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MALE OF *NAGATOMYIA MELANICA* MURDOCH ET TAKAHASI (Diptera, Tabanidae)

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The male of *Nagatomyia melanica* Murdoch et Takahasi is here described for the first time. Grateful acknowledgment is made to Dr. Masatake Shibuya of Kagoshima University and Dr. Keizo Yasumatsu of Kyushu University for their constant encouragement and support.

Nagatomyia Murdoch et Takahasi

Nagatomyia Murdoch et Takahasi, 1961, Jap. J. Sanit. Zool. 12: 111.

Eyes pilose in both sexes, contiguous in ♂, and widely separated in ♀; 3 ocelli present; front in ♀ gradually narrower toward vertex and without callus; face as in Figs. 2 & 3; mid-lower face in ♂ does not attain to height of side of face but in ♀ appears to be somewhat higher than side of face; antennal flagellum longer than segments 1+2, sword-like, with 5 rather indistinct divisions of which the 2nd is the longest (Fig. 6); each of antennal segments 1-2 as long as wide or roughly so; in palpus, segment 2 about as long as and much narrower than segment 1 in ♂ (Fig. 4) and much longer than and equal in width or roughly so to segment 1 in ♀ (Fig. 5); proboscis comparatively short. Wing with 1st- and 4th posterior cell open but anal cell closed; subepaulet practically bare and not inflated. Tibial spurs 0:2:2. Abdomen oval in shape.

Type-species: *Nagatomyia melanica* Murdoch et Takahasi.

Among the genera known from the Palaearctic region, *Nagatomyia* is most closely related to *Stonemyia* Brennen, 1935 but is easily distinguished from the latter by the shape of antenna (after Murdoch and Takahasi, 1961).

Nagatomyia melanica Murdoch et Takahasi (Figs. 1-10)

Nagatomyia melanica Murdoch et Takahasi, 1961, Jap. J. Sanit. Zool. 12: 111.

♂. Head: Dark brownish to blackish and pale gray pollinose; (1) antennal segments 1+2, (2) side of face, (3) cheeks, (4) palpus, (5) proboscis, (6) ocellar triangle, and (7) occiput with black hairs which are long on the former 4; eye densely covered with relatively short, black pile; frontal triangle, face except side, and antennal flagellum without hairs (lateral part of mid-lower face has black hairs and antennal flagellum may have a few, inconspicuous black ones); width of one eye on a mid line from a direct frontal view roughly equal to width of face at lowest portion from a direct frontal view (0.8 times), nearly twice

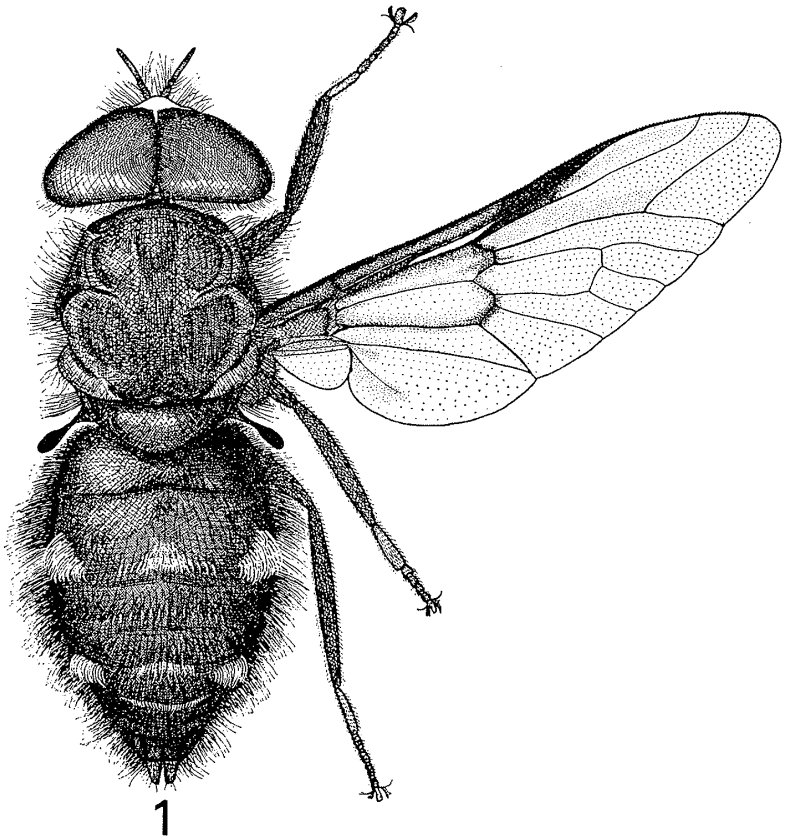
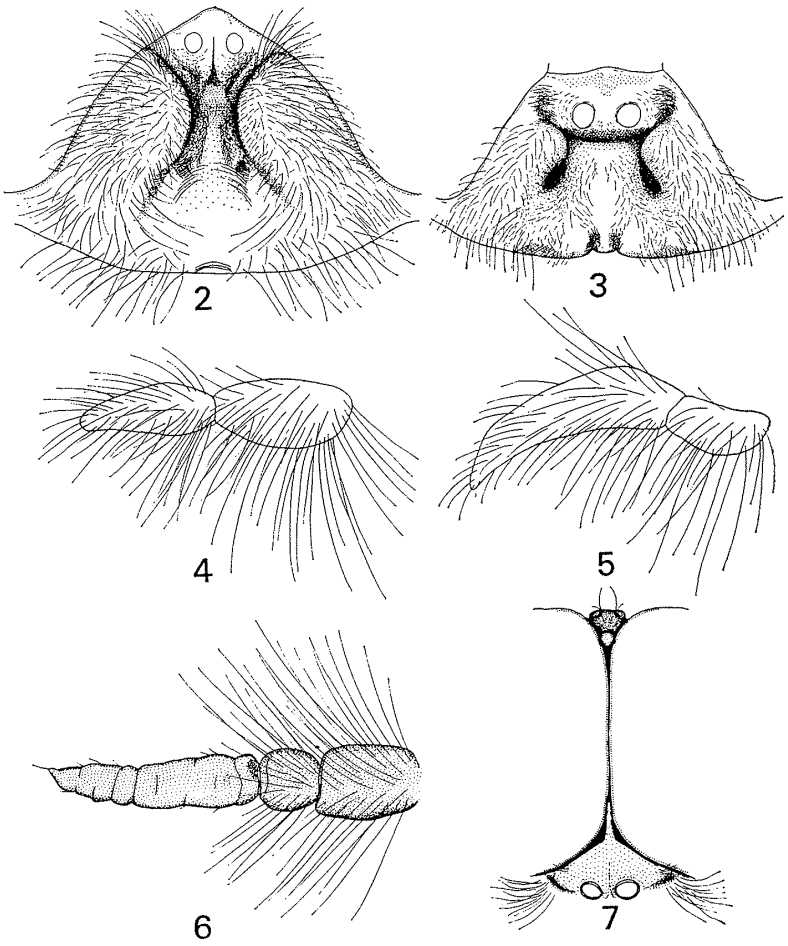


Fig. 1. *Nagatomyia melanica* Murdoch et Takahasi, ♂.

width of front just above antenna (1.8 times) and just equal to distance from antenna to median ocellus, which is 1½ distance from proboscis to antenna; middle part of face at narrowest point about ½ as wide as side of face on a mid line; frontal triangle as in Fig. 7; when measured along inner surface antenna shorter than distance from antenna to median ocellus (0.7 times), its flagellum not over twice as long as segments 1+2 (1.4 times in specimen on hand), and segment 2 about as long as wide, wider than flagellum (1.5 times in specimen on hand), and shorter than segment 1; palpus shorter than distance from palpus to antenna (0.8 times in specimen on hand) and its segment 2 about as long as but narrower than segment 1; space between antennae narrower than width of ocellar triangle.

Thorax: Dark brownish to blackish and pale gray pollinose; mesonotum with 3 broad, ill-defined darker stripes (on which pollen is indistinct); thorax covered with long black hairs which are absent on postscutellum, hypo-, upper part of meta-, and pteropleura (except upper part) (of which the last mentioned one has some short hairs below spiracle); haltere dark brownish to blackish and more or less pale gray pollinose.

Leg: Dark brownish to blackish, coxa pale gray pollinose and femur more or

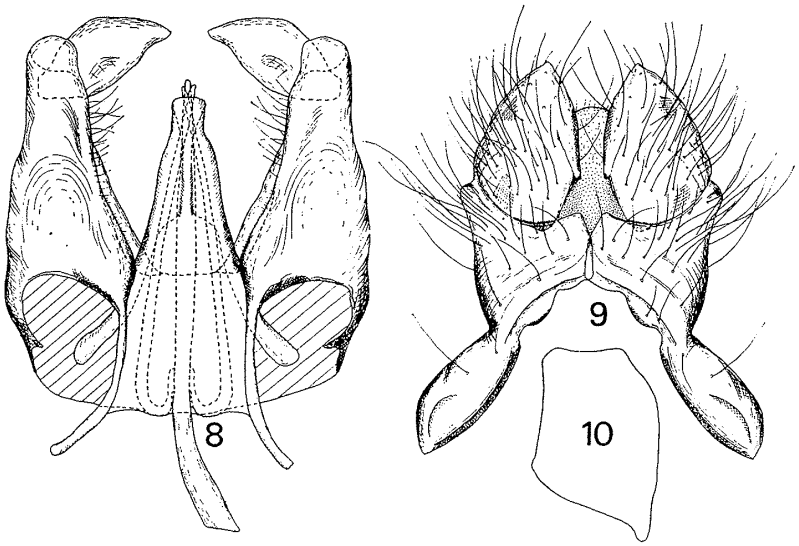


Figs. 2-7. *N. melanica* (2: face, ♂; 3: face, ♀; 4: palpus, ♂; 5: palpus, ♀; 6: antenna, inner view, ♂; 7: frontal- and ocellar triangle and line between them, ♂).

less so; coxa and femur with black hairs which are long on coxa, outer surface of fore femur, ventral surfaces of mid- and hind femur; relative length of segments (excluding coxa and trochanter) of fore leg 342-353-100-47-42-34-53, of mid leg 321-363-89-34-29-24-45, of hind leg 411-453-132-53-37-29-53 (measured along dorsal surface; based on 1 specimen); in hind leg from a lateral view basitarsus 1/5 as wide as long, narrower than (0.7 times) tibia which is narrower than (0.7 times) femur, and each of tarsal segments 2-3 about ½ as wide as long.

Wing: Membrane tinged with dark brown; base of wing, stigma, costal cell, subcostal cell above stigma, and 1st basal cell darker and basal portion of 1st submarginal-, base of discal-, and apex of 2nd basal cell somewhat so; basal portion of marginal cell nearly white.

Abdomen: Dark brownish to blackish, more or less pale gray pollinose; above and below clothed with black hairs which become whitish on posterior borders of terga 2, 4-5, and of sterna 2-5; whitish haired region on tergum 2 is confined to middle and near both sides (this may be somewhat true of terga 4-5).



Figs. 8-10. *N. melanica* (8: genitalia, dorsal view, ♂; 9: cerci and epandrium, dorsal view, ♂, not flattened; 10: cercus, dorsal view, ♂, flattened, of which longer portion is inner margin).

Genitalia: As in Figs. 8-10.

Length: Body 11 mm; wing 10; fore basitarsus 0.75.

♀. Similar to ♂ except as follows: Head: Front and central face with black hairs which are absent on areas just above and below antenna and just above proboscis; width of one eye on a mid line from a direct frontal view about ½ width of face at lowest portion from a direct frontal view, equal to or nearly so width of front just above antenna (0.8-1.0 times), and somewhat shorter than distance from antenna to median ocellus (0.8-0.9 times); width of front at transverse suture over ½ that just above antenna (0.7 times) and about 1½ that at median ocellus (1.4-1.5 times) which is about twice width of ocellar triangle (2.1-2.3 times); middle part of face at narrowest point about as wide as side of face on a mid line (0.9-1.0 times); antennal segment 2 less than 1½ as wide as flagellum (1.0-1.2 times); palpus as long as or longer than distance from palpus to antenna (1.0-1.2 times), its segment 2 twice or roughly so as long as segment 1 (1.8-2.4 times) and equal or roughly so in width to segment 1; in specimens on hand space between antennae 0.2-0.4 times width of ocellar triangle and when measured along inner surface antennal flagellum 1.4-1.9 times antennal segments 1+2, segment 2, 0.8-0.9 times as long as wide, 0.7-0.9 times as long as segment 1, and 0.8-1.0 times as wide as segment 1 which is 0.8-1.2 times as long as wide.

Leg: Relative length of segments of fore leg 316 (300-321): 331 (315-342): 100: 46 (43-47): 41 (40-42): 30 (30): 51 (48-53), of mid leg 326 (295-347): 348 (310-363): 89 (80-95): 35 (30-37): 30 (30): 24 (20-26): 48 (45-53), of hind leg 387 (375-405): 450 (420-474): 116 (85-126): 47 (45-50): 41 (40-42): 27 (25-30): 55 (50-58) (based on 4 specimens) (in hind leg from a lateral view basitarsus ⅓-¼ as wide as long, 0.7-0.8 times as wide as tibia which is 0.7-0.8 times as wide as femur, and each of tarsal segments 2-3 about ½ as wide as long).

Abdomen: Pollen on segments 1-2 (especially segment 2) more distinct; whitish pile is wholly present on tergum 2 except anterior part, and in some specimens may be absent on tergum 5.

Length: Body 11-12 mm; wing 11-12; fore basitarsus 0.75-0.8.

Distribution: Japan (Honshu and Kyushu).

Type-locality: Hataganaru (Ôginosen), Tajima Province (Hyogo-Pref.), Honshu. Type in Kyushu University, Fukuoka.

Specimens examined: Honshu: 2 ♀♀, Hataganaru (Ôginosen), Tajima Province, 19-23. vii. 1959, A. Nagatomi. Kyushu: 1 ♀, Inunakiyama, Chikuzen Province, 26. v. 1966, H. Shima; 1 ♀, Gokanosho, Higo Province, 20. vii. 1966, A. Tanaka; 1 ♂, Jônodan, Mt. Shibi, Satsuma Province, 5. v. 1968, A. Tanaka.

References

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Nagatomi, A. and Tanaka, A. 1968 Egg and first instar larva of *Nagatomyia melanica* Murdoch et Takahasi and *Chrysops suavis* Loew (Diptera, Tabanidae). Kontyû 36: 111-115.

Takahasi, H. 1962 Fauna Japonica. Tabanidae (Insecta: Diptera). Tokyo. 143 pp.