

Peculiar, diverse and dangerous to crops: A checklist of the scale insects of Iran

October 2 2013



This image shows the scale insect *Rhizopulvinaria artemisiae* (Signoret). Credit: M. Moghaddam

A detailed annotated checklist of the scale insects of Iran, describing a total of 275 species from 13 families, represents a first effort towards a better knowledge of the Coccoidea family in attempt to improve the view in practical fields such as pest control management. The scale insects species are listed along with their locality data and host plants. In



addition to latest species names for any record, new records for Iran and new host plants for some scale insects species. The study was published in the open access journal *Zookeys*.

Scale insects of the superfamily Coccoidea are sap-sucking hemipterous insects with an estimated 8000 species within 49 families, of which 16 are only known from fossils. They vary dramatically in appearance, some of them are very small (around 1 mm) and grow beneath wax covers, others look like shiny pearl-like objects or are covered with mealy wax. These peculiar looking creatures secrete a waxy coating for defense. This makes them resemble reptilian scales or fish scales, hence their common name.

Scale insects are studied relatively little in Iran, but are economically important as they cause reduced crop yield through their feeding and transferring pathogen microorganisms to a wide range of plants. "Although the scale insects of Iran have been relatively well studied, there is still a strong need for further investigations, including extensive collections of these families in Iran," explains the author of the study Dr Masumeh Moghaddam, <u>Iranian Research Institute of Plant Protection</u>, Tehran.





This image shows Eriococcus abaii (Danzig). Credit: M Moghaddam





This image shows the scale insect species *Trabutina mannipara* (Hemprich & Ehrenberg). Credit: M Moghaddam

The new detailed study of the Coccoidea superfamily aims at paving the road for future research on this important group of insects and the practical implementation of knowledge in pest control management.

More information: Moghaddam M (2013) An annotated checklist of the scale insects of Iran (Hemiptera, Sternorrhyncha, Coccoidea) with new records and distribution data. *ZooKeys* 334: 1. <u>DOI:</u> 10.3897/zookeys.334.5818

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