

A New Species of *Hirtodrosophila* from South Korea
(Diptera, Drosophilidae)*

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In these years the taxonomists and the geneticists in South Korea have found numerous drosophilid species inhabiting that country, among which six species of the subgenus *Hirtodrosophila* of the genus *Drosophila* are recorded. During May to July, 1960, the junior author found at the Mt. Sori, Kyungi Province, a hitherto unknown species of this subgenus which will be described here.

Drosophila (Hirtodrosophila) kangii Okada and Lee, sp. nov. (Fig. 1)

Male and female: Body about 2.0-2.3mm (male) and 2.2-2.5mm (female). dark brown or blackish. Antenna dark brown, 2nd joint with 2 bristles, 3rd darker and with long pilosity. Arista with 6 branches including a small or moderate fork, one below it. Proclinate orbital slightly shorter than the posterior reclinate, anterior reclinate about $\frac{3}{5}$ posterior, situated just outside proclinate. Only one prominent oral bristle, 2nd one about $\frac{1}{5}$ vibrissa in length. Carina flat, rather narrow, and yellowish brown. Palpus pale brown, club-shaped, basally paler, with one prominent apical bristle which attains half the length of palpus itself. Ocellar triangle black; periorbits orange brown, posteriorly darker. Front orange brown, anteriorly darker, about half as broad as the head width. Cheek dark brown, about $\frac{1}{4}$ as broad as the greatest diameter of eye. Clypeus black. Eye brilliant dark red, pubescent. Mesoscutum dark brown, with black indistinct longitudinal stripes, one at middle, one shorter on each side inside dorsocentrals. Acrostichals in 6 rows; no prescutellars. Cross distance of dorsocentrals about twice or more the length distance. Scutellum dark brown. Anterior scutellars about $\frac{1}{3}$ length of posteriors. Thoracic pleura darker. Humeral 2, subequal. Sterno-index about 0.5-0.7. Legs brown, coxa and femur except both ends dark brown. Apical bristle on the 2nd tibia, preapicals on the 2nd and 3rd. Wings (Fig. 1 A) hyaline, without any spots or cloudings. Veins pale yellow, tip of the 1st costal section distinctly fuscous. Costa not extending beyond tip of r_{4+5} . r_{2+3} gently curved forward at tip. r_{4+5} and m nearly parallel. Costal index about 1.4-1.8, 4V-index about 2.0. 4C-index about 1.5, 5X-index about 2.2-2.5. 2 bristles at the apex of the 1st costal section subequal. 3rd costal section with heavy bristles on its basal about $\frac{2}{3}$. Halteres yellowish white. Abdomen with each tergite entirely dark brown or black, in some female specimens anterior tergites each with a pair of small yellowish area on the anterior margin. Abdominal sternites pale.

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Periphallallic organs (Fig. 1 B) : Genital arch dark yellowish brown, paler below, widely truncate at ventral tip; caudal margin conically projected caudally above insertion of clasper; upper caudal margin with about 3-5 hairs; lower caudal margin with about 7-10; toe conically projected posteriorly and setigerous; heel low and rectangular, somewhat pointed anteriorly. Clasper brown, elongate, concave above, dorsoapically with a short dark finger-like process. Primary teeth about 6-7, black, arranged in a row covering almost entire length of the distal margin of clasper. On the lower distal portion of the clasper there are about 9 stout black bristles arranged in about 4 rows. Anal plate pale yellowish brown, oval, separated from genital arch, anterior margin projected anteriorly at middle.

Phallic organs (Fig. 1, C) : Aedeagus pale yellowish brown, slender, slightly curved in S-shape at lateral aspect, subapically thickest, finely but irregularly serrated on distal portion, apically indistinctly divided into two lateral flaps. Apodeme of aedeagus short and thick, less than 1/3 length of aedeagus itself. Vertical rod undeveloped. Anterior parameres elongate, elliptical, bordered with dark ridges, basally connected with the base of aedeagus, and each with about 6 sensilla arranged in a longitudinal row on the dorsoapical border. Pos-

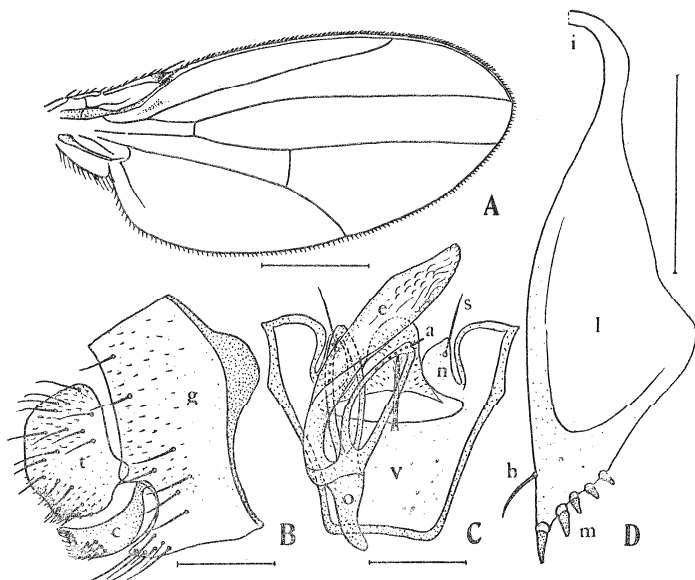


Fig. 1. *Drosophila (Hirtodrosophila) kangi* Okada and Lee, sp. nov.

A. Wing. B.Periphallallic organs. C. Phallic organs (dorsal aspect). D. Egg-guide. a, anterior paramere; c, clasper; e, aedeagus; g, genital arch; h, subterminal hair; i, basal isthmus; l, lobe; m, marginal teeth; n, novasternum (hypandrium); o, apodeme of aedeagus; s, submedian spine; t, anal plate; v, ventral fragma. Scale 0.5mm in A, 0.1mm in B-D.

terior parameres seem to be absent. Ventral fragma quadrate, proximally narrowing. Novasternum with a deep wide median notch, at the middle of which arises a dark rod terminating into a thin pubescent membrane. Each hypandrial plate conical and with a rather long spine.

Egg-guide (Fig. 1D): Lobe yellow, fusiform, swollen above at middle, pointed at apex, with about 5 pointed dark brown marginal teeth on the apical portion of upper margin, apical tooth being longest, and with a prominent subterminal hair on the lower margin near apex.

Holotype: Male, Mt. Sori, Kyungi Province, South Korea, May to July, 1960 (Lee).

Allotopotype: Female, collected together with the holotype.

Paratopotypes: 12 males and 3 females, collected together with the holotype.

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

Distribution: South Korea.

Relationships: Closely resembles *D. (H.) nokogiri* Okada from Japan, especially in the structure of male and female genitalia, but differs from it in having body smaller and darker, costal index much smaller, costa somewhat swollen at the tip of the 2nd break, acrostichals in fewer rows, anterior reclinate orbital closer to proclinate, toe of genital arch acuter in angle, aedeagus not prominently serrated at sides.

Remarks: The species trivial name is contributed to Prof. Yung Sun Kang, Department of Zoology, College of Liberal Arts and Sciences, Seoul National University. The type specimens are deposited at the same laboratory; one male and two female paratypes at the Department of Biology, Tokyo Metropolitan University.

翅に斑紋のあるフサシヨウバエ属

フサシヨウバエ属 (*Hirtodrosophila*) はシヨウバエ属 (*Drosophila*) の 1 亜属で、世界各地から計約 50 種、うち日本から 9 種、知られているが、何れも翅には顕著な斑紋がないようである。ところが 1960 年 11 月甲府市郊外で、翅に 3 本の大きな黒斑のある本亜属の 1 種 3 ♂ が sweeping によって得られ、ついで 1961 年 6 月韓国ソウル大学の李惠英女史から送られた南鮮産標本中に、さらに複雑な美しい斑紋を有する別の 1 種 1 ♂ 1 ♀ が見出された。翅の斑紋は一見本亜属と極めて近縁で新熱帯区およびサモア島に endemic の *Zygothrica* 属を思わせる。また *Drosophila* 属内では従来シヨウバエ属 (*Drosophila* s. str.) やキイロシヨウバエ属 (*Sophophora*) だけに知られていた“翅斑の顕著な種の出現”が本亜属にも平行的に見られることを知り得た。この両種とも新種と思われるが記載は後報にゆずる。(岡田豊日)