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A new record of *Eotetranychus libocedri* (McGregor, 1936) (Prostigmata, Tetranychidae) from Russia

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Short note

ABSTRACT

Eotetranychus libocedri (McGregor, 1936) is recorded for the first time in Russia. As it is often the case, this species was collected in urban environments on two different ornamental plants, all belonging to Cupressaceae. Among them, *Platycladus orientalis* is a new host plant.

Keywords fauna; alien species; spider mites; Palearctic region

Introduction

The North American species *Eotetranychus libocedri* (McGregor, 1936) has been recorded on ornamental plants in a park in Istanbul, Turkey (Yeşilayer and Çobanoğlu, 2015) and in Budapest, Hungary (Kontschán *et al.*, 2018; Kontschán, 2019).

This species was not known on the territory of the former USSR, including Russia (Mitrofanov *et al.*, 1987), although it was mentioned by Wainstein (1960) and Mitrofanov *et al.* (1975) in the diagnostic keys with indicating the distribution of the species on the territory of the North America. Updating the fauna of spider mites from different regions of the world is important for the study of biodiversity and plant protection.

In the present study, the new record of *Eotetranychus libocedri* is reported for the first time for Russia.

Material and methods

The collection was carried out by the author in 2018 and 2022 on ornamental plants in the cities of Krasnodar and Novorossiysk (Russia). The mites were collected by beating the branches over an A4 sheet of white paper and then were preserved in 70% ethanol. Slides were prepared using Hoyer’s medium (Walter and Krantz, 2009). Identification of mites was carried out under transmitted light using phase-contrast microscopes of ZEISS Axio Imager 2 and Levenhuk MED D45T LCD and using the following literature sources (McGregor, 1950; Pritchard and Baker, 1955; Tuttle *et al.*, 1976; Baker and Tuttle, 1994).

Photographing and subsequent processing of the illustrations were carried out using Zen 2.3 and Zerene Stacker.

Materials and slides are stored in the acarological collection of the All-Russian Plant Quarantine Center (“VNIIKR”) and in the author’s personal collection.

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Results

Family Tetranychidae Donnadieu, 1875

Subfamily Tetranychinae Berlese, 1913

Tribe Tetranychini Reck, 1950

Genus *Eotetranychus* Oudemans, 1931

Eotetranychus Oudemans, 1931: 224. Type species: *Trombidium tiliarium* Hermann, 1804

Eotetranychus libocedri (McGregor, 1936)

Material examined — Twenty-four females, five males collected on *Platycladus orientalis* (L.) Franco (Cupressaceae), ornamental plantings, (45°01'04"N 38°57'06"E), Krasnodar, Krasnodar Krai, Russia, 25-VI-2022. Three females collected on *Thuja occidentalis* L. (Cupressaceae), ornamental plantings, (45°03'25"N 38°54'55"E), Krasnodar, Krasnodar Krai, Russia, 26-IV-2018. Three females, 1 nymph collected on *P. orientalis* and *T. occidentalis* (Cupressaceae), ornamental plantings, (44°43'13"N, 37°46'34"E), Novorossiysk, Krasnodar Krai, Russia, 3-5-X-2018.

Host plants — This species has previously been recorded on Cupressaceae, Pinaceae, Tamaricaceae, Celastraceae (Migeon and Dorkeld, 2023). *Eotetranychus libocedri* is recorded for the first time on *P. orientalis* (Cupressaceae).

Remarks — To complete the record, dorsal aspect and shape of the first three pairs of dorsocentral setae (*c1*, *d1* and *e1*) of *E. libocedri* female are illustrated in Figures 1A-B. Male aedeagus is shown in Figure 1C.

Most of all known records of *E. libocedri* in Eurasia are associated with ornamental plants both in our study and according to literature data (Yeşilayer and Çobanoğlu, 2015; Kontschan, 2019). Based on these considerations and taking into account the wide application of Cypress plants for ornamental purposes, it is assumed that the actual distribution of *E. libocedri* in Eurasia may be much larger than known by present time.

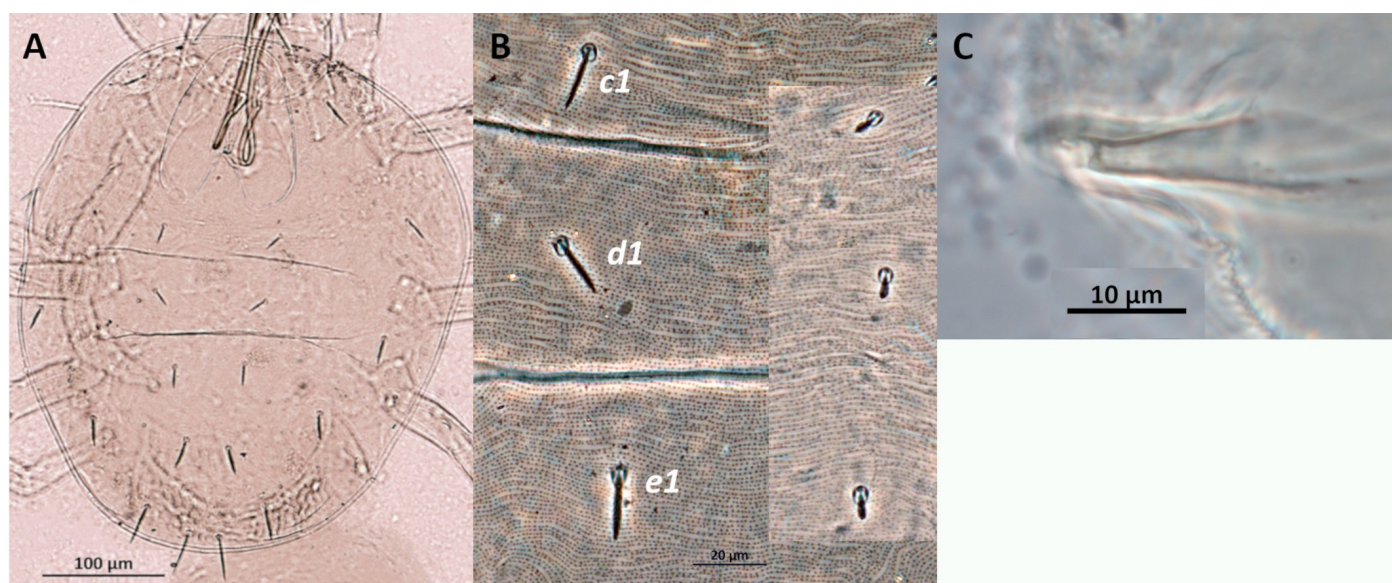


Figure 1 *Eotetranychus libocedri*: A – dorsal view in habitus; B – dorsocentral setae *c1-e1* of females of *E. libocedri* in comparison with *E. thujae* (right inset); C – aedeagus.

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