

## THE GENUS PROCLINOPYGA, A NEARCTIC ELEMENT OF EMPIDIDAE, IN JAPAN (Diptera, Empididae)

SAIGUSA, TOYOHEI  
Biological Laboratory General Education Department Kyushu University

<https://hdl.handle.net/2324/7343167>

---

出版情報 : Sieboldia : acta biologica . 3 (1), pp.91-95, 1963-06-30. 九州大学教養部生物学教室  
バージョン :  
権利関係 :

THE GENUS *PROCLINOPYGA*, A NEARCTIC ELEMENT  
OF EMPIDIDAE, IN JAPAN  
(Diptera, Empididae)

TOYOHEI SAIGUSA

(Biological Laboratory, General Education Department, Kyushu University)

The genus *Proclinopyga* Melander is one of the some Empid genera which are distributed from North America to Ussuri or Japan and do not extend to Europe. The genus was founded by Melander based upon five North American species. In 1941, the sixth, the first Palaearctic, species was described from Ussuri Region. The author has taken more than six species in Japan, of which five are new to science. In this paper he describes two new species and newly records Ussurian *pervaga* Collin from Japan.

The genus *Proclinopyga* seems to be one of the primitive forms of Clinoceratinae from which *Clinocera* and its allied genera have been derived. The structures of head, thorax and female genitalia are quite identical with those of *Clinocera*. But the genus is intermediate between *Clinocera* or its allies and Hilarini of Empidinae concerning with the structures of male genitalia and wings.

The species of the genus may be found on the wet stones at the fords in the mountain streams. In such habitats we also find some species of *Clinocera*, *Wiedemannia*, *Trichoclinocera* and *Hyphenella*.

The type-specimens of the following new species are now preserved in the author's collection.

*Proclinopyga seticosta* Saigusa, sp. nov.

(Fig. 1, ♂ genitalia)

♂. Small-sized species, easily mistaken for a small *Hilara*. Body rather short and stout, heavily greyish brown pollinose, abdomen much greyer, thoracic pleura and sides of mesoscutum grey with a bluish tinge. Bristles and hairs on head all blackish. Acrostichals biserial, short; 7-9 dorsocentrals long and arranged in a single row; four scutellars, outer pair half length of inner one; 2-3 black setulae on metapleura. Legs rather short, greyish brown, knees paler; front and middle femora short-

haired above, clothed beneath with a double row of black hairs which are prominent towards base; hind femora clothed above with several black bristles longer than femur is thick, beneath with a row of short anteroventral bristly hairs; tibiae long and slender, short-haired, with an anterodorsal bristle situated subbasally, hind tibiae clothed above with several bristles as long as diameter of tibia; tarsi simple. Wings more or less ample, distinctly infuscated; costa not prominently arched, but with short setulae on apical two-thirds; venation as in *amplectens* Melander, but  $A_1$  prominent only near base; axillary incision nearly  $130^\circ$ , axillary lobe weakly developed; stigma faint. Squama yellowish brown, with dark fringe. Halteres greyish brown, with paler stem. Abdomen clothed with short black hairs, 6th tergum with longer bristles, 7th and 8th segments small. Genitalia: tergal lobe triangular, with a short simple tergal process; surstyli slender, bare and weakly curved at tip; cerci long and straight, clothed with long hairs in front, short ones behind; aedeagus stout, not projecting above tip of tergal process, swollen posteriorly beyond middle, truncate and membranous at tip and bearing a pair of curved hooks distad the swollen portion.

Length: Body 2.2–2.8 mm; wings 3.1–3.5 mm.

♀. Resembling male, but ventral hairs of front and middle femora shorter; abdomen tapered, 8th and 9th segments short, with a pair of small cerci.

Length: Body 2.5–3.3 mm; wings 3.2–3.6 mm.

Distribution: Japan (Kyushu).

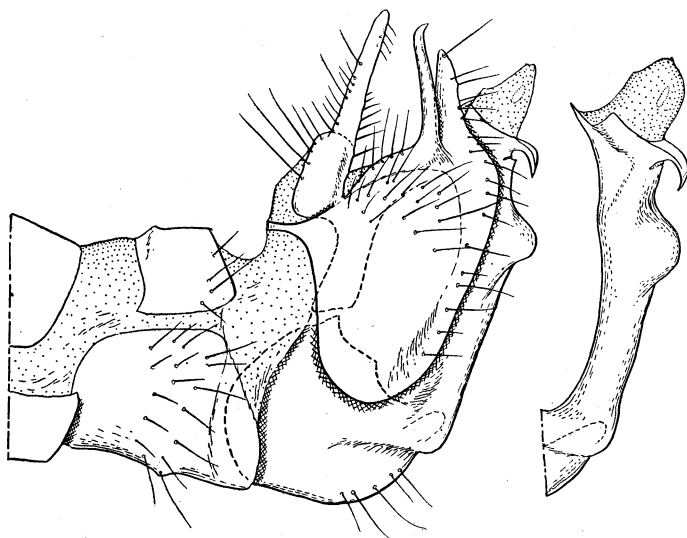


Fig. 1. Male genitalia of *Proclinopyga seticosta* Saigusa, sp. nov., with aedeagus.

Types: Holotype ♂, Magaribuchi, Sagara, Fukuoka Pref., Kyushu, 22. IV. 1962, T. Saigusa leg. Paratypes 54 ♂♂ 27 ♀♀, the same data as holotype; 1 ♂ 2 ♀♀, the same locality, 9. IV. 1961, T. Saigusa leg.

This new species is apparently allied to the North American *monogramma* Melander, from which it may be distinguished by the weakly haired ventral surface of middle femora, the prominent bristles on the sixth abdominal tergum and the compound eyes consisted of the equally large facets.

*Proclinopyga bispinicauda* Saigusa, sp. nov.

(Fig. 2, ♂ genitalia)

♂. Medium-sized species, more *Clinocera*-like than the preceding species. Body long and slender, heavily greyish brown pollinose, thoracic pleura and abdomen much greyer. Occiput clothed above with black bristles, beneath with pale hairs. Acrostichals biserial, short; 10-12 fairly long dorsocentrals uniserial; 5-8 scutellars, of which inner pair is long.

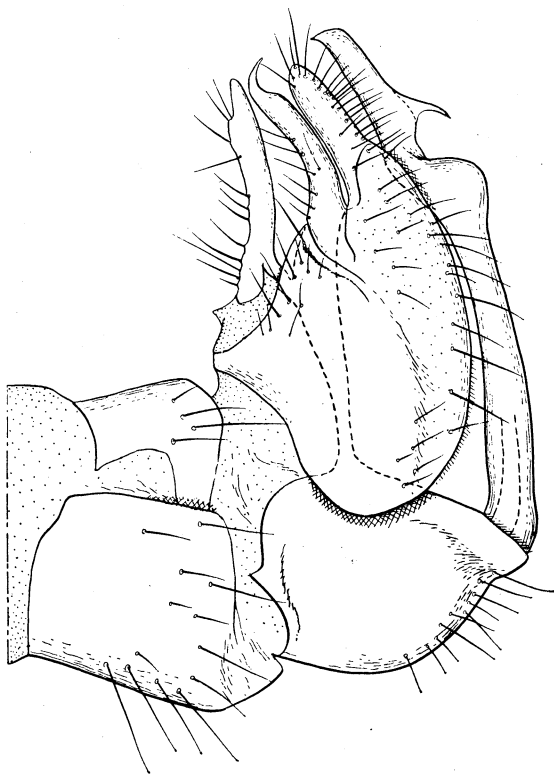


Fig. 2. Male genitalia of *Proclinopyga bispinicauda* Saigusa, sp. nov.

prominent; a few black setulae on metapleura. Legs long and slender; dark greyish brown; tip of coxae and knees a little paler; greyish coxae and trochanters clothed with yellow hairs; remainder of legs with black hairs or bristles; chaetotaxy of femora as in *seticosta* Saigusa, but bristles of hind femora weaker; front and hind tibiae without a subbasal bristle; middle tibiae with short hairs which are more or less erect on ventral side, and with a posterodorsal bristle at subbasal portion. Wings long but rather broad, widest at middle, infuscated, costa not arched, without prominent setulae on its apical half; venation as in *seticosta*; axillary incision nearly 130°, axillary lobe more or less developed; stigma faint. Squama dusky, with pale fringe. Halteres yellowish brown. Abdomen clothed with prominent strong bristles on terga, weaker hairs on sterna, bristles on 6th tergum only slightly differentiated; 7th and 8th segments small. Genitalia: tergal lobes large, gently arched on hind-margin, and with a tapered tergal process which is covered with hairs on hind-margin; surstyli narrower than tergal process and hooked at tip, clothed with several hairs on front margin; cerci simple, long and tapered, not extending the tip of surstylus; hypandrium moderately large, aedeagus long and rather stout, distinctly swollen on hind-margin beyond middle, with a pair of curved teeth distad the swollen portion, apical portion of aedeagus tapered, compressed, and curved at short-hooked tip, but without a membranous projection.

Length: Body 3.2–3.4 mm; wings 4.1–4.5 mm.

♀. Differing from the male in the characters stated in the female of the preceding species.

Length: Body 3.6–3.8 mm; wings 4.2–4.6 mm.

Distribution: Japan (Hokkaido).

Types: Holotype ♂, Aizankei (1,100 m alt.), Mt. Daisetsu-zan, Hokkaido, 18. VII. 1962, T. Saigusa leg. Paratypes 40 ♂♂ 20 ♀♀, the same locality as holotype, 17–24. VII. 1962, T. Saigusa leg.

This new species is closely related to *seticosta*, and resembles *monogramma*. From the latter it may be distinguished by the much larger size of body. From *seticosta*, this new species is easily separated by the slender body and legs, the finer genital aedeagus with a long sclerotized apical projection, and the pale hairs on the lower portion of occiput.

### *Proclinopyga pervaga* Collin, 1941

*Proclinopyga pervaga* Collin, 1941, Proc. R. ent. Soc. Lond. (B) 10: 241 (the description of only male).—Frey, 1956, in Lindner, Die Fliegen der palaearktischen Region 28, Empididae: 619.

This rather aberrant species with arched costa was described by Collin based upon only one male specimen from Tigrovaja, Sutchan District of Ussuri. The present author have taken a number of the specimens of

this species including females at Aizankei in Hokkaido. The female differs from the male as follows.

♀. Resembling male, but femora all simple and shorter-haired, hind pair with a few long bristles in front towards base; front tibiae as in male, middle and hind tibiae slender and simple, shorter-haired, and with a subbasal bristle anterodorsally; wings as in male, with dark brown, prominent stigma, but costa only slightly arched at middle.

Length: Body 3.0—3.5 mm; wings 3.5—4.4 mm.

Distribution: Ussuri and Japan (Hokkaido).

Specimens examined: 1 ♂ 2 ♀♀, Kiyokawa, Ashoro, Hokkaido, 28. V. 1957, M. Takahashi leg.; 27 ♂♂ 29 ♀♀, Aizankei (1,100—1,400 m alt.), Mt. Daisetsu-zan, Hokkaido, 17—25. VII. 1962, T. Saigusa leg.

This species is easily distinguished from the other Japanese species by the prominent dark brown stigma in both sexes, the arched costa of wings and the ornamented middle femora in males.

Acknowledgement: The author wishes to express his thanks to Professor K. Yasumatsu, Professor T. Shirôzu and Professor S. Miyamoto of Kyushu University, and Mr. M. Takahashi of the National Institute of Health in Tokyo for their kind guidance and help in the material.

