

Article

A new eriophyoid mite species (Acari: Eriophyidae) infesting *Haloxylon ammodendron* and *H. persicum* (Chenopodiaceae) in Xinjiang Uigur Autonomous Region, northwest China

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Abstract

A new mite species belonging to the Eriophyidae (Acari: Eriophyoidea) from Shihezi, Xinjiang Uigur Autonomous Region, northwestern China, is described and illustrated. The new species, *Aceria haloxylonis* sp. nov. causes galls on its host plants, *Haloxylon ammodendron* (C.A.Mey.) Bunge and *Haloxylon persicum* Bunge ex Boiss. et Buhse (Chenopodiaceae).

Key words: *Aceria haloxylonis*, new species, taxonomy

Introduction

There are 11 species in the genus *Haloxylon* (Chenopodiaceae), but only *H. ammodendron* and *H. persicum* are distributed in China. *Haloxylon* species live mainly in deserts and can suffer drought, infertility and extreme temperature, and have salt-tolerance to some extent (Zhang 2010). In the desert ecosystem of China, they are the biggest individuals, having the highest biomass and production. The plants serve as shelter belts to impede wind erosion and stabilize sand dunes, helping counter the process of desertification. Their bark can also be a source of water. *Haloxylon ammodendron* is also the host of the parasitic plant *Cistanche deserticola* Ma (Orobanchaceae), whose fleshy stems are of medicinal importance.

The genus *Aceria* was established by Keifer (1944) based on the type species *Eriophyes tulipae* Keifer, 1938. It is characterized by having a gnathosoma usually small in comparison to the body; body vermiform; prodorsal shield tubercles on or near rear shield margin, setae projecting posteriorly; legs with usual segments; coxal plates with three pairs of setae; empodium simple; opisthosoma evenly arched, with subequal dorsal-ventral annuli. *Aceria* is the largest genus of Eriophyoidea. Up to now, the genus contained 975 listed names (de Lillo & Amrine 2011, unpublished data), and no eriophyoid species were known from *Haloxylon* spp.

This new eriophyoid mite induces flower-like galls on stems. The galls are generally located at the base of newly born stems or small branches. At the early infesting stage, the protuberant galls are small. The gall color changes from green, yellow, yellowish-brown to dark, during the growing season. Finally, the galls dessicate and both ends of the stem turn yellow and also dessicate. Some galls occurring on *H. persicum* become red in the last stage.

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