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Some new records of spider mites (Acari, Tetranychidae) from Syria

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ABSTRACT — Five species of Tetranychidae are reported in this study, two species and three species from subfamilies, Bryobinae and Tetranychinae, respectively. Two species, *Petrobia* (*Petrobia*) *latens* (Muller) and *Bryobia rubrioculus* (Scheuten) from Bryobinae while, the other three species, *Amphitetranychus viennensis* (Zacher), *Eotetranychus carpini* (Oudemans) and *Eotetranychus hirsti* Pritchard & Baker represent Tetranychinae.

KEYWORDS — *Bryobia*; *Petrobia*; *Amphitetranychus*; *Eotetranychus*; Syria

ZOOBANK — 7FE6A48A-E59F-4DC3-BE70-25E9500F3820

INTRODUCTION

Of over 1275 described species of spider mites in the world, only 11 species have been reported from Syria (Kady, 1964; Barbar, 2013, 2014, 2016; Zriki *et al*., 2015). The Syrian mite fauna is poor owing to limited work in this branch of acarology. The identification of Syrian mites associated with plants started with Kady (1964) from a quarantine station in Egypt, with the report of *Panonychus ulmi* on imported apple from Syria. Most of the recent mite faunal studies were restricted to agro-ecosystems with field crops, orchards and wild plants (Barbar, 2013, 2014, 2015, 2016; Kerhili *et al*., 2015; Zriki *et al*., 2015). This report is a part of annual survey of plant-associated mites carried out at Latakia Center of Agricultural Research, General Commission for Scientific Agricultural Research in Syria.

The aim of this report is to make official documentation of some important spider mite species. Many species are already known from the neighboring countries and five species of spider mites are reported as new records in this study.

MATERIALS AND METHODS

A small twig of the plant (cultivated or wild) was plucked and examined using a 10X hand lens for the presence of spider mites. Plant materials with mites were placed in polyethylene bags with proper labeling. The label contained details like name of the host, date of collection, location details (GPS data) and collector. The plant samples were then brought to the laboratory for further examination. The samples were processed within 2-3 days and those which could not be processed were stored in a refrigerator at 10°-15°C and processed within next two days. Mite specimens were mounted in Hoyer's medium for further taxonomic identification. Males of subfamily Tetranychinae were mounted in lat-

eral position for examination of aedeagus, a very important character for species level identification (Pritchard and Baker, 1955). All microscopic slide mounts were maintained at Latakia Center of Agricultural Research.

RESULTS

Five species of spider mites (Tetranychidae) were collected in this study. The systematic positions of the species were recorded along with the collection data.

Sub-family Bryobinae

Bryobia rubrioculus (Scheuten, 1857)

This species reported from Lebanon on *Malus domestica* and *Prunus domestica* (Dosse 1963, Dosse and Musa, 1967). This species is distributed worldwide and reported from 63 countries on 66 species of host plants a majority of them belonging to family Rosaceae. In the present study, this species was found associated with the buds of the *Prunus domestica* and relatively in huge members at the bases of leaves, feeding and causing discoloration on the upper surface of the leaf.

Material examined — 11 females, ex. *Prunus domestica,* coll. Mahran Zeity, Qalaat Mahalibeh, Latakia, (35°30′13.6"N, 36°05′03.6"E) September, 2016.

Petrobia (*Petrobia*) *latens* Muller

This species is polyphagous, reported from more than 115 host plants has worldwide distribution.

Material examined — Three females, ex. *Triticum aestivum*, coll. Mahran Zeity, Qalaat Mahalibeh, Latakia, (35°30′14.6"N, 36°05′01.1"E), May, 2016.

Sub-family Tetranychinae

Eotetranychus carpini (Oudemans) (Figure 1, a)

This species is yellowish-green in colour. It was reported from Lebanon on *Prunus* sp. Also reported on 40 host plants from 27 countries in two major regions of Nearctic and Palearctic (Migeon and Dorkeld, 2006-2016). This species is reported from Syria on *Ostrya carpinifolia*, as reported from France and Italy (Duso *et al*., 2004; Migeon *et al*., 2007). This species causes serious damage to leaves of *Ostrya carpinifolia* due to feeding by large number of individuals.

Material examined — Four males and six females, ex. *Ostrya carpinifolia*, coll. Mahran Zeity, Qalaat Mahalibeh, Latakia, (35°30′08.5"N, 36°05′01.0"E), May 2016.

Eotetranychus hirsti Pritchard & Baker (Figure 1, b)

This species is reported from neighboring countries of Syria. So far this species reported from five countries on seven host plant species in the world. *Eotetranychus hirsti* type locality is Coimbatore, India 1926. Zeity (2015) reported this species from down surface of *Ficus* leaves in Bangalore and Raichur, Karnataka, India, more often associated with rust fungus and caused discoloration of leaves. Individuals of mite colony move out towards the fruit region and cause blistering on the fruit skin due to feeding/damage by huge mite population.

Material examined — Five males and seven females, ex. *Ficus carica*, coll. Ayman Halloum, Al Qutayfah, Damascus countryside (33°42′36.9"N 36°33′54.7"E), August, 2016.

Amphitetranychus viennensis (Zacher) (Figure 1, c)

This species bordeaux-red in color inhabits down surface of leaves with low population and without a distinct web. It was reported from neighboring country Lebanon by Dosse and Musa (1967) on *Prunus* sp. and *Malus domestica.*

Amphitetranychus viennensis is reported on 51 host plants species from 38 countries distributed in Oriental and Palearctic regions (European countries). Majority of host plants are under botanical family Rosaceae and genera like *Crataegus, Cydonia, Malus* and *Prunus*.

Material examined — Four males and 8 females, *Prunus domestica* (cultivar Stanley), coll. Mahran Zeity, Qalaat Mahalibeh, Latakia (35°30′13.5"N, 36°05′01.9"E), August 2016.

FIGURE 1: Male aedeagus of (a) *Eotetranychus carpini*, (b) *Eotetranychus hirsti* and (c) *Amphitetranychus viennensis*.

DISCUSSION

This is a brief documentation of knowledge about spider mites of Syria. This short communication added five species of Tetranychidae so far unknown from Syria. Further studies are to be carried out on the fauna of Acari from Syrian region.

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