of parafacialia; antenna darker than frons, third segment faintly tinged with brown excepting base; arista black except for base; palpus testaceous; thorax densely gray dusted; scutum with a pair of brown short stripes before transverse suture between *dc*-lines, mesad of second *dc* and caudad of *prsc*, respectively, anteriormost one distinctly narrowed anteriorly, second one connected with round spot at base of second *dc*; a brown transverse spot just before suture mesad of *prs*, round spots, which are variable in size, at bases of bristles; scutellum with pale brown median stripe which is constricted at middle and extended to bases of apical *sc*; anepisternum broadly brown along dorsal, anterior and ventral margins; katepisternum largely brown ventrally; abdomen densely gray-dusted, T2 with two brown transverse narrow band on cuadrolateral margin, T3-5 each with three brown triangular markings, which are extended throughout the whole length of tergite, at middle and on lateral sides, and these spots connected each another along posterior margin of tergite, T6 with three spots small and not connected each another posteriorly. Wing pale brown except for base and posterior margin, with hyaline spots as shown in Fig. 10B; halter yellow. Legs yellowish.

Frons 1.3 times as wide as long, nearly twice as wide as eye, parallel-sided; parafrontalia projecting above eye in profile; lower *or* shorter than the upper; *oc* subequal to upper *or*; gena 1/5-1/4 eye height; *pm* 5-6, short; face flat; third antennal segment nearly 1.5 times as long as wide; arista short-haired.

Mesoscutum with 0+3 *dc*, six rows of *acr*, of which lateral two rows very sparse, *prsc* shorter than first *dc*. Wing:

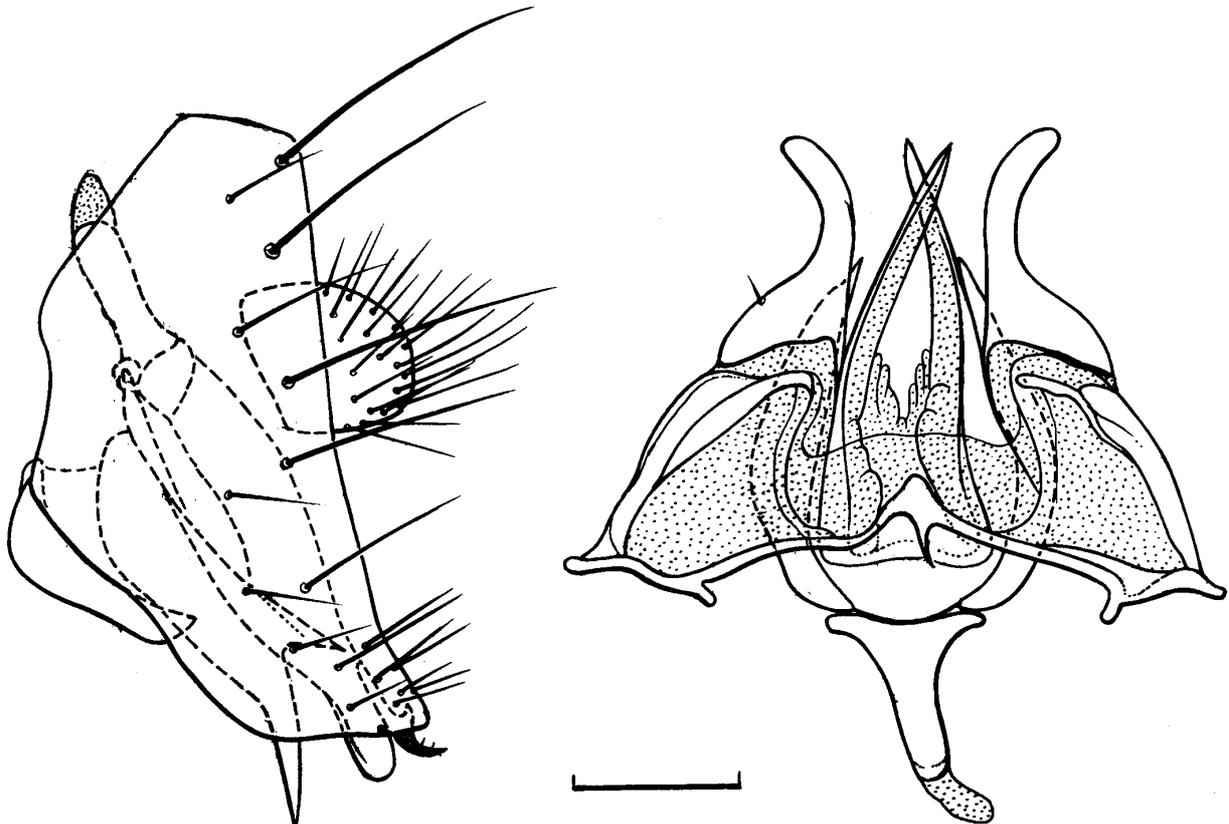


Fig. 30. Male genitalia of *Homoneura (Homoneura) nubecula* n. sp. (holotype).

C-index 2.7-3.3, r-m at middle of discal cell, 4V-index 1.2-1.4, 5V-index 0.11-0.13. Legs: f_1 with 3-4 *pv*, f_2 with 3-6 *a*; all tibiae with *pd*, t_2 with *pd* stout among them, and one long and one short spurs.

All T with marginal bristles long, as long as or slightly longer than tergal length; male S4-6 each 1.6-1.8 times as wide as long. Protandrium horseshoe-shaped, slightly longer than epandrium in dorsal side, with an irregular row of several short marginal setae. Epandrium with sparse bristles except for caudoventral apex; surstylus short, claw-like; hypandrium shallow V-shaped, with long lateral arms; pregonite with or without a seta at base; aedeagus with lateral sclerites bifurcated, each pointed apically; aedeagal apodeme short.

Body length 3.2 (holotype)-3.6 (female) mm, wing length 3.8 (female)-3.9 (holotype) mm.

Holotype male (OMNH-TI 150), Sa Pa, Lao Kai, 20. VI. 1999, M. Sasakawa; abdomen and genitalia in a polyethylene tubule with glycerol and pinned with the specimen. Paratype female, same locality as in holotype but on 21. VI. 1999.

Distribution. Viet Nam.

Discussion. This species belongs to the *picta*-group in the wing pattern, but differs from *picta* and *sarangana* Curran (1931), known from Java, by its pale wing, with large hyaline spots, and unspotted face, less-spotted mesoscutum and pale femora.

Etymology. The specific name refers to the 'nubilous' wing.

65. *Homoneura (Homoneura) subnubecula* n. sp. (Figs. 10, C & 31)

Male & female. Differs from *nubecula* n. sp. only in the coloration and structures of male genitalia: frontal brown stripes separated in two dorsal and ventral spots, respectively; face with brown spots just ventrad of antennal bases and transverse oval spot at middle and subtriangular ones at lateral corners just above ventral margin; palpus distinctly darkened along ventroapical margin; mesoscutum in male dark brownish quadrivittate, median pair between *dc*-rows ending behind level of second *dc*, lateral one broad above *prs*-line before transverse suture and that between *dc*- and *sa*-rows behind suture narrowed posteriorly and extended to caudolateral corner of scutum, bristles and setulae growing on brown round spots which are variable in size; scutellum dark brown except for anterior lateral corners and lateral margins; pleura dark brown, anepisternum with small gray-dusted testaceous spot ventrad of

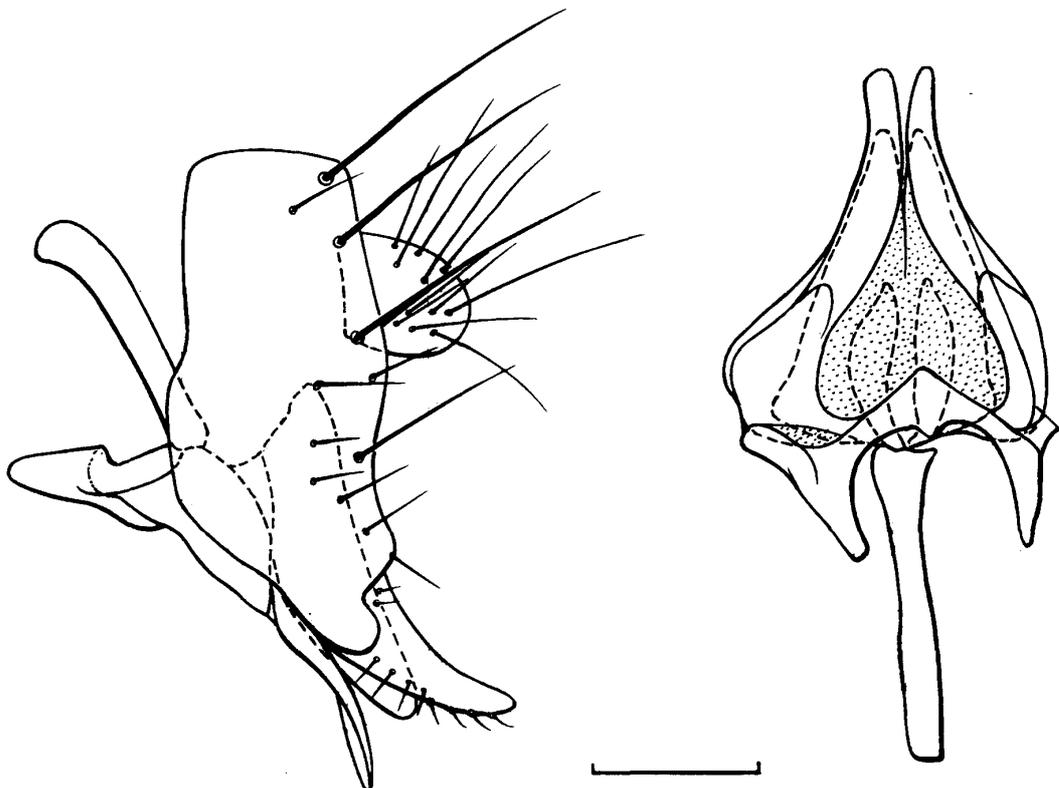


Fig. 31. Male genitalia of *Homoneura (Homoneura) subnubecula* n. sp. (paratype).

mspl-base and katapisternum with similar spot around bases of *stpl*; scutum in female with two pairs of brown short stripes between suture and mesad of second *dc*, spots around bases of bristles and setulae almost similar to those in male, scutellum with inverted U-shaped brown spot extending to base of apical *sc*, pleura same as in *nubecula*; abdomen with T1 brown, T2-6 dark brown, each with four subquadrate testaceous spots, of which lateral one smaller than median one on T3-5, but those connected with each other on T2 and 6 (anterior dark margin on each T not visible in dry specimen); wing markings as in Fig. 10C; mid and hind femora more or less darkened except for apices (male hind femur more darkened).

Protandrium horseshoe-shaped, slightly longer than epandrium, with two pairs of short marginal setae. Epandrium with sparse marginal bristles and setae, and a small lobate process on caudoventral apex; surstylus long and setose; hypandrium somewhat U-shaped; pregonite long; aedeagus with lateral and ventroproximal sclerites; aedeagal apodeme almost as long as aedeagus.

Body length 3.1 (holotype)-3.2 (female) mm, wing length 3.3 (female)-3.7 (holotype) mm.

Holotype male (OMNH-TI 151), Sa Pa, Lao Kai, 20. VI. 1999, M. Sasakawa. Paratypes: 1 ♂ & 3 ♀, same locality as in holotype but on 20-23. VI. 1999.

Distribution. Viet Nam.

Discussion. The body coloration of this species is somewhat similar to that of *sarangana* Curran, but the wing pattern is quite different from each other.

66. *Homoneura (Homoneura) trypetoptera* (Hendel)

See Sasakawa (1992), p. 207.

Specimens examined. 1 ♂ & 1 ♀, Di Linh (1200 m), 22-28.IV.1960 (L. Q.); 2 ♀, Chute de Bobla, 7 km W. of Di Linh (840 m), 27. IV. 1960 (R. L.); 1 ♂, 19 km NE. of Ban Me Thuot, 18. V. 1960 (L. Q.); 5 ♂ & 8 ♀, Ban Me Thuot (500-870 m), 16-21. V. & 20-24. XII. 1960 (L. Q. & C. Y.); 3 ♂, 22 km S. of Nha Trang, 20-26. XI. 1960 (C. Y.); 4 ♂ & 1 ♀, M'Drak, E. of Ban Me Thuot, 8-19.XII.1960 (C. Y.); 1 ♀, Karyn Danar (200 m), 13-28. II. 1961 (N. S.).

Distribution. Malaya, Thai, Viet Nam, Java, Sumatra, Borneo, Krakatau, Lombok, Philippines, Formosa, India, Nepal, Ceylon.

67. *Homoneura (Homoneura) picta* (de Meijere)

See Sasakawa (1992), p. 192.

Specimens examined. 1 ♂, 40 km N. of Di Linh (540 m), 26. IV. 1960 (R. L.); 2 ♂ & 1 ♀, Dalat (1500 m), 29. IV. -4. V. 1960 (L. Q.); 2 ♂ & 2 ♀, 76 km SW. of Ban Me Thuot (870 m), Dak Song, 19-21. V. 1960 (L. Q.); 7 ♂, Dalat, 11. & 26-27. IX. 1960 (C. Y. & J. G.); 1 ♂ & 1 ♀, Di Linh, 27. IX. -14. X. 1960 (C. Y.); 2 ♂ Blao (Balao)(500 m), 14-21. X. 1960 (C. Y.); 1 ♂, Karyu Danar (200 m), 13-28. II. 1961 (N. S.); 5 ♂ & 2 ♀, Mt. Lang Bian (1500-2000 m), 19.V. -8. VI. 1961 (N. S.); 2 ♂ & 2 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961 & 12. IX. 1960 (N. S. & J. G.); 5 ♂ & 1 ♀, Fyan (900-1200 m), 11. VII. -9. VIII. 1961 (N. S.); 3 ♂ & 7 ♀, Tam Dao, 18. & 25-26. VI. 1999 (M. S. & Y. Y.); 2 ♂ & 2 ♀, Sa Pa, 20-23. VI. 1999(M. S.).

Distribution. Malaya, Thai, Viet Nam, China, Java, Sumatra, Borneo, Formosa, India, Nepal. New to Viet Nam.

68. *Homoneura (Homoneura) piliseta* Malloch

Homoneura piliseta Malloch, 1929: 45 (n. name for *pubiseta* de Meijere, 1924)

This black species with clear wing (4.6 mm in length) is characterized by the pubescent arista, densely brownish pollinose mesoscutum, scutellum and abdomen, grayish pollinose face, occiput and thoracic pleura; scutellum with apical one-third conspicuously gray-dusted and scutum with posterior margin grayish when viewed from behind. A female specimen has the pale legs, that is, coxae and fore femur blackish brown, mid and hind femora broadly pale

brown on ventral sides, and all tibiae and tarsi testaceous (*not* black as described by de Meijere).

Specimen examined. 1 ♀, Tam Dao, Vinh Phu, 18. VI. 1999 (M. S.).

Distribution. Sumatra, Viet Nam. New to Viet Nam.

69. *Homoneura (Homoneura) protuberans* n. sp. (Fig. 32)

Male & female. Head pale brown, parafrontalia, ocellar triangle and face slightly and *or*-bases distinctly darkened; frons mat, sparsely pollinose; occiput, postgena and parafacialia densely grayish dusted; face grayish dusted excepting a pair of subshiny triangles at ventrolateral corners slightly dorsad of peristome; antenna dark testaceous, arista brown except for testaceous base; palpus brown. Thorax and abdomen black, the former densely gray-dusted, the latter sparsely pruinose and T5-6 slightly shining; scutum and scutellum brownish pollinose; epandrium dark brown; cercus black in male but brown in female. Wing slightly tinged with brownish yellow, without markings and not darkened at base; halter testaceous yellow. Legs with coxae and femora brown, tibiae dusky testaceous, tarsi pale testaceous; femora whitish gray dusted.

Frons as long as wide, slightly wider than eye (1.3 : 1), almost parallel-sided; lower *or* about three-fourths length of the upper; *oc* as long as lower *or*; eye 1.2 times as high as wide; face flat; gena about one-seventh height of eye; *pm* 7-8, short; third antennal segment 1.5-1.6 times as long as wide, slightly narrowing apically; arista plumose, with dorsal longest hair only a little shorter than width of third segment.

Mesoscutum with 0+3 *dc*, first *dc* close to suture, 8(-10) rows of *acr*, *prsc* slightly shorter than first *dc*, *ipa* slightly shorter than *opa*; anterior *stpl* short. Wing: C-index 3.5 (male)- 3.8 (female), r-m before middle of discal cell, 4V-index 1.5-1.6, 5V-index 0.13. Legs: *f*₁ with three long and one short *pv*, *f*₂ with 5-6 *a*; *t*₂ with three spurs, all tibiae with *pd*.

Protandrium ringed, with narrow sternal sclerite almost horizontal in posterior view, and dorsal side broad, as long as ventral length of epandrium. Male S6 as long or wide as S5, with V-shaped concavity on hind one-third (one-fourth in S5). Epandrium with anterior ventral margin projected into two pairs of short processes; surstylus black, setulose and minutely trifurcate distally; hypandrium H-shaped, with anterior lateral arms extremely broadened; aedeagus with lateral sclerite curved rectangularly before apex and provided with a small dorsal tooth at middle, membranous ventrally; aedeagal apodeme shorter than aedeagus.

Body length 3.7 (male, female) mm, wing length 3.8 (holotype)- 3.9 mm.

Holotype male (BISHOP No. 16415), Dalat (1500 m), 29. IV. -5. V. 1960, S. Quate. Paratypes: 1 ♂ & 5 ♀, Mt. Lang

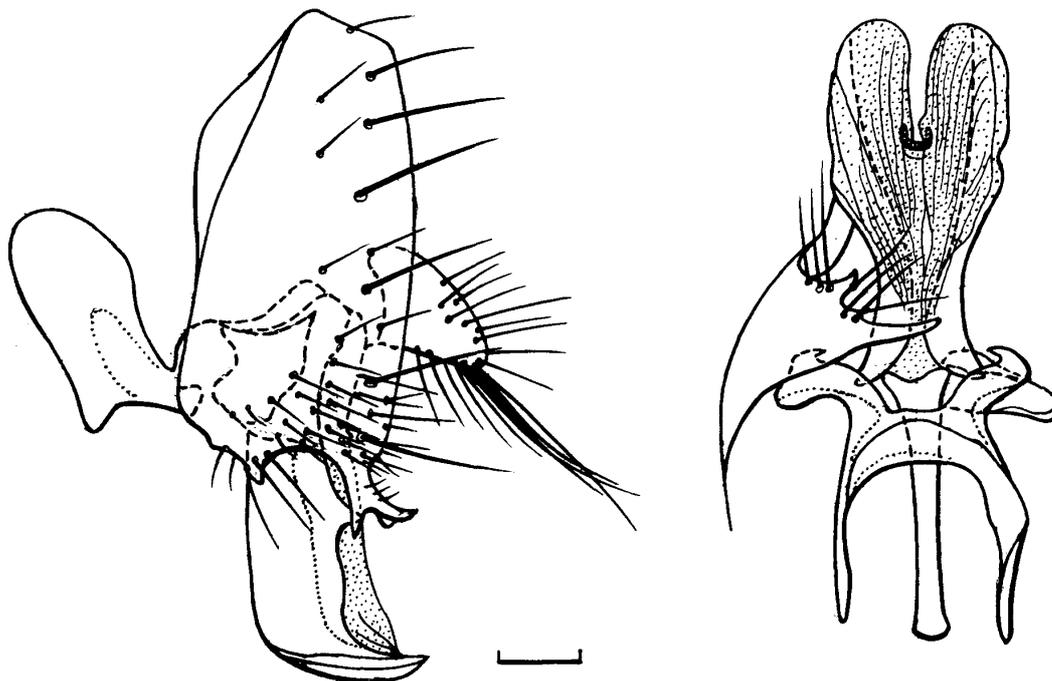


Fig. 32. Male genitalia of *Homoneura (Homoneura) protuberans* n. sp. (paratype).

Bian (1500-2000 m), 3. V. 1960, S. Quate and 19. V. -8. VI. 1961, N. R. Spencer; 1 ♀, 6 km S. of Dalat (1400-1500 m), 9. VI. -7. VII. 1961, N. R. Spencer.

Distribution. Viet Nam.

Diagnosis. This blackish species is unique in the structures of male genitalia: a pair of ventral processes, which is extended toward the center, on anterior ventral margin of the epandrium.

Discussion. In the coloration, this new species is similar to *H. (H.) opacithorax* Malloch (1929), known from the Philippines, but it is pale on the antenna and palpus, thus differing from the related species.

Etymology. The specific name refers to the 'pro-tuberances' on anterior ventral margin of epandrium.

70. *Homoneura (Homoneura) signatifrons* (Kertész) (Fig. 33)

See Sasakawa (1992), p. 199.

Abdomen is mat black; male genitalia are distinctive in the following points: protandrium and epandrium shiny brown, the former ringed, dorsally as long as epandrium, densely setulose, with anteriorly semicircular dorsal apodeme; sternite small, subquadrate, with a small hole at middle; epandrium projected ventrally, knob-like; surstylus incurved, pointed mesally and setulose; hypandrium shallow V-shaped but bifid at base; pregonite subconical but pointed laterally on tip, with a spine on inner base; aedeagus membranous ventrally, with lateral sclerite pointed posteriorly on tip; aedeagal apodeme slightly longer than aedeagus.

Specimens examined. 1 ♂, Kontum (550 m), N. of Pleiku, 13. V. 1960 (L. Q.); 1 ♀, N. of Nha Trang, 30. XI. - 5. XII. 1960 (C. Y.).

Distribution. Borneo, Viet Nam, New Guinea. New to Viet Nam.

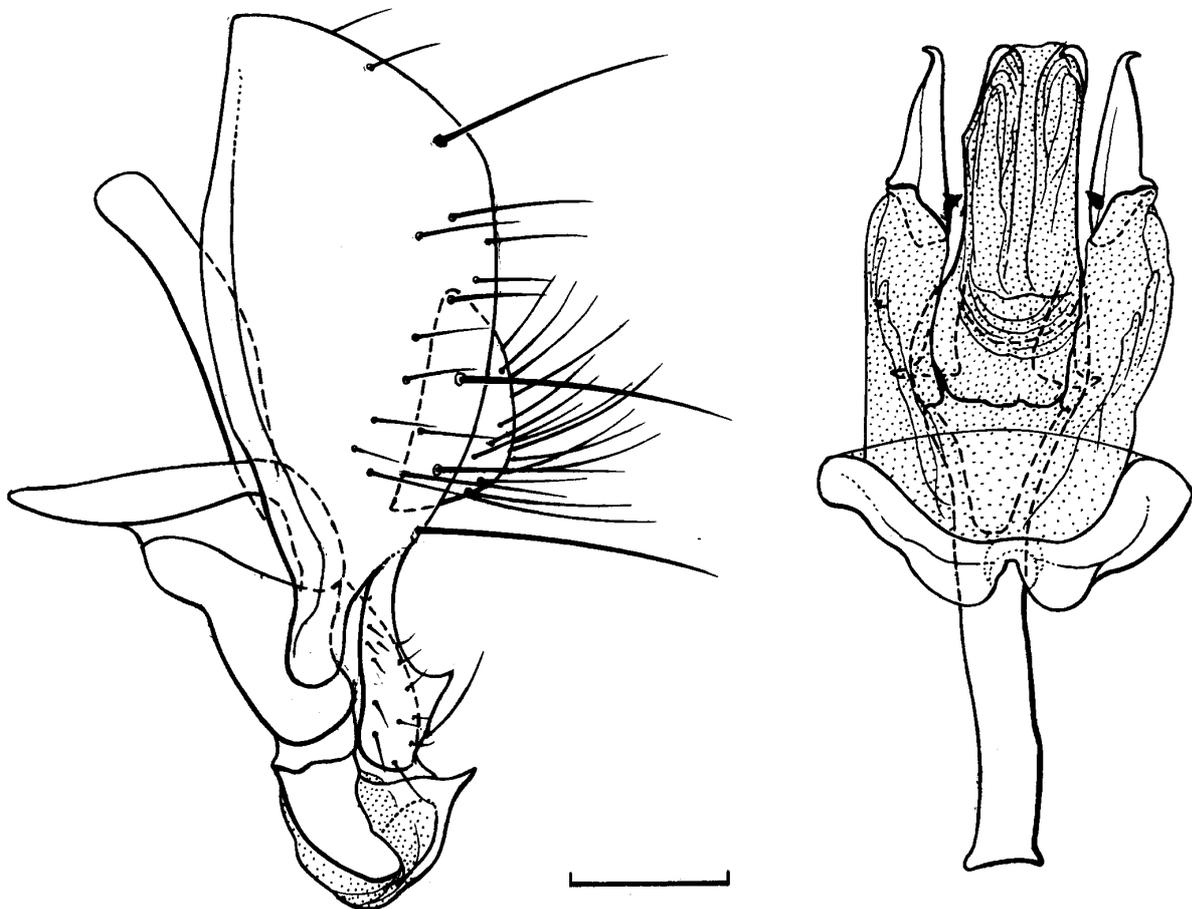


Fig. 33. Male genitalia of *Homoneura (Homoneura) signatifrons* (Kertész).

71. *Homoneura (Homoneura) ornatifrons* (Kertész)

Lauxania (Minettia) ornatifrons Kertész, 1913: 91.

This small, blackish species is characterized by the brownish yellow scutellum (darkened basally), short *prsc* (subequal to or slightly longer than other *acr* in length) and hyaline wing (2.4-3.0 mm long). Other characteristics are as follows: frons dark testaceous on ventral half; parafacialia and gena yellow to testaceous and silverly whitish pruinose; face pale brown, testaceous ventrally; antenna testaceous but third segment fuscous except for base; arista plumose; thorax and abdomen shiny black excepting postpronotal lobe testaceous, scutum sparsely pollinose, with 0+3 *dc*, six rows of *acr*; halter and legs testaceous yellow but mid and hind femora dark brown except for apices; t_2 with two spurs. Male genitalia: see Sasakawa (1998), p.64.

Specimens examined. 30 ♂ & 22 ♀, M'Drak, E. of Ban Me Thuot (4-600 m), 8. - 19. XII. 1960 (C. Y.); 1 ♂, Plateau G. (1170 m), 63 km NE. of Kontum, 11-12. VI. 1960, (R. L.); 2 ♀, Tam Dao, 18. VI. 199 (M. S.).

Distribution. Viet Nam, Formosa, Japan (Ryukyus). New to Viet Nam.

72. *Homoneura (Homoneura) interrupta* n. sp. (Fig. 10D)

Female. Head testaceous yellow, sparsely dusted, but back of head largely brownish, frontalia with a pair of pale brown stripes laterally, not reaching to its ventral margin; ocellar triangle brown; face with antennal grooves dorsally brown-tinged; antenna and palpus testaceous, the former darker than the latter; arista black except for base. Thorax brownish black in ground colour excepting scutellum testaceous along margin, densely grayish dusted, but brown-dusted around bases of bristles on scutum; scutum with a median scarcely dusted vitta between a pair of median *acr*-rows, two vittae at bases of *prsc* extending to scutellum which is brown on anterior two-thirds and indistinctly separated linearly into two parts at middle line. Wing brownish black except for hyaline apical (between apices of R_{2+3} and M_1) and smoky posterior margins, and with three hyaline fasciae, of which two extending basad and laterad of r-m (between r-m and m-cu) and the former complete fascia but the latter separated into three triangular spots by the veins, subapical one laterad of m-cu also separated by vein M_1 ; halter yellow. Legs pale testaceous. Abdomen testaceous, with dark brown median vitta on all tergites and posterior bands on T2-6 laterally, vitta and band not touched mesally on T2 and 6.

Frons slightly wider than long, about 1.3 times as wide as eye, slightly diverging ventrally; parafrontalia with ventral part slightly projecting beyond eye in profile; lower *or* slightly shorter than the upper; *oc* subequal to lower *or* in length; eye about 1.3 times as high as wide; gena about one-ninth eye height; *pm* six, short; face slightly concave; third antennal segment about 1.8 times as long as wide; arista plumose, with dorsal longest hair approximately two-thirds width of third segment.

Mesoscutum with 0+3 *dc*, eight rows of *acr*. Wing: C-index 2.8-3.0, r-m beyond middle of discal cell, 4V-index 1.5, 5V-index 0.15. Legs: f_1 with three long *pv*, f_2 with six *a*; t_2 with two spurs, *pd* on t_3 subequal to that on t_1 .

Body length 2.7 mm, wing length 3.0 mm.

Male. Unknown.

Holotype female (OMNH-TI 152), Tam Dao, Vinh Phu, 25. VI. 1999, M. Sasakawa.

Distribution. Viet Nam.

Diagnosis. This species is unique in the wing pattern, so that, the specific name refers to the 'interrupted' hyaline fasciae on wing.

73. *Homoneura (Homoneura) discoglauca* (Walker)

See Sasakawa (1992), p. 172.

Specimens examined. 1 ♂, Karyu Danar (200 m), 13-28. II. 1961 (N. S.); 15 ♂ & 30 ♀, Fyan (900-1200 m), 11. VII. - 9. VIII. 1961 (N. S.); 1 ♀, Di Linh, 29. IX. -14. X. 1960 (C. Y.); 1 ♀, Blao (Balao)(600 m), 16-21. X. 1960 (C. Y.); 1 ♀, M'Drak, E. of Ban Me Thuot (4-60 m), 8-19. XII. 1960 (C. Y.).

Distribution. Malaya, Viet Nam, Java, Celebes, Krakatau, Lombok, Formosa, Japan; Solomon Is. New to Viet Nam.

74. *Homoneura (Homoneura) immaculata (de Meijere)*

See Sasakawa (1992), p. 181.

The specimens collected in June, 1999, are mostly darkened in the frontalia, antenna and thoracic pleura, that is, frontalia dark testaceous to fuscous; first and second antennal segments black, third antennal segment black at base, brownish along dorsal and apical margins; anepisternum brownish black in ground colour, densely whitish gray dusted, katepisternum with a brownish spot at base of *stpl*, other pleural area pale to dark brown. A female from Sa Pa has the entirely black antennae. Wing length 3.75 (3.3-4.6) mm in males and 4.11 (3.2-4.6) mm in females.

Specimens examined. 1 ♀, Sa Pa, Lao Kai, 20. VI. 1999 (M. S.); 8 ♂ & 8 ♀, Tam Dao, Vinh Phu, 26. VI. 1999 (M. S. & Y. Y.); 1 ♂, 6 km S. of Dalat, 9.VI. -7. VII. 1961 (N. S.); 2 ♂ & 1 ♀, Fyan, 11. VII. -9. VIII. 1961 (N. S.).

Distribution. Malaya, Viet Nam, Java. New to Viet Nam.

75. *Homoneura (Homoneura) fasciventris Malloch*

See Sasakawa (1992), p. 173.

Specimens examined. 1 ♀, Dalat (1500 m), 29. IV. -4. V. 1960 (L.Q.); 1 ♀, 18 km NW. of Dalat (1300 m), 4-5. V. 1960 (L. Q.); 1 ♀, 6 km SW. of Dalat (1550 m), 11. IX. 1960 (L. Q.); 1 ♀, 17 km S. of Di Linh (1300 m), 6-13. X. 1960 (C. Y.); 1 ♀ Nha Hue, 15 km N. of Phan Rang, 10. XI. 1960 (C. Y.); 1 ♀, 22 km S. of Nha Trang, 20-26. XI. 1960 (C. Y.); 7 ♀, Ban Me Thuot (500 m), 20-24. XII. 1960 (C. Y.); 1 ♀ Karyu Danar (200 m), 13-28. II. 1961 (N. S.); 1 ♀, Mt. Lang Bian (1500-2000 m), 19. V. -8. VI. 1961 (N. S.); 9 ♀, 6 km S. of Dalat, 9. VI. -7. VII. 1961 (N. S.); 39 ♂ & 57 ♀, Fyan (900-1200 m), 11. VII. -9. VIII. 1961 (N. S.).

Distribution. Malaya, Viet Nam, Borneo, Formosa. New to Viet Nam.

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