Two new eriophyoid mite species (Acari: Prostigmata: Eriophyidae) on Euphorbia spp. (Euphorbiaceae) from Iran

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Abstract

Eriophyoid mites infesting spurges (Euphorbiaceae) were surveyed in Kandovan and Govgan, southwest of East Azerbaijan Province in Iran, during 2010 and 2011. Two new species are described and illustrated: Aculops seguieranae n. sp. from Euphorbia seguierana Necker and Euphorbia cheiradenia Boiss. et Hohen, and Aceria cheiradeniae n. sp. from E. cheiradenia. No damage symptoms were observed.

Keywords: weeds, spurge, taxonomy, new species

Introduction

About 120 eriophyoid mite species have been recorded from spurges (Euphorbiaceae) around the world. Up to now, five and 19 of them have been found to belong to the genera Aculops and Aceria, respectively. Fourteen species (including three Aculops and three Aceria) have been associated with Euphorbia spp. and listed in the catalogue of Amrine and Stasny (1994). Since 1994, no other species have been found on Euphorbia spp.

Recently, the eriophyoid fauna of Iran has been more intensely investigated by authors such as Xue et al. 2009 and Xue et al. 2011. In a large survey of these tiny mites within the Azerbaijan province, two new species were collected from Euphorbia spp. and are herein described.

Material and methods

The eriophyoid mite fauna of spurges was studied from plant samples collected in Kandovan and Govgan, East Azerbaijan province, Iran, during July 2010 and 2011.

Specimens were recovered by washing the plant material (Monfreda et al. 2007). Some of them were slide mounted according to the protocol reported in Baker et al. (1996) and others were preserved in Oudemans’ fluid (Walter & Krantz 2009) for future reference. Lindquist’s (1996) terminology and setal notation were used for the morphological descriptions. The number of measured specimens (n) is given within parentheses in the description. All measurements were made according to Amrine and Manson (1996) and de Lillo et al. (2010), and are given in micrometres. Measurements and means are rounded off to the nearest integer when required, and refer to the length of the morphological characters unless specified otherwise. Because some measurements of the holotype could not be taken, due to the mounting position, the mean measurements of the paratypes are reported. Range values are given in parentheses except in cases of constant value.