

## On the 9 unrecorded Syrphidae (Insecta, Diptera) from Korea

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韓國産 꽃등애科 (昆蟲綱, 파리目)의 9未記錄種에 관하여

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### 摘 要

현재까지 한국산 꽃등애科는 47屬 112種이 報告되었다. 그러나 아직도 상당히 많은 種들이 同定되지 않고 있는 실정이며 이를 해결하기 위하여 10여년 전부터 文獻의 수집과 標本의 同定을 실시하고 있다. 이러한 과정에서 다음과 같이 4屬을 포함한 9種이 새로 調査되었기에 이를 밝히고자 하며, 따라서 지금까지의 한국산 꽃등애科는 51屬 121種이 報告된다.

Cheilosinae, *Ferdinandea nigrifrons* (Egger) 검은 이마 큰벌꽃등애(신칭)

*Pipiza abdominalis* (Shiraki et Edashige) 배점박이 쯤꽃등애(신칭)

*Orthonevra karumaiensis* (Matsumura) 벌꽃등애부치(신칭)

*Psilota brevicornis* Shiraki 잔털꽃등애(신칭)

*Cheilosia longiptera* Shiraki 큰날개 벌꽃등애(신칭)

Xylotinae, *Temnostoma nitobei* Matsumura 니토베 배세줄 꽃등애(신칭)

*Blera japonica* (Shiraki) 큰허리 꽃등애(신칭)

Merodontinae, *Mesembrius flavipes* (Matsumura) 노랑배 수정다리 꽃등애(신칭)

*Mesembrius nigra* Shiraki 검정배 수정다리 꽃등애(신칭)

112 species of the Syrphid flies was recorded from Korea, hitherto, but we have yet many species unreported which was difficulty in identification by the appropriate references. In this situation, we have obtained 9 species identified containing 4 genera of them and report it. Therefore, Korean syrphidae of the 121 species 51 genera was known.

**Cheilosiiinae*****Ferdinandea nigrifrons*** (Egger)

Verh. Zool.-bot. Ges. Wien, X: 661 (Chrysochlamys)

Medium sized by the body length 8~10 mm, but our specimen is 11.2 mm. Bluish black shining species with dull bands on the tergites, but rather smaller and more blackish than *F. cuprea*.

**Description:** Frons about 1/6 as wide as the head, shining black entirely with black pubescence; face broadened forwards with the side margins slightly concave. Mesonotum longer than wide, black, with four whitish grey stripes; humeral calli tinged with orange-yellow; notopleura with usually 3 black bristles. Scutellum twice as wide as long, shining brownish-yellow except for blackish basal corners, with black and yellow pubescence on the disc, and with 8~10 black bristles on the hind margin which is strongly rounded. Wing shorter than the body, brownish especially in the female, with clouded brown on each cross-vein.

**Collection:** Mt. Cheonma-san, Namyangju-Kun, Kyunggi-Do, 4/IX, 1965, 1♀, by Y.C. Jeon.

**Distribution:** Korea, Japan

***Pipiza abdominalis*** (Shiraki et Edashige)

Trans. Shikoku Ent. Soc. III, 5/6: 84, fig. 1(2), 1953 (*Pipizella*)

Moderately small by the 8~9 mm, shining black with whitish pubescence and with a pair of small triangular orange-yellow spot on the 2nd tergite. This species resembles somewhat to *P. inornata*, but easily distinguished by the yellowish spot on the tergite, and differ from *P. flavimaculata* by the apical margin of the 3rd antennal segment rather obliquely rounded in the female.

**Description:** Head weakly broader than the thorax; frons well produced, about twice as broad as long, black with a weak bluish lustre slightly covered with whitish dust, clothed with long black hairs; vertex about 1/7 as wide as the head, 1½ times as long as wide, with the side margins straight, black and shining, with long blackish pubescence; face shining black, with greyish dust and long blackish pubescence. Eyes covered with long pale brown pubescence, touching for a distance about as long as the frons. Legs black, with yellowish basal tibia and the tip of the femora. Wings brownish clouded at the middle.

**Collection:** Yeonsu-Ri, Yangpyeong-Kun, Kyunggi-Do, 31/VIII, 1980, 1♀, by H.K. Park; Mt. Chukryung-san, Namyangju-Kun, Kyunggi-Do, 6/IX, 1980, 1♀ by H.K. Park.

**Distribution:** Korea, Japan

Genus *Orthonevra* Macquart

Recueil Soc. Sci. Agr. Lille. 1828: 188, 1829

Small to medium size, black, strongly shining metallic group. Face without central knob; eyes bare, touching for a distance in the male; 3rd antennal segment elongate. Abdomen dull black, with margins strongly metallic shining. Hind femora mostly furnished with short and minute spines. Tip of the  $R_{2+3}$  emit a black line to the  $M$  alike an apical cross-vein forming a right or obtus angle.

*Orthonevra karumaiensis* (Matsumura)Ent. Mag. Japan, II(1):16, pl. 1, fig. 12, 1916 (*Pipizella*)

Small species by the body length of 5~6 mm; cross-vein blackish clouded; mesonotum with 3 lines purplish longitudinal.

**Description:** Face brightly shining green, about 1/2 as wide as the head, protruded remarkably to the anterior; epistoma projected forward; hind of the head hollowed, black and weakly shining. Antenna yellowish brown, slender and longer than the head, 2nd segment about twice as long as the 1st, 3rd segment about as long as the 2 basal segments united. Mesonotum punctuate bright shining greenish black, with 5 aeneous brown lines and clothed with yellowish short pubescence. Abdomen oval, flattened, shorter than the head and thorax together, broader than the thorax. Frons of the female about 1/3 as wide as the head, distinctly broadened forwards, with 3 transverse furrows touching to the middle longitudinal sulcus.

**Collection:** Naidong-Ri, Cheolwon-Kun, Kangwon-Do, 22/VIII, 1967, 1♂, by J.I. Kim; Mt. Acha-san, Seoul, 20~24/VIII, 1980, 1♂ 2♀♀, by H.K. Park; Mt. Chukryung-san, Namyangju-Kun, Kyunggi-Do, 6/IX, 1980, by H.K. Park

**Distribution:** Korea, Japan

Genus *Psilota* Meigen

Syst. Beshr., III: 256, 1822

Small, bluish or brownish black, clothed densely with pubescence nearly all over the body. Face descended beneath the antenna, without central knob but with upper mouth-edge, very hairy. Eyes densely hairy, with unusually long pubescence and touching for a long space in the male, but widely separated in the female. Antenna with the 3rd segment elongate or roundish; arista quite bare. Abdomen short, oval. Legs simple, with hind femora thickened weakly. Wings with the discal and postical veins, subapical and postical cross-veins almost straight.

*Psilota brevicornis* Shiraki

Faun. Jap., Syrph., II: 56, fig. 15, 1968

Medium sized in this genus by the body length of 8 mm, shining bluish black and

pilosed species.

**Description:** Head about as wide as the thorax; frons well produced, with a middle longitudinal sulcus, covered with white tomentum, clothed with long white hairs, with shining black lunule very narrowly; vertex triangular shining black, about  $1/7$  as wide as the head,  $1\frac{1}{2}$  as long as wide, clothed with very long black hairs; face broadened weakly to the below, with greyish white tomentum and long white hairs. Eyes clothed densely with very long pale brownish hairs, Antenna short and black. Mesonotum shining black, with long blackish yellow hairs densely. Scutellum about twice as wide as long, with hind margin rounded strongly, clothed with long yellowish hairs. Abdomen shining black, with long yellowish pubescence which was more blackish on the 3rd and 4th tergites. Hypopygium shining black, with very long yellowish cerci.

**Collection:** Aingmubong, Goyang-Kun, Kyunggi-Do, 14/IV, 1974, 1♂, by J.I. Kim

**Distribution:** Korea, Japan

### *Cheilisia longiptear* Shiraki

Faun. Jap., Syrph., II: 103, fig. 27, 58, 1968

Medium sized in this genus by the body length of 10 mm and shining black species.

**Description:** Frons of female about  $1/5$  as wide as the head, broadened forwards, with a longitudinal middle sulcus, with a pair of faintly dusted side spots, clothed with short and black pubescence, but very long on the ocellar triangle; epistoma rather produced beyond the central knob. Eyes pilosed with long brownish pubescence. Antenna black, with 3rd segment larger and blackish. Mesonotum with 2~3 black bristles on the postalar calli, 1~2 at the wing base. Scutellum with many marginal bristly hairs yellowish. Wings long, large and weakly brown, with yellowish at the basal 3rd; orange-yellow of the pterostigma. Abdomen black, roundish, distinctly broader than the thorax, weakly longer than the head and thorax united, with short pubescence; cerci yellowish brown, large and elliptical.

**Collection:** Mt. Cheonma-san, Namyangju-Kun, Kyunggi-Do, 26/IV, 1970, 1♀, by J.I. Kim

**Distribution:** Korea, Japan

## Xylotinae

### *Temnostoma nitobei* Matsumura

Thous. Ins. Jap. Add. II: 199, pl.XVI, fig. 15, 1916

*Temnostoma japonicum* Hull, Psyche LI: 41, 1944

Small in this genus by the body length of 11-14 mm, elongate and black species with 3 golden yellow bands on the tergites, with the wings brown at the frontal half.

**Description:** Frons shorter than wide, covered with densely golden yellow tomentum; lunule very narrow and pale yellow; face moderately widened below, with hardly concave

side; epistoma not produced, lateral oral margin ascending hindward. Eyes bare, almost touching for a point. Thorax dull black, with two pairs of golden yellow spots on the humeral calli and the notopleura, with reddish yellow triangular spot on the frontal scutellum. Abdomen elongate, almost parallel-side in the male, non parallel-side and broader than the thorax in the female.

**Collection:** Hyangrobong, Koseong-Kun Kangwon-Do, 16/VI, 1968, 1♂ 1♀, by J.I. Kim

**Distribtuion:** Korea, Japan

#### Genus *Blera* Billberg

Enum. Ins. Mus. Gust. Joh. Billberg, p. 118, 1820

*Cynorrhina* Williston, Bull. U.S. Nat. Mus., XXXI: 209, 1886

Medium to small, rather shining group. Frons produced and horizontally flattened above, quite bare; face distinctly hollowed beneath the antenna, convexed lower part and descending below the eyes, with a weak central knob. Eyes bare, touching for some distance. Antenna short, 3rd segment approximately suborbicular. Thorax and Abdomend clothed with pubescence densely. Abdomen with yellow marking sometimes. Legs simple. Wings with subapical cell petiolated or non-petiolated, discal cross-vein slopped to the median discal cell.

#### *Blera japonica* (Shiraki)

Mem. Fac. Sci. & Taihoku Imp. Univ., I: 60, fig.18, ♀, 1930 (*Cynorrhina*)

Mushi, XXIII(1): 4, fig. 3, ♂, 1952 (*Cynorrhina*)

Medium size by the body length of 14 mm, shining black species with 3 pairs of yellow spots on the shining cupreous black abdomen.

**Description:** Head of the female broader weakly than the thorax, twice as wide as long; frons shining black, clothed with black pubescence except for the whitish eye margins and the frontal process which have a fine longitudinal furrow. Abdomen of the female distinctly broader than the thorax, with 3 pairs reddish yellow basal spots transversal on the tergites, 5th tergite small with similar basal spots which connected narrowly in the middle; genitalia black with slender blackish cerci.

**Collection:** Kwangreung, Pocheon-Kun, Kyunggi-Do, 28/V, 1972, 1♀, by S. E. Ann

**Distribution:** Korea, Japan

#### Merodontinae

Genus *Mesembrius* Rondani

Dipt. Ital. Prodrome, II: 50, 1857

Medium size, *Helophilus* like flies, but the eyes of the male are touching for a small point and with a patch of globuliferous hairs under the base or greater part of the under

side of hind metatarsi. Face concave above; mesonotum with yellowish or greyish tomentosed strips; abdomen with yellowish markings or not.

***Mesembrius flavipes*** (Matsumura)

Thous. Ins. Jap., II: 104, pl.XXVI, fig. 14, 1905 (*Helophilus*)

*Helophilus flavipes* var. *akakurensis* Mats., Thous. Ins. Jap. Add. II: 246,  
pl.XVII, fig. 22, 1916

Medium size by 10-14 mm and with 2 pairs large yellow spots on the tergite, but our specimen has the body length of 11 mm and yellowish tergite with some median black spots by the enlarged yellowish patterns.

**Description:** Head broader than the thorax; frons produced by the wide nearly as long as, covered with yellowish white tomentum and with whitish pubescence except for yellowish lunula; vertex triangle about 1/6 as wide as the head, twice as long as wide, covered with yellowish white tomentum at apical half and black at hind half; face parallel-sided, hardly concave beneath the antenna, with whitish tomentum and pubescence; brownish epistoma and cheeks. Eyes bare, touching for a small point. Antenna yellowish, but our specimen with black 3rd segment. Mesonotum deep black with 2 pairs yellowish white strips, with yellowish white pubescence on the disc. Abdomen shorter than the head and thorax together, weakly broader than the thorax at 2nd segment and narrowed to hindward, black color remained only in the middle part. Legs black with yellowish tibia and tarsi of the front and middle; hind femora thickend.

**Collection:** Juan, Incheon city, Kyunggi-Do, 6/VI, 1967, 1♂, by J.I. Kim

**Distribution:** Korea, Japan

***Mesembrius nigra*** Shiraki

Faun. Jap., Syrph., III: 225, fig. 43. 83. 84. 109, 1968

10-11 mm, very characteristic species in this genus by the black abdomen without yellow patterns. Male unknown.

**Description:** Head weakly broader than the thorax; frons produced weakly, broadened forwards, with side-margins slightly concaved, black, greyish white tomentum at the half of the lateral front and greyish pubescence at the hind half; face broadened below and weakly concave beneath the antenna, with whitish tomentum and pale pubescence; yellowish epistoma; dull black cheeks. Eyes bare. Antenna black with brownish 3rd segment. Mesonotum black, with two pairs of greyish dusted longitudinal strips, pale yellow pubescence on the disc; scutellum shining blackish brown, more yellowish at the hind margin. Abdomen nearly as long as the head and thorax together, all black, with shining ashy black in each tergite. Legs black with yellowish parts of the tibia and some tarsi, hind femora moderate thickened.

**Collection:** Mt. Cheonma-san, Namyangju-Kun, Kyunggi-Do, 23/IX, 1973, 1♀, by J.I.

Kim

**Distribution:** Korea, Japan

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