Description of *Haematopota nagashimai* n. sp. from Honshu Island, Japan (Diptera, Tabanidae)

Hirofumi HAYAKAWA* and Hirosi TAKAHASI**

* Tohoku National Agricultural Experiment Station, Morioka-city, Iwate Prefecture 020-01, Japan
** Ground Self-Defense Force Medical School, Setagaya-ku, Tokyo 154, Japan

(Received: March 3, 1976)

Abstract: *Haematopota nagashimai*, a new species is described from the northern part of Honshu Island, Japan. This species is closely related with *H. rufipennis* Bigot, but *H. nagashimai* can be distinguished from *H. rufipennis* by its dark brown scutellum, glossy black abdomen without any stripes or spots and a bilobed extension of basal callus on frons.

In the course of research on tabanids in Yamagata Prefecture in 1972, by Department of Medical Zoology (Professor M. Otsuru), closely related species with *H. rufipennis* Bigot were collected in the vicinity of Oguni, along with large numbers of *Tabanus iyovenis* Shiraki. Also the same individuals were collected at Sawauchi in Iwate Prefecture by H. Hayakawa in 1974. Morphological studies showed that these flies belong to a new species. The present species was named after Mr. Y. Nagashima, the first collector of this species. The male flies and immature stages are still unknown.

*Haematopota nagashimai* n. sp.

**Female** (Figs. 1–3): Length 9–11 mm.


*Head*: Broader than thorax. Eyes purple or copperygreen with narrow sinuous green bands in life, black in dried specimens; very fine short piles on eyes perceptible under high magnification. Ocellar tubercle absent. Frons as broad as one-third the width of head, slightly narrowed above, light grey to brownish grey pollinose with short black hairs. Vertex somewhat depressed, with more or less large darken area. Paired velvety black spots almost circular, very large, often broadly confluent with basal callus and touching eye-margins. Median black spot clearly marked, small, diamond shaped. Basal callus shiny black, rather broad occupying lower third of frons and touching eye-margins at lower sides, convex at middle with a prominent bilobed extension upwards. Subcallus small, blackish brown pollinose with a velvety triangle spot; light brownish rims to antennal pits. Face and cheeks yellowish grey pollinose and covered with dense blackish hairs; cheeks speckled with small dots, or with unbroken black spot to upper margins. *Antennae* dark brown to black, slender, longer than the length of head. Scape and pedicel shiny black with short black hairs; scape stout, cylindrical without any constriction before tip, about twice as long as broad, a little longer than basal segment of flagel-
Fig. 1 Haematopota nagashimai n. sp.

Fig. 2 Haematopota nagashimai n. sp.
  a. frons; b. antenna; c. palpus.

Fig. 3 Female genitalia of Haematopota nagashimai
  a. terminal segments; b. eighth sternite; c. genital fork and spermathecal ducts.

Palpus as long as proboscis, greyish brown.
with sparse black hairs; second palpal segment cylindrical, tapering towards a blunt apex, more than three times as long as subbasal width.

Thorax: About as long as broad. Scutum dark brown, covered with short golden hairs, sometimes mixed with black hairs; three whitish longitudinal stripes present, middle stripe very narrow and indistinct, supraalar stripes broader and clear ending just behind transverse suture; a pair of white markings adjacent to scutellum. Scutellum extensively dark brown. Hemeral callus grey pollinose, covered with golden hairs. Pleura, sternum and fore coxae dark grey with lighter greyish hairs.

Wings: As long as body length, brown to dark brown, speckled with white spots. Clear spots small; apical band single, small, only across vein R₄; rosset-shaped arrangement indistinct; hind margin of wing with pale triangles in most celles, but in some specimens clouded. Veins brown; vein R₄ with appendix. Halter dark brown with paler stem.

Legs: Femora blackish grey, black haired. Fore tibiae whitish on basal third; mid and hind tibiae and fore tarsi black. Mid and hind tibiae with two whitish rings, the basal one large and distinct, covered with black hairs except paler area. Metatarsi brown; other tarsal joints black with black hairs.

Abdomen: Rather elongate in shape, glossy dark brown to black in ground color, without any middorsal stripes or sublateral spots, but in some specimens tergite 2 to 4 narrowly pale brown on posterior and lateral margins. Pubescence black. Venter uniformly dark brown, mostly covered with short black hairs.

Genitalia: Ninth tergum separated, small and narrow. Tenth tergum separated, rectangular, broader laterally. Cerci triangular with dull apex. Eighth sternum small, as long as broad. Genital fork parallel, broad at base and apex. Spermatheca slightly fusiform at apex, dark.

Male: Unknown.

Type series: Holotype; ♀, Awamoyu Spa, Oguni-cho, Yamagata Pref., 10. VIII. 1972, Y. Nagashima leg. (dry ice trap). Paratype: 5 ♀, same locality as holotype, 10-13. VIII. 1972; Y. Nagashima and H. Hayakawa leg.; 2 ♀, Kaisawano, Sawauchi-mura, Iwate Pref., 20. VIII. 1974, H. Hayakawa leg. (dry ice trap). Holotype and 2 paratypes are preserved in Division of Entomology, National Institute of Agricultural Sciences, Tokyo. Other paratypes are also preserved in Division of Environment, Tohoku National Agricultural Experiment Station.

Distribution: Honshu Island. This species is so far recorded from Yamagata and Iwate Prefecture, but it is quite possible that the species is distributed in mountainous areas throughout the northern parts of Honshu Island.

Remarks: This species seems to be quite characteristic among Oriental Haematopota species in having a bilobed extension of basal callus on frons (Stone and Philip, 1974). Also no other species are known from Japan in having such a feature (Murdoch and Takahasi, 1969). Except that, H. nagashimai is closely related with H. rufipennis. Differences between them are listed in Table 1.

H. rufipennis occurs in rather large numbers in the same locality than H. nagashimai.
shimai at Sawauchi, Iwate Prefecture. However, the season of occurrence seems differ between the species. *H. rufipennis* is recorded from middle June to late July with a main peak of early July, whereas *H. nagashimai* was collected in Middle August.

**ACKNOWLEDGEMENTS**

Gratitude is expressed to Mr. Y. Nagashima of Maki Agricultural High School in Niigata Prefecture for furnishing us with his collected specimens. Thanks also due to Professor M. Otsuru of Department of Medical Zoology, Niigata University School of Medicine for his pertinent suggestions during the study.

**REFERENCES**

