

Studies on Korean Chironomidae (Diptera).

2. Description of a New Genus and a New Species of Chironominae.

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韓國産 Chironomidae (Diptera)에 관한 研究

2. Chironominae 亞科의 一新屬 一新種

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(Received September 19, 1981)

摘 要

韓國産 Chironomidae 成蟲을 採集 調査中 數個 地域에서 腹部 末端 三個節이 黑色인 個體를 發見 同定한 結果, 新種으로 確認되었으며 類似屬인 *Xenochironomus*와는 特異한 形態的 特徵을 나타내므로 新屬 *Kimius*와 新種 *Kimius hoonscoi*를 設定하여 記載한다.

In the course of non-biting midge investigations in Korea, a medium-sized midge with tip of the abdomen dark was collected at several localities. Examination and study of the adults revealed that they represent a new species of a new genus in the subfamily Chironominae.

Kimius n. gen.

Type species: *Kimius hoonsooi* n. sp.

Description. Male antennae 12 segmented, female 6 segmented. Frontal tubercles present. Eyes bare, dorsally produced. Palpus 4 segmented. Pronotum narrowed medially, reaching to anterior end of scutum, but medially divided by narrow notch. Wing membrane without macrotrachia. Squamal fringe present. Costa not produced. Ends of R_1 and R_{2+3} slightly but distinctly separated. fCu beyond r-m. Anal lobe moderately developed. Fore tibia without combs or spur; combs of posterior tibiae broadly triangular, similar in size and shape, adjacent but separated by a distinct notch, each with a spur. Pulvilli conspicuous. Anal point present, strongly bent downwards. Appendage 1 rather long and broad, rounded and swollen at tip, with a few setae internally.

Remarks. This genus is very similar to *Xenochironomus* Kieffer, 1921 (Goetghebuer, 1928; Townes, 1945; Johannsen & Townes, 1952; Freeman, 1957; 1961; Beck & Beck, 1958; Pinder, 1978), but distinguished by frontal tubercles present and shape of appendage 1 of hypopygium which is rather long and broad, slightly swollen at tip (short and lobe-shaped to linear in *Xenochironomus*). It is named in honor of Professor Hoon Soo Kim, Seoul National University and its gender is masculine.

***Kimius hoonsooi* n. sp.**

(Fig. 1)

Diagnosis. Medium to small size. Wing length 1.99 ± 0.22 mm long. Legs black with basal half of femur and tarsus I pale. Abdomen greenish yellow, with tergites VI-VIII and hypopygium dark. Appendage 1 of hypopygium slightly globular with 3~4 setae in inner apical disc. Antennal ratio 2.28 ± 0.13 . Leg ratio 1.74 ± 0.08 .

Description. Male. Head: Eye black, bare, with dorsal projection well developed; antenna dark brown, 12 segmented; clypeus yellowish brown, with 20 bristles; palpus 4 segmented: 52.5, 150, 169.4, 241.1 (1:2.9:3.2:4.6); frontal tubercle conspicuous (19.6 \pm 1.1 long and 7.5 \pm 0.2 wide). **Thorax:** Pronotum brown, developed slightly narrowed medially, reaching anterior end of scutum but medially divided by narrow notch; scutum brown, with inconspicuous dark brown vittae; acrostical hairs about 9, and dorsocentral hairs about 10 pairs, both arised from conspicuous pale punctures; scutellum dark brown, with 10 bristles, along apical margin; postnotum dark brown; halter yellowish brown, with dark tip. **Wing:** Membrane greyish, bare, with microtrichia (detectable under 300X); costa not produced, ending above M. R_{2+3} close to R_1 , but distinctly separated at tip; fCu beyond r-m. Cu_2 bent forwards at tip; an slightly beyond fCu; dark hairs along stem vein of R, R_1 and R_{4+5} ; lobe moderately developed; squama with numerous setae. **Legs:** All femur black, with basal 1/3 yellow; tibia black; Fore tarsi all dark, except basal half of tarsus I; middle and hind tarsi dark (lighter than fore tarsi), except basal 4/5 of I and basal 1/3 of II; fore tibia without combs; posterior tibial combs well developed, with short two spurs; pulvilli conspicuous; middle and hind femur with well developed, darkened hook at ventral tip. **Abdomen:** Tergites I-V greenish yellow, VI-VIII and hypopygium dark brown; each tergite with numerous numbers of hairs. **Hypopygium:** Anal point sharply bent downwards (when slide preparation made dorsally, it appears abruptly cut at base); gonostylus not narrowed at middle but at tip, with an apical and 5~6 inner, subapical setae; appendage 1 pale, straight, rounded, swollen at tip, with 3 minute setae in disc, internally and apically.

Female. General characters same as in male, except usual sexual differences; abdomen uniformly brown; frontal tubercles minute; antenna 6 segmented: 45, 105, 67, 67, 90, 157 (1:2.3:1.5:1.5:2:3.5); cerci pale brown.

Specimens Examined. Holotype: 1♂ (R-S-520, slide-mounted), Sinlim-dong, Seoul, 10 X 1977, H. I. Ree. Paratypes: 4 ♂♂, 1♀, Ichon-dong, Seoul, 20 IX 1977, H. I. Ree. 2♂♂, Mt. Soyo, Yangjugun, Gyonggi-do, 12 X 1977, H. I. Ree. 5♂♂, 1♀, Eden Park, Busan, 11 IX 1978, H. I. Ree. 1♂, Daejeo-dong, Busan, 21 VI 1979, H. I. Ree. 5♂♂, 1♀, S.N.U., Sinlim-dong, Seoul, 3 VII 1979, H. I. Ree. 1♂, Weoncheon Resort, Suweon City, Gyonggido, 19 X 1979, H. I. Ree. 78♂♂, 8♀♀, Kyongju City, Gyongsang-bugdo, 16 VII 1980, H. I. Ree.

Remarks. It is easily distinguished by the coloration of the legs and abdomen and by the features of anal point and appendage 1 of hypopygium which are described elsewhere. This species is so characteristic that the author has not met allied species. The adults were collected near ponds, lakes and the likes.

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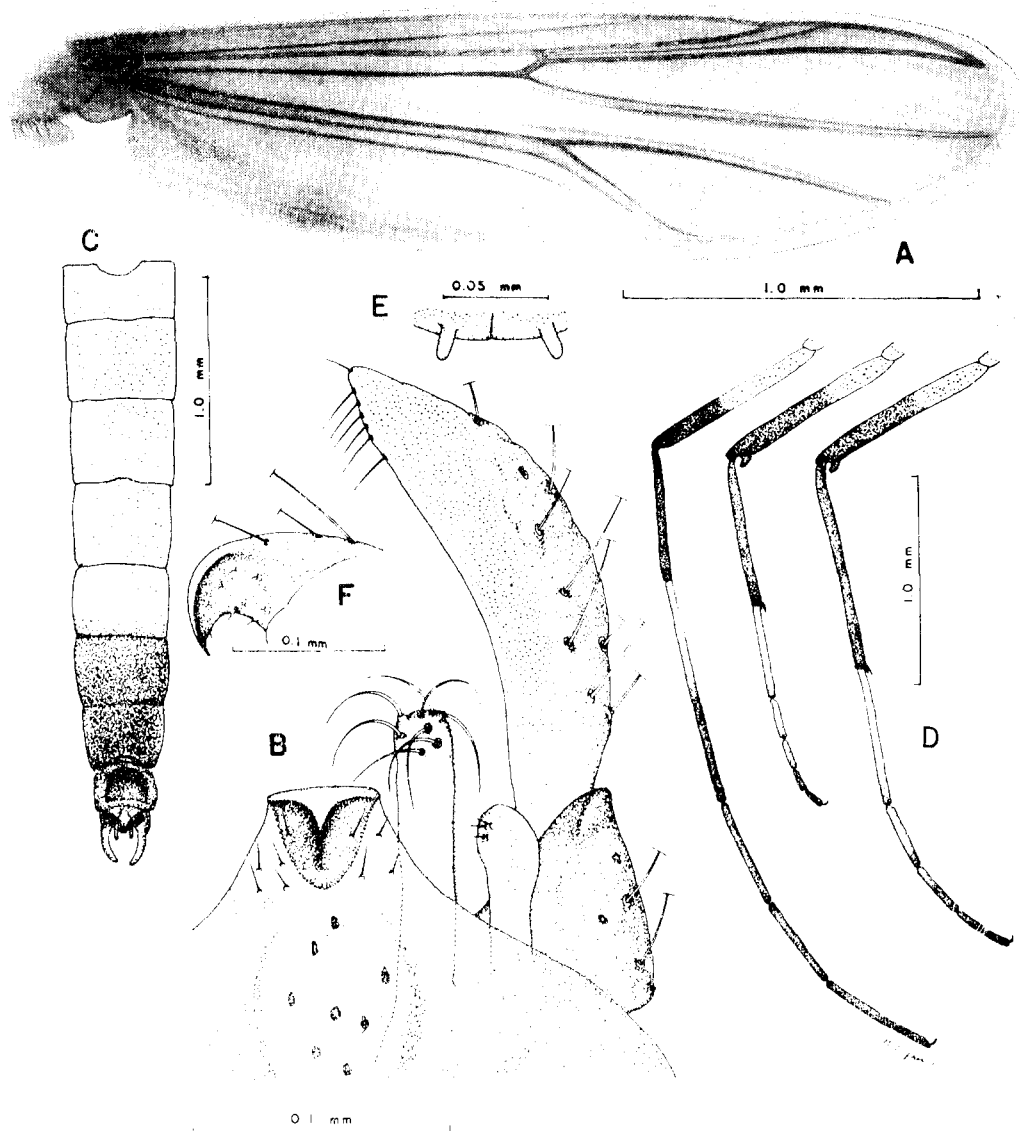


Fig. 1. *Kimius hoonsooi* sp. nov. (♂)

A: wing, B: hypopygim, C: abdomen, D: legs (front, middle, hind from left), E: front tubercles, F: anal point (lateral view).