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***Miyazakia*, a new aphid genus from Japan (Hemiptera: Aphididae: Macrosiphini)**

ANDREY V. STEKOLSHCHIKOV

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia. E-mail: aphids@zin.ru

Abstract

Miyazakia **gen. nov.** with type species *Miyazakia ranunculi* (Miyazaki, 1971) **comb. nov.** is described. The species is illustrated and biometric data are provided for all morphs, except the fundatrix. This aphid genus is closely related to *Sappaphis* Matsumura, 1919. *M. ranunculi* is a heteroecious species; its primary host is probably *Photinia villosa* (Thunb.) DC and its secondary host is *Ranunculus*.

Key words: *Sappaphis ranunculi*, *Miyazakia ranunculi*, life cycle, heteroecious species, *Ranunculus*, *Photinia*

Introduction

Miyazaki (1971) described a new aphid species, *Sappaphis ranunculi*, based on samples collected from *Ranunculus japonicus* Thunb. by Takahashi in 1960 in Osaka Prefecture; 14 apterous viviparous females collected on 2–3 July and 4 alate viviparous females collected on 24 October. Miyazaki placed this species in the genus *Sappaphis*, but wrote: “This is not a typical member of *Sappaphis* on account of the sclerotized tergum and rigid setae of the body.” Sorin collected this species in the same area in 1959 and 1960. Later he deposited part of his aphid collection in the Muséum national d’Histoire naturelle (Paris, France) and part in the Insect Museum of the National Institute of Agro-Environmental Sciences (Tsukuba, Ibaraki, Japan). He also donated some slides to the Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia) (ZIN RAS). Takahashi also donated two slides to the ZIN RAS.

The study of these materials has led to the conclusion that the species described by Miyazaki belongs in a separate, new genus. The life cycle of the species and all the morphs except the fundatrix are described. In tables and text, measurements (in micrometres, μm), counts of setae and rhinaria, and ratios are presented as ranges, with arithmetic means in brackets; if the arithmetic mean differs significantly between samples then the range is given in brackets, for example 178–275 (212–250). The apterous viviparous female is described in greatest detail. For the other morphs, the differences from the latter are pointed out.

***Miyazakia* gen. nov.**

Type species: *Sappaphis ranunculi* Miyazaki, 1971 = *Miyazakia ranunculi* (Miyazaki, 1971), **comb. nov.**

Description. Body of apterous morphs elliptical or broadly elliptical, of alate morphs elliptical, elongate elliptical or elongate oval. Dorsum of apterous exules strongly sclerotized, with bands and spots fused to form a solid shield covering most of the dorsum; abdomen of other morphs with more or less clearly marked dorsal bands, sometimes fragmented on some tergites into rows of partially interconnected, partially free sclerites, and marginal maculae on all segments. Surface of head and dorsal side of body smooth, sometimes with sparse, rare, large pointed spinules, or slightly wrinkled with short rows of sparse spinules on abdominal tergites VI and VII, which on tergite VIII become more numerous and partially fused to form scales; only occasionally the surface is finely reticulate on marginal macula and around spiracles of apterous exules (contours of cells formed by thin, irregular line); surface of ventral side of abdomen with long rows of small pointed spinules sometimes forming strongly stretched cells.

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