

# Classification of the jumping plant-louse genus *Acizzia* Haslop-Harrison belonging to the subfamily Acizziinae from Korea (Homoptera: Psylloidea)

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## Abstract

The constituent members of the genus *Acizzia* Heslop-Harrison, 1961 can be characterized apparently by having the subtriangular posterior lobe of proctiger in male genitalia. So far, 3 species belonging to this genus have been known in Korean fauna: *Acizzia jamatonica* (Kuwayama, 1908), *A. moiwasana* (Kuwayama, 1908) and *A. sasakii* (Miyatake, 1963). As the continuous taxonomic survey on the jumping plant-lice in Korean peninsula since the recent completion of the monograph on the Korean Psylloidea (Kwon & Kwon, 2020), the authors have found a further new species from highlands in Central Korea: *Acizzia gangwona* sp. nov. Thus, all together 4 species of this genus are listed in the inventory of Korean Homoptera. Description and illustration of morphological features of the new species and key to the Korean species of the genus are provided respectively.

**Key words:** Hemiptera, Sternorrhyncha, Psyllidae, taxonomy, identification, new species.

## Introduction

The taxonomic concept of the jumping plant-lice genus *Acizzia* Heslop-Harrison, 1961 has been obscurely defined, in spite of the erection of the genus *Neoacizzia* by Li (2011) who splitted it from the former taxon, based on the type species: *Psylla sasakii* Miyatake, 1963.

Subsequently, Burckhardt and Ouvrard (2012) treated the latter genus as a junior synonym of the former without stating any justification.

Provisionally, the genus *Acizzia* can be characterized apparently by having the subtriangular posterior lobe of proctiger in male genitalia; forewing with surface spinules very minute and dense, completely covering membranes; curvature of vein M running continuously with M3+4.

So far, 3 species belonging to this genus have been known in Korean fauna: *Acizzia jamatonica* (Kuwayama, 1908), *A. moiwasana* (Kuwayama, 1908) and *A. sasakii* (Miyatake, 1963).

As the continuous taxonomic survey on the jumping plant-lice in Korean peninsula since the recent completion of the monograph on the Korean Psylloidea (Kwon & Kwon, 2020), the authors have found a further new species from highlands in Central Korea: *Acizzia gangwona* sp. nov. Thus, all together 4 species of this genus are listed in the inventory of Korean Homoptera.

Description and illustration of morphological features of the new species and key to the Korean species of the genus are provided respectively.

## Systematics

Family PSYLLIDAE Latreille, 1807

Subfamily ACIZZIINAE White et Hodkinson, 1961

Genus *Acizzia* Heslop-Harrison, 1961

### Key to species of the genus *Acizzia* from Korea

1. Genal cone rudimental. Frons clearly visible as a small sclerite, bearing median ocellus prominent at apex. Antenna about twice as long as width of head including eyes ---- *A. sasakii*
- . Genal cone prominent, broad at base, contiguous, or slightly divergent apically. Frons rudimentary, almost entirely occupied by median ocellus. Antenna distinctly shorter than 1.5 times as long as width of head including eyes ----- 2.
2. Male proctiger apparently longer than paramere or distal segment of aedeagus, with basal half subtriangularly produced posteriorly. Female proctiger short subtriangular; anus more than half as long as remainder of proctiger ----- *A. jamatonica*

- . Male proctiger short and stout, about as long as paramere, apparently shorter than distal segment of aedeagus, with lateral side subtriangularly produced posteriorly. Female proctiger subtriangularly elongate, narrowly produced apically; anus about half as long as remainder of proctiger ----- 3.
3. Body and forewing tinted with orange brown markings. Forewing with apical margin gently rounded. Paramere curved at distal 1/3 anteriorly in lateral view ----- *A. moiwasana*
- . Body and forewing tinted with dark brown markings. Forewing with apical margin obliquely rounded before middle. Paramere curved at middle anteriorly in lateral view ----- *A. gangwona* sp. nov.

### Checklist of species of the genus *Acizzia* from Korea

#### 1. *Acizzia gangwona* sp. nov.

Diagnosis: Body and forewing tinted with dark brown markings. Forewing with apical margin obliquely rounded before middle. Distal segment of aedeagus with apex roundly terminated. Paramere curved at middle anteriorly in lateral view.

Distribution: Korea (new record: Central).

#### 2. *Acizzia jamatonica* (Kuwayama, 1908)

Distribution: Korea (whole), Japan (Hokkaido, Honshu, Kyushu, Shikoku, Tsushima), China (Anhui, Beijing, Gansu, Guizhou, Hebei, Henan, Jiangsu, Shandong, Shaanxi, Shanxi, Sichuan, Yunnan), Europe (introduced), USA (introduced).

#### 3. *Acizzia moiwasana* (Kuwayama, 1908)

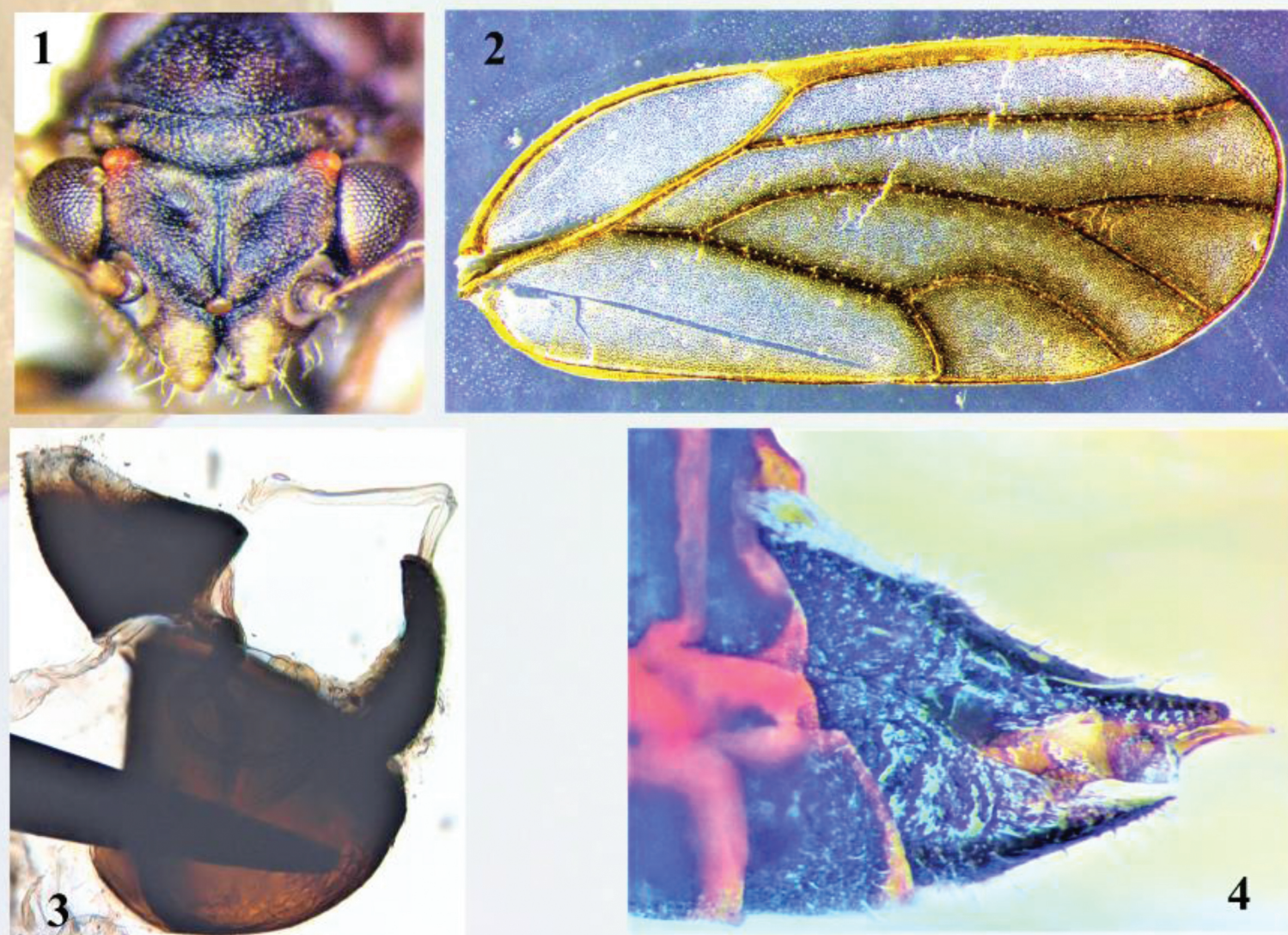
Distribution: Korea (Central, South), Japan (Hokkaido, Honshu, Kyushu, Shikoku).

#### 4. *Acizzia sasakii* (Miyatake, 1963)

Distribution: Korea (whole), Japan (Honshu, Shikoku, Tsushima), China (Beijing, Guizhou, Hebei, Henan, Jiangsu, Shandong, Shaanxi, Shanxi, Sichuan).

## References

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Figs. 1-4. *Acizzia gangwona* sp. nov. 1: head in anterior view, 2: forewing with spinulation, 3: male genitalia in lateral view, 4: female genitalia in lateral view.