

A CONTRIBUTION TO THE KNOWLEDGE OF THE SPIDER MITE FAUNA (PROSTIGMATA: TETRANYCHIDAE) OF THE NORTH CAUCASUS, RUSSIA

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ABSTRACT: Twenty-four species of Tetranychidae are reported from the North Caucasus, Russia. The presence of *Eurytetranychus buxi* (Garman, 1935) in this region has been confirmed. *Bryobia tiliae* (Oudemans, 1928) is a new species for the fauna of Russia. The present article provides information on the new host plants for *Bryobia praetiosa*, *B. rubrioculus*, *Eotetranychus carpini*, *Eo. rubiphilus*, *Oligonychus longiclavatus* and *O. piceae*.

KEY WORDS: phytophagous mites, pests, biodiversity, alien species

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INTRODUCTION

The spider mite fauna of the North Caucasus (Southern Russia) is poorly studied, especially compared to that of the South Caucasus (also known as Transcaucasus) (e.g., Khalilova 1953; Reck 1953, 1959, 1976; Bagdasaryan 1957; Zapletina 1972; Mitrofanov *et al.* 1987; Arabuli 2008).

The first reliable data on the spider mite species from the North Caucasus were published by Ivanova (1956), Beglarov (1957) and Smolyannikov (1959)¹ as a result of investigations of fruit crop pests in the Krasnodarsky Krai and the Stavropol'sky Krai of Russia. There is a small number of sources that contain information pertaining to the distribution of some spider mite species in the North Caucasus (e.g., Wainstein 1960; Mitrofanov *et al.* 1975, 1987; Cherkezova 2001; Protsenko and Karpun 2016; Kamayev and Karpun 2020).

The present study aims to contribute new data on spider mite diversity in the North Caucasus with an emphasis on urbanized areas.

MATERIALS AND METHODS

The collections were carried out in 2022 in the North Caucasus, Russia: Krasnodarsky Krai (Krasnodar, leg. I.O. Kamayev; Sochi, leg. I.O. Kamayev and N.N. Karpun), Stavropol'sky Krai (Pyatigorsk, Gornozavodskoe, leg. I.O. Kamayev) and Kabardino-Balkaria (Nalchik, Kakhun, Prokhladny, Proletarskoe, leg. I.O. Kamayev). The specimens were preserved in 70% ethanol. Slides were prepared

using Hoyer's medium (Walter and Krantz 2009). The mites were identified by I.O. Kamayev using the ZEISS Axio Imager 2 and the Levenhuk MED D45T LCD phase-contrast microscopes. Our identifications were based on the following literature sources (Reck 1959; Wainstein 1960; Mitrofanov *et al.* 1975, 1987; Baker and Tuttle 1994; Marić *et al.* 2018).

The systematics of Tetranychidae are based on Migeon and Dorkeld (2024). Among other things, the above authors provide the host plants and the world distribution of each spider mite species, including the records from Russia and other countries of the Transcaucasus (Bagdasaryan 1957; Reck 1959, 1976; Mitrofanov *et al.* 1987; Arabuli 2008).

Materials and slides are stored in the acarological cabinet of the All-Russian Plant Quarantine Centre (VNIKR, Bykovo, Moscovskaya Oblast, Russia) and partly in the author's personal collection (Moscow, Russia).

SYSTEMATICS

Family **Tetranychidae** **Donnadieu, 1875**

Subfamily **Bryobiinae** **Berlese, 1913**

Tribe **Bryobiini** **Reck, 1952**

Genus ***Bryobia*** **Koch, 1836**

Type species: *Bryobia praetiosa* Koch, 1836

Bryobia praetiosa **Koch, 1836**

Material. 7 females, Krasnodarsky Krai, Krasnodar, ornamental plantings area, 45.0569°N, 38.9152°E, on *Thuja occidentalis* L. (Cupressaceae), 26–27 April 2022.

¹ In the latter case, the identification was carried out by G.F. Reck.

Host Plants. This species is polyphagous, it has been recorded on more than 300 plant species from 70 families.

Distribution. This cosmopolitan species is known from Russia. The distribution of *B. praetiosa* in Transcaucasia needs to be confirmed (Reck 1953, 1959, 1976; Arabuli 2008; Migeon and Dorkeld 2024).

Remarks. *B. praetiosa* has not previously been recorded from the North Caucasus. This species was detected on *Thuja occidentalis* for the first time.

***Bryobia rubrioculus* (Scheuten, 1857)**

B. redikorzevi Reck, 1947, Ivanova 1956: 148; Beglarov 1957: 372; Smolyannikov 1959: 52; Livshits 1960: 39; Cherkezova 2001: 37; Livshits *et al.* 2011: 146

Material. 1 female, Stavropolsky Krai, Pyatigorsk, ornamental plantings area, 44.0443°N, 43.0998°E, on *Taxus baccata* L. (Taxaceae), 21 July 2022.

Host Plants. This species is polyphagous, it has been recorded on more than 100 plant species from 26 families.

Distribution. This cosmopolitan species is known from Russia, including the North Caucasus and the countries of the Transcaucasia.

Remarks. *B. rubrioculus* was recorded on *Taxus baccata* for the first time.

***Bryobia tiliae* (Oudemans, 1928)**

Material. 1 female, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4589°N, 43.5905°E, on *Tilia* sp. (Malvaceae), 24 July 2022.

Host Plants. This species has mainly been recorded on *Tilia* species.

Distribution. Palearctic region. This species is known from the countries of the Transcaucasia.

Remarks. This species was recorded from Russia for the first time.

Subfamily Tetranychinae Berlese, 1913

Tribe Eurytetranychini Reck, 1950

Genus *Eurytetranychus* Oudemans, 1931

Type species: *Tetranychus latus* Oudemans, 1931 not Canestrini and Fanzago, 1876 (= *Neotetranychus buxi* Garman, 1935)

***Eurytetranychus buxi* (Garman, 1935)**

Material. 29 females, 3 deutonymphs, Kabardino-Balkaria, Nalchik, ornamental plantings area,

43.4792°N, 43.5986°E, on *Buxus sempervirens* L. (Buxaceae), 24 July 2022.

Host Plants. This species has mainly been recorded on *Buxus* species.

Distribution. Holarctic region (see also the Remarks section).

Remarks. There are unpublished 2018 records of *Eu. buxi* by the specialists of the Krasnodar Branch of the Russian Forest Health Center, on an introduced *Buxus* sp., in the western part of the North Caucasus (the suburbs of Gelendzhik). The above identification was provisional, without slide preparation (Bondarenko *et al.* 2018). Taking into account our records from Kabardino-Balkaria, the presence of *Eu. buxi* in the North Caucasus has been confirmed.

***Eurytetranychus furcisetus* Wainstein, 1956**

Material. 35 females, 11 deutonymphs, 1 larva, Stavropolsky Krai, Pyatigorsk, ornamental plantings area, 44.0443°N, 43.0998°E, on *Picea pungens* Engelm. (Pinaceae), 21–23 July 2022. 5 females, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4587°N, 43.5919°E, on *P. pungens*, 24 July 2022.

Host Plants. This species has been recorded on *Picea* species and *Pinus sylvestris* L. (Pinaceae).

Distribution. Palearctic region. This species is known from Russia.

Remarks. *Eu. furcisetus* has not previously been recorded from the North Caucasus.

Tribe Tetranychini Reck, 1950

Genus *Amphitetranychus* Oudemans, 1931

Type species: *Tetranychus viennensis* Zacher, 1920

***Amphitetranychus viennensis* (Zacher, 1920)**

A. viennensis, Cherkezova 2001: 37; Livshits *et al.* 2011: 146

Tetranychus crataegi Hirst, 1920, Ivanova 1956: 148; Beglarov 1957: 372; Smolyannikov 1959: 52

Tetranychus viennensis Zacher, 1920, Livshits 1960: 39

Tetranychus (*Amphitetranychus*) *viennensis* Zacher, 1920, Wainstein 1960: 164

Material. 6 females, 3 males, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5943°N, 39.7177°E, on *Prunus cerasifera* Ehrh. (Rosaceae), 28 June 2022. 5 females, 1 male, Krasnodarsky Krai, Sochi, Khostinsky District,

orchard, 43.5722°N, 39.7531°E, on *P. cerasus* L. (Rosaceae), 29 June 2022. 3 females, 1 male, Krasnodarsky Krai, Sochi, Adlersky District, canyon of the Psakho River, 43.5396°N, 39.9712°E, on *P. cerasifera*, 30 June 2022.

Host Plants. *A. viennensis* is polyphagous; this species is often recorded on Rosaceae plant species.

Distribution. Palearctic and Oriental regions. This species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

Genus *Eotetranychus* Oudemans, 1931

Type species: *Trombidium tiliarium* Hermann, 1804

Eotetranychus carpini (Oudemans, 1905)

Material. 2 females, 2 males, Krasnodarsky Krai, Sochi, Central District, Park Rivyera, 43.5931°N, 39.7155°E, on *Ulmus glabra* Huds. (Ulmaceae), 21 June 2022. 16 females, 4 males, Krasnodarsky Krai, Sochi, Khostinsky District, 43.5722°N, 39.7531°E, on *Corylus avellana* L. (Betulaceae) and *Parthenocissus tricuspidata* (Siebold and Zucc.) Planch. (Vitaceae), 24 June 2022. 2 females, Krasnodarsky Krai, Sochi, Lazarevsky District, valley of the Shakhe River, 43.8027°N, 39.6247°E, on *C. avellana*, 29 June 2022.

Host Plants. *Eo. carpini* is polyphagous; this species often feeds on Betulaceae, Ulmaceae and Vitaceae plant species.

Distribution. Holarctic region. This species is known from Russia (the Central European part and the Far East) and the countries of the Transcaucasus.

Remarks. *Eo. carpini* has not previously been recorded from the North Caucasus. This species was detected on *Parthenocissus tricuspidata* for the first time.

Eotetranychus rubiphilus Reck, 1948

Material. 9 females, 5 males, Krasnodarsky Krai, Sochi, Khostinsky District, valley of the Khosta River, 43.5258°N, 39.8743°E, on *Rubus sanctus* Schreb. (= *R. anatolicus* (Focke) Focke ex Hausskn.) and *Duchesnea indica* (Andr.) Focke (Rosaceae), 28 June 2022. 1 female, 1 male, Krasnodarsky Krai, Sochi, Khostinsky District, 43.5722°N, 39.7531°E, on *R. sanctus*, 29 June 2022.

Host Plants. *Eo. rubiphilus* has mainly been recorded on Rosaceae species.

Distribution. Palearctic region. This species is known from Russia and the countries of the Transcaucasus.

Remarks. *Eo. rubiphilus* has not previously been recorded from the North Caucasus. This species was detected on *Duchesnea indica* for the first time.

Eotetranychus libocedri (McGregor, 1936)

Eo. libocedri, Kamayev 2024: 41

Material. 1 female, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5744°N, 39.7265°E, on Cupressaceae, 28 June 2022.

Host Plants. This species has been recorded on Cupressaceae, Pinaceae, Tamaricaceae, Celastraceae.

Distribution. Holarctic region. This species is known from Russia.

Eotetranychus thujae (McGregor, 1950)

Material. 12 females, 7 males, 3 deutonymphs, Stavropolsky Krai, Pyatigorsk, ornamental plantings area, 44.0440°N, 43.1015°E, on *Thuja occidentalis* (Cupressaceae), 21 July 2022. 1 female, 4 males, 4 deutonymphs, 1 larva, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4586°N, 43.5896°E, on *T. occidentalis*, 24 July 2022. 4 females, Krasnodarsky Krai, Sochi, Adlersky District, ornamental plantings area, 43.5770°N, 39.9755°E, on *Juniperus* sp. (Cupressaceae), 30 June 2022.

Host Plants. This species has been recorded on the plants of the Cupressaceae family.

Distribution. Holarctic region. This species is known from Russia.

Remarks. *Eo. thujae* has not previously been recorded from the North Caucasus.

Eotetranychus tiliarium (Hermann, 1804)

Material. 14 females, 7 males, Krasnodarsky Krai, Krasnodar, ornamental plantings area, 45.0222°N, 38.9660°E, on *Tilia platyphyllos* Scop. (Malvaceae), 26 June 2022. 9 females, 11 males, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5747°N, 39.7264°E, on *Tilia begoniifolia* Steven, 28 June 2022. 3 females, 3 males, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4589°N, 43.5905°E, on *Tilia* sp., 24 July 2022. 8 females, 2 males, Kabardino-Balkaria, Prokhladny, ornamental plantings area, 43.7595°N, 43.9907°E, on *Tilia* sp., 26 July 2022.

Host Plants. This species is polyphagous; it feeds on Malvaceae, Sapindaceae, Betulaceae and other plant species.

Distribution. Holarctic region. This species is known from Russia and the countries of the Transcaucasus.

Remarks. This species has not been reliably recorded from the North Caucasus.

Genus *Oligonychus* Berlese, 1886

Type species: *Heteronychus brevipodus* Targioni Tozzetti, 1878

Oligonychus brevipilosus (Zacher, 1932)

O. brevipilosus, Kamayev and Karpun 2020: 297

O. subnudus (McGregor, 1950), Karpun *et al.* 2021: 120 [misidentification]

Material. 8 females, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5943°N, 39.7177°E, on *Pinus brutia* var. *pityusa* (Steven) Silba (Pinaceae), 28 June 2022.

Host Plants. This species has been recorded on Pinaceae species.

Distribution. Palearctic region. This species is known from Russia, including North Caucasus, and the countries of the Transcaucasus.

Oligonychus buschi (Reck, 1956)

O. buschi, Kamayev and Karpun 2020: 296

Host Plants. This species has been recorded on *Quercus* species (Fagaceae).

Distribution. Palearctic region. This species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

Oligonychus hondoensis (Ehara, 1954)

O. hondoensis, Kamayev and Karpun 2020: 297

Material. 9 females, 1 male, Krasnodarsky Krai, Sochi, Central District, Park Rivyera, 43.5928°N, 39.7159°E, on *Cryptomeria japonica* (Thunberg ex Linnaeus f.) D. Don (Cupressaceae), 21 June 2022. 21 females, 6 males, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5744°N, 39.7265°E, on *C. japonica*, 21–28 June 2022.

Host Plants. This species has been recorded on Cupressaceae and Pinaceae plant species.

Distribution. Holarctic and Australasian regions. This species is known from Russia (Sochi).

Oligonychus lagodechii Livshits and Mitrofanov, 1969

O. lagodechii, Kamayev and Karpun 2020: 296

Material. 29 females, 2 males, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5744°N, 39.7265°E, on *Juniperus* sp. and *Cupressus sempervirens* L. (Cupressaceae), 21–28 June 2022. 2 females, Krasnodarsky Krai, Krasnodar, park, 45.0173°N, 38.9540°E, on *Platycladus orientalis* (Cupressaceae), 25 June 2022. 9 females, Stavropolsky Krai, Gornozavodskoe, ornamental plantings area, 44.0262°N, 43.9445°E, on *Thuja occidentalis*, 22 July 2022. 1 male, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4588°N, 43.5868°E, on *T. occidentalis*, 24 July 2022.

Host Plants. This species has been recorded on plants of Cupressaceae family.

Distribution. Palearctic region. This species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

Oligonychus longiclavatus (Reck, 1953)

Material. 18 females, 4 males, Krasnodarsky Krai, Sochi, Khostinsky District, Arboretum, 43.5691°N, 39.7410°E, on *Quercus hartwissiana* Steven (Fagaceae), 22 June 2022.

Host Plants. This species has mainly been recorded on *Quercus* species.

Distribution. Palearctic region. This species is known from Russia and the countries of the Transcaucasus.

Remarks. This species was recorded on *Quercus hartwissiana* for the first time.

Oligonychus piceae (Reck, 1953)

O. piceae, Mitrofanov *et al.* 1975: 10; Mitrofanov *et al.* 1987: 117

Material. 2 females, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5943°N, 39.7177°E, on *Pinus brutia* var. *pityusa* (Pinaceae), 28 June 2022. 2 females, Stavropolsky Krai, Pyatigorsk, ornamental plantings area, 44.0370°N, 43.0863°E, on *P. sylvestris*, 23 July 2022. 9 females, 3 deutonymphs, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4558°N, 43.5886°E, on *P. sylvestris*, 24 July 2022.

Host Plants. This species has mainly been recorded on *Pinus* and *Picea* species.

Distribution. Palearctic region. This species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

Remarks. In the vast majority of Russian-language sources, the host plants of *O. piceae* are indicated as *Pinus* species with no further details (e.g., Reck 1953; Bagdasaryan 1957; Wainstein 1960; Mitrofanov *et al.* 1975, 1987). This mite species was detected on *Pinus sylvestris* var. *hamata* Steven in the works of Reck (1959) and Mitrofanov (1967)¹ on *P. nigra* subsp. *pallasiana* (Lamb.) Holmboe in the thesis of Bosenko (1973), and on *P. sylvestris* in Ponomareva and Gabrid (1981). See also Migeon and Dorkeld (2024).

Thus, *O. piceae* was recorded on *Pinus brutia* var. *pityusa* for the first time.

***Oligonychus ununguis* (Jacobi, 1905)**

O. ununguis, Protsenko and Karpun 2016: 190; Kamayev and Karpun 2020: 297; Karpun *et al.* 2021: 11; Kochergina and Yudina 2022: 71

Material. 8 females, Krasnodarsky Krai, Sochi, Khostinsky District, Arboretum, 43.5690°N, 39.7436°E, on *Picea pungens*, 22 June 2022. 1 female, 1 male, Krasnodarsky Krai, Sochi, Adlersky District, ornamental plantings area, 43.5770°N, 39.9755°E, on *Juniperus* sp., 30 June 2022. 5 females, Krasnodarsky Krai, Krasnodar, ornamental plantings area, 45.0183°N, 38.9574°E, on *Juniperus* sp., 25 June 2022. 2 females, Krasnodarsky Krai, Krasnodar, ornamental plantings area, 45.0216°N, 38.9653°E, on *Platycladus orientalis*, 25 June 2022. 24 females, 4 males, 5 deutonymphs, Stavropolsky Krai, Pyatigorsk, ornamental plantings area, 44.0443°N, 43.0998°E, on *Picea pungens*, 21–23 July 2022. 4 females, 1 male, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4587°N, 43.5919°E, on *Picea abies* (L.) H. Karst. (Pinaceae), 24 July 2022.

Host Plants. This species is polyphagous, it has been recorded on more than 100 plant species from 12 families.

Distribution. This cosmopolitan species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

¹ In both sources, only the trivial species name “Caucasian pine” is given. It most likely corresponds to *Pinus caucasica* (Medw.) N. Busch. or *P. kochiana* Klotzsch ex. K. Koch, which are junior synonyms of *Pinus sylvestris* var. *hamata* Steven (Farjon *et al.* 2024).

Genus ***Neotetranychus* Trägårdh, 1915**

Type species: *Neotetranychus rubi* Trägårdh, 1915

***Neotetranychus rubi* Trägårdh, 1915**

Material. 2 females, Kabardino-Balkaria, Nalchik, ornamental plantings area, 43.5135°N, 43.6068°E, on *Rubus idaeus* L. (Rosaceae), 27 July 2022.

Host Plants. This species is mainly recorded on *Rubus* species.

Distribution. Palearctic region. This species is known from Russia and the countries of the Transcaucasus.

Remarks. This species has not previously been recorded from the North Caucasus.

Genus ***Panonychus* Yokoyama, 1929**

Type species: *Tetranychus ulmi* Koch, 1835

***Panonychus ulmi* (Koch, 1836)**

Metatetranychus ulmi, Beglarov 1957: 373; Smolyannikov 1959: 52

P. ulmi, Wainstein 1960: 203; Cherkezova 2001: 37

Material. 2 females, 2 males, Krasnodarsky Krai, Sochi, Khostinsky District, orchard, 43.5722°N, 39.7531°E, on *Prunus laurocerasus* L. (Rosaceae), 30 June 2022.

Host Plants. This species is polyphagous, it has been recorded on more than 160 plant species from 39 families.

Distribution. This cosmopolitan species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

Genus ***Schizotetranychus* Trägårdh, 1915**

Type species: *Tetranychus schizopus* Zacher, 1913

***Schizotetranychus schizopus* (Zacher, 1913)**

Material. 11 females, 1 male, Kabardino-Balkaria, Nalchik, ornamental plantings area near Lake Kurortnoe, 43.4587°N, 43.5922°E, on *Salix* sp. (Salicaceae), 24 July 2022.

Host Plants. This species is mainly recorded on Salicaceae plant species.

Distribution. Holarctic region. This species is known from Russia and the countries of the Transcaucasus.

Remarks. This species has not previously been recorded from the North Caucasus.

Genus **Tetranychus Dufour, 1832**

Type species: *Tetranychus lintearius* Dufour, 1832

***Tetranychus przhevalskii* Reck, 1956**

Material. 3 females, 2 males, 1 deutonymph, 2 protonymphs, Kabardino-Balkaria, Nalchik, ornamental plantings area, 43.4790°N, 43.5983°E, on Poaceae, 24 July 2022.

Host Plants. *T. przhevalskii* mainly feeds on Poaceae. This species is a pest of *Triticum* spp. and *Zea mays* L. (Mitrofanov *et al.* 1987).

Distribution. Palearctic region. This species is defined from Georgia and is also known from Russia.

Remarks. This species has not previously been recorded from the North Caucasus.

***Tetranychus turkestanii*
(Ugarov and Nikolskii, 1937)**

T. turkestanii, Livshits *et al.* 2011: 150

Material. 3 females, 2 males, Krasnodarsky Krai, Sochi, Central District, ornamental plantings area, 43.5938°N, 39.7239°E, on *Rosa hybrida* Vill. (Rosaceae), 21 June 2022. 9 females, 4 males, Krasnodarsky Krai, Sochi, Adlersky District, roadside, 43.5875°N, 40.0076°E, on *Convolvulus arvensis* L. (Convolvulaceae), 30 June 2022. 15 females, 18 males, Stavropolsky Krai, Pyatigorsk, 44.0449°N, 43.1019°E, on weeds (*Fragaria* sp., Lamiaceae, Euphorbiaceae), 23 July 2022.

Host Plants. This species is polyphagous, it has been recorded on more than 160 plant species from 39 families.

Distribution. This cosmopolitan species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

***Tetranychus urticae* Koch, 1835**

T. urticae, Beglarov 1957: 373; Smolyannikov 1959: 52; Cherkezova 2001: 37; Livshits *et al.* 2011: 152; Karpun *et al.* 2021: 11

Material. 1 female, 2 males, Krasnodarsky Krai, Sochi, Central District, Park Rivyera, 43.5889°N, 39.7158°E, on *Euphorbia* sp. (Euphorbiaceae), 21 June 2022. 6 females, 5 males, Krasnodarsky Krai, Sochi, Khostinsky District, Arboretum, 43.5707°N, 39.7442°E, on *Physocarpus opulifolius* (L.) Maxim. (Rosaceae), 22 June 2022. 1 female, 5 males, Krasnodarsky Krai, Sochi, Khostinsky District, orchard, 43.5722°N, 39.7531°E, on *Rosa* sp. (Rosaceae), 29 June 2022. 5 females, 2 males, Krasnodarsky Krai,

Sochi, Adlersky District, Krasnaya Polyana, roadside, 43.6731°N, 40.1952°E, on *Calystegia* sp. (Convolvulaceae) and *Morus nigra* L. (Moraceae), 30 June 2022. 9 females, 1 male, Kabardino-Balkaria, Kakhun, crop field, 43.5348°N, 43.8752°E, on *Solanum lycopersicum* L. (Solanaceae), 26 July 2022. 6 females, 1 male, Kabardino-Balkaria, 4 km to the north from Proletarskoe, crop field, 43.8843°N, 44.0381°E, on *S. lycopersicum*, 26 July 2022.

Host Plants. This species is polyphagous, it has been recorded on more than 1,500 plant species from 130 families.

Distribution. This cosmopolitan species is known from Russia, including the North Caucasus, and the countries of the Transcaucasus.

CONCLUSION

As a result of the present study, 24 spider mite species from the North Caucasus were listed, of which 1 species is new to the fauna of Russia, and 9 species were recorded for the first time from this region. In addition, the distribution of *Eurytetranychus buxi* has been confirmed.

Eotetranychus libocedri, *Eo. thujae*, *Eurytetranychus furcisetus*, and *Oligonychus hondoensis* are reliable alien species to the fauna of Russia (Kamayev and Karpun 2020; Kamayev 2023, 2024), associated with ornamental conifers in the urbanized areas of the North Caucasus. The invasions of these species into Russia have occurred over the last 36 years since the last faunistic study on Tetranychidae (Mitrofanov *et al.* 1987). Given the obtained data, *Eotetranychus thujae* and *Eurytetranychus furcisetus* are widespread in the European part of Russia, whereas *Eo. libocedri* and *Oligonychus hondoensis* have a restricted distribution only in the western part of the North Caucasus. Repeated records of the two latter species in 2018–2019 and 2022 indicate that they have formed stable populations.

It is expected that the present list of spider mite species from the North Caucasus is not exhaustive and will expand as the research progresses in the future. For comparison, the spider mite fauna of Georgia includes at least 70 species (Reck 1953, 1959, 1976; Mitrofanov *et al.* 1987; Arabuli 2008; Migeon and Dorkeld 2024), that of Armenia—48 species (Bagdasaryan 1957; Mitrofanov *et al.* 1987; Migeon and Dorkeld 2024), and that of Azerbaijan—at least 50 species (Khalilova 1953; Zapletina 1972; Mitrofanov *et al.* 1987; Migeon and Dorkeld 2024). In our opinion, the above fig-

ures have to do with the fact that the studies on the systematics of Tetranychidae have been conducted in the above Transcaucasian countries since the 1940s.

In addition to the trophic ecology of spider mites, new data on the host plants of *Bryobia praetiosa*, *B. rubrioculus*, *Eotetranychus carpini*, *Eo. rubiphilus*, *Oligonychus longiclavatus* and *O. piceae* were obtained.

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