

Three New Species and Two Unrecorded Species of Drosophilidae from Korea

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韓國産 초파리 科의 3 新種과 2 未記錄種

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摘 要

Scaptomyza 屬의 1 新種, *Drosophila* 屬의 2 新種의 記載와 *Amiota* 屬의 韓國未記錄 2 種을 記錄했다.

Scaptomyza(*Scaptomyza*) *choi* sp. nov. 제주-각씨초파리 (新稱)

Drosophila(*Hirtodrosophila*) *nigripennis* sp. nov. 검은뚝니-초파리(新稱)

Drosophila(*Hirtodrosophila*) *pseudonokogiri* sp. nov. 헛뚝니-초파리(新稱)

Amiota(*Amiota*) *stylopyga* WAKAHAMA & OKADA, 1958

Amiota(*Amiota*) *dispina* OKADA, 1960

In the present paper are described a new species of the genus *Scaptomyza* and two new species of the genus *Drosophila*, and reported two hitherto unrecorded Korean species of the genus *Amiota*.

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Scaptomyza (*Scaptomyza*) *choi* sp. nov. (Fig. 1)

Male and female: Body about 3.0 mm., greyish black. Eyes dark red, with short piles. Antenna yellow in male, darker in female. Arista with about 7 branches including a large fork, but no ventral branches. Ocellar triangle and periorbits black. Front blackish brown, with yellowish V-shaped stripe. Second orbital bristle about 2/3 length of the first. Carina narrow and yellow in male, black in female. Cheek pale yellowish brown, black above, and about 1/5 as broad as the greatest diameter of eye. Clypeus black. Palpus large and black, with a few stout apical bristle. Only one prominent oral bristle.

Mesonotum and scutellum greyish black. Humeral bristles 2. Acrostichal hairs in 4 rows. Sterno-index about 0.4. Legs yellowish brown, fore tarsus darker. Preapicals on all three tibiae, apicals on middle.

Wings hyaline, crossveins clear. Costal-index about 4.0, 4v-index about 1.2, 4c-index about 0.5, 5x-index about 1.3, C 1-bristles 2, C 3-bristles on basal about 1/2. Halteres yellowish white. Abdominal tergites greyish black.

Periphallic organs: Genital arch broad, blackish brown, and lower margin with about 10 long hairs. Clasper much

broader than long, yellowish brown, with about 11 long black teeth arranged in a slightly concave row. Anal plate large, blackish brown, separated from genital arch, with about 25 brownish black hairs.

Phallic organs: Aedeagus pale brown, rounded at tip in side view, and bifid. Anterior paramere minute. Novasternum with a pair of strong submedian rod-like processes. Ventral fragma broader than long.

Egg-guides: Lobe yellowish brown, apically pointed, and with about 15 marginal black teeth and about discal 9 black teeth.

Holotype: ♂, Mt. Halna, Quelpart Island; 15 Nov. 1964 (Bahng).

Allotype: ♀, collected together with holotype.

Paratypes: 2 ♂♂ and 2 ♀♀, collected together with holotype.

Habitats: Mountain, collected by sweeping as well as on grass.

Distribution: Mt. Halna, Quelpart Island, Korea.

Relationships: Closely resembles *S. graminum* (Fallén), but differs from it in lacking ventral branches of arista below fork and in having large palpi.

Remarks: The specific name is contributed to Dr. Pok Sung Cho, Department of Biology, Korea University, Seoul, Korea. The type specimens are deposited at the Department of Biology, Chungang University.

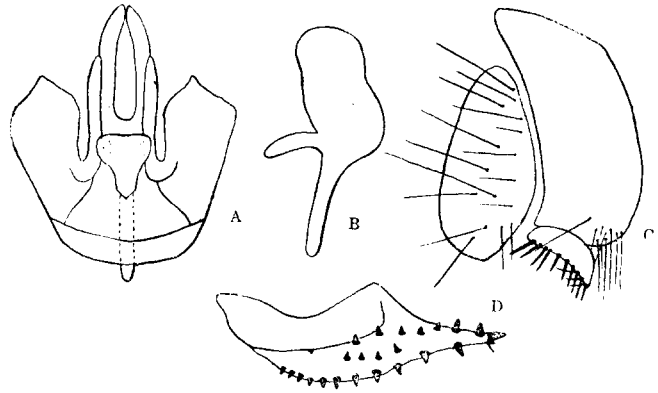


Fig. 1. *Scaptomyza (Scaptomyza) choi* sp. nov.

A: Phallic organs (ventral aspect), B: Aedeagus (lateral aspect), C:Periphallic organs, D: Egg-guide.

Drosophila (Hirtodrosophila) nigripennis sp. nov. (Fig. 2)

Male and female: Body about 2.3–2.5 mm. (male) and 2.4–2.7 mm. (female), blackish brown. Antenna dark brown, 2nd joint with 2 bristles, 3rd darker and with long pilosity. Arista with 6 branches including a small fork, one below it. Second orbital bristle about 2/5 length of the first. Only one prominent oral bristle. Carina flat and yellowish brown. Palpus yellowish brown, with one prominent apical bristle, and about 3 shorter bristles. Ocellar triangle and brownish black, periorbits yellowish brown. Front orange brown, about half as broad as the head width.

Cheek dark brown, about 2/5 as broad as the greatest diameter of eye. Clypeus black. Eyes dark red, pubescent.

Mesonotum brown, posteriorly darker. Scutellum blackish brown. Acrostichal hairs in 6 rows, no prescutellars. Thoracic pleura darker. Humerals 2, subequal. Sterno-index about 0.5.

Legs brown, coxa darker. Preapicals on hind tibia, apicals on middle. Wings hyaline, without any spots or cloudings. Veins pale yellow. Costal-index about 1.6, 4 v-index about 2.1. 4 c-index about 1.3, 5 x-index about 1.8, C 1-bristles 2. C 3-bristles on basal about 2/3. Halteres yellowish white. Abdominal tergites entirely black. Abdominal sternites pale.

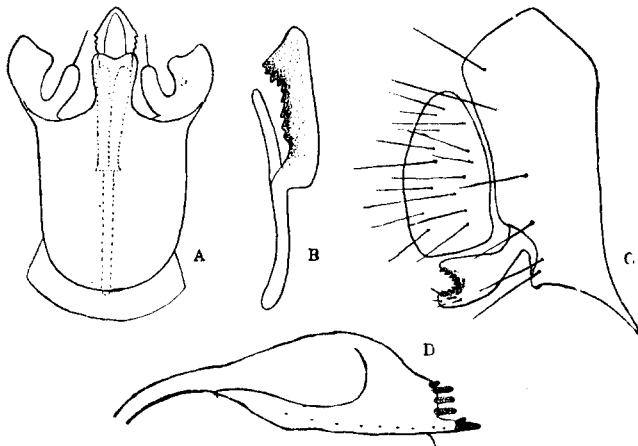


Fig. 2. *Drosophila (Hirtodrosophila) nigripennis* sp. nov. A: Phallic organs (ventral aspect), B: Aedeagus (lateral aspect), C:Periphallic organs, D: Egg-guide.

Periphallial organs: Genital arch broad, dark brown, and with a strongly pointed process at heel, the upper portion with about 3 hairs; lower portion with about 3 hairs. Clasper yellowish brown, and with about 7 black teeth arranged in a concave row as well as about 8 stout setae. Anal plate yellowish brown, separated from genital arch, and with about 20 hairs.

Phallic organs: Aedeagus blackish brown, rod-shaped, and with serrate lateral margins. Anterior paramere blackish brown, posterior parameres seem to be absent. Novasternum with a deep wide median notch. Each hypandrial plate with a rather long spine. Ventral fragma quadrate and dark brown.

Egg-guides: Lobe yellow, swollen above at middle, pointed at apex, with about 6 black marginal teeth on the apical portion of upper margin, and with a prominent subterminal hairs on the lower margin near apex.

Holotype: ♂, Mt. Sori, Kyungki Province. June to July, (Bahng).

Allotype: ♀, collected together with the holotype.

Paratypes: 1 ♂ and 11 ♀♀, collected together with the holotype.

Habitats: Mountain, collected by sweeping as well as on grass.

Distribution: Mt. Sori, Kyungki Province, Korea.

Relationships: Closely resembles *D.(H.) kangi* Okada & Lee, in general bodily characters, but differs from it in the shapes of male and female genitalia.

Remarks: The type specimens are deposited at the Department of Biology, Chungang University.

***Drosophila (Hirtodrosophila) pseudonokogiri* sp. nov. (Fig. 3)**

Male: Body about 3.0 mm., reddish brown. Antenna yellowish brown, 3rd joint broad and large, with pilosity. Arista with about 7 branches including a large fork, one below it. Eyes dark red, pubescent. Ocellar triangle and occiput black. Periorbits orange brown. Carina flat, low, and orange brown. Front orange brown, about half as broad as head width. Cheek yellowish brown, about 1/5 as broad as the greatest diameter of eye. Clypeus black. Second orbital bristle about 1/2 of the first. Palpus yellowish brown, with one prominent apical bristle and a few shorter bristles. Only one prominent oral bristle.

Mesonotum reddish brown, with black indistinct longitudinal stripes at middle. Scutellum blackish brown. Thoracic pleura darker. Humerals 2, subequal. Acrostichal hairs in 6—8 irregular rows. Sterno-index about 0.5. Legs dark brown. Preapicals on hind tibia, apicals on middle.

Wings slightly fuscous. Crossveins clear. Costal-index about 2.6, 4 v-index about 1.7, 4 c-index about 0.8, 5 x-index about 1.4. C 1-bristles 2. C 3-bristles on basal 1/2. Halteres yellow. Abdomen brown, each tergite with posterior band and laterally projected forward to reach the anterior margin.

Periphallial organs: Genital arch dark yellowish brown, broad, paler below, and with about 6—8 long upper marginal hairs as well as about 10 long lower hairs. Clasper yellowish brown, triangular, and with about 8 black teeth in a straight row. On the lower distal portion of the clasper there are about 15 stout black bristles arranged in about 3 rows. Anal plate yellowish brown, separated from genital arch, and with about 60 long and short hairs.

Phallic organs: Aedeagus pale yellowish brown, slender, slightly curved in S-shape at lateral aspect. Anterior parameres

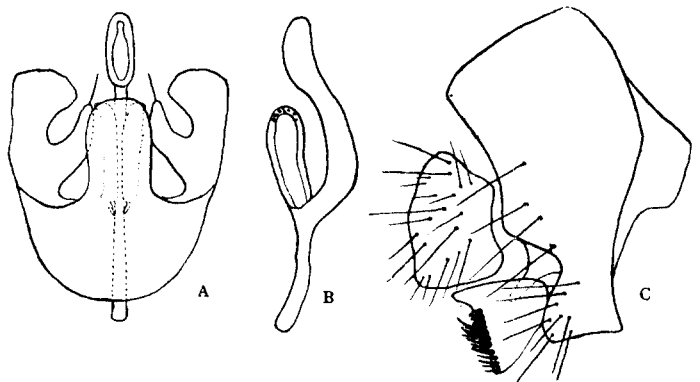


Fig. 3. *Drosophila (Hirtodrosophila) pseudonokogiri* sp. nov.
A: Phallic organs (ventral aspect), B: Aedeagus (lateral aspect), C:Periphallial organs.

elongate, elliptical, bordered with dark ridges, basally connected with the base of aedeagus, and each with about 8 sensilla on the border. Posterior parameres seem to be absent. Novasternum with a deep wide median notch. Each hypandrial plate with a rather long spine. Ventral fragma hemispherical, and pale yellowish brown.

Holotype: ♂, Mt. Sori, Kyungki Province, June to July, 1964 (Bahng).

Paratypes: 6 ♂♂, collected together with the holotype.

Habitats: Mountain, collected by sweeping as well as on grass.

Distribution: Mt. Sori, Kyungki Province, Korea.

Relationships: Closely resembles *D.(H.) nokogiri* Okada, in general bodily characters, but differs from it in having body smaller and darker, and in the shapes of male genitalia.

Remarks: The type specimens are deposited at the Department of Biology, Chungang University.

***Amiota (Amiota) stylopyga* WAKAHAMA & OKADA**

Wakahama & Okada, 1958. *Annot. Zool. Japon.* 31, 109.

This species is new to Korean drosophilid fauna. The junior author (Bahng) collected 5 males by net sweeping at Mt. Sori in July, 1964.

Distribution: Korea; Mt. Sori. Japan.

***Amiota (Amiota) dispina* OKADA**

Okada, 1960. *Mushi* 34, 89.

This species is new to Korean drosophilid fauna. The junior author (Bahng) collected 3 males by net sweeping at Mt. Sori in July, 1964.

Distribution: Korea; Mt. Sori. Japan.

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