

Classification of the leafhopper genus *Oncopsis* Burmeister belonging to the tribe Macropsini from Korea (Homoptera: Cicadellidae)

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Abstract

In the previous report presented in the spring conference of ESK (2022), the authors rectified all the erroneous records and arranged 3 species of the genus *Oncopsis* Burmeister, 1838 to be listed in Korean inventory of Cicadellidae. During the continuous taxonomic survey on the leafhopper in Korean peninsula, the authors have found the further 6 unknown species new to science. Thus, a total of 9 species of the genus *Oncopsis* are known to be occurred in Korea. Descriptions and illustrations of morphological features of these new taxa, and the key to Korean species of the present genus are provided respectively.

Key words: Auchenorrhyncha, leafhopper, Macropsini, taxonomy, Korea, new species.

Introduction

Previously seven species of Macropsini have been recorded from Korea based on morphological studies and these species are separated into four genera: *Macropsidius*; *Macropsis*; *Pediopsis*; *Pediopsoides* (National Institute of Biological Resources, 2019). However, study of specimens of the Macropsini group in the insect collection of Kyungpook National University, Korea, not only revealed that some previously recorded species were based on misidentifications but also that the Korean fauna includes at least three new record species.

The constituent species of the genus *Oncopsis* distributed throughout the Korean fauna should be revised with sound reliable taxonomic methods. However, this task requires clarifying the taxonomic status of a number of questionable forms at the species level from morphologically indistinguishable cryptic species or species complexes.

The previous record on the *Oncopsis* (*Oncopsis*) *juglans* (Matsumura, 1912) listed in the National List of Species of Korea (2014) was an error due to numerous misidentifications for *Pediopsoides* (*Syspocnis*) *kogotensis* (Matsumura, 1912) as rectified by Li *et al.* (2019). Consequently, this erroneous record of the genus *Oncopsis* Burmeister, 1838 should be removed from Korean fauna, and has remained as unknown status in reality.

Thus, a total of 12 species of the tribe Macropsini have been recorded from Korea based on morphological studies, and these species are separated into four genera: *Macropsidius*, *Macropsis*, *Pediopsis*, and *Pediopsoides*, excluding *Oncopsis* (Kwon & Huh, 2001).

In the course of taxonomic survey on the leafhopper in Korean peninsula, the authors have found the fifth genus *Oncopsis* Burmeister at last, along with three species, *Oncopsis alni* (Schrank, 1801), *O. latusoid* Yang et Zhang 2015, and *O. ochotensis* Anufriev, 1967 to be added to the inventory of Korean Homoptera.

Redescriptions and illustrations of morphological features of the newly recorded taxa, and keys to the Korean genera of the tribe Macropsini are provided respectively.

Systematics

Checklist of species of genus *Oncopsis* Burmeister from Korea

Family Cicadellidae

Subfamily Macropsinae Evans, 1935

Genus *Oncopsis* Burmeister, 1838

1. *Oncopsis alni* (Schrank, 1801)
2. *Oncopsis latusoid* Yang et Zhang 2015
3. *Oncopsis ochotensis* Anufriev, 1967
4. *Oncopsis* sp. n. 1 sp. nov.
5. *Oncopsis* sp. n. 2 sp. nov.
6. *Oncopsis* sp. n. 3 sp. nov.
7. *Oncopsis* sp. n. 4 sp. nov.
8. *Oncopsis* sp. n. 5 sp. nov.
9. *Oncopsis* sp. n. 6 sp. nov.

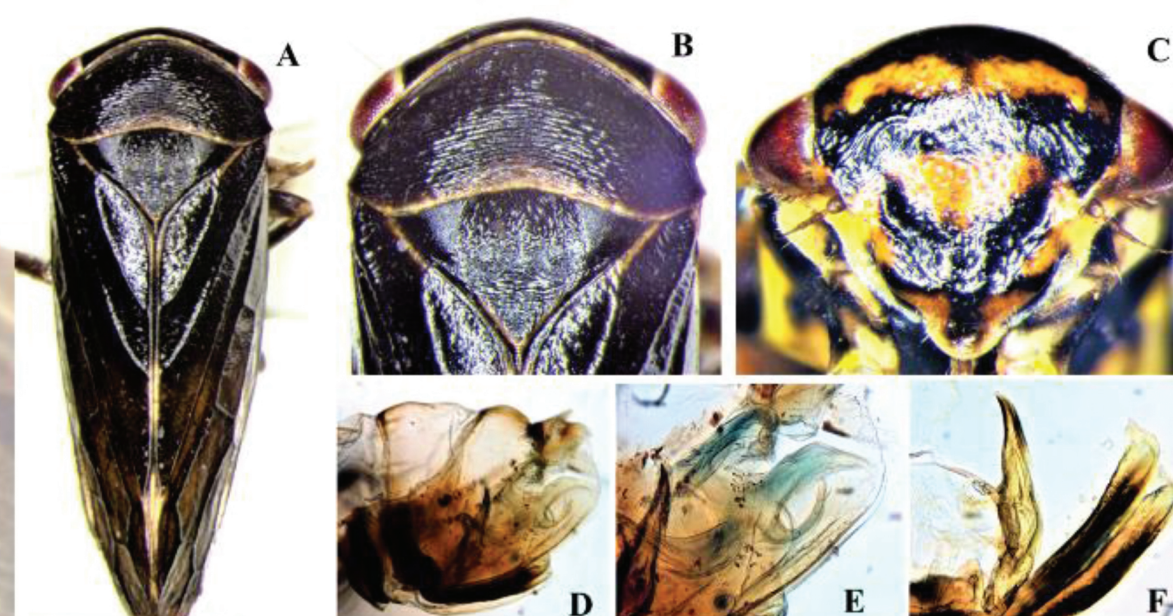


Fig. 1. *Oncopsis* sp.n.1. A: adult, B: head, C: face, D: male genitalia in lateral view, E: style, F: pygofer and aedeagus.

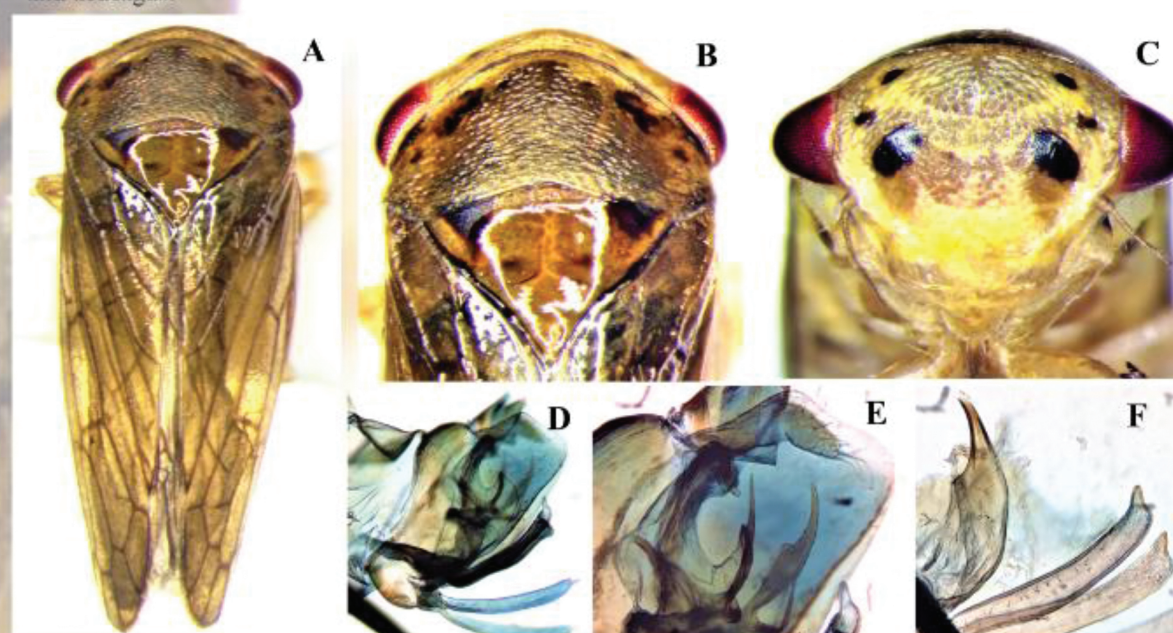


Fig. 2. *Oncopsis* sp.n.2. A: adult, B: head, C: face, D: male genitalia in lateral view, E: pygofer, F: aedeagus and style.

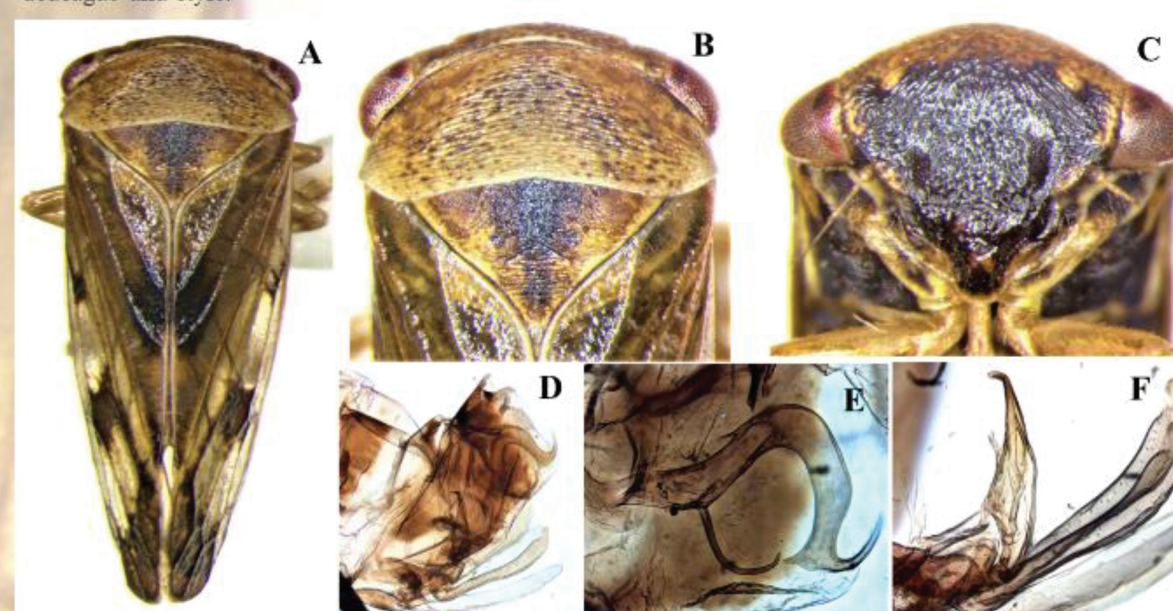


Fig. 3. *Oncopsis* sp.n.3. A: adult, B: head, C: face, D: male genitalia in lateral view, E: style, F: pygofer and aedeagus.

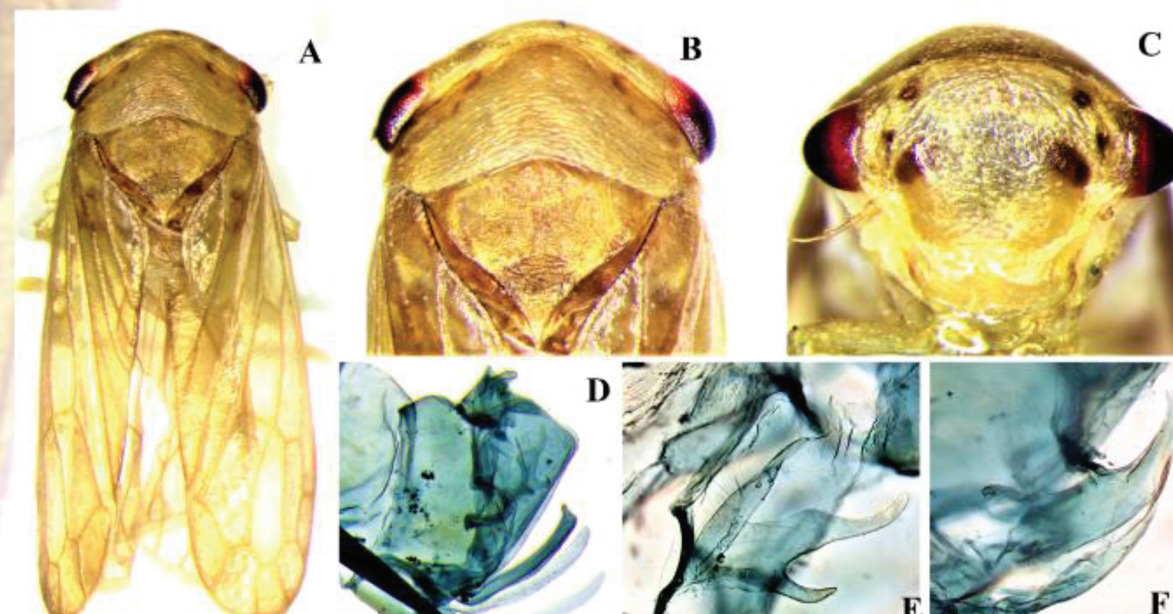


Fig. 4. *Oncopsis* sp.n.4. A: adult, B: head, C: face, D: male genitalia in lateral view, E: style, F: aedeagus.

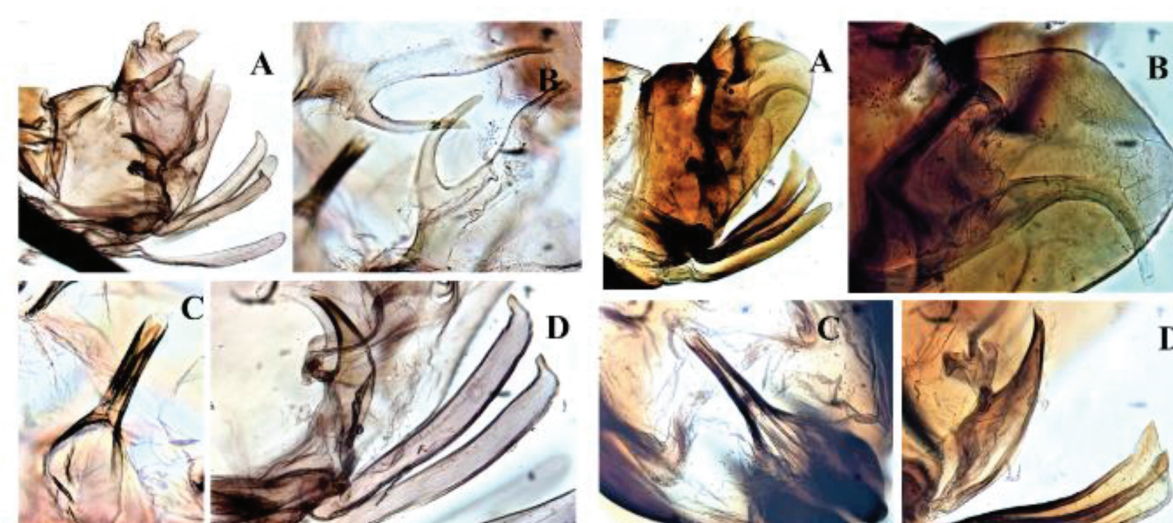


Fig. 5. *Oncopsis* sp.n.5. A: male genitalia in lateral view, B: style, C, D: aedeagus.

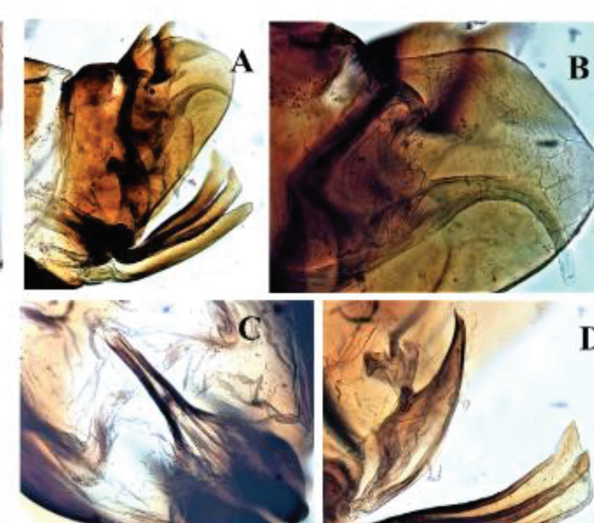


Fig. 6. *Oncopsis* sp.n.6. A: male genitalia in lateral view, B: style, C, D: aedeagus.