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Two new species of the genus *Arboridia* Zachvatkin (Hemiptera: Auchenorrhyncha: Cicadellidae: Typhlocybinae) from Korea

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Abstract

Two new species of the genus *Arboridia* Zachvatkin, *A. koreana* sp. nov., *A. septempunctata* sp. nov., are described from Korea. Photographs of dorsal habitus, illustrations of male genitalia, abdomens and forewings, and biological information such as host plants and distributional records and a key to the Korean *Arboridia* species are provided.

Key words: Hemiptera, Cicadellidae, Typhlocybinae, *Arboridia*, new species

Introduction

The leafhopper genus *Arboridia* Zachvatkin, 1946 belongs to the tribe Erythroneurini of subfamily Typhlocybinae (Hemiptera: Auchenorrhyncha: Cicadellidae). Several members of the genus *Arboridia* are known as grape pests in various Eurasian countries including Korea, and some of them are also known as pests on cherry, hawthorn, pear, peach, apple, mulberry, maple, woodbine, dogwood, and several other plants (Song & Li, 2013). A total of 69 valid species have been described in the Palearctic and Oriental region (Song & Li, 2013). So far, seven species of this genus have been recorded in the Korean Peninsula (Kwon & Huh, 2001).

In this study, two new species of *Arboridia* are described and illustrated from Korea, and a key to the Korean *Arboridia* species is also provided.

The materials used in this study are stored in the Laboratory of Systematic Entomology, Chungnam National University (CNU), Daejeon, Korea. Morphological terminology follows Dietrich (2005). The genitalia segment was detached from abdomen and macerated in 10% KOH for about 60min. in 70° for dissection to examine male genitalia.

Genus *Arboridia* Zachvatkin, 1946

Arboridia Zachvatkin, 1946: 153 (Type species: *Typhlocyba parvula* Boheman, 1845)

Khoduma Dworakowska, 1972: 403 (Type species: *Khoduma jacobii* Dworakowska, 1972)

Diagnosis. Vertex with one or two pair of dark spots. Pronotum without conspicuous pits. Abdominal apodemes small and pygofer lobes without macrosetae. Subgenital plates with group of macrosetae at middle of outer margin. Style apex with 3 points.

Key to the *Arboridia* species of the Korean Peninsula

1. Forewings with white round markings. Pronotum anterior margin with one black anterior spot 2
- Forewings without white round markings. Pronotum anterior margin without black spot 5

Type materials. Holotype: [CNU] 1♂, Korea, Suwon, 23.x.1974, coll. T.Okada. Paratypes: 1♂, 2♀♀, same data as holotype.; [CNU] 2♀♀, Korea, Suwon, 15.v.1979. coll. K.R.Choe.

Host plants. *Vitis* sp. (Vitales: Vitaceae)

Distributions. Korea (Suwon)

Remarks. This species is similar to *Arboridia maculifrons* (Vilbaste, 1968), but differs in forewing pattern and the black spot above the antennal pit.

Etymology. The specific name is derived from the characteristic 7 prominent spots on the head, pronotum and mesonotum.

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