

Kontyû, 47(4): 476-486. December 25, 1979

New Tribe, Genera and Species of Japanese and Oriental Tachinidae (Diptera), with Note on Synonymy

Louis P. MESNIL

Commonwealth Institute of Biological Control, European
Station, Delémont CH-2800, Switzerland

and

Hiroshi SHIMA

Biological Laboratory, College of General Education,
Kyushu University, Ropponmatsu, Fukuoka 810, Japan

Synopsis A new tribe of the family Tachinidae is proposed for a new genus comprising 3 new species from Japan, Taiwan and Vietnam: Leptothelairini tribus nov. (type-genus: *Leptothelaira* gen. nov.); *L. longicaudata* sp. nov. (type-species), *L. meridionalis* sp. nov. and *L. orientalis* sp. nov. This tribe seems to be close to Thelairini. *Anechuromyia nigrescence*, a new genus and species of the tribe Blondeliini, parasitic on an earwig *Anechura harmandii* in Japan, is described. *Gibsonomyia* CURRAN is synonymized with *Phyllomya* ROBINEAU-DESVOIDY. A synonymic note on *Phyllomya aristalis* (MESNIL et SHIMA) is given.

Leptothelairini tribus nov.

Head semicircular, dichoptic; face concave, facial carina absent; epistoma not beyond vibrissal angle; ocellar seta proclinate or indistinct; lowest frontal seta level with base of 1st antennal segment; parafacial bare; facial ridge bare; vibrissa strong; cheek narrower than length of 3rd antennal segment; occipital dilation absent; occiput flattened, upper portion with irregular rows of black hairs; arista long plumose; proboscis short; palpus well developed; eye bare. Thorax closed above hind coxae by a broad sclerotized bridge, the hind coxae widely separated from abdominal base; 1 *ia*; 1 presutural seta; no pre-alar seta; 1+1 *stpl*; scutellum with strong subapical scutellar setae widely separated from each other and with strong apical setae crossed; propleuron, prosternum and suprasquamal ridge bare; barete bare; pteropleural seta absent; hypopleural setae hair-like, in a tuft of long hairs; metathoracic spiracle small; wing vein bare, except for basal node of vein R_{4+5} , which bears only 1 hair dorsally (occasionally with an additional fine hair); vein $Cu+A$ not reaching wing margin. Legs elongate; fore coxa bare on inner anterior surface; hind coxa bare posterodorsally; hind tibia without *pv* apical seta. Abdomen elongate and narrow; syntergum 1+2 excavated only at base; intermediate terga with discal and marginal setae; sterna concealed.

Type-genus: *Leptothelaira* gen. nov.

Remarks. The tribe Leptothelairini is here proposed for a single Asiatic genus *Leptothelaira* gen. nov. This tribe seems to be related to Thelairini, but is distinguished from all groups allied to Thelairini by its wing vein R_{4+5} with only 1 seta on its base and by the thorax closed above hind coxae by a sclerotized bridge. This

tribe is also different from Doleschaliini, which have the thorax closed behind the hind coxae, in various characters, such as the head structure and the chaetotaxy of the thorax.

Leptothelaira gen. nov.

♂♀. Vertex $1/4-1/7$ of head width; interfrontal area very narrow; cheek $1/3-1/5$ of eye-height; parafacial almost bare; inner vertical setae strong, crossing or converging; outer vertical seta present or absent in male; prevertical seta, reclinate orbital seta and proclinate orbital seta absent in male; female with prevertical seta and proclinate orbital setae; 2 fine postocellar setae; 1 fine postvertical seta on each side; frontal setae inclinate and proclinate; vibrissa strong, nearly level with lower margin of face; antenna rather long, 1st segment not prominent, 3rd segment

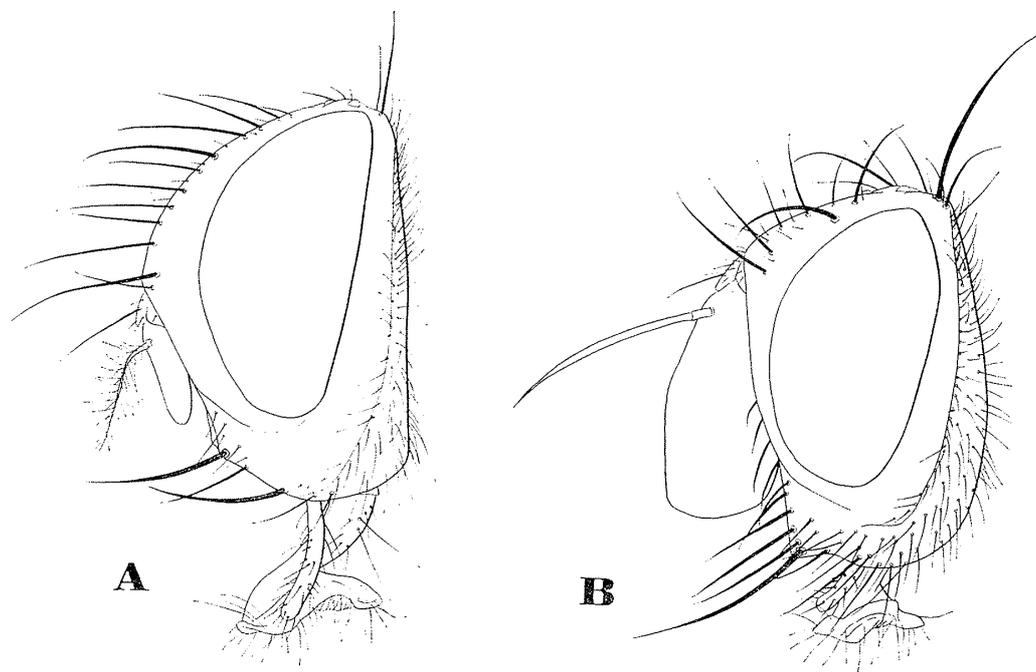


Fig. 1. Male head in profile. A: *Leptothelaira longicaudata* gen. et sp. nov., B: *Anechuro-myia nigrescens* gen. et sp. nov.

$3-4\times$ as long as 2nd; 2nd segment of arista very short, 3rd segment thickened only at base; palpus rather long. Thorax: Hairs on thorax black; $1+0$ *ac*; $2+3$ *dc*; 1 posthumeral seta; 2 humeral setae, if 3, then inner one very fine and hair-like; 1 supra-alar seta; propleural and prostigmatic setae strong; prosternum rather wide; mediotergite bare. Wing hyaline; lower calypter rounded, with long white fringe; 2nd and 3rd costal sectors haired ventrally; bend of vein M_1 gently curved, without appendage; cell R_{4+5} open. Legs very long; fore coxa elongate; fore tibia with 1 *ad* and 1 *pd* setae; mid-tibia with 1 *ad*, 2 *pd* and 1 *v* setae; hind tibia with 2 preapical *d* setae; female fore tarsus normal. Abdomen: Hairs black; syntergum $1+2$ with 2 median marginal and 1 lateral marginal setae; 2 median discal and 1 lateral discal setae on both 3rd and 4th terga; 2 median marginal and 1 lateral marginal setae on 3rd tergum; male 6th abdominal tergum entire, free from synsternum $7+8$, without hairs. Male genitalia: Similar to those of Thelairini; pregonite undeveloped; postgonite elongate; basiphallus long; distiphallus with a short article at apex; epiphallus

present. Female terminalia: Sixth tergum short, entire; 7th tergum still short; 6th spiracle on ventral portion of 6th tergum; 7th spiracle on intersegmental membrane between 6th and 7th terga; 9th tergum absent.

Type-species: *Leptothelaira longicaudata* sp. nov.

Remarks. The genus *Leptothelaira* is found in Japan, Taiwan and Vietnam. Although the host insects of this genus are unknown, this genus is larviparous. We could get large 1st instar larvae from a dried female specimen of *L. longicaudata* sp. nov. by boiling it in 15% potassium hydroxide in water.

Leptothelaira longicaudata sp. nov.

(Figs. 1A, 2 & 3)

♂. Head reddish yellow in ground color, upper portion of parafrontal, postorbit and occiput black; parafrontal densely clothed with yellow or golden yellow pollinosity; parafacial with dense whitish yellow pollinosity; face, cheek, postorbit and occiput densely white pollinose; interfrontal area brown; lunula pale yellow; antenna yellow or orange yellow; arista pale yellow at base, darkened apically; palpus pale yellow; proboscis and labella yellowish. Vertex 0.17–0.19 of head width; interfrontal area very narrow, at the narrowest point subequal in width to base of arista; parafacial weakly narrowed below, slightly wider than 3rd antennal segment at middle-height; face about twice as long as wide; cheek 0.28–0.31 of eye-height; peristoma oblique in profile; postorbit widened below. Inner vertical seta about $2/5$ of eye-height; outer vertical seta absent or very fine and hair-like; ocellar seta very fine and hair-like; 7–12 frontal setae; cheek with 5–7 fine hairs on its lower portion. Second antennal segment with a long seta and several fine hairs, the former subequal in length to 3rd antennal segment; 3rd segment $3.5\text{--}3.8\times$ as long as 2nd, falling short of lower margin of face by about $2/5$ length of 3rd antennal segment. Arista slightly longer than antenna. Proboscis about $1/2$ of eye-height. Palpus subequal in length to antenna, weakly flattened dorso-ventrally, bearing rather short black hairs.

Thorax black in ground color, humeral callus reddish yellow; dorsum densely clothed with grayish yellow pollinosity, pleura with rather thin whitish pollinosity; 4 rather broad longitudinal vittae present on prescutum and scutum, the inner pair ending at anterior $2/5$ of scutum. Prosternum slightly longer than wide. Subapical scutellar seta about $3\times$ as long as scutellum; apical scutellar seta $2/3\times$ as long as subapical one; preapical scutellar seta absent.

Wing slightly tinged with yellow; tegula black; basicosta brown; veins brownish yellow; calypter pale brownish white, semitranslucent; halter pale yellow. Second costal sector $0.38\text{--}0.45\times$ as long as 3rd, slightly shorter than 4th; length of vein M_1 from discal crossvein to its bend $0.86\text{--}0.91\times$ as long as that from the bend to apex of vein M_1 , $1.4\text{--}1.6\times$ as long as distance between the bend and wing margin; ultimate section of vein M_3 about $0.4\times$ as long as discal crossvein. Costal spine strong, slightly shorter than *r-m* crossvein.

Legs reddish yellow, tarsi black, pulvilli tawny yellow. Fore coxa elongate, about $1/2$ length of fore femur; fore and hind tibiae weakly sinuate; fore claw and pulvillus long, slightly longer than 5th tarsomere. Fore tibia with 1 rather strong *ad* and 1 very strong *p* setae (in one specimen examined a rather weak additional *p* seta present above normal strong *p* seta); hind tibia with 3 *ad*, 3 *pd* and 1 *v* setae.

Abdomen elongate, nearly cylindrical, 4th and 5th terga weakly compressed laterally; abdomen about $2.5\times$ as long as combined length of head and thorax; abdomen broadly reddish yellow in ground color, narrow mid-dorsal portion of syntergum 1+2 to 4th tergum, posterior $3/5$ of 4th tergum and entire 5th tergum black; anterior $1/8$ of 4th and entire 5th terga thinly clothed with whitish pollinosity; syntergum 1+2 about $3/4\times$ as long as 3rd; 4th tergum subequal in length to 3rd;

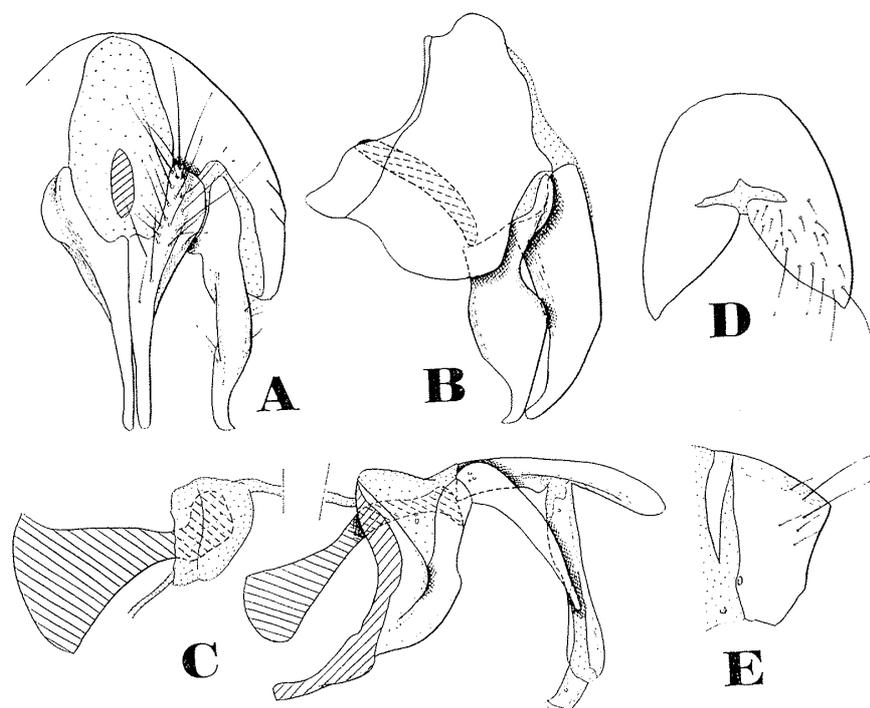


Fig. 2. Male hypopygium of *Leptothelaira longicaudata* gen. et sp. nov. A: Epandrium, cerci and surstylus in dorsal view, B: same in lateral view, C: hypandrium, postgonite and aedeagus in lateral view, D: 5th sternum in ventral view, E: 6th tergum and synsternum 7+8 in lateral view.

5th tergum $1.2\times$ as long as 4th, posterior $3/5$ produced into a long "tail"; 5th sternum evenly narrowed anteriorly, with posterior lobe on its posterior $1/2$, posterior lobe with several fine hairs on posterior portion. Male genitalia: Cerci in dorsal view evenly narrowed posteriorly, very narrowly separated from each other on apical $2/5$, in lateral view evenly narrowed posteriorly; surstylus in lateral view slightly widened at middle, apex feebly curved ventrally and pointed, in dorsal view the apex weakly curved outwards; distiphallus slightly swollen ventrally at base; ejaculatory apodeme large.

Body length: 15.6–16.5 mm., wing length: 9.6–10.4 mm.

♀. Conspicuously differing from male as follows: Vertex 0.25–0.28 of head width; interfrontal area wider, about $1/2$ as wide as parafrontal at middle and slightly narrower than 3rd antennal segment; cheek 0.31–0.33 of eye-height; inner vertical seta strong, about $3/4$ length of eye-height; outer vertical seta about $1/2$ length of inner one; 1 prevertical seta, directed outwards; 2 proclinate orbital setae, anterior seta stronger than posterior one and slightly shorter than inner vertical seta; 6–8 frontal setae; scutum blackish between inner vittae when viewed from behind; fore and hind tibiae straight; fore claw and pulvillus distinctly shorter than 5th tarsomere; posterior $1/3$ – $3/4$ of 3rd abdominal tergum and entire 4th and 5th terga black; 3rd tergum with thin whitish pollinosity; abdominal syntergum 1+2 about $3/5\times$ as long as 3rd tergum; 4th abdominal tergum subequal in length to 3rd and $1.3\times$ as long as 5th; 5th tergum normal, without "tail". Female terminalia: Sixth tergum with a row of several fine setae on posterior margin; 6th sternum rectangular, with hairs on posterior $1/3$; 7th tergum about $1/2$ length of 6th tergum, narrowly divided into 2 hemitergites longitudinally, without hairs; 7th sternum subequal in length to 6th sternum; 8th sternum projecting posteriorly, composing conical "ovipositor".

Body length: 8.4–9.3 mm., wing length: 8.4–9.3 mm.

Holotype: ♂, Kiyokawa, Ashoro, Hokkaido, Japan, 23.vii.1967, A. Nakanishi, deposited in the collection of the Biological Laboratory, College of General Education, Kyushu University, Fukuoka (BLKU).

Paratypes: 1 ♂ 3 ♀♀, same data as holotype, T. SAIGUSA & A. NAKANISHI; 1 ♀, Mt. Rausu (200–900 m), Hokkaido, 3.viii.1967, A. NAKANISHI; 1 ♂, Shimashimadani, Nagano, Honshu, Japan, 4.vii.1966, Y. MIYATAKE; 1 ♂, Shimashimadani, 11.ix.1975, A. NAKANISHI.

Distribution. Japan (Hokkaido & Honshu).

Remarks. This species is characterized by the tail-like projection of the male 5th abdominal tergum and the undeveloped ocellar seta.

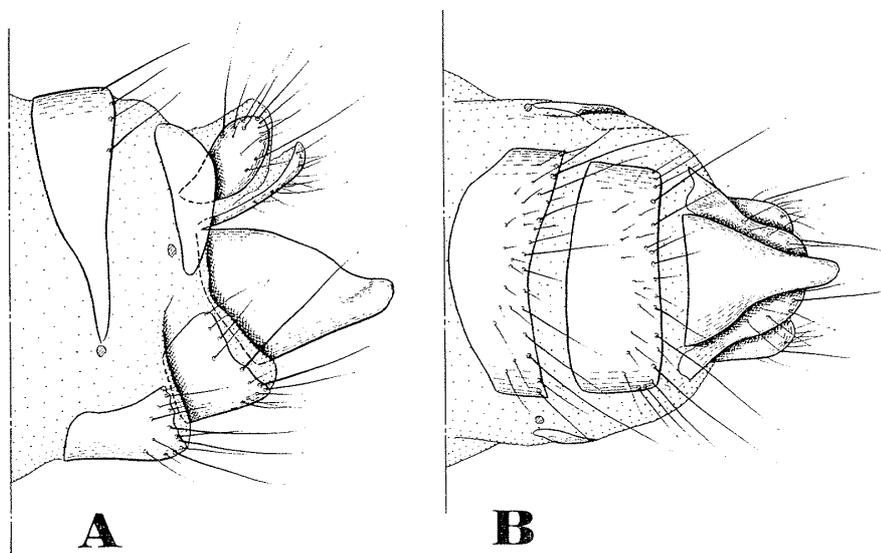


Fig. 3. Female terminalia of *Leptothelaira longicaudata* gen. et sp. nov. A: Lateral view, B: ventral view.

Leptothelaira meridionalis sp. nov.

(Figs. 4 A, C, E & G)

♂. Similar to the preceding species, but differing in the following points: Pollinosity on parafrontal more whitish; vertex 0.15–0.17 of head width; cheek 0.22–0.25 of eye-height; outer vertical seta strong, 3/5–3/4 length of inner one; ocellar seta strong, longer than inner vertical seta; scutum blackish between inner vittae; a pair of setulae distinguishable on preapical area of scutellum; second costal sector 0.38–0.44 × as long as 3rd, subequal in length to 4th; vein M_1 from discal cross-vein to its bend 0.8–0.9 × as long as that from the bend to apex of vein M_1 , 1.2–1.4 × as long as distance between the bend and wing margin; costal spine short, at most twice as long as costal hairs; fore tibia straight; abdomen about 1.4 × as long as combined length of head and thorax; abdominal syntergum 1+2 about 0.8 × as long as 3rd; 4th abdominal tergum slightly shorter than 3rd tergum and slightly longer than 5th; 5th tergum without “tail”; 5th sternum wider than in the preceding species. Male genitalia: Closely resembling those of *longicaudata*, but differing as follows: Surstylus in lateral view more abruptly narrowed at apical 1/5, apical portion wider; distiphallus slenderer at base.

♀. Unknown.

Body length: 8.8–11.8 mm., wing length: 7.0–10.0 mm.

Holotype: ♂, Mt. Wanizuka, Miyazaki Pref., Kyushu, Japan, 23.v.1966, A. NAGATOMI (BLKU).

Paratypes: 8 ♂♂, same data as holotype, A. NAGATOMI & A. TANAKA; 1 ♂, Fenchifu, Chia-i Hsien, Taiwan, 1.vi.1970, K. NISHIDA.

Distribution. Japan (Kyushu) & Taiwan.

Remarks. This species resembles the preceding species, but is easily recognized by the strong ocellar seta, by the well developed outer vertical seta, by the fine costal spine, by the male abdomen without elongate "tail" and by the narrower vertex and cheek. This species occurs in southern part of Japan and in Taiwan.

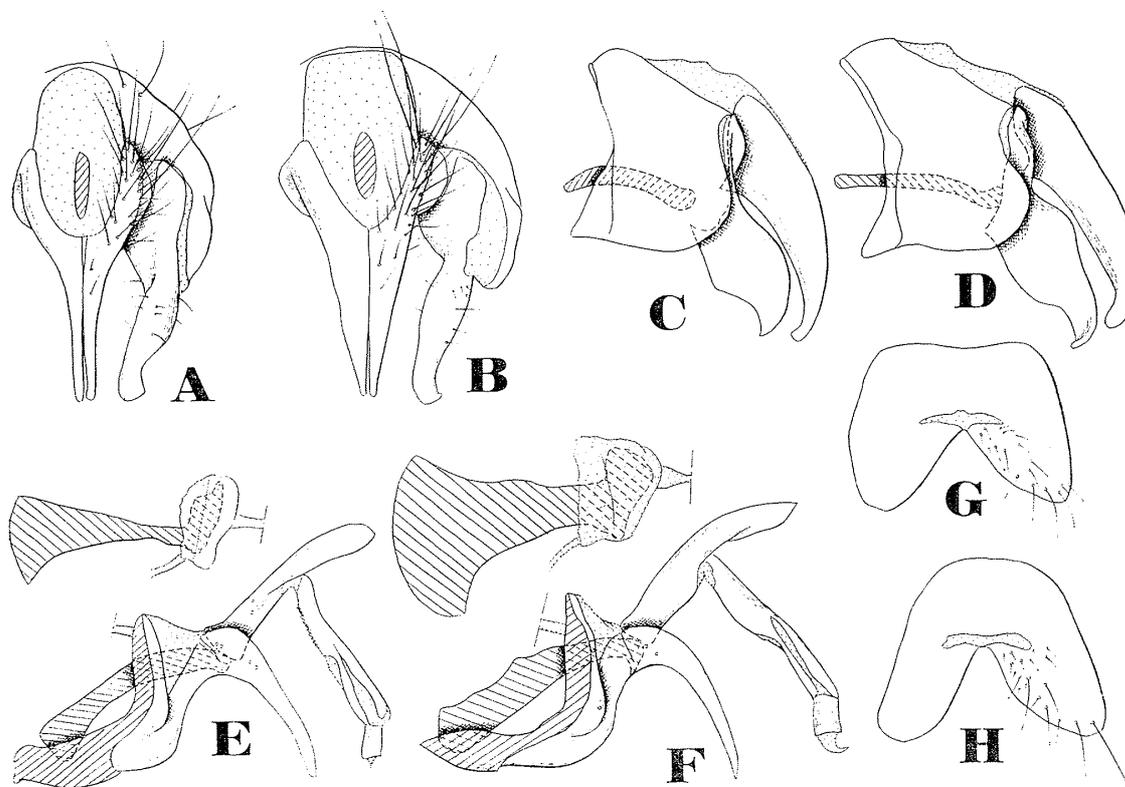


Fig. 4. Male hypopygia of *Leptothelaira meridionalis* sp. nov. (A, C, E, G) and *L. orientalis* sp. nov. (B, D, F, H). A, B: Epandria, cerci and surstyli in dorsal view, C, D: same in lateral view, E, F: hypandria, postgonites and aedeagus in lateral view, G, H: 5th sterna in ventral view.

Leptothelaira orientalis sp. nov.

(Figs. 4 B, D, F & H)

♂. Very closely resembling the preceding species, but differing as follows: Vertex 0.16–0.17 of head width; interfrontal area slightly wider; cheek 0.25–0.27 of eye-height; ocellar seta rather fine, shorter than outer vertical seta; second costal sector 0.45–0.47 × as long as 3rd, slightly shorter than 4th; vein M_1 from discal crossvein to its bend subequal in length to that from the bend to apex

of vein M_1 and $2.0-2.3 \times$ as long as distance between the bend and wing margin; costal spine rather strong, about $2/3 \times$ as long as $r-m$ crossvein; abdominal syntergum 1+2 about $2/3 \times$ as long as 5th tergum; 3rd abdominal tergum subequal in length to 4th and slightly longer than 5th; anterior $2/3-1/2$ of 5th abdominal tergum and anterior $4/5$ of 4th tergum reddish yellow. Male genitalia: Very closely resembling those of the preceding species, but differing as follows: Cerci in dorsal view wider; apical portion of surstylus more strongly directed outwards.

♀. Unknown.

Body length: 7.9–11.6 mm., wing length: 7.2–9.9 mm.

Holotype: ♂, Fyan (900–1,000 m), Vietnam, 11.vii–9.viii.1961, N. R. SPENCER, deposited in the collection of Bernice P. Bishop Museum, Honolulu (BISHOP 11, 387).

Paratypes: 3 ♂♂, same data as holotype.

Distribution. Vietnam.

Remarks. This species seems to be very closely allied to *meridionalis*, but is distinguished from it by the longer wing vein M_1 from discal crossvein to its bend, the reddish 5th abdominal tergum on its anterior portion and the wider cheek.

Anechuromyia gen. nov.

♂♀. Vertex wide, about $2/5$ of head width; parafrontal distinctly shorter than parafacial; face strongly concave; epistoma not projecting forwards, nearly level with face; parafacial narrower than 3rd antennal segment at middle-height; cheek less than $1/3$ of eye-height; occipital dilation distinct; occiput bulged; inner and outer vertical setae present; reclinate and proclinate orbital setae present in male as well as in female; frontal setae inclinate and weakly reclinate, at most descending to the level of base of 3rd antennal segment; parafacial bare; facial ridge with rather fine setae on its lower $1/3-1/2$; occiput with many black hairs, and brownish hairs confined on its ventromedian portion; 1st antennal segment very short, not prominent, 3rd segment more than $5 \times$ as long as 2nd; arista bare, thickened on its basal $2/3$, 2nd segment $2 \times$ as long as wide; eye bare; propleuron bare; prosternum with a strong downwardly directed hair and 1–2 fine hairs on each side; 3 humeral setae in a straight line, inner one sometimes very fine; 3+3 *ac*, anterior ones of prescutum and scutum sometimes very fine and irregularly set; 2+3 *dc*; 1+3 *ia*, presutural and 1st postsutural *ia* setae fine; 1 presutural seta; pre-alar seta very fine, sometimes indistinct; 1 propleural and 1 prostigmatic setae; 1+1 *stpl*; pteropleural seta very fine; 3–4 hypopleural setae; barett and mediotergite bare; scutellum with 4 pairs of marginal setae (basal, lateral, subapical and apical), subapical scutellar setae strong and divergent, apical setae fine, preapical scutellar seta absent; wing with 2nd costal sector haired dorsally and ventrally; 3rd costal sector haired ventrally; basal node of vein R_{4+5} with each 1 seta dorsally and ventrally; cell R_{4+5} open just before wing tip; ultimate section of vein M_3 longer than $1/2$ length of discal crossvein; fore tibia with 1 *p* seta; mid-tibia with 1 *ad*, 2 *pd* and 1 *v* setae; hind tibia with 3 preapical *d* setae, without apical *pv* seta; mid-dorsal portion of abdominal syntergum 1+2 excavated only at base; abdominal terga without discal setae; sterna concealed; venter of female 4th abdominal tergum strongly produced posteriorly on each side; male 6th abdominal tergum entire. Male genitalia: Pregonite and postgonite present; cerci narrowly separated from each other; epiphallus present.

Type-species: *Anechuromyia nigrescens* sp. nov.

Remarks. This new genus seems to be related to the European genus *Picconia* ROBINEAU-DESVOIDY, 1863, but is distinguished from it by the narrower parafacial and cheek and by the wing vein R_{4+5} with only 1 seta on its base.

The genus runs to couplet 12 in SHIMA's key to genera of the Japanese Blondeliini (SHIMA, 1979, Kontyû 47: 129). Because of the finding of this new genus, the

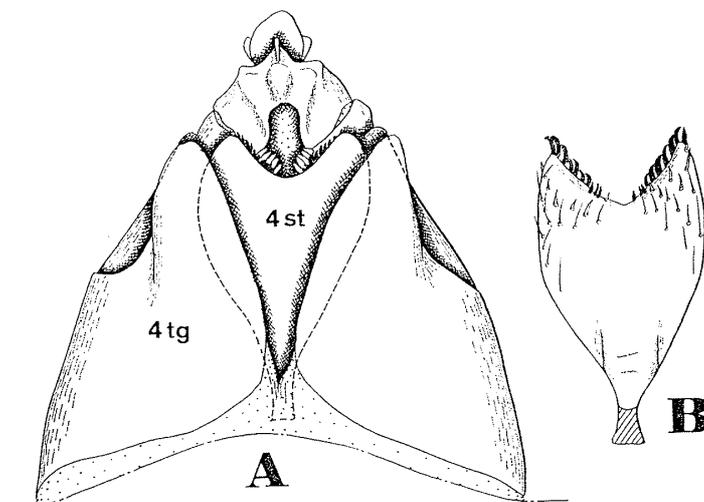


Fig. 5. A: Female abdominal apex of *Anechuromyia nigrescens* gen. et sp. nov., B: female 4th abdominal sternum in ventral view.

couplet 12 in the key should be changed as follows.

12. Arista thickened at least on its basal 1/2; vertex wide in male and female, about 1/3 width of head. 12a
 — Arista thickened at most on its basal 1/3; vertex narrower. 13
 12a. Abdomen with discal setae; hind tibia with 2 preapical *d* setae; mid-tibia with 2–3 *ad* setae; palpus black. *Leiophora* ROBINEUA-DESVOIDY
 — Abdomen without discal setae; hind tibia with 3 preapical *d* setae; mid-tibia with 1 *ad* seta; palpus yellow. *Anechuromyia* gen. nov.

Anechuromyia nigrescens sp. nov.

(Figs. 1 B, 5, 6 & 7)

♂. Head black in ground color, cheek reddish brown; parafrontal shining black, anterior portion clothed with grayish pollinosity; parafacial, face and cheek with dense grayish white pollinosity; occiput dark grayish pollinose; interfrontal area black; lunula black; antenna and arista brown-black; palpus yellow. Vertex 0.39–0.43 of head width; interfrontal area parallel-sided, about $0.6 \times$ as wide as parafrontal; parafrontal about $2/3 \times$ as long as parafacial; parafacial strongly narrowed below, about $1/4 \times$ as wide as 3rd antennal segment; cheek 0.27–0.29 of eye-height, occipital dilation nearly on the lower $2/3$ of cheek; face 1.7 – $1.8 \times$ as long as wide. Inner vertical seta about $3/4$ of eye-height; outer vertical seta about $1/2$ length of inner one and subequal in length to ocellar seta; 1 reclinate orbital seta, subequal in length to outer vertical seta; 1 proclinate orbital seta, slightly longer than reclinate one; 2–3 postvertical setae on each side; 2 postocellar setae; 4–6 frontal setae, lowest one at the level of middle of 2nd antennal segment; parafrontal with several fine hairs outside the row of frontal setae; facial ridge with rather fine setae on its lower $1/2$; vibrissa nearly level with lower margin of face; occipital dilation with rather strong hairs. Second antennal segment short, about $1/7 \times$ as long as 3rd; 3rd segment long and wide, about $2 \times$ as long as wide, falling short of lower margin of face by about the length of 2nd antennal segment. Arista subequal in length to 3rd antennal segment. Palpus weakly clavate, about $1/2$ length of 3rd antennal segment.

Thorax shining black in ground color; prescutum, humeral callus and pleural region with thin grayish white pollinosity; scutum and scutellum almost bare, at most very thinly clothed with grayish pollinosity; 4 rather broad longitudinal vittae visible only on prescutum. Hairs black; dorsum with rather sparse and erect hairs, pleura with fine and long hairs, scutellum with fine recumbent hairs on its posterior 2/3; basal scutellar seta 1.3–1.4 \times as long as scutellum; lateral scutellar seta subequal in length to basal one; subapical scutellar seta about 2 \times as long as scutellum; apical scutellar setae fine, divergent apically, subequal in length to scutellum; distance between bases of 2 subapical scutellar setae about 0.6 \times as long as that between basal and subapical setae of same side.

Wing hyaline, slightly tinged with brown on anterior portion; tegula and basicosta black; veins brown; calypter pale brown; halter brown, darkened apically. Second costal sector 0.30–0.33 \times as long as 3rd, slightly shorter than 4th; vein M_1 from discal crossvein to its bend subequal in length to that from the bend to apex of vein M_1 , and 1.8–2.0 \times as long as distance between the bend and wing margin; ultimate section of vein M_3 about 3/4 \times as long as discal crossvein.

Legs entirely black, pulvilli yellowish. Hind tibia with rows of *ad* and *pd* setae and with 3–4 *v* setae; fore claw and pulvillus shorter than 5th tarsomere.

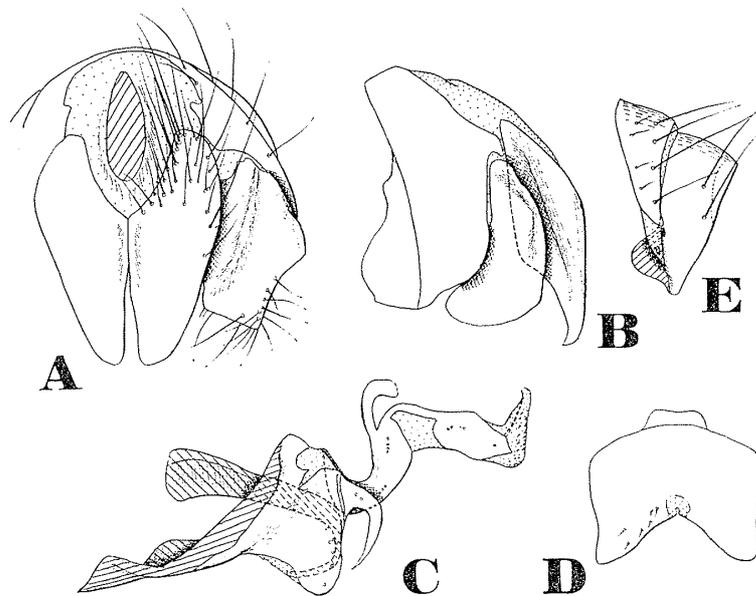


Fig. 6. Male hypopygium of *Anechuromyia nigrescens* gen. et sp. nov. A: Epandrium, cerci and surstylus in dorsal view, B: same in lateral view, C: hypandrium, pregonite, postgonite and aedeagus in lateral view, D: 5th sternum in ventral view, E: 6th tergum and synsternum 7+8 in lateral view.

Abdomen ovate, shining black, without pollinosity on dorsum, 3rd to 5th terga each rather thinly clothed with whitish pollinosity on narrow anterolateral portions. Third tergum subequal in length to 4th; 5th tergum about 2/3 \times as long as 3rd. Hairs black, suberect and rather strong on dorsum, finer on venter; 2nd and 3rd terga each with a pair of median marginal setae and 3–4 lateral marginal setae; 4th and 5th terga each with a row of marginal setae; discal setae absent; 6th tergum subequal in length to synsternum 7+8. Male genitalia: Cerci in dorsal view short and wide; surstylus wide and short, with dense hairs on apical portion; hypandrium concave on each side, distal arms of hypandrium fused with each other medially; pregonite broad, without

hairs; postgonite very narrow, strongly curved ventrally; apex of distiphallus directed upwards; epiphallus narrow, strongly curved ventrally.

♀. Closely resembling male, but differing as follows: Vertex 0.38–0.39 of head width; cheek narrower, 0.23–0.25 of eye-height; inner vertical seta slightly shorter than 1/2 length of eye-height; setae on facial ridge finer, sometimes confined on lower 1/3; 2nd antennal segment about 1/5 × as long as 3rd, 3rd segment 2.5 × as long as wide; hairs on abdomen rather recumbent and sparse; venter of 4th abdominal tergum strongly produced posteriorly into a strong process on each side; posterior margin of 4th sternum broadly concave, with a row of strong spines on posterior margin; 5th sternum strongly invaginated on anterior portion. Female terminalia: Sixth tergum entire, about twice as long as 7th tergum, closely fused with 6th sternum on ventral margin and making a circular plate; posterior margin of 6th sternum concave at middle; 7th tergum narrowed at middle; 7th sternum of a strongly sclerotized plate bearing a hook on its apex; 8th tergum and 9th tergum absent; subanal plate rather long; cercus short and wide.

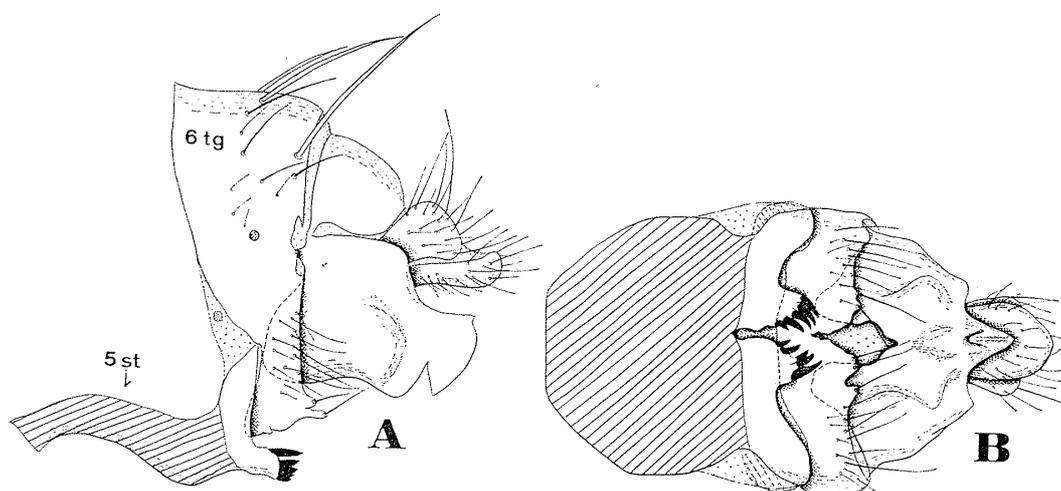


Fig. 7. Female terminalia of *Anechuromyia nigrescens* gen. et sp. nov. A: Lateral view, B: ventral view.

Body length: 4.4–4.8 mm., wing length: 4.1–4.5 mm.

Holotype: ♂, Yamakita-machi, Kanagawa Pref., Japan, iv. 1977, reared from a female of *Anechura harmandii* by T. SASAMOTO (BLKU).

Paratypes: 3 ♂♂ 4 ♀♀, same data as holotype.

Host. *Anechura harmandii* (BURR) (Dermaptera: Forficulidae).

Distribution. Japan (Honshu).

Remarks. The female 4th abdominal segment and female terminalia of this species are very peculiar in shape. This structure seems to be associated with the ovipositing habit of this species. This is the first species of the tribe Blondeliini known as parasitic on an earwig. According to Mr. T. SASAMOTO (by personal communication) 1–3 fly larvae came out in April from a female earwig collected in March. The female earwig was still alive after the fly larvae had come out, but did not oviposit. The fly was never reared from male earwig.

Synonymic note on "*Gibsonomyia*" *aristalis* MESNIL et SHIMA

As mentioned under the original description of *Gibsonomyia aristalis* MESNIL et SHIMA, 1978 (Kontyû 46: 315), this species has intermediate characters between *Gibsonomyia* CURRAN and *Phyllomya* ROBINEAU-DESVOIDY. After a careful examination of the species of both genera, we concluded that it is preferable to suppress the genus *Gibsonomyia* CURRAN, 1925 as a synonym of the genus *Phyllomya* ROBINEAU-DESVOIDY, 1830. Thus the new combination *Phyllomya aristalis* (MESNIL et SHIMA) is established.

During the course of MESNIL's recent work on the Palearctic Dexiinae, he found that *Myostoma elegans* KOLOMIETZ, 1973 (Rev. Faun. Siberia: 91) does not belong to the genus *Myostoma* ROBINEAU-DESVOIDY. It is even not a member of Dexiinae, but is exactly same as "*Gibsonomyia*" *aristalis*. So that this species should be called *Phyllomya elegans* (KOLOMIETZ, 1973), but the name has already been preoccupied by *Phyllomya elegans* VILLENEUVE, 1937 (Bull. Mus. r. Hist. nat. Belg. 13: 134). Thus the synonymy of this species is as follows.

Genus *Phyllomya* ROBINEAU-DESVOIDY

- Phyllomya* ROBINEAU-DESVOIDY, 1830, Mém. div. Sav. Acad. Sci. Inst. Fr. 2: 213. Type-species: *Musca volvolus* FABRICIUS, 1794, by monotypy.
Gibsonomyia CURRAN, 1925, Can. Ent. 57: 281. Type-species: *Gibsonomyia nigricosta* CURRAN, 1925 (= *Morinia washingtoniana* BIGOT, 1888), by original designation. Syn. nov.

Phyllomya aristalis (MESNIL et SHIMA) comb. nov.

- Gibsonomyia aristalis* MESNIL et SHIMA, 1978, Kontyû, 46: 315.
Myostoma elegans KOLOMIETZ, 1973, Rev. Faun. Siberia: 91. Preoccupied by *Phyllomya elegans* VILLENEUVE, 1937.

Acknowledgements We are very grateful to Dr. F. J. RADOVSKY, Bernice P. Bishop Museum, Honolulu, Prof. A. NAGATOMI, Kagoshima University, Kagoshima, Prof. T. SAIGUSA and Assoc. Prof. A. NAKANISHI, Kyushu University, Fukuoka, Mr. Y. MIYATAKE, Osaka Museum of Natural History, Osaka, Messrs. S. TACHIKAWA and T. SASAMOTO, Tokyo University of Agriculture, Tokyo, Mr. A. TANAKA, Oshima Branch of Kagoshima Agricultural Experimental Station, Naze and Mr. K. NISHIDA, Kanazawa University, Kanazawa, for the loan or gift of their specimens. One of us, SHIMA, is also much indebted to Dr. J. L. GRESSITT, Wau Ecology Institute, Wau, Papua New Guinea and Profs. T. SHIRÔZU and T. SAIGUSA, Kyushu University, for their kind guidance and encouragement.