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***Rhodochlanis suaedicola* sp. nov. (Hemiptera: Sternorrhyncha: Psylloidea: Aphalaridae) associated with *Suaeda japonica* (Amaranthaceae) from Korea**

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Abstract

A new psyllid species, *Rhodochlanis suaedicola* sp. nov., is described and illustrated from Korea based on adults and fifth instar immatures. *Rhodochlanis* is reported for the first time from Korea. The new species is associated with *Suaeda japonica* (Amaranthaceae) growing in saline habitats. Salt marshes in Korea are threatened by sea side developments. It is suggested that these habitats should be protected to ensure the survival of *R. suaedicola*.

Key words: psyllids, Aphalarinae, new species, host plant, taxonomy, conservation

Introduction

Psyllids or jumping plant-lice are small phloem-sucking insects. Around 4,000 species are described worldwide (Li 2011; Burckhardt & Ouvrard 2012). They are generally highly host specific on dicots, and related psyllid species often develop on related host taxa (Burckhardt 2005). They show their greatest diversity in the tropical and south temperate zones (Hollis 2004).

Rhodochlanis was described by Loginova (1964), based on the type species *R. halimocnemis* (Becker, 1864) from South European Russia which is associated with *Halimocnemis* spp. (Amaranthaceae). *Rhodochlanis*, including its synonym *Rhombaphalara* Loginova (Burckhardt & Queiroz 2013), currently contains 14 described species restricted to the Palaearctic region (Li 2011, Ouvrard 2015). As far as known, species develop on Amaranthaceae. Ephedraceae as host of *Rhodochlanis ephedrae* Li as reported by Li (2011) is very unlikely as no immatures have been found.

Recently we found a *Rhodochlanis* species on *Suaeda japonica* (Amaranthaceae), growing in the supralittoral zone of tidal mudflats in Korea, which turned out to be undescribed. *Suaeda*, also called seepweed or seablite, thrives in saline habitats. According to Lee *et al.* (2007) over 100 *Suaeda* species are described worldwide and mostly found in salt marshes and interior deserts. In Korea, six *Suaeda* species are recorded in restricted areas along the southwestern coast (Shim 2001). *Suaeda japonica* is a halophyte that grows on the shores of the South Western Sea in Korea.

In this paper, we describe the new *Rhodochlanis* species developing on *Suaeda japonica* based on adults and fifth instar immatures together with biological notes.

Material and methods

The specimens treated in this paper were collected by sweeping and direct searching on *Suaeda japonica* by Geonho Cho. Most specimens are preserved in 95% ethanol, some adults are dry mounted and some adults and immatures are slide mounted. They are deposited in the College of Agriculture and Life Science, Seoul National University, Seoul, Korea (SNU), and the Naturhistorisches Museum Basel, Switzerland (NHMB).