

Classification of the microleafhopper genus *Alebroides* Matsumura from Korea (Homoptera: Cicadellidae: Typhlocybinae)

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Abstract

The microleafhopper genus *Alebroides* Matsumura, 1931, in the tribe Empoascini Distant, 1908, from Korea is revised herein. So far, 4 species belonging to this genus have been known to be occurred in Korean peninsula, since Hossain's Ph.D. thesis (2018). In the course of the continuous survey on the taxonomy of typhlocybina leafhoppers from Korea, the authors have found further 2 species new to science: *Alebroides insularis* sp. nov. and *A. yokjidoensis* sp. nov. Thus, all together 6 constituent species of the genus *Alebroides* are included in the inventory of Korean leafhoppers. Descriptions and illustrations of morphological features of the present new taxa and key to the Korean species are provided respectively.

Key words: Hemiptera, Auchenorrhyncha, Typhlocybinae, taxonomy, identification, new genus.

Introduction

The microleafhopper genus *Alebroides* Matsumura, 1931, in the tribe Empoascini Distant, 1908, can be characterized by having the male genitalia with pygofer process elongate ventrally; subgenital plate extending far beyond pygofer, nearly parallel-sided, with apex rounded and slanting upwards; anal tube with a pair of basal processes.

Hitherto, all together 4 species belonging to this genus have been known to be occurred in Korean peninsula by Hossain, one of the author, in his Ph.D. thesis (2018).

In the course of the continuous survey on the taxonomy of typhlocybina leafhoppers from Korea, the authors have found further 2 species new to science: *Alebroides insularis* sp. nov. and *A. yokjidoensis* sp. nov. Thus, a total of 6 constituent species of the genus *Alebroides* are included in the inventory of Korean leafhoppers. Descriptions and illustrations of morphological features of the present new taxa and key to the Korean species are provided respectively.

Systematics

Genus *Alebroides* Matsumura, 1931

Alebroides Matsumura, 1931, Ins. Mats. 6(2): 68.

Type species: *Alebroides marginatus* Matsumura, 1931.

Type locality: Japan.

Diagnosis: Head at most as wide as pronotum, with vertex roundly produced apically. Pronotum about twice as long as vertex mesally. Forewing with stalked 3rd apical cell, sometimes stalk very short. Hindwing with forked Cu1, branched vein CuA with branching point at or basad of coalescence of CuA with MP, nearly parallel-sided, with rounded ends, and somewhat slanting upwards. Male genitalia with pygofer process elongate ventrally; subgenital plate extending far beyond pygofer, nearly parallel-sided, with apex rounded and slanting upwards; anal tube with a pair of basal processes.

Key to species of the genus *Alebroides* species from Korea

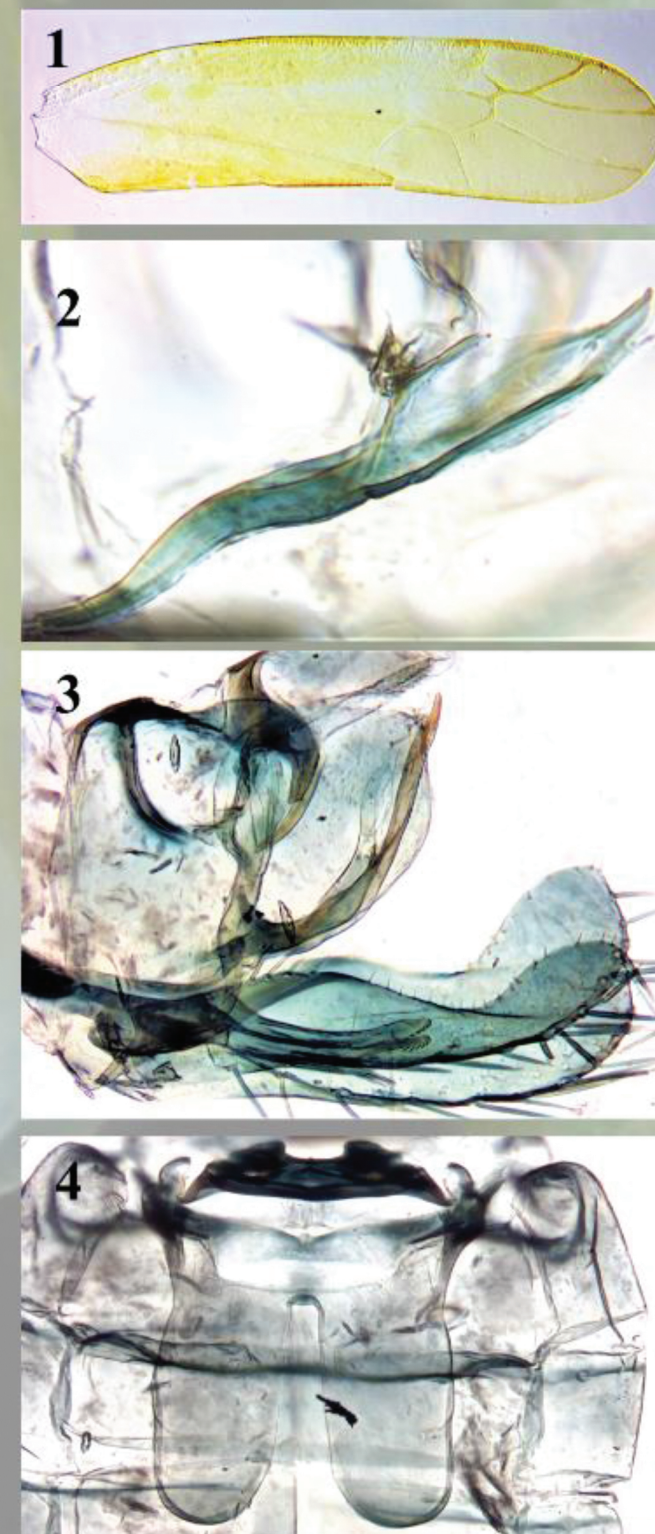
1. Anal tube with basal processe narrow tubular, rounded apically *A. akashianus*
– Anal tube with basal process tapered apically. 2.
2. Anal tube with basal process hook-shaped, bent forward and pointed apically 3.
– Anal tube with basal process bifurcated apically 4.
3. Anal tube with basal process rather stout, gently narrowed apically *A. insularis* sp. nov.
– Anal tube with basal process abruptly narrowed and slender from middle portion to apex . . . 5.
4. Ventral process of pygofer slender, rather straight distally, reaching upper corner of apical margin in lateral view. *A. salicis*
– Ventral process of pygofer crescent sword-like, gently curved distally, reaching middle of apical margin in lateral view *A. yokjidoensis* sp. nov.
5. Ventral process of pygofer bearing a row of latero-ventral teeth on caudal half *A. marginatus*
– Ventral process of pygofer lacking latero-ventral teeth on caudal half *A. flavifrons*

Checklist of the species from Korea

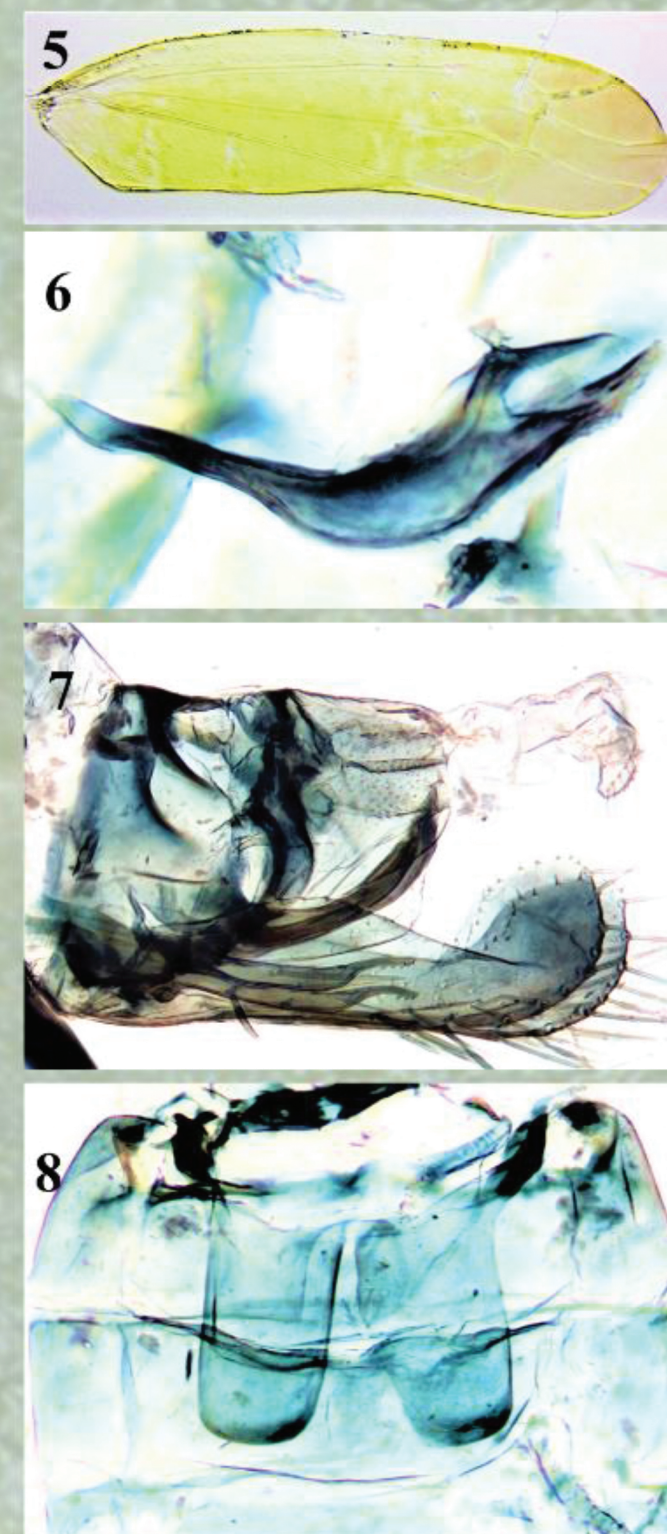
1. *Alebroides akashianus* Matsumura, 1931
Distribution: Korea (Jejudo), Japan (Honshu).
2. *Alebroides flavifrons* Matsumura, 1931
Distribution: Korea (South), China (Guangdong, Hunan, Guizhou, Zhejiang), Japan (Honshu, Kyushu), Taiwan.
3. *Alebroides marginatus* Matsumura, 1931
Distribution: Korea (Central, South, Jejudo), China (Hong Kong), Japan (Honshu, Kyushu), Taiwan.
4. *Alebroides salicis* (Vilbaste, 1968)
Distribution: Korea (whole), China (Hunan, Guizhou, Shaanxi, Sichuan), Russia (Maritime Territory), Taiwan.
5. *Alebroides insularis* sp. nov.
Distribution: Korea (new record: South).
6. *Alebroides yokjidoensis* sp. nov.
Distribution: Korea (new record: South).

References

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Figs. 1-4. *Alebroides insularis* sp. nov. 1: forewing, 2: male pygofer in lateral view, 3: aedeagus in lateral view, 4: male abdominal apodeme.



Figs. 5-8. *Alebroides yokjidoensis* sp. nov. 5: forewing, 6: male pygofer in lateral view, 7: aedeagus in lateral view, 8: male abdominal apodeme.