

New Record of *Tetranychus merganser* Boudreaux¹ on *Thevetia ahouai* L. and *Acacia farnesiana* (L.) Willd at Ciudad Victoria, Tamaulipas, Mexico

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Most mites (Acari) that injure crops and other plants belong to six families: Eriophyidae, Phytoptidae, Tarsonemidae, Tenuipalpidae, Tetranychidae, and Tuckerellidae (Aguilar and Murillo 2008). Tetranychids are the group of phytophagous mites most important in agriculture because many species are plagues of major crops; the mites feed on cells of the epidermis and parenchyma of green tissues and are characterized by their tendency to cluster in silk-covered colonies and especially by the extreme polyphagia of some species that develop optimally on many plant species (Soler-Salcedo and Ferragut 2006). When damage is severe, the mite causes mesophyll collapse and defoliation (Ochoa et al. 1994).

Tetranychus merganser Boudreaux (Acari: Tetranychidae) is distributed in Mexico, China, and the United States (Bolland et al. 1998). In Mexico, it has been reported in different hosts (Tuttle et al. 1976, Rodríguez-Navarro and Estébanes-González 1998, Rodríguez-Navarro 1999, Lomelí-Flores et al. 2008, Valencia-Domínguez et al. 2011, Monjarás-Barrera et al. 2015).

This note reports two new hosts -- *Thevetia ahouai* (L.) A. DC. (Apocynaceae) and *Acacia farnesiana* (L.) Willd (Leguminosae) associated with *T. merganser* at Ciudad Victoria, Tamaulipas, Mexico. *A. farnesiana* was in a greenhouse (23° 45' 28.84" N and 99° 9' 53.54" W, 297 m above sea level) where 25 leaves were collected on 20 and 21 May. The second host, *T. ahouai*, was in an urban area (23° 46' 10.49" N and 99° 9' 44.95" W, 308.4 m above sea level) where 20 leaves were collected in February 2017.

Leaves of *A. farnesiana* and *T. ahouai* damaged by mites were observed with a 30-x magnifying loupe. Samples were taken to a laboratory of Instituto de Ecología Aplicada at Ciudad Victoria, Tamaulipas. About 30 and 15 mites from the two hosts were collected and preserved. The mites were identified according to Barker and Tuttle (1994). Identified was *T. merganser* characterized by the empodium with proximoventral hairs (Fig. 1A) and aedeagus (male) (Fig. 1B). *T. merganser* produces chlorotic spots on *A. farnesiana* and *T. ahouai*, but produced white webbing only on the first host (Fig. 1D).

T. ahouai (Fig. 1C) is distributed from Mexico to Colombia (Morales 2009). The plant is important because the latex is spread on the skin as a medicine to treat

¹Acari: Tetranychidae

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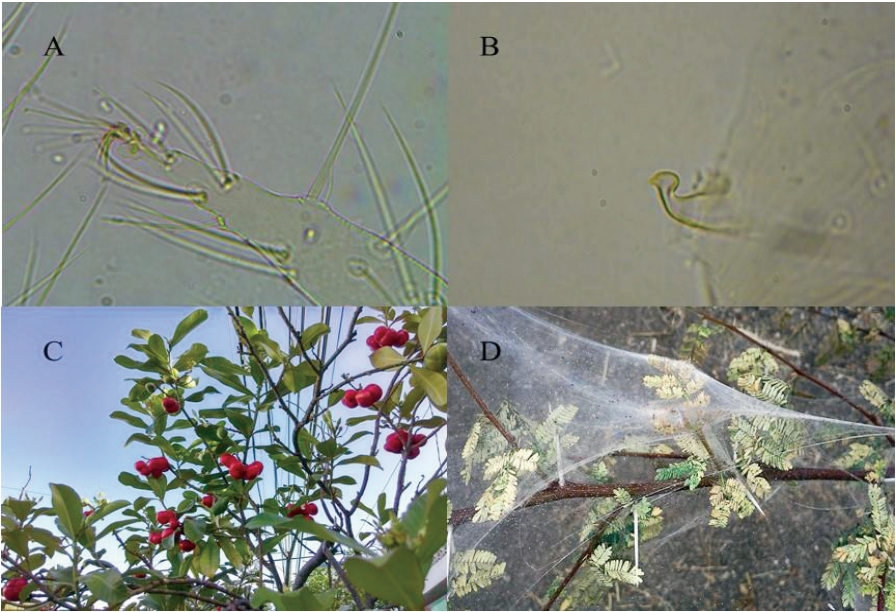


Fig. 1. *Tetranychus merganser* A) empodium with proximoventral hairs and B) aedeagus (male); C) *Thevetia ahouai*; and D) *Acacia farnesiana*.

Fig. 1. *Tetranychus merganser* A) empodium con pelos proximoventrales (hembra) y B) aedeagus (macho); C) *Thevetia ahouai*; D) *Acacia farnesiana*.

Leishmaniasis, as well as warts and skin cysts. In Yucatán, México, the latex is used against skin infections. In Belize and Honduras, the latex is used as an analgesic for pain of dental treatments. In Costa Rica, Panama, and the urban área of Ciudad Victoria, the plant is ornamental (Ruiz et al. 2009). The fruit and seeds *T. ahouai* cause disorders of the central nervous system and heart, and can cause death (Flores et al. 2001).

Acacia farnesiana (Fig. 1D) is distributed from the southwestern United States to the Antilles and Argentina; it also is naturalized in many warm areas of the Old World. It is found in all states of Mexico. The aromatic flowers of *A. farnesiana* are used in the perfume industry and the plant is grown for this purpose in the Mediterranean region. In neighboring Huasteca Potosina, the flowers are used for medicinal purposes but can cause allergic reactions (Rzedowski and Calderón 2007).

Because of its recent expansion around the world and increase in its range of hosts and damage, the mite has demonstrated potential as an invasive species (Valencia-Domínguez et al. 2011).

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