

## Three New Species of Leafhoppers (Cicadellidae; Homoptera) from Korea

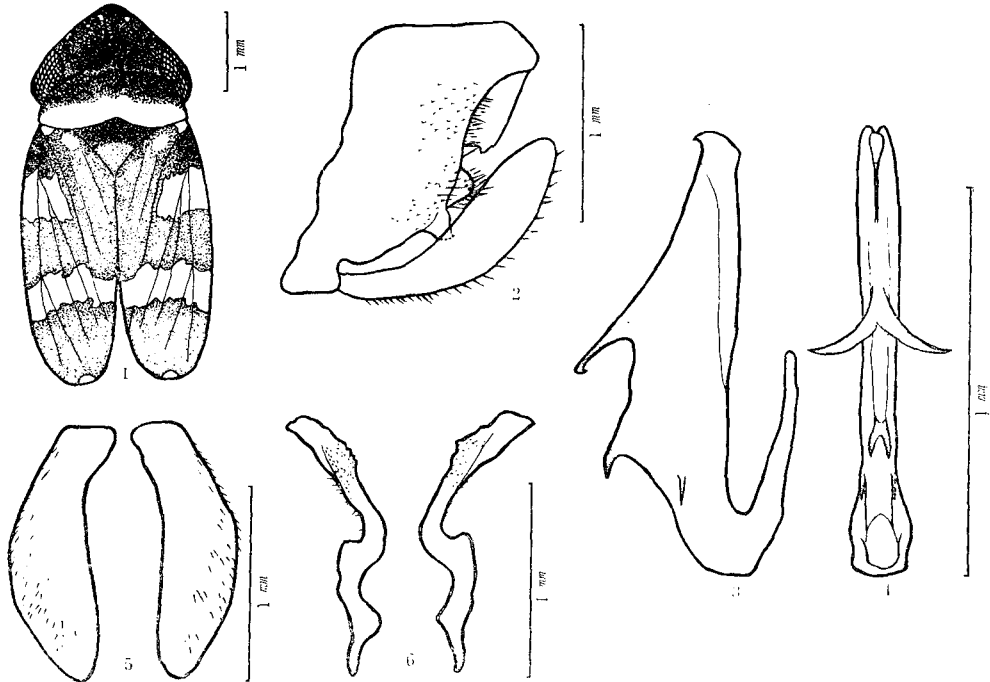
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매미충類 新種 3種에 關하여

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### Abstract

The paper contains descriptions of three new species from Korea: *Planaphrodes bella* sp. n., *Xestocephalus cognatus* sp. n. and *Watanabella graminea* sp. n. Figures of external characters and male genitalia are given for all species.



**Figs. 1~6.** *Planaphrodes bella* sp. n.: 1-Body in dorsal aspect, male; 2-Male genital segments in lateral aspect; 3-Aedeagus in lateral aspect; 4-Aedeagus in caudal aspect; 5-Genital plates in ventral aspect; 6-Genital styli in dorsal aspect.

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***Planaphrodes bella* sp. nov.**

General body length of male is 3.8mm.

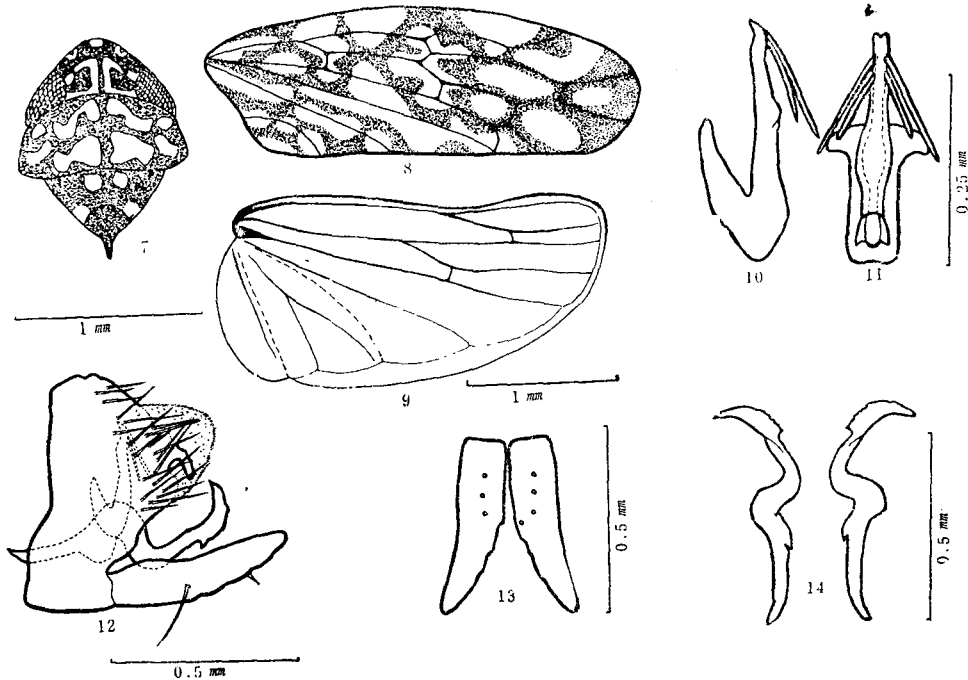
Male. General color brown to dark brown. Face light yellowish brown, darker towards upper margin. Vertex dark with four yellowish spots on anterior margin. Pronotum dark on anterior half, whitish yellow on posterior half. Scutellum dark on anterior half, yellowish brown on posterior half. Tegmina brown with whitish yellow spots or band, two small spots at base, large one at one-third from base, transverse band at two-thirds from base, and a small spot at apex. Legs light brown to dark brown, darker towards apex.

Pygofer in lateral aspect about 1.3 times as wide as long, caudal margin with distinct triang-

ular process arising from middle of caudal margin and projecting ventrally, convex process on middle of caudal submargin. Aedeagus in lateral aspect recurved, widest at middle of shaft and narrowing towards apex, with three pairs of processes arising middle of shaft, one-third from base of shaft, and near base of shaft, respectively.

Holotype: ♂, Soheugsan Is., Jeonnam Province, 11. VII. 1974, K.R. Choe leg.

This species, related to *P. nigricans*, can be distinguished by the aedeagus with pared processes at the middle of the shaft projecting outwardly and with paired processes near the base of the shaft.



**Figs. 7~14.** *Xestocephalus cognatus* sp. n.: 7-Head, pronotum and scutellum in dorsal aspect; 8-Fore wing; 9-Hind wing; 10-Aedeagus in lateral aspect; 11-Aedeagus in caudal aspect; 12-Male genital segments in lateral aspect; 13-Genital plates in ventral aspect; 14-Genital styli in dorsal aspect.

***Watanabella graminea* sp. nov.**

General body length of male 3.0~3.3 mm, female 3.4~3.7mm. General color yellowish brown to dark brown with pale brownish markings. Vertex brown except apex' surrounding portion of ocelli, neighbouring portions of eyes, hind margin and medial area except apical area. Head in frontal view entirely light brown. Pronotum and scutellum brown with irregular pale yellowish markings.

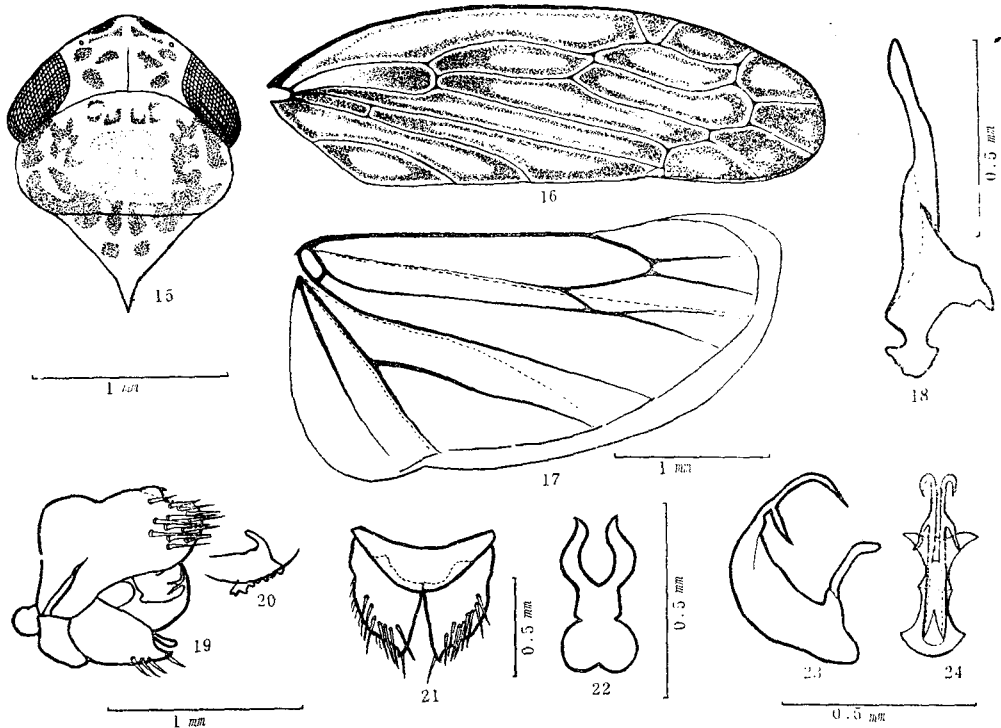
Body beneath mostly brown. Tegmina subhyaline, yellowish brown with irregular fuscous cloudy markings and prominent white on central portions near discal cells, middle portions and tide of claval veins. Legs mostly light brown, darker towards apex.

Head including eyes 2.7 times as wide as the length at the middle of vertex. Frons widest at

the middle, about 1.3 times as long as the largest width. Pronotum about 2 times as wide as long. Scutellum slightly longer than pronotum. Pygofer in lateral aspect about 1.3 times as wide as long, with a hook-like process on each inner side and with spine-like setae on the lateral sides. Aedeagus in lateral aspect long, curved, narrowing towards apex, with two pairs of terminal processes.

Holotype: ♂, Mt. Seolag, Gangweon Province, 5, W. 1974, K.R. Choe leg. Paratypes: 2♂♂ & 40♀♀, the same as the holotype.

Although closely similar to *X. koreanus* kwon, in some respects, the present species may be easily discernible from the latter in the shape of aedeagus.



**Figs. 15~24.** *Watanabella graminea* sp. n.: 15-Head, pronotum and scutellum in dorsal aspect; 16-Fore wing; 17-Hind wing; 18-Genital stylus in dorsal aspect; 19-Male genital sements in lateral aspect; 20-Appendage of pygofer lobe in caudal aspect; 21-Genital valve and plates in ventral aspect; 22-Connective in dorsal aspect; 23-Aedeagus in lateral aspect; 24-Aedeagus in caudal aspect.

***Xestocephalus cognatus* sp. nov.**

General body length of male 4.4~4.6mm., female 4.4~4.8mm. General color brown to dark brown with dark markings. Vertex yellowish brown with dark brown markings. Frons 1.4 times as long as wide. Pronotum medially about 1.5 times as long as vertex with straight posterior margin. Scutellum much shorter than pronotum. Male pygofer in lateral aspect about 1.2 times as long as wide, the upper and under edges being nearly parallel each other and hind margin rounded. Pygofer lobe with a toothed appendage on each inner side. Genital plates with long setae on the lateral sides. Aedeagus in lateral aspect broad

Head including eyes slightly wider than pronotum, smoothly curved anteriorly. Head in the frontal view slightly wider than length. Frons 1.4 times as long as wide. Pronotum medially about 1.5 times as long as vertex with straight posterior margin. Scutellum much shorter than pronotum. Male pygofer in lateral aspect about 1.2 times as long as wide, the upper and under edges being nearly parallel each other and hind margin rounded. Pygofer lobe with a toothed appendage on each inner side. Genital plates with long setae on the lateral sides. Aedeagus in lateral aspect broad

basally, narrowed subapically, curved, with pair of prominent terminal processes, each process with lateral secondary process arising near base. Female seventh sternum in ventral aspect with caudal margin deeply and broadly concave.

Holotype: ♂, Yangyang, Gangweon Province, 17. X. 1974, K.R. Choe leg. Paratypes: 15♂♂ & 11♀♀, the same as the holotype.

Similar to *W. montivaga* Baker with respect to the structure of the genitalia, but well distinguished by the shape of aedeagus with secondary terminal process.

### 摘 要

1974년에 國內에서 採集한 매미충을 分類同定하여 新種 *Planaphrodes bella* sp. n. (섬흑곰매미충 : 新稱) *Xestocephalus cognatus* sp. n. (설악벌매미충 : 新稱) *Watanabella graminea* sp. n. (풀꼬리매미충 : 新稱) 의 3種을 記載報告한다.

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