

Short Paper

First record of *Acizzia jamatonica* (Kuwayama) (Hemiptera: Psyllidae: Acizziinae) in IranShahab Manzari^{1*} and Ahad Sahragard²

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Abstract: The East Asian psyllid, *Acizzia jamatonica* (Kuwayama, 1908) (Hemiptera: Psyllidae) is newly reported from Iran. This is also considered as the first record of the genus *Acizzia* Heslop-Harrison and the subfamily Acizziinae for the country. The psyllid was collected from Persian silk tree, *Albizia julibrissin* Durazzini (Fabaceae), in Rasht, Guilan province, in July 2013. A brief taxonomic diagnosis is provided to facilitate its recognition.

Keywords: *Acizzia jamatonica*, Psyllidae, Acizziinae, Iran, *Albizia julibrissin*

Introduction

The Persian silk tree, also known as mimosa or silky acacia, *Albizia julibrissin* Durazzini, is a woody ornamental plant belonging to the family Fabaceae (Leguminosae). It is thought to be native to subtropical and temperate regions of Asia, occurring from Iran to Japan (Sabeti, 1966; Godt and Hamrick, 1997; Rico Arce *et al.*, 2008). The tree was introduced from Asia to Europe and then from Europe to North America in the mid-eighteenth century (Cothran, 2004). It has been widely planted for landscaping purposes due to its graceful flowers and umbrella-like canopy (Pásztor *et al.*, 2010). In Iran, *A. julibrissin* is distributed in northern plain forests (the coast along the Caspian Sea and the northern slopes of the Alborz mountains) (Sabeti, 1966; Karimi, 2002).

Materials and Methods

In July 2013, *A. julibrissin* trees were found to be infested by a psyllid species feeding on the lower surface of the leaves in high numbers. The collected specimens were identified by the first author as *Acizzia jamatonica* (Kuwayama, 1908) (Hem.: Psyllidae: Acizziinae). This species is reported for the first time in Iran. Furthermore, this is the first record of the genus *Acizzia* Heslop-Harrison and the subfamily Acizziinae for the country. Voucher specimens have been deposited in the Hayk Mirzayans Insect Museum, Iranian Research Institute of Plant Protection, P. O. Box: 1454, Tehran 19395, Iran.

Results***Acizzia jamatonica* (Kuwayama, 1908) (Fig. 1A-B)**

Material examined—Iran: Guilan province, Rasht, Golsar, -12 m., 7.vii.2013, 37° 18' 47.34" N, 49° 34' 34.89" E, 42♀♀, 45♂♂, leg. A. Sahragard, on *Albizia julibrissin* (Fabaceae).

Diagnosis—The genus *Acizzia* includes more than 60 species (Ouvrard, 2014) and is characterized by the male proctiger bearing a

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conspicuous basal lobe posteriorly and genal cones being shorter than half vertex length along the midline. A detailed morphological description of adults, both male and female, and all the five instar larvae of *A. jamatonica* was presented by Yang (1984) in the description of *Arytaina albizziae* Yang, a synonym of *A. jamatonica*. It can be recognized from other *Acizzia* species by the following combination of characters: forewings nearly uniformly pale lacking a darker pattern but with only small and faint dark spots at the apical margins of cells r_2 , m_1 , m_2 , and cu_1 ; proctiger in male genitalia elongate, apical part narrow and obliquely truncate at apex, basal posterior lobe large and broadly triangular; parameres, in lateral view, with nearly parallel margins, slightly turned posteriorly at the apex, about as long as proctiger; distal segment of aedeagus widened apically.



Figure 1 *Acizzia jamatonica*: A) male, dorsal habitus, B) male, lateral habitus.

Discussion

The psyllid *A. jamatonica*, which is native to East Asia, was described from Japan as *Psylla*

jamatonica by Kuwayama (1908) and only known from this country until the 1980's, when it was reported from Korea (Kwon, 1983) and Taiwan (Yang, 1984). During the last decade, *A. jamatonica* has rapidly increased its geographical distribution and currently established in Europe, including Italy, Slovenia, Croatia, Switzerland, France, Hungary, Spain, Bulgaria (Vétek and Rédei, 2009), Greece (Pásztor *et al.*, 2010), Serbia, England, Slovakia (Lauterer *et al.*, 2011) and Montenegro (Malumphy *et al.*, 2013), and North America, including USA (Ulyshen and Miller, 2007; Wheeler and Hoebeke, 2009). Like some other members of the genus *Acizzia*, the psyllid is thought to be monophagous feeding exclusively on *A. julibrissin* (Wheeler and Hoebeke, 2009; Ouvrard, 2014).

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اولین گزارش *Acizzia jamatonica* (Kuwayama) (Hemiptera: Psyllidae: Acizziinae) از ایران

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چکیده: پسیل (*Acizzia jamatonica* (Kuwayama, 1908) (Hem.: Psyllidae) برای اولین بار از ایران گزارش می‌شود. همچنین، این اولین گزارش جنس *Acizzia* Heslop-Harrison و زیرخانواده *Acizziinae* از ایران محسوب می‌شود. این پسیل از روی درخت ابریشم ایرانی، *Albizia julibrissin* (Fabaceae)، از استان گیلان، رشت، در تیر ماه ۱۳۹۲ جمع‌آوری شد. خصوصیات تشخیصی برای شناسایی این گونه ارائه شده است.

واژگان کلیدی: *Acizzia jamatonica*, Psyllidae, *Acizziinae*, ایران، *Albizia julibrissin*