INSECTS OF CAMPBELL ISLAND. DIPTERA: CECIDOMYIIDAE

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Specimens of Cecidomyiidae from Campbell I. were taken by J. L. Gressitt during Dec. 1961 and include representatives of 2 new gall midges. One belongs to the genus *Cordylomyia* Felt, the other to the genus *Holoneurus* Kieffer. There is a 3rd species which seems to belong to the tribe Cecidomyiariae but these are not in good enough condition for identification. I wish to express my thanks to J. L. Gressitt, L. W. Quate and C. M. Yoshimoto for their aid and advice.

Genus Cordylomyia Felt

Cordylomyia Felt, 1911: 35; 1913: 194.—Kieffer, 1913b: 295.—Felt, 1926: 266.—Edwards, 1938: 199.—Pritchard, 1947: 29.

Prosaprionus Kieffer, 1913a: 54; 1913b: 300 (type species Prosaprionus cellularis K.; synonymy after Edwards, 1938).

Type species: Cordylomyia coprophila Felt.

Genus characterized by flagellate antennal segments bearing 1 or 3 crenulate whorls of short stout, usually recurved spines or sometimes very long bristles in 3° , 2° usually with 11 or 12 antennal segments, occasionally more or less, without crenulate whorls. Palpus 4-segmented, eye bridge often well developed, 3° genitalia with basistyle broadly united below.

Cordylomyia gressitti Yukawa, n. sp. Fig. 1.

This species is distinguished from other members of the genus by: 14 antennal segments in both sexes, claws about $2 \times$ length of pulvilli, \mathcal{J} genitalia with spines arising from tuberculate bases at apex of dististyle.

 $\vec{\sigma}$: Predominantly dark brown. Antenna nearly as long as body, 14-segmented, haired dark brown, antennal segment 1 slightly longer than wide, segment 2 globose, segment 3 (or flagellar segment 1) elongate, last segment slightly reduced, tapering to a subacute apex, other segments with stem about 2/3 length of base, base about 1.5× as long as wide and with 3 crenulate whorls of long curved bristles, 1 complete at middle and 2 on upper 1/2, incomplete. Palpus 4-segmented, brown with few setae, segment 1 roundish large, 2 elliptical, 3 slightly longer than 2, segment 4 about 1/3 longer than 3. Thorax dark brown on dorsum, brown on sides. Legs dark brown. Claws simple, bent at nearly right angle, about $2 \times$ length of pulvilli. Wings sparsely haired, vein M rudimentary, obsolete distad and

varied in length in each specimen. Abdomen dark brown. Genitalia as figured, dististyle curved slightly, $2 \times$ as long as wide, very hairy on inner surface and some spines arising from tuberculate bases at apex, basistyle broad, terminal tergum broadest in middle, caudal margin shallowly concave with scattered setae. Wing length: 1.5-1.9 mm.

 φ : Colored like \eth and almost same size, with 14 antennal segments, flagellar segments tapering, subsessile, without crenulate whorls as in \eth , subbasal whorl sparsely haired, nearly $2\times$ longer than middle whorl, subapical short, scattered. Two equal ovoid spermathecae brown, about 0.09 mm maximum diameter; 0.06 mm minimum one, duct not visible.

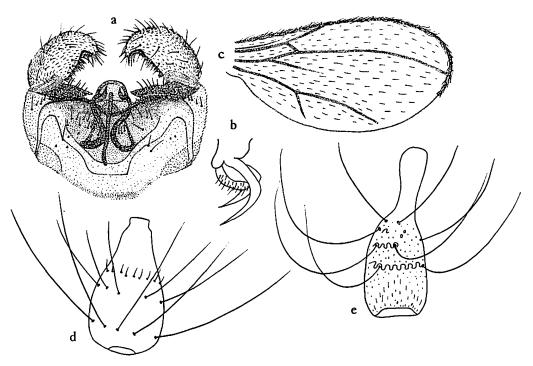


Fig. 1. Cordylomyia gressitti, n. sp. a, σ genitalia; b, σ claw and pulvilli; c, σ wing; d, φ flagellar antennal segment; e, σ flagellar antennal segment.

Holotype 3th (on slide) (D. S. I. R., Nelson), Campbell I.: Tucker Cove, 4 m, Malaise trap, 16–18. XII. 1961, J. L. Gressitt. Allotype \mathcal{P} (on slide) (BISHOP 3607) same data. Paratypes: 13th (on paper point), 2 \mathcal{P} (1 on slide, 1 on paper point), same data.

This genus has been recorded hitherto only from North America and Europe. From a study of the above specimens it is clear that this species belongs to the genus *Cordylomyia* and the occurrence on Campbell I. is a considerable extension of the range of the genus.

Genus Holoneurus Kieffer

Holoneura Kieffer, 1894: 316. Holoneurus Kieff., 1895: 115; 1896: 15; 1897: 43.—Felt, 1908: 420; 1911: 41.—Kieffer,

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1913b: 264.—Felt, 1916: 188; 1919: 287.—Foote, 1956: 49.—Marikovskii, 1958: 1884. Type species: *Holoneurus cinctus* (Kieffer).

This genus has crossvein nearly parallel to costa, 3 long veins, vein Cu simple, claws simple or sometimes with tooth, as long as or longer than pulvilli, palpus 4-segmented, ∂^{3} dististyle with small apical claw.

Holoneurus aliculatus Yukawa, n. sp. Fig. 2.

This species is closely allied to *H. elongatus* Felt a North American species, but distinguished by its rather slender dististyle with 2 small teeth apically in 3° genitalia and flagellate antennal segments with base about $1.3 \times a_{\circ}$ long as wide. 2° wing reduced.

 \mathfrak{G}^{1} . Antenna 16-segmented, slightly dark brown, sparsely haired, flagellar segments with stem about 2× length of base, base about 1.4× as long as wide, terminal segment 3× as wide, tapering, pedicel roundish, segment 1 larger than 2. Palpus 4-segmented, brown, with few setae, segment 1, 2× as wide, 2 about 1.3× longer than 1, 3 about 1.3 longer than 2, 4 about 1.5 as long as 3. Thorax brown on dorsum, brown to yellowish brown on sides. Legs slightly dark brown, claws simple, curved about 1.8 longer than pulvilli. Wing with

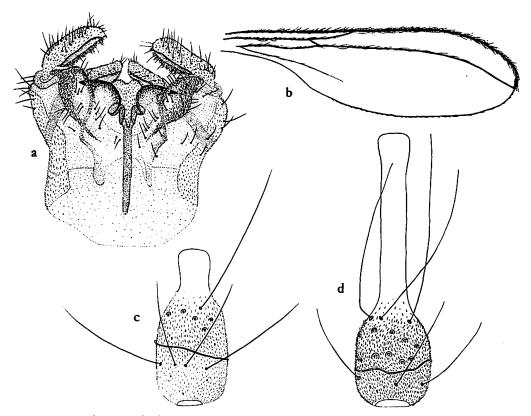


Fig. 2. Holoneurus aliculatus, n. sp. a, \mathfrak{F} genitalia; b, \mathfrak{F} wing; c, \mathfrak{P} flagellar antennal segment; d, \mathfrak{F} flagellar antennal segment.

crossvein nearly parallel to costa, 3 long veins, vein Cu simple, rudimentary distally. Abdomen brown to yellowish brown. Genitalia as figured, dististyle rather slender, $3 \times$ longer than wide, very hairy on inner surface and with two small teeth apically. Wing length: 1.9-2.2 mm.

 \mathcal{Q} . Colored like \mathcal{J} , antenna 13-segmented, flagellar segments slightly more slender than in \mathcal{J} , tapering with stem about 1/3 length of base, base about $1.8 \times$ as long as wide and sparsely haired, last segment slightly reduced, tapering. Wing greatly reduced, to mere flaps without distinct venation. Spermathecae globular, colorless, about 0.11 mm in diameter, duct distinct and very long. Wing length: 0.30-0.34 mm.

Holotype & (on slide), (D.S.I.R., Nelson), Campbell I.: Beeman Hill, 100-180 m, *Pleuro-phyllum* leaf mold, 2-6. XII. 1961, J. L. Gressitt. Allotype & (on slide) (BISHOP 3608), same data. 2 paratypes: & (on paper point), Campbell I.: Moubray Hill, 200 m, 12. XII. 1961, Gressitt; & (on slide), Campbell I.: Beeman Hill, 100-180 m, 2-6.XII.1961, Gressitt.

At least 7 species of the genus are known from Europe, 5 from North America and 1 from Panama. The above species extends the range of the genus to Campbell I.

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