

Diversity of acarine fauna (Acari: Parasitiformes, Acariformes) inhabiting ornamental trees and shrubs in Hungary: A review

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ABSTRACT

This paper reviews of the recent progress in the acarological researches and knowledge on mites occurring in the canopy of ornamental trees and shrubs. The inventory of Acari includes 444 mite species belonging to 33 families which were recorded from 283 hardwood tree and shrub species of 45 plant families. The highest number of mite families and species were reported from the families Rosaceae (21 mite families), Salicaceae (20) and Oleaceae (17), and Salicaceae (99 mite species), Rosaceae (98) and Fagaceae (63), respectively. The most diverse acarine fauna was found on *Acer campestre* (37 mite species), *Prunus spinosa* (37), *Acer pseudoplatanus* (33), *Tilia cordata* (33) and *Salix alba* (31). The most frequently occurring mite species were *Euseius finlandicus* (on 78 host species), *Tydeus californicus* (64) and *Zetzellia mali* (60).

KEYWORDS

woody ornamentals, phytophagous, predatory mite, species composition, species richness

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INTRODUCTION

The diversity of arboreal mite communities of woody ornamentals and shade trees remains poorly explored. Mites are among the most diverse groups of arthropods. The diversity of plant-inhabiting mites in Hungary is reviewed using the literature and collection records. For the acarine fauna of woody ornamentals in Hungary, no attempt has previously been made for the compilation of, and updating the information available from bibliography and recent research.

Within the scope of this research, the author started an intense bibliographic and faunistic research and extended it to his 32-year long survey. In order to contribute to taxonomic and faunistic information on mites associated with woody ornamentals, the results are summarized and synthesized based on primary literature records. The aim of this work was not only to contribute to the list of mites living on ornamental trees and shrubs in Hungary, but also to compile a list of species accessible in urban environment, and compare the species richness of mite community assemblages of the different host plants.

Because the acarine fauna of deciduous and coniferous species still remains little explored the goal of this paper is to characterize the current and important researches concerned with mites living in urban environment.

During the last three decades, there has been increasing interest in the mite fauna of arboreal plants.

MATERIAL AND METHODS

Based on the papers of Bognár et al. (1977), Bolland and Ripka (2000), Bozai (1969, 1970, 1997), Chetverikov et al. (2020), Fain and Bochkov (2001), Fain and Ripka (1998a, b, c), Farkas (1965, 1966), Gólya et al. (2001), Hajdú et al. (2010, 2011), Kaźmierski and Ripka (2001), Komlovszky (1984), Komlovszky and Jenser (1992), Kontschán (2014), Kontschán and Ripka (2017, 2018), Kontschán et al. (2019, 2020), Korda et al. (2019), Lewandowski and Ripka (2022), Lucza et al. (1996), Magowski et al. (2013), Ripka (1998a, b, 2000, 2006, 2007, 2008, 2009a, b, 2010a, b, c, 2011a, b, 2012), Ripka and Csóka (2010), Ripka and de Lillo (1997), Ripka and Kaźmierski (1998a, b), Ripka and Mikulás (2013), Ripka and Salamon (2013), Ripka and Érsek (2014), Ripka and Iñigo Sánchez (2017), Ripka and Szabó (2010, 2011), Ripka et al. (1993, 1997, 1999, 2002, 2005, 2009, 2013a, b, 2015a, b, c, 2018, 2020a, b, c, 2021, 2022a, b), Szabó et al. (2009, 2010, 2013), Szabóné Komlovszky (1980), Tempfli et al. (2012, 2014), Ueckermann and Ripka (2016) a total of 283 tree and shrub species belonging to 45 families were included in this work. Out of these species 195 are introduced, alien species.

Besides strictly taken ornamental trees and shrubs, some fruits (almond, elder-berry, fig, hazel, sea-buckthorn), forestry used (beech, black locust, oaks) and herb species (rosemary) are treated in this paper. The taxonomic and nomenclatural treatment of mites follows the world catalogue databases of Fauna Europaea (Magowski, 2014), Beron (2008, 2017, 2020, 2021), Bolland et al. (1998), Mesa et al. (2009) and Demite et al. (2021). Nomenclature of host plants was used in accordance with WFO (2023): World Flora Online, published on the internet.



RESULTS

Aceraceae

Acer buergerianum Miq.

Acariform mite species: *Lorryia pulchra* (Oudemans), *Triophtydeus flatus* Kuznetzov.

Acer campestre L.

Parasitiform mite species: *Amblyseius andersoni* (Chant), *Euseius finlandicus* (Oudemans), *Kampimodromus aberrans* (Oudemans), *Neoseiulella aceri* (Collyer), *Neoseiulella tiliarum* (Oudemans), *Paraseiulus talbii* (Athias-Henriot), *Phytoseius echinus* Wainstein et Arutunjan.

Acariform mite species: *Aceria aceriscampestris* (Nalepa), *Aceria cephalonea* (Nalepa), *Aceria carinifex* (Kieffer), *Aceria heteronyx* (Nalepa), *Aceria macrochela* (Nalepa), *Aceria macrocheluserinea* (Trotter), *Aceria macrorhyncha* (Nalepa), *Aceria monspessulerinea* (Nalepa), *Anthocoptes transitionalis* Hodgkiss, *Cecidophyes gymnaspis* (Nalepa), *Czenspinksia transversostriata* (Oudemans), *Dendroptus flexus* (Livshitz, Mitrofanov et Sharonov), *Dendroptus willmanni* (Schaarschmidt), *Eotetranychus carpini* (Oudemans), *Eotetranychus tiliarium* (Hermann), *Lorryia bathorii* Ripka et Kaźmierski, *Lorryia mali* (Oudemans), *Lorryia pulchra*, *Neopronematus solani* Łaniecka et Kaźmierski, *Neotegonotus fastigatus* (Nalepa), *Shevtchenkella serrata* (Nalepa), *Tarsonemus stammeri* Schaarschmidt, *Tegonotus pseudoobtusus* Petanović, *Tetranychus urticae* (Koch), *Triophtydeus immanis* Kuznetzov, *Triophtydeus triophthalmus* (Oudemans), *Tydeus calabrbus* (Castagnoli), *Tydeus californicus* (Banks), *Tydeus clavimaculatus* Kaźmierski, *Zetzellia mali* (Ewing).

Acer monspessulanum L.

Acariform mite species: *Aceria aceriscampestris*, *Aceria cephalonea*.

Acer negundo L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus sol-eiger* (Ribaga).

Acariform mite species: *Aceria aceriscampestris*, *Aceria cephalonea*, *Eotetranychus populi* (Koch), *Homeopronematus anconai* (Baker), *Lorryia incrustata* (Kuznetzov), *Neopronematus lundqvisti* Sadeghi, Łaniecka et Kaźmierski, *Rhyncaphytoptus negundivagrans* Farkas, *Shevtchenkella brevisetosa* (Hodgkiss), *Tydeus californicus*, *Zetzellia mali*.

Acer opalus Mill.

Parasitiform mite species: *Kampimodromus aberrans*.

Acariform mite species: *Tydeus californicus*.

Acer palmatum Thunb.

Parasitiform mite species: *Euseius finlandicus*.

Acer platanoides L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella aceri*.

Acariform mite species: *Aceria heteronyx*, *Aceria macrochela*, *Aceria macrorhyncha*, *Aceria marshalli* (Keifer), *Aceria platanoides* (Nalepa), *Anthocoptes transitionalis*, *Cecidophyes gymnaspis*, *Czenspinksia transversostriata*, *Lorryia ocellata* (Kuznetzov), *Lorryia visenda* (Kuznetzov), *Michaelopus corticalis* (Michael), *Neotegonotus fastigatus*, *Shevtchenkella serrata*, *Tarsonemus nodosus* Schaarschmidt, *Tydeus californicus*, *Tydeus caudatus* (Dugès), *Zetzellia mali*.

Acer pseudoplatanus L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella aceri*, *Paraseiulus soleiger*, *Phytoseius echinus*, *Typhlodromus tiliae* Oudemans.



Acariform mite species: *Aceria aceriscampestris*, *Aceria cephalonea*, *Aceria macrochela*, *Aceria macrocheluserinea*, *Aceria macrorhyncha*, *Aceria monspessulerinea*, *Aceria platanoidea*, *Aceria pseudoplatani* (Corti), *Cecidophyes gymnaspsis*, *Cecidophyes siculus* Ripka, *Eotetranychus tiliarium*, *Lorryia incrustata*, *Lorryia ocellata*, *Lorryia pulchra*, *Lorryia reticulata* (Oudemans), *Michaelopus corticalis*, *Shevtchenkella brevisetosa*, *Shevtchenkella serrata*, *Tarsonemus lobosus* Suski, *Tarsonemus nodosus*, *Tetranychus turkestanii* (Ugarov et Nikolskii), *Tetranychus urticae*, *Triophyteus triophthalmus*, *Tydeus calabrus*, *Tydeus californicus*, *Tydeus caudatus*, *Zetzellia mali*.

Acer rubrum L.

Acariform mite species: *Aceria aceriscampestris*, *Aceria cephalonea*, *Aceria macrocheluserinea*, *Aceria monspessulerinea*.

Acer saccharinum L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus talbii*.

Acariform mite species: *Aceria macrorhyncha*, *Lorryia hungarica* Łaniecka et Ripka, *Tarsonemus nodosus*, *Triophyteus flatus*, *Tydeus californicus*, *Tydeus narolicatus* K azmierski et Ripka, *Vasates quadripedes* Shimer, *Zetzellia mali*.

Acer tataricum L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aceria aceriscampestris*, *Aceria cephalonea*, *Aceria macrorhyncha*, *Shevtchenkella tataricis* (Farkas).

Anacardiaceae

Cotinus coggygria Scop.

Acariform mite species: *Aceria szepligetii* Farkas, *Epitrimerus cotini* Farkas.

Rhus typhina L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Typhlodromus recki* Wainstein.

Acariform mite species: *Cunaxoides kielczewskii* Michocka, *Hemisarcoptes budensis* Fain et Ripka, *Michaelopus corticalis*, *Paratriophyteus elegans* Kuznetzov, *Tarsonemus karli* Sharonov et Mitrofanov, *Tydeus californicus*.

Apocynaceae

Nerium oleander L.

Acariform mite species: *Tetranychus urticae*.

Aquifoliaceae

Ilex aquifolium L.

Acariform mite species: *Cheletogenes ornatus* (Canestrini et Fanzago), *Michaelopus corticalis*, *Scapheremaeus reticulatus* (Berlese).

Araliaceae

Hedera helix L.

Acariform mite species: *Bryobia kissophyla* van Eindhoven.



Berberidaceae

Berberis × *neubertii* hort. ex Lem.

Parasitiform mite species: *Euseius finlandicus*.

Berberis vulgaris L.

Parasitiform mite species: *Amblyseius andersoni*, *Phytoseiulus persimilis* Athias-Henriot.

Acariform mite species: *Cheletogenes ornatus*, *Michaelopus corticalis*, *Phyllocoptes granulatus* (Nalepa).

Betulaceae

Alnus alnobetula (Ehrh.) K. Koch

Acariform mite species: *Eriophyes laevis* (Nalepa).

Alnus incana (L.) Moench

Acariform mite species: *Acalitus brevitarsus* (Fockeu), *Coptophylla borealis* (Liro), *Diptacus dipterochelus* (Nalepa), *Eriophyes inangulis* Nalepa, *Eriophyes laevis*.

Alnus glutinosa Gaertn.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Paraseiulus talbii*, *Phytoseius echinus*.

Acariform mite species: *Acalitus brevitarsus*, *Acaricalus trinotus* (Nalepa), *Epitrimerus* cf. *longitarsus* (Nalepa), *Eriophyes inangulis*, *Eriophyes laevis*, *Lorryia pulchra*, *Panonychus ulmi* (Koch), *Tegonotus heptacanthus* (Nalepa), *Tegonotus keiferi* (Farkas), *Tegonotus trouessarti* Nalepa, *Zetzellia mali*.

Alnus × *pubescens* Tausch

Acariform mite species: *Acalitus brevitarsus*, *Eriophyes inangulis*, *Eriophyes laevis*.

Betula nana L.

Acariform mite species: *Acalitus rudis* (Canestrini).

Betula pendula Roth

Acariform mite species: *Acalitus rudis*.

Betula pubescens Ehrh.

Acariform mite species: *Acalitus calycophthirus* (Nalepa), *Acalitus rudis*.

Bignoniaceae

Catalpa bignonioides Walt.

Parasitiform mite species: *Kampimodromus aberrans*.

Acariform mite species: *Tydeus californicus*.

Buxaceae

Buxus sempervirens L.

Parasitiform mite species: *Neoseiulus cucumeris* (Oudemans).

Acariform mite species: *Eriophyes buxi* (Canestrini), *Eriophyes canestrinii* (Nalepa), *Eriophyes tricheutes* Nalepa, *Eurytetranychus latus* (Canestrini et Fanzago).

Caesalpiniaceae

Gleditsia triacanthos L.



Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculops gleditsiae* (Keifer).

Caprifoliaceae

Lonicera tatarica L.

Acariform mite species: *Tetranychus urticae*.

Lonicera xylosteum L.

Acariform mite species: *Aculus xylostei* (Canestrini).

Sambucus ebulus L.

Acariform mite species: *Epitrimerus trilobus* (Nalepa).

Sambucus nigra L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Brevipalpus obovatus* Donnadieu, *Epitrimerus trilobus*, *Homeopronematus staerki* (Schruft), *Neopronematus solani*, *Panonychus ulmi*, *Tarsonemus smithi* Ewing, *Tetranychus urticae*, *Triophtydeus triophthalmus*, *Tydeus californicus*, *Tydeus caudatus*.

Sambucus racemosa L.

Acariform mite species: *Epitrimerus trilobus*.

Symphoricarpos albus var. *laevigatus* Blake

Acariform mite species: *Allothrombium pulvinum* Ewing, *Eriophyes brownei* Keifer, *Neopronematus solani*, *Paratriophtydeus elegans*.

Symphoricarpos × *chenaultii* Rehd.

Acariform mite species: *Neopronematus solani*.

Symphoricarpos orbiculatus Moench

Acariform mite species: *Allothrombium pulvinum*, *Neopronematus solani*, *Podothrombium pannonicum* Fain et Ripka, *Pronematus sextoni* Baker, *Triophtydeus immanis*, *Tydeus californicus*, *Zetzellia mali*.

Viburnum carlesii Hemsl.

Parasitiform mite species: *Kampimodromus aberrans*.

Viburnum lantana L.

Parasitiform mite species: *Typhlodromus pyri* Scheuten.

Acariform mite species: *Aculops oblongus* (Nalepa), *Eriophyes viburni* (Nalepa).

Viburnum opulus L.

Parasitiform mite species: *Kampimodromus aberrans*, *Typhlodromus pyri*.

Acariform mite species: *Triophtydeus flatus*.

Celastraceae

Celastrus orbiculatus Thunb.

Acariform mite species: *Cheletogenes ornatus*, *Dendroptus flexus*, *Hemisarcoptes budensis*, *Lorryia reticulata*, *Mediolata mariaefrancae* André, *Michaelopus corticalis*, *Tarsonemus lobosus*, *Tarsonemus nodosus*, *Triophtydeus immanis*.

Celastrus scandens L.

Acariform mite species: *Michaelopus corticalis*, *Triophtydeus triophthalmus*.

Euonymus europaeus L.



Parasitiform mite species: *Typhlodromus involutus* Livshitz et Kuznetsov, *Typhlodromus rhenanus* (Oudemans).

Acariform mite species: *Anystis baccharum* (Linnaeus), *Cecidophyes psilonotus* (Nalepa), *Hemisarcoptes budensis*, *Lorryia reticulata*, *Mediolata mariaefrancae*, *Michaelopus corticalis*, *Neophyllobius euonymi* Bolland et Ripka, *Stenacis euonymi* (Frauenfeld), *Tarsonemus nodosus*, *Tarsonemus waitei* Banks, *Tetranychus urticae*, *Triophyteus immanis*, *Tydeus californicus*.

Euonymus japonicus Thunb.

Acariform mite species: *Tarsonemus nodosus*.

Euonymus verrucosus Scop.

Acariform mite species: *Cecidophyes psilonotus*, *Stenacis euonymi*.

Cornaceae

Cornus alba L.

Acariform mite species: *Cenopalpus pulcher* (Canestrini et Fanzago), *Michaelopus corticalis*, *Tydeus californicus*.

Cornus mas L.

Acariform mite species: *Anthocoptes platynotus* Nalepa.

Cornus sanguinea L.

Parasitiform mite species: *Euseius finlandicus*, *Paraseiulus triporus* (Chant et Yoshida-Shaul), *Typhlodromus pyri*, *Typhlodromus tiliae*.

Acariform mite species: *Anthocoptes cornicolus* Farkas, *Anthocoptes platynotus*, *Anystis baccharum*, *Cenopalpus pulcher*, *Diptacus corni* de Lillo et Fontana, *Lorryia mali*, *Lorryia pulchra*, *Shevtchenkella cornifoliae* (Keifer), *Tegonotus acutilobus* (Nalepa), *Tydeus caudatus*, *Zetzellia mali*.

Cornus sericea L.

Acariform mite species: *Lorryia sanctikingai* Ripka et Łaniecka, *Michaelopus corticalis*, *Tarsonemus waitei*, *Tydeus californicus*.

Cornus sp.

Parasitiform mite species: *Neoseiulella tiliarum*.

Acariform mite species: *Tegonotus acutilobus*.

Corylaceae

Carpinus betulus L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Typhlodromus tiliae*.

Acariform mite species: *Aceria carpini* (Frauenfeld), *Aceria tenella* (Nalepa), *Aculops macrotrichus* (Nalepa), *Aculus betuli* (Nalepa), *Eotetranychus carpini*, *Lorryia incrustata*, *Phyllocoptes carpini* Nalepa, *Tegonotus depressus* (Nalepa), *Triophyteus flatus*, *Tydeus californicus*, *Zetzellia mali*.

Corylus americana Walter

Acariform mite species: *Cecidophyopsis vermiformis* (Nalepa), *Phytoptus avellanae* Nalepa.

Corylus avellana L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Galendromus longipilus* (Nesbitt), *Kampimodromus aberrans*, *Kampimodromus corylosus* Kolodochka, *Neoseiulella aceri*,



Neoseiulella tiliarum, *Paraseiulus soleiger*, *Phytoseius plumifer* (Canestrini et Fanzago), *Typhlodromus recki*, *Typhlodromus tiliae*.

Acariform mite species: *Aculus comatus* (Nalepa), *Bryobia rubrioculus* (Scheuten), *Coptophylla lamimani* (Keifer), *Diptacus calicoryli* (Keifer), *Eotetranychus carpini*, *Eotetranychus coryli* (Reck), *Eotetranychus pruni* (Oudemans), *Lorryia dumosa* (Kuznetsov), *Lorryia ferula* Baker, *Lorryia incrustata*, *Neapolorryia regia* (Kuznetsov), *Phytoptus avellanae*, *Tegonotus depressus*, *Tetranychus turkestanii*, *Tetranychus urticae*, *Tetranychopsis horridus* (Canestrini et Fanzago), *Tydeus californicus*, *Zetzellia mali*.

Corylus colurna L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella aceri*, *Neoseiulella tiliarum*, *Phytoseius plumifer*.

Acariform mite species: *Anystis baccharum*, *Camisia biverrucata* (Koch), *Cecidophyopsis vermiformis*, *Cheletogenes ornatus*, *Coptophylla lamimani*, *Cymbaeremaeus cymba* (Nicolet), *Eotetranychus carpini*, *Eotetranychus coryli*, *Mediolata similans* González-Rodríguez, *Micreremus brevipes* (Michael), *Neoliodes theleproctus* (Hermann), *Neopronematus solani*, *Phytoptus avellanae*, *Tarsonemus bachmaieri* Cooreman, *Tarsonemus waitei*, *Tegonotus depressus*, *Tetranychopsis horridus*, *Tydeus californicus*, *Zetzellia mali*.

Corylus maxima Mill.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Phytoseius plumifer*.

Acariform mite species: *Phytoptus avellanae*, *Zetzellia mali*.

Corylus sp.

Acariform mite species: *Cymbaeremaeus cymba*.

Cupressaceae

Calocedrus decurrens (Torr.) Florin

Acariform mite species: *Pentamerismus oregonensis* McGregor, *Tarsonemus bachmaieri*.

Chamaecyparis lawsoniana Parl.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus baccettii* Lombardini, *Typhlodromus tiliae*.

Acariform mite species: *Cheletogenes ornatus*, *Oligonychus ununguis* (Jacobi), *Pentamerismus juniperi* (Reck), *Pentamerismus oregonensis*, *Tarsonemus waitei*, *Tetranychus urticae*.

Chamaecyparis pisifera (Siebold et Zucc.) Endl.

Acariform mite species: *Oligonychus ununguis*.

Cupressus × *leylandii* A.B. Jacks. et Dallim.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus baccettii*, *Typhlodromus involutus*.

Cupressus lusitanica Mill.

Acariform mite species: *Platytetranychus libocedri* (McGregor).

Cupressus nootkatensis D. Don

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus involutus*.

Acariform mite species: *Oligonychus ununguis*.

Cupressus sempervirens L.

Acariform mite species: *Cheletogenes ornatus*, *Epitrimerus cupressi* (Keifer), *Pentamerismus oregonensis*.



Cupressus sp.

Acariform mite species: *Platytranychus libocedri*, *Platytranychus thujae* (McGregor).

Juniperus chinensis L.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus involutus*.

Acariform mite species: *Oligonychus ununguis*.

Juniperus communis L.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus pyri*, *Typhlodromus rarus* Wainstein.

Acariform mite species: *Anystis baccharum*, *Bryobia praetiosa* Koch, *Eurytranychus admes* Pritchard et Baker, *Lorryia ferula*, *Pentamerismus juniperi*, *Zetzellia crassirostris* (Leonardi), *Zetzellia mali*.

Juniperus horizontalis Moench

Parasitiform mite species: *Amblyseius andersoni*.

Juniperus pseudosabina Fisch. et C. A. Mey.

Acariform mite species: *Pentamerismus oregonensis*.

Juniperus sabina L.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus bakeri* (Garman), *Typhlodromus pyri*, *Typhlodromus rarus*.

Acariform mite species: *Bryobia praetiosa*, *Eurytranychus admes*, *Lorryia ferula*, *Mediolata similans*, *Oligonychus ununguis*, *Pentamerismus juniperi*, *Tetranychus urticae*, *Zetzellia crassirostris*, *Zetzellia mali*.

Juniperus sp.

Acariform mite species: *Anystis baccharum*, *Pentamerismus juniperi*, *Pentamerismus oregonensis*, *Platytranychus libocedri*, *Tarsonemus smithi*, *Tyrophagus putrescentiae* (Schrank).

Juniperus scopulorum Sarg.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus baccettii*, *Typhlodromus involutus*.

Acariform mite species: *Lorryia ocellata*, *Pentamerismus oregonensis*, *Tarsonemus lobosus*, *Tarsonemus waitei*, *Triophyteus immanis*, *Tydeus californicus*.

Juniperus virginiana L.

Parasitiform mite species: *Amblyseius andersoni*, *Neoseiulus agrestis* (Karg), *Typhlodromus involutus*, *Typhlodromus pyri*, *Typhlodromus rarus*.

Acariform mite species: *Anystis baccharum*, *Bryobia praetiosa*, *Cheletogenes ornatus*, *Eurytranychus admes*, *Oligonychus ununguis*, *Tetranychus urticae*.

Metasequoia glyptostroboides Hu et W.C. Cheng

Acariform mite species: *Pentamerismus juniperi*.

Platycladus orientalis (L.) Franco

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus involutus*.

Acariform mite species: *Aegyptobia wainsteini* (Bagdasarian), *Calepitrimerus occithujae* Keifer, *Oligonychus lagodechii* Livshits et Mitrofanov, *Oligonychus ununguis*, *Pentamerismus oregonensis*, *Platytranychus thujae*, *Trisetacus juniperinus* (Nalepa), *Trisetacus thujae* (Garman).

Taxodium distichum (L.) Rich.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus bakeri*, *Typhlodromus bichaetae* Karg, *Typhlodromus involutus*, *Typhlodromus pyri*.



Thuja occidentalis L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Typhlodromus cotoneastri* Wainstein, *Typhlodromus involutus*, *Typhlodromus phialatus* Athias-Henriot.

Acariform mite species: *Calepitrimerus occithujae*, *Cheletogenes ornatus*, *Lorryia ferula*, *Lorryia ocellata*, *Lorryia sanctikingai*, *Oligonychus ununguis*, *Pentamerismus oregonensis*, *Tarsonemus karli*, *Tarsonemus nodosus*, *Tetranychus urticae*, *Trisetacus thujae*.

Thuja plicata Donn ex D. Don

Parasitiform mite species: *Amblyseius andersoni*.

Thuja sp.

Acariform mite species: *Lorryia ferula*, *Oligonychus ununguis*, *Pentamerismus juniperi*, *Pentamerismus oregonensis*, *Platytetranychus thujae*, *Tarsonemus bachmaieri*, *Trisetacus juniperinus*.

Elaeagnaceae

Elaeagnus angustifolia L.

Acariform mite species: *Aceria eleagnicola* Farkas, *Aceria angustifoliae* Denizhan, Monfreda, de Lillo et Çobanoğlu, *Acotyledon paradoxa* Oudemans, *Homeopronematus staerki*, *Pronematus vandus* Baker, *Triophtydeus triophthalmus*.

Elaeagnus commutata Bernh.

Acariform mite species: *Triophtydeus immanis*, *Tydeus californicus*.

Elaeagnus umbellata Thunb.

Acariform mite species: *Anthocoptes scythiacus* Ripka, *Tarsonemus nodosus*, *Tetranychus urticae*, *Tydeus californicus*.

Hippophaë rhamnoides L.

Acariform mite species: *Aceria hippophaena* (Nalepa), *Anthocoptes hungaricus* Ripka, *Micreremus brevipes*, *Tydeus californicus*.

Escalloniaceae

Escallonia × *rigida* Phil.

Parasitiform mite species: *Typhlodromus recki*.

Acariform mite species: *Dendroptus flexus*, *Lorryia electra* Kuznetzov, *Lorryia reticulata*, *Tarsonemus karli*, *Triophtydeus immanis*, *Triophtydeus triophthalmus*.

Fabaceae

Caragana arborescens Lam.

Acariform mite species: *Tetranychus urticae*.

Cytisus scoparius (L.) Link

Acariform mite species: *Aceria genistae* (Nalepa).

Cytisus sp.

Acariform mite species: *Aculops cysticolus* (Canestrini).

Genista tinctoria L.

Acariform mite species: *Aceria genistae*.

Laburnum anagyroides Medik.

Acariform mite species: *Anystis baccarum*.

Laburnum × *watereri* (A. C. Rosenthal et Bermann) Dippel



Parasitiform mite species: *Euseius finlandicus*.

Robinia pseudoacacia L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculops allotrichus* (Nalepa), *Neopronematus solani*, *Panonychus ulmi*, *Tetranychus turkestanii*, *Tetranychus urticae*.

Sophora japonica L.

Acariform mite species: *Anystis baccharum*, *Hemisarcoptes budensis*, *Neopronematus solani*, *Panonychus ulmi*, *Tarsonemus karli*, *Triophtydeus triophthalmus*.

Spartium junceum L.

Acariform mite species: *Triophtydeus immanis*.

Fagaceae

Fagus sylvatica L.

Parasitiform mite species: *Euseius finlandicus*, *Paraseiulus soleiger*.

Acariform mite species: *Acalitus stenaspis* (Nalepa), *Aceria nervisequa* (Canestrini), *Cheiracus ornatus* (Farkas).

Quercus alba L.

Acariform mite species: *Zetzellia mali*.

Quercus cerris L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*, *Typhlodromus exhilaratus exhilaratus* (Ragusa) Chant et Yoshida-Shaul, *Typhlodromus intercalaris* Livshitz et Kuznetzov, *Typhlodromus pyri*, *Typhloseiulus peculiaris* (Kolodochka), *Typhloseiulus simplex* (Chant).

Acariform mite species: *Achaetocoptes quercifolii* Farkas, *Acaricalus cerriquerci* Petanović et Vidović, *Aceria cerrea* (Nalepa), *Aceria cerrigemmarum* (Nalepa), *Bariella bakonyense* Ripka et Csóka, *Cecidophyes cerriquerci* (Farkas), *Cecidophyes tristernalis* (Nalepa), *Charletonia krendowskyi* (Feider), *Czenspinksia transversostriata*, *Dendroptus willmanni*, *Lorryia paraobliqua* Panou et Emmanouel, *Oligonychus lagodechii*, *Phyllocoptes cerriphilus* Farkas, *Rhyncaphytoptus cerrifoliae* Farkas, *Rhyncaphytoptus longisetosus* Farkas, *Rhyncaphytoptus massalongoianus* (Nalepa), *Stigmaeus* cf. *confusus* Wood, *Tarsonemus nodosus*, *Zetzellia mali*.

Quercus × *hispanica* Lam.

Acariform mite species: *Triophtydeus immanis*, *Triophtydeus triophthalmus*, *Tydeus californicus*.

Quercus petraea (Matt.) Liebl.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Typhlodromus rhenanus*.

Acariform mite species: *Acaricalus cerriquerci*, *Brevulacus carpathicus* Ripka, *Glyptacus matrensis* Ripka et Csóka, *Lorryia incrustata*, *Lorryia paraobliqua*, *Oligonychus lagodechii*, *Oligonychus longiclavatus* (Reck), *Rhyncaphytoptus massalongoianus*, *Tarsonemus nodosus*, *Zetzellia mali*.

Quercus pubescens Willd.

Parasitiform mite species: *Phytoseius echinus*, *Typhlodromus pyri*.

Acariform mite species: *Acaricalus secundus* Keifer, *Stigmaeus* cf. *confusus*, *Triophtydeus triophthalmus*, *Zetzellia mali*.



Quercus robur L.

Parasitiform mite species: *Euseius finlandicus*, *Galendromus longipilus*, *Neoseiulus reductus* (Wainstein), *Typhlodromus cotoneastri*, *Typhlodromus tiliae*.

Acariform mite species: *Aceria* sp. near *quercina* (Canestrini), *Aceria magyarica* Ripka, *Aceria quercina* (Canestrini), *Allothrombium pulvinum*, *Bucculacus kaweckii* Boczek, *Cecidophyes sanctiregisladislai* Ripka, *Cheletogenes ornatus*, *Eotetranychus carpini*, *Oligonychus buschi* (Reck), *Oligonychus brevipodus* (Targioni-Tozzetti), *Oligonychus longiclavatus*, *Rhyncaphytoptus arpadi* Ripka, *Rhyncaphytoptus cerrifoliae*, *Rhyncaphytoptus lanuginosae* Farkas, *Schizotetranychus garmani* Pritchard et Baker, *Tarsonemus lobosus*, *Tarsonemus primus* Suski, *Tydeus californicus*, *Tydeus caudatus*, *Tydeus kochi* (Oudemans), *Zetzellia mali*.

Quercus rubra L.

Acariform mite species: *Lorryia obliqua* (Kuznetsov), *Triophtydeus triophthalmus*, *Zetzellia mali*.

Quercus sp.

Acariform mite species: *Acaricalus secundus*, *Rhyncaphytoptus massalongoianus*.

Grossulariaceae

Ribes aureum Pursh

Acariform mite species: *Aceria scaber* (Nalepa).

Ribes sylvestre Mer. et Koch

Acariform mite species: *Homeopronematus staerki*, *Tarsonemus nodosus*, *Triophtydeus immanis*, *Triophtydeus triophthalmus*.

Ribes sp.

Acariform mite species: *Tydeus californicus*.

Hippocastanaceae

Aesculus hippocastanum L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*, *Paraseiulus triporus*, *Typhlodromus pyri*.

Acariform mite species: *Aculus hippocastani* (Fockeu), *Eotetranychus carpini*, *Neopronematus lundqvisti*, *Shevtchenkella carinata* (Nalepa), *Zetzellia mali*.

Aesculus neglecta Lindl.

Acariform mite species: *Shevtchenkella carinata*.

Aesculus pavia L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculus hippocastani*, *Shevtchenkella carinata*, *Tydeus calabrus*, *Tydeus clavimaculatus*.

Hydrangeaceae

Deutzia × *hybrida* Cov.

Acariform mite species: *Tetranychus urticae*.

Deutzia × *magnifica* (Lemoine) Rehd.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Tydeus californicus*.



Juglandaceae

Carya cordiformis (Wangenheim) K. Koch

Acariform mite species: *Czenspinksia transversostriata*, *Triophyteus flatus*, *Zetzellia mali*.

Juglans nigra L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Typhlodromus repens* (Begljarov), *Typhlodromus rhenanus*.

Acariform mite species: *Aceria brachytarsus* (Keifer), *Aculus nigrus* Keifer, *Anystis baccarum*, *Apodiptacus cordiformis* Keifer, *Homeopronematus staerki*, *Neophyllobius* sp. near *sturmerwoodi* Bolland, *Phauloppia conformis* (Berlese), *Tarsonemus waitei*, *Triophyteus triophthalmus*, *Tydeus californicus*.

Juglans regia L.

Acariform mite species: *Aceria brachytarsus*, *Aceria erinea* (Nalepa), *Aceria tristriata* (Nalepa), *Aculops unguiculatus* (Nalepa), *Shevtchenkella juglandis* (Keifer).

Juglans sp.

Acariform mite species: *Aceria tristriata* (Nalepa), *Tydeus californicus*.

Lamiaceae

Rosmarinus officinalis L.

Acariform mite species: *Brevipalpus lewisi* McGregor, *Cenopalpus adventicius* Ueckermann et Ripka.

Magnoliaceae

Magnolia kobus DC.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Tydeus californicus*.

Magnolia × *soulangeana* Soul. et Bod.

Acariform mite species: *Tarsonemus karli*.

Moraceae

Ficus carica L.

Acariform mite species: *Allothrombium pulvinum*.

Maclura pomifera (Rafin.) Schneid.

Acariform mite species: *Allothrombium pulvinum*, *Triophyteus triophthalmus*.

Morus alba L.

Acariform mite species: *Allothrombium pulvinum*, *Lorryia reticulata*, *Vasates mori* Farkas.

Oleaceae

Fontanesia phillyraeoides Labill. ssp. *fortunei* (Carr.) Yalt.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Allothrombium pulvinum*, *Brevipalpus lewisi*, *Dendroptus flexus*, *Tarsonemus waitei*, *Tydeus californicus*.

Forsythia suspensa (Thunb.) Vahl



Acariform mite species: *Aceria* sp. near *forsythiae* Domes, *Lorryia incrustata*, *Lorryia ocellata*, *Lorryia sanctikingai*, *Michaelopus corticalis*, *Tarsonemus fusarii* Cooreman, *Tarsonemus nodosus*, *Tarsonemus waitei*, *Tetranychus urticae*.

Fraxinus americana L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aceria fraxiniflora* (Felt), *Aceria fraxinivora* (Nalepa), *Tydeus californicus*.

Fraxinus angustifolia Vahl

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*, *Paraseiulus incognitus* Wainstein et Arutunjan, *Paraseiulus soleiger*.

Acariform mite species: *Aceria fraxinivora*, *Aculus fraxini* (Nalepa), *Dendroptus willmanni*, *Hemisarcoptes budensis*, *Lorryia ocellata*, *Lorryia reticulata*, *Neopronematus solani*, *Tegolophus califraxini* (Keifer), *Tegonotus collaris* Nalepa, *Tetranychus urticae*, *Triophtydeus triophthalmus*, *Tydeus californicus*, *Tydeus caudatus*, *Zetzellia mali*.

Fraxinus bungeana A. DC.

Acariform mite species: *Aceria fraxinivora*.

Fraxinus excelsior L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus incognitus*, *Paraseiulus soleiger*, *Phytoseius plumifer*, *Typhlodromus tiliae*.

Acariform mite species: *Aceria fraxinicola* (Nalepa), *Aceria fraxinivora*, *Aculus epiphyllus* (Nalepa), *Aculus fraxini*, *Cheletogenes ornatus*, *Czespinskia transversostriata*, *Dendroptus willmanni*, *Eotetranychus fraxini* (Reck), *Lorryia ocellata*, *Michaelopus corticalis*, *Tegolophus califraxini*, *Tegonotus collaris*, *Tetranychus urticae*, *Triophtydeus flatus*, *Tydeus californicus*, *Tydeus longisetosus* Kuznetzov et Zapletina, *Zetzellia mali*.

Fraxinus ornus L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus soleiger*.

Acariform mite species: *Aceria fraxinicola*, *Aceria fraxinivora*, *Eotetranychus carpini*, *Neopronematus solani*, *Tarsonemus karli*, *Tarsonemus nodosus*, *Tegolophus califraxini*, *Tegonotus collaris*, *Tetranychus urticae*, *Tydeus californicus*, *Zetzellia mali*.

Fraxinus pennsylvanica Marsh.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus incognitus*, *Paraseiulus soleiger*.

Acariform mite species: *Aceria fraxiniflora*, *Aceria fraxinivora*, *Aculus epiphyllus*, *Cenopalpus pulcher*, *Hemisarcoptes budensis*, *Neopronematus solani*, *Tegonotus collaris*, *Triophtydeus immanis*, *Tydeus californicus*.

Fraxinus sp.

Acariform mite species: *Amphitetranychus viennensis* (Zacher).

Jasminum beesianum Forrest et Diels

Acariform mite species: *Cheletogenes ornatus*, *Lorryia electra*, *Michaelopus corticalis*, *Mediolata mariaefrancae*, *Schelorbates latipes* (Koch), *Tarsonemus lobosus*, *Trichoribates trimaculatus* (Koch), *Triophtydeus immanis*.

Ligustrum ovalifolium Hassk.

Acariform mite species: *Aceria ligustri* (Keifer), *Aculus ligustri* (Keifer), *Zetzellia mali*.

Ligustrum vulgare L.



Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculus ligustri*, *Brevipalpus lewisi*, *Czenspinksia transversostriata*, *Lorryia ocellata*, *Michaelopus corticalis*, *Neopronematus solani*, *Shevtchenkella ligustri* (Farkas), *Triophthyeus triophthalmus*, *Tydeus californicus*, *Zetzellia mali*.

Osmanthus × *burkwoodii* (Burkw. et Skipw.) P.S. Green

Acariform mite species: *Triophthyeus immanis*, *Tydeus californicus*.

Syringa emodi Wall. ex Royle

Acariform mite species: *Aceria petanovicae* Amrine et de Lillo.

Syringa vulgaris L.

Parasitiform mite species: *Galendromus longipilus*.

Acariform mite species: *Aceria loewi* (Nalepa), *Aceria petanovicae*, *Anystis baccarum*, *Eotetranychus populi*, *Michaelopus corticalis*, *Tetra balasi* Farkas, *Tetranychus urticae*, *Tetraspinus lentus* Boczek.

Pinaceae

Abies alba Mill.

Parasitiform mite species: *Amblyseius andersoni*, *Transeius tenuis* (Hirschmann), *Typhlodromus bichaetae*, *Typhlodromus cotoneastri*, *Typhlodromus involutus*, *Typhlodromus tiliae*.

Acariform mite species: *Bdella iconica* Berlese, *Camisia segnis* (Hermann), *Cheletogenes ornatus*, *Cunaxoides fidus* Kuznetzov et Livshitz, *Cyta coerulipes* (Dugès), *Lorryia ferula*, *Mediolata similans*, *Micreremus brevipes*, *Neoapolorryia regia*, *Neoliodes theleproctus*, *Pentamerismus oregonensis*, *Scutovertex minutus* (Koch), *Spinibdella cronini* (Baker et Balock), *Stigmaeus solidus* Kuznetzov, *Tenuipalpus cheladezeae* Gomelauri, *Tenuipalpus szarvasensis* Bozai, *Tetranychus urticae*, *Trichoribates trimaculatus*, *Zetzellia mali*.

Abies nordmanniana (Steven) Spach

Acariform mite species: *Tarsonemus karli*, *Tarsonemus lobosus*, *Tenuipalpus szarvasensis*.

Abies pinsapo Boiss.

Parasitiform mite species: *Typhlodromus cotoneastri*, *Typhlodromus tiliae*.

Acariform mite species: *Bdella iconica*, *Cheletogenes ornatus*, *Cunaxoides fidus*, *Cyta coerulipes*, *Lorryia ferula*, *Neoapolorryia regia*, *Stigmaeus solidus*, *Tenuipalpus cheladezeae*, *Tetranychus urticae*, *Trichoribates trimaculatus*, *Zetzellia mali*.

Abies sp.

Acariform mite species: *Camisia segnis*, *Epitrimerus pilisensis* Ripka, *Micreremus brevipes*, *Neoliodes theleproctus*, *Scutovertex minutus*.

Larix decidua Mill.

Acariform mite species: *Boczekella laricis* Farkas, *Oligonychus karamatus* (Ehara).

Picea abies (L.) Karst.

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus bakeri*, *Typhlodromus involutus*.

Acariform mite species: *Bryobia praetiosa*, *Cheletogenes ornatus*, *Eurytetranychus admes*, *Lorryia elinguis* (Kuznetzov), *Metalorryia armaghensis* (Baker), *Oligonychus karamatus*, *Oligonychus ununguis*, *Tenuipalpus cheladezeae*, *Tetranychus urticae*.

Picea glauca (Moench) Voss



Parasitiform mite species: *Amblyseius andersoni*, *Transeius tenuis*, *Typhlodromus bakeri*, *Typhlodromus involutus*, *Typhlodromus pyri*.

Acariform mite species: *Bryobia praetiosa*, *Cheletogenes ornatus*, *Eurytetranychus admes*, *Tenuipalpus cheladezeae*.

Picea pungens Engelm.

Parasitiform mite species: *Typhlodromus phialatus*.

Acariform mite species: *Cunaxoides kielczewskii*, *Eurytetranychus furcisetus* Wainstein, *Lor-ryia reticulata*, *Tarsonemus karli*.

Pinus mugo Turra

Parasitiform mite species: *Amblyseius andersoni*, *Typhlodromus bakeri*, *Typhlodromus involutus*.

Acariform mite species: *Trisetacus pini* (Nalepa).

Pinus nigra Arn.

Parasitiform mite species: *Typhlodromus athiasae* Porath et Swirski, *Typhlodromus bakeri*.

Acariform mite species: *Cheletogenes ornatus*, *Eriophyes hunniacus* Ripka, *Neoapolorryia regia*, *Platyphytoptus sabinianae* Keifer, *Proiectus farkasi* (Boczek), *Tetranychus urticae*, *Trisetacus confusus* Livshits et Vasilieva.

Pinus sp.

Acariform mite species: *Pentamerismus juniperi*.

Pinus strobus L.

Acariform mite species: *Bryobia graminum* (Schrank), *Cheletogenes ornatus*, *Neoapolorryia regia*.

Pinus sylvestris L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Typhlodromus bakeri*, *Typhlodromus bichaetae*, *Typhlodromus cotoneastri*, *Typhlodromus ernesti* Ragusa et Swirski, *Typhlodromus involutus*.

Acariform mite species: *Cenopalpus lineola* (Canestrini et Fanzago), *Cheletogenes ornatus*, *Mediolata similans*, *Neoapolorryia regia*, *Oligonychus brevipilosus* (Zacher), *Oligonychus lagodechii*, *Oligonychus ununguis*, *Proctotydaeus oblongus* (Kuznetsov), *Tetranychus turkestanii*, *Tetranychus urticae*, *Trisetacus pini*, *Tydeus inclutus* Livshitz, *Tydeus kochi*, *Zetzellia mali*.

Platanaceae

Platanus × *hybrida* Brot.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*.

Acariform mite species: *Bryobia lagodechiana* Reck, *Eriophyes avaricus* Ripka, *Hericia hericia* Robin, *Rhyncaphytoptus platani* Keifer, *Tydeus californicus*, *Zetzellia mali*.

Poaceae

Phyllostachys angusta McClure

Acariform mite species: *Abacarus korosicsomai* Ripka, *Bambusacarus longipalpis* (Xue et Hong).

Phyllostachys aurea A. Rivière et C. Rivière

Acariform mite species: *Stigmaeopsis nanjingensis* (Ma et Yuan).

Phyllostachys aureosulcata McClure



Acariform mite species: *Adventacarus turulae* Ripka, *Bambusacarus longipalpis*.

Phyllostachys edulis (Carrière) J. Houzeau

Acariform mite species: *Abacarus korosicsomai*, *Adventacarus turulae*, *Bambusacarus longipalpis*.

Phyllostachys fimbriligula T.H. Wen

Acariform mite species: *Abacarus korosicsomai*, *Bambusacarus longipalpis*.

Phyllostachys iridescens C.Y. Yao et S.Y. Chen

Acariform mite species: *Abacarus korosicsomai*, *Mucotergum nigrum* Ripka.

Phyllostachys meyeri McClure

Acariform mite species: *Mucotergum nigrum*.

Phyllostachys nigra var. *henonis* (Mitford) Stapf ex Rendle

Acariform mite species: *Adventacarus turulae*.

Phyllostachys rubromarginata McClure

Acariform mite species: *Abacarus korosicsomai*, *Aceria bambusae* ChannaBasavanna, *Adventacarus turulae*, *Bambusacarus longipalpis*, *Zetzellia mali*.

Phyllostachys sulphurea f. *sulphurea* (Carr.) A. Rivière et C. Rivière

Acariform mite species: *Schizotetranychus bambusae* Reck.

Phyllostachys tianmuensis Z.P. Wang et N.X. Ma

Acariform mite species: *Aceria bambusae*, *Adventacarus turulae*, *Bambusacarus longipalpis*.

Phyllostachys viridi-glaucescens A. Rivière et C. Rivière

Parasitiform mite species: *Amblyseius andersoni*, *Paraseiulus incognitus*, *Paraseiulus soleiger*, *Typhlodromus tiliae*.

Acariform mite species: *Abacarus korosicsomai*, *Adventacarus turulae*, *Tarsonemus karli*, *Triophyteus immanis*, *Tydeus californicus*, *Tydeus inclutus*, *Zetzellia mali*.

Phyllostachys yunhoensis S.Y. Chen et C.Y. Yao

Acariform mite species: *Bambusacarus longipalpis*.

Punicaceae

Punica granatum L.

Acariform mite species: *Aceria granati* (Canestrini et Massalongo).

Rhamnaceae

Frangula alnus Mill.

Acariform mite species: *Pentamerus septemcarinatus* (Liro).

Rhamnus catharticus L.

Parasitiform mite species: *Neoseiulella tiliarum*.

Acariform mite species: *Aceria rhamni* Roivainen, *Aequosomatus annulatus* (Nalepa), *Anystis baccarum*, *Cheletacarus raptor* Volgin, *Floracarus atillai* Ripka, *Mediolata mariaefrancae*, *Pentamerus septemcarinatus*, *Tarsonemus nodosus*, *Tetra rhamni* Roivainen.

Rhamnus imeretina Booth, Petz. et G. Kirchn.

Acariform mite species: *Tetranychus urticae*.

Rhamnus utilis Decne.

Parasitiform mite species: *Euseius finlandicus*.



Acariform mite species: *Floracarus atillai*, *Tarsonemus nodosus*, *Triophtydeus immanis*, *Triophtydeus triophthalmus*, *Tydeus californicus*, *Tydeus meshkinensis* André, Ueckermann et Rahmani.

Rosaceae

Amelanchier canadensis (L.) Medik.

Acariform mite species: *Tydeus californicus*.

Cotoneaster dammeri C.K. Schneid.

Acariform mite species: *Eriophyes pyri* (Pagenstecher).

Cotoneaster integerrimus Medik.

Acariform mite species: *Acalitus cotoneastri* (Nalepa).

Cotoneaster nebrodensis (Guss.) K. Koch

Acariform mite species: *Cenopalpus pulcher*, *Tetranychus urticae*.

Cotoneaster niger (Thunb.) Fr.

Acariform mite species: *Acalitus cotoneastri*.

Cotoneaster sp.

Acariform mite species: *Acalitus cotoneastri*, *Brevipalpus thelycraniae* Livshitz et Mitrofanov.

Cotoneaster thymifolius hort. ex Baker

Acariform mite species: *Cenopalpus pulcher*.

Cotoneaster tomentosus (Aiton) Lindl.

Acariform mite species: *Eriophyes propinquus* Nalepa.

Crataegus laevigata (Poir.) DC.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Amphitetranychus viennensis*, *Anystis baccharum*, *Bryobia rubrioculus*, *Calepitrimerus armatus* (Canestrini), *Cenopalpus pulcher*, *Cheletogenes ornatus*, *Diptacus gigantorhynchus* (Nalepa), *Eupalopsis maseriensis* (Canestrini et Fanzago), *Hemisarcoptes budensis*, *Michaelopus corticalis*, *Phyllocoptes goniothorax* (Nalepa), *Tetranychus urticae*, *Tydeus californicus*, *Tydeus caudatus*.

Crataegus × *lavalleyi* Hérincq.

Parasitiform mite species: *Kampimodromus aberrans*.

Acariform mite species: *Triophtydeus flatus*.

Crataegus monogyna Jacq.

Parasitiform mite species: *Euseius finlandicus*, *Typhlodromus bichaetae*.

Acariform mite species: *Aculops crataegumplicans* (Cotte), *Cenopalpus mespili* (Livshitz et Mitrofanov), *Cenopalpus pulcher*, *Eupalopsis maseriensis*, *Michaelopus corticalis*, *Mediolata chanti* González-Rodríguez, *Micreremus brevipes*, *Phyllocoptes goniothorax*, *Tarsonemus nodosus*, *Triophtydeus immanis*, *Triophtydeus triophthalmus*, *Tydeus californicus*.

Crataegus orientalis (Mill.) M. Bieb.

Acariform mite species: *Phyllocoptes goniothorax*.

Crataegus sp.

Parasitiform mite species: *Typhlodromus cotoneastri*.

Acariform mite species: *Amphitetranychus viennensis*, *Petrobia latens* (Müller).

Crataegus succulenta Link

Acariform mite species: *Cenopalpus pulcher*, *Michaelopus corticalis*, *Tydeus californicus*.



Karpatisorbus pseudolatifolia (Boros) Sennikov et Kurtto

Acariform mite species: *Phyllocoptes sorbeus* (Nalepa).

Malus asiatica Nakai

Acariform mite species: *Aculus schlechtendali* (Nalepa).

Malus baccata (L.) Borkh.

Acariform mite species: *Aculus schlechtendali*, *Hemisarcoptes budensis*, *Michaelopus corticalis*, *Triophyteus immanis*.

Malus halliana Koehne

Acariform mite species: *Michaelopus corticalis*.

Malus pumila Mill. var. *niedzwetzkyana*

Parasitiform mite species: *Euseius finlandicus*, *Galendromus longipilus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*, *Paraseiulus soleiger*, *Phytoseius macropilis* (Banks), *Phytoseius plumifer*, *Typhlodromus athiasae*.

Acariform mite species: *Aculus schlechtendali*, *Eotetranychus pruni*, *Eotetranychus prunicola* Livshitz, *Epitrimerus malimarginemtorquens* (Liro), *Eupalopsis maseriensis*, *Microtydeus constans* Thor, *Scapheremaeus reticulatus*, *Triophyteus immanis*, *Tydeus caudatus*.

Malus × *purpurea* (Barbier) Rehd.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*.

Acariform mite species: *Bryobia rubrioculus*, *Eotetranychus carpini*, *Eotetranychus pruni*, *Eotetranychus tiliarum*, *Michaelopus corticalis*, *Phyllocoptes malinus* (Nalepa), *Tydeus californicus*, *Zetzellia mali*.

Malus × *spectabilis* (Sol.) Borkh.

Acariform mite species: *Micreremus brevipipes*.

Potentilla fruticosa L.

Acariform mite species: *Pronematus sextoni*, *Tetranychus urticae*.

Prunus cerasifera Ehrh.

Parasitiform mite species: *Blattisocius keegani* Fox, *Euseius finlandicus*, *Phytoseius plumifer*.

Acariform mite species: *Aculus fockeui* (Nalepa et Trouessart), *Amphitetranychus viennensis*, *Bryobia rubrioculus*, *Diptacus gigantorhynchus*, *Lorryia mali*, *Michaelopus corticalis*, *Panonychus ulmi*, *Phyllocoptes abaeus* Keifer, *Tarsonemus karli*, *Tarsonemus nodosus*, *Tydeus californicus*, *Tydeus caudatus*, *Zetzellia mali*.

Prunus dulcis D. A. Webb

Parasitiform mite species: *Paraseiulus talbii*.

Acariform mite species: *Aculus fockeui*, *Amphitetranychus viennensis*, *Eriophyes distinguendus* (Kieffer), *Bryobia rubrioculus*, *Triophyteus flatus*, *Triophyteus immanis*, *Tydeus californicus*.

Prunus laurocerasus L.

Acariform mite species: *Cheletogenes ornatus*.

Prunus mahaleb L.

Acariform mite species: *Aculus fockeui*, *Allothrombium pulvinum*, *Amphitetranychus viennensis*, *Eriophyes homophyllus* Nalepa, *Eriophyes prunianus* Nalepa, *Eriophyes prunispinosae* Nalepa, *Eriophyes similis* (Nalepa), *Phyllocoptes eupadi* (Newkirk), *Podothrombium exiguum* Fain et Ripka.

Prunus padus L.

Parasitiform mite species: *Euseius finlandicus*.



Acariform mite species: *Amphitetranychus viennensis*, *Eriophyes distinguendus*, *Eriophyes homophyllus*, *Eriophyes prunianus*, *Phyllocoptes eupadi*, *Tarsonemus lobosus*, *Tydeus californicus*.

Prunus serrulata Lindl.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Charletonia cardinalis* (C. L. Koch).

Prunus sp.

Acariform mite species: *Aculus fockeui*, *Amphitetranychus viennensis*, *Bryobia rubrioculus*, *Cenopalpus pulcher*, *Tarsonemus nodosus*, *Triophtydeus flatus*, *Zetzellia mali*.

Prunus spinosa L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Kampimodromus aberrans*, *Paraseiulus soleiger*, *Phytoseius echinus*, *Phytoseius macropilis*, *Phytoseius plumifer*, *Typhlodromus recki*.

Acariform mite species: *Aculus fockeui*, *Acalitus phloeocoptes* (Nalepa), *Aculus parakarensis* (Bagdasarian), *Amphitetranychus viennensis*, *Bryobia rubrioculus*, *Diptacus gigantorhynchus*, *Eotetranychus pruni*, *Eriophyes homophyllus*, *Eriophyes prunianus*, *Eriophyes prunispinosae*, *Eriophyes similis*, *Eriophyes spinosicola* Rainiss, *Lorryia sanctikingai*, *Michaelopus corticalis*, *Micreremus brevipes*, *Panonychus ulmi*, *Phyllocoptes abaenus*, *Phyllocoptes eupadi*, *Rhinophytoptus dudichi* Farkas, *Rhinotergum schestovici* Petanović, *Schizotetranychus ugarovi* (Wainstein), *Tarsonemus nodosus*, *Tarsonemus stammeri*, *Triophtydeus immanis*, *Triophtydeus triophthalmus*, *Tydeus californicus*, *Tydeus caudatus*, *Tydeus reticoxus* Uecker-mann, *Zetzellia mali*.

Pseudocydonia sinensis (Thouin) C. K. Schneid.

Parasitiform mite species: *Kampimodromus aberrans*.

Pyraacantha coccinea Roem.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aceria pyraacanthi* (Canestrini), *Cenopalpus spinosus* (Donnadieu).

Pyrus amygdaliformis Vill.

Acariform mite species: *Epitrimerus marginemtorquens* (Nalepa), *Eriophyes pyri*.

Pyrus betulifolia Bunge

Parasitiform mite species: *Typhlodromus recki*.

Acariform mite species: *Czenspinskia transversostriata*, *Hemisarcoptes budensis*, *Michaelopus corticalis*.

Pyrus calleryana Decne.

Parasitiform mite species: *Euseius stipulatus* (Athias-Henriot).

Pyrus pashia Hamilt.

Acariform mite species: *Anystis baccharum*, *Michaelopus corticalis*, *Triophtydeus immanis*.

Pyrus pyraaster Burgsd.

Acariform mite species: *Aculus schlechtendali*, *Dendroptus flexus*, *Epitrimerus marginemtorquens*, *Epitrimerus pyri* (Nalepa), *Eriophyes pyri*, *Hemisarcoptes budensis*, *Michaelopus corticalis*, *Triophtydeus immanis*, *Tydeus californicus*.

Rhodotypos scandens (Thunb.) Mak.

Acariform mite species: *Allothrombium pulvinum*.

Rosa canina L.

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulus agrestis*.



Acariform mite species: *Callyntrotus schlechtendali* Nalepa, *Homeopronematus staerki*, *Triophtydeus triophthalmus*, *Tydeus californicus*, *Tydeus caudatus*.

Rosa rugosa Thunb.

Acariform mite species: *Eotetranychus tiliarium*, *Tetranychus urticae*.

Rosa sp.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Cenopalpus pulcher*, *Lorryia sanctikingai*, *Tetranychus urticae*, *Zetzellia mali*.

Sorbus aria (L.) Crantz

Acariform mite species: *Cenopalpus pulcher*, *Eriophyes arianus* (Canestrini), *Eriophyes sorbi* (Canestrini), *Phyllocoptes sorbeus*.

Sorbus aucuparia L.

Acariform mite species: *Amphitetranychus viennensis*, *Eriophyes arianus*, *Eriophyes burtsi* Wilson et Oldfield, *Eriophyes sorbi*, *Panonychus ulmi*, *Phyllocoptes sorbeus*, *Tetranychus urticae*.

Sorbus borbasii Jáv.

Acariform mite species: *Amphitetranychus viennensis*, *Cenopalpus pulcher*, *Tydeus californicus*.

Sorbus commixta Hedl.

Acariform mite species: *Eriophyes arianus*, *Phyllocoptes sorbeus*.

Sorbus domestica L.

Acariform mite species: *Eriophyes arianus*, *Lorryia ocellata*.

Sorbus sp.

Parasitiform mite species: *Paraseiulus talbii*.

Acariform mite species: *Cenopalpus pulcher*.

Sorbus torminalis (L.) Crantz

Parasitiform mite species: *Euseius finlandicus*, *Phytoseius macropilis*, *Typhlodromus pyri*, *Typhlodromus tiliae*.

Acariform mite species: *Calepitrimerus mathiasrexi* Ripka, *Cenopalpus spinosus*, *Eriophyes arianus*, *Eriophyes pyri*, *Eriophyes sorbi*, *Eriophyes torminalis* Nalepa, *Panonychus ulmi*, *Phyllocoptes sorbeus*, *Tydeus caudatus*, *Tydeus kochi*, *Zetzellia mali*.

Spiraea sp.

Parasitiform mite species: *Typhlodromus cotoneastri*.

Rutaceae

Citrus trifoliata L.

Acariform mite species: *Tetranychus urticae*.

Phellodendron amurense Rupr.

Acariform mite species: *Hemisarcoptes budensis*, *Lorryia ocellata*, *Lorryia sanctikingai*, *Michaelopus corticalis*.

Ptelea trifoliata L.

Acariform mite species: *Allothrombium pulvinum*, *Erythraeus budapestensis* Fain et Ripka.

Tetradium daniellii (Benn.) T. G. Hartley

Acariform mite species: *Tydeus californicus*.



Salicaceae

Populus alba L.

Parasitiform mite species: *Euseius finlandicus*, *Kampimodromus aberrans*, *Neoseiulus huron* (Chant et Hansell), *Neoseiulus versutus* (Begljarov), *Phytoseius macropilis*.

Acariform mite species: *Aceria dispar* (Nalepa), *Aceria populi* (Nalepa), *Aceria populicanescentis* Roivainen, *Aculus knowltoni* Keifer, *Aculus moger* (Farkas), *Allothrombium pulvinum*, *Cenopalpus cumanicus* Ueckermann et Ripka, *Charletonia cardinalis*, *Eotetranychus populi*, *Lorryia sanctikingai*, *Michaelopus corticalis*, *Phyllocoptes populi* (Nalepa), *Tarsonemus nodosus*, *Tarsonemus populi* Magowski, *Tarsonemus waitei*, *Tydeus californicus*.

Populus × *berolinensis* K. Koch

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulus astutus* (Begljarov), *Neoseiulus versutus*.

Acariform mite species: *Aceria populi*, *Aceria salicis* (Murray), *Aculus moger* (Farkas), *Anystis bacarum*, *Eotetranychus populi*, *Tarsonemus lobosus*, *Tarsonemus populi*, *Tarsonemus waitei*.

Populus × *canescens* (Ait.) P. Smith

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulus astutus*, *Proctolaelaps scolyti* Evans, *Typhlodromus foenilis* Oudemans.

Acariform mite species: *Aceria populi*, *Aceria populicanescentis*, *Aculus knowltoni*, *Aculus moger* (Farkas), *Cenopalpus cumanicus*, *Cenopalpus pulcher*, *Cheletacarus raptor*, *Cheletogenes ornatus*, *Czespinskia transversostriata*, *Eotetranychus populi*, *Hemisarcoptes budensis*, *Lorryia ferula*, *Lorryia hungarica*, *Mediolata mariaefrancae*, *Michaelopus corticalis*, *Prosocheyla ripkai* Fain et Bochkov, *Tarsonemus primus*, *Triophytodeus triophthalmus*, *Tydeus californicus*, *Tydeus spathulatus* Oudemans, *Tyrophagus putrescentiae*, *Zetzellia mali*.

Populus deltoides W. Bartram ex Marshall

Acariform mite species: *Aceria populi*.

Populus × *euramericana* (Dode) Guinier

Parasitiform mite species: *Kampimodromus aberrans*.

Acariform mite species: *Aculus moger* (Farkas), *Eotetranychus populi*, *Tarsonemus lobosus*, *Tarsonemus populi*, *Tarsonemus smithi*, *Tarsonemus waitei*, *Tetranychus urticae*.

Populus grandidentata Michx.

Acariform mite species: *Aculus knowltoni*.

Populus nigra L.

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulus astutus*, *Neoseiulus herbarius* (Wainstein), *Neoseiulus populi* (Bozai).

Acariform mite species: *Aceria populi*, *Aculus moger* (Farkas), *Eotetranychus populi*, *Phyllocoptes populi*, *Tarsonemus nodosus*, *Tarsonemus populi*, *Tyrophagus putrescentiae*.

Populus simonii Carr.

Parasitiform mite species: *Neoseiulus astutus*.

Acariform mite species: *Aceria populi*, *Cheletacarus raptor*, *Cheletogenes ornatus*, *Hemisarcoptes budensis*, *Michaelopus corticalis*, *Prosocheyla ripkai*, *Prosocheyla traubi* (Baker), *Tydeus californicus*, *Zetzellia mali*.

Populus sp.

Acariform mite species: *Aceria populi*, *Aculus reticulatus* (Nalepa), *Amphitetranychus viennensis*, *Bryobia praetiosa*.



Populus tremula L.

Parasitiform mite species: *Amblyseius andersoni*.

Acariform mite species: *Aceria dispar*, *Aceria populi*, *Aceria varia* (Nalepa), *Aculus aegirinus* (Nalepa), *Aculus mogeri*, *Cheletogenes ornatus*, *Eotetranychus populi*, *Eriophyes diversipunctatus* (Nalepa), *Phyllocoptes populi*.

Populus trichocarpa Torr. et A. Gray ex Hook.

Acariform mite species: *Aceria populi*.

Salix aegyptiaca L.

Parasitiform mite species: *Galendromus longipilus*, *Kampimodromus aberrans*.

Acariform mite species: *Aceria salicis*, *Aculus gemmarum* (Nalepa), *Andretydaeolus alius* Kaźmierski et Ripka, *Schizotetranychus garmani*, *Stenacis palomaris* Keifer, *Triophyteus immanis*, *Triophyteus triophthalmus*, *Tydeus caudatus*, *Tydeus californicus*, *Zetzellia mali*.

Salix alba L.

Parasitiform mite species: *Euseius finlandicus*, *Galendromus longipilus*, *Neoseiulus salicicola* (Bozai), *Typhlodromus tiliae*.

Acariform mite species: *Acaphyllisa salicobia* (Nalepa), *Aceria salicina* (Nalepa), *Aceria salicis*, *Aculops rhodensis* (Keifer), *Aculus craspedobius* (Nalepa), *Aculus laevis* (Nalepa), *Aculus magnirostris* (Nalepa), *Aculus myrsinitis* (Roivainen), *Aculus parvus* (Nalepa), *Aculus salicisalbae* (Nalepa), *Aculus tetanothrix* (Nalepa), *Aculus truncatus* (Nalepa), *Aculus variabilis* (Roivainen), *Anthocoptes salicis* Nalepa, *Anystis salicinus* (Linnaeus), *Eotetranychus populi*, *Lorryia ferula*, *Schizotetranychus schizopus* (Zacher), *Stenacis palomaris*, *Stenacis triradiatus* (Nalepa), *Tarsonemus lobosus*, *Tarsonemus nodosus*, *Tarsonemus populi*, *Tarsonemus waitei*, *Tetranychus urticae*, *Triophyteus immanis*, *Tydeus californicus*.

Salix babylonica L.

Parasitiform mite species: *Typhlodromus cotoneastri*.

Acariform mite species: *Aculus gemmarum*, *Aculus magnirostris*, *Anthocoptes salicis*, *Anystis salicinus*, *Stenacis triradiatus*, *Tydeus caudatus*.

Salix caprea L.

Parasitiform mite species: *Neoseiulus astutus*, *Paraseiulus talbii*, *Phytoseius echinus*, *Phytoseius juvenis* Wainstein et Arutunjan.

Acariform mite species: *Aculus gemmarum*, *Anthocoptes salicis*, *Anystis salicinus*, *Epitrimerus* sp. near *crassus* Sapozhnikova, *Homeopronematus staerki*, *Proctotydaeus oblongus*, *Rhyncaphytoptus capreae* Liro, *Schizotetranychus schizopus*, *Stenacis palomaris*, *Tarsonemus confusus* Ewing, *Tarsonemus waitei*, *Tetranychus urticae*, *Zetzellia mali*.

Salix cinerea L.

Acariform mite species: *Aceria iteina* (Nalepa), *Aculus tetanothrix*, *Stenacis triradiatus*.

Salix cordata Michx.

Acariform mite species: *Stenacis triradiatus*.

Salix daphnoides Vill.

Acariform mite species: *Eotetranychus populi*, *Stenacis triradiatus*.

Salix elaeagnos Scop.

Parasitiform mite species: *Amblyseius andersoni*, *Phytoseius echinus*, *Phytoseius juvenis*, *Phytoseius macropilis*.

Acariform mite species: *Acaphyllisa rakoczii* Ripka, *Aculops rhodensis*, *Aculus gemmarum*, *Daidalotarsonemus* sp. near *hewitti* Mahunka, *Epitrimerus* sp. near *crassus* Sapozhnikova,



Cenopalpus pulcher, *Cunaxoides ornatus* K azmierski et Laniecka, *Panonychus ulmi*, *Schizotetranychus schizopus*, *Stenacis palomaris*, *Tarsonemus hermes* Suski, *Tarsonemus* sp. near *secundus* Suski, *Tarsonemus piliger* von Schlechtendal, *Tarsonemus smithi*, *Tarsonemus virgineus* Suski, *Tarsonemus waitei*, *Triophyteus immanis*, *Tydeus kochi*, *Tydeus longisetosus*, *Zetzellia mali*.

Salix × *erythroflexuosa* Rag.

Acariform mite species: *Aculus gemmarum*, *Aculus magnirostris*, *Anthocoptes salicis*.

Salix × *fragilis* Scop.

Acariform mite species: *Acaphyllisa salicobia*, *Aculus laevis*, *Aculus magnirostris*, *Aculus parvus*, *Aculus tetanothrix*, *Stenacis triradiatus*.

Salix herbacea L.

Acariform mite species: *Aculus parvus*.

Salix integra Thunb.

Acariform mite species: *Aculus craspedobius*, *Aculus tetanothrix*.

Salix matsudana Koidz. ‘Tortuosa’ Vilm.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculus gemmarum*, *Anthocoptes salicis*, *Schizotetranychus garmani*, *Stenacis palomaris*, *Tarsonemus nodosus*.

Salix ‘Mesuneko’

Parasitiform mite species: *Phytoseius plumifer*.

Acariform mite species: *Aculus gemmarum*, *Anystis salicinus*, *Schizotetranychus garmani*, *Stenacis palomaris*, *Tarsonemus karli*, *Zetzellia mali*.

Salix × *pendulina* Wender.

Acariform mite species: *Stenacis triradiatus*.

Salix purpurea L.

Acariform mite species: *Aculus craspedobius*, *Aculus magnirostris*, *Aculus salicisalbae*, *Aculus tetanothrix*, *Anthocoptes salicis*, *Schizotetranychus schizopus*, *Stenacis palomaris*, *Stenacis triradiatus*.

Salix repens L.

Acariform mite species: *Stenacis triradiatus*.

Salix rosmarinifolia L.

Acariform mite species: *Stenacis triradiatus*.

Salix × *rubra* Huds.

Acariform mite species: *Aculus tetanothrix*, *Stenacis triradiatus*.

Salix × *sitchensis* Sanson ex Bong.

Acariform mite species: *Aculus tetanothrix*.

Salix × *smithiana* Willd.

Acariform mite species: *Aculus salicisalbae*, *Aculus tetanothrix*, *Stenacis triradiatus*.

Salix sp.

Acariform mite species: *Aculus gemmarum*, *Anthocoptes salicis*, *Stenacis palomaris*, *Stenacis triradiatus*.

Salix triandra L.

Acariform mite species: *Aculus tetanothrix*.

Salix viminalis L.

Parasitiform mite species: *Paraseiulus talbii*.



Acariform mite species: *Aceria salicis*, *Aculus craspedobius*, *Aculus salicisalbae*, *Aculus teta-nothrix*, *Anthocoptes salicis*, *Eotetranychus carpini*, *Schizotetranychus garmani*, *Stenacis triradia-tus*, *Zetzellia mali*.

Sapindaceae

Koelreuteria paniculata Laxm.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Homeopronematus staerki*, *Neopronematus solani*, *Rhinophytoptus szechenyii* Ripka, *Tydeus californicus*.

Xanthoceras sorbifolium Bunge

Parasitiform mite species: *Euseius finlandicus*.

Simaroubaceae

Ailanthus altissima (Mill.) Swingle

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aculops mosoniensis* Ripka, *Neopronematus solani*, *Pronematus sextoni*, *Tydeus californicus*.

Solanaceae

Lycium barbarum L.

Parasitiform mite species: *Euseius stipulatus*.

Acariform mite species: *Aceria kuko* (Kishida).

Staphyleaceae

Staphylea pinnata L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Anystis baccharum*, *Zetzellia mali*.

Taxaceae

Taxus baccata L.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Typhlodromus bakeri*, *Typhlodromus cotoneastri*, *Typhlodromus phialatus*, *Typhlodromus pyri*, *Typhlodromus rarus*.

Acariform mite species: *Cecidophyopsis psilaspis* (Nalepa), *Cheletogenes ornatus*, *Cunaxoides kielczewskii*, *Lorryia ferula*, *Mediolata similans*, *Pentamerismus taxi* (Haller), *Tyrophagus putres-centiae*, *Zetzellia mali*.

Taxodiaceae

Sequoia sp.

Acariform mite species: *Pentamerismus taxi*.

Thymelaeaceae

Daphne mezereum L.

Acariform mite species: *Michaelopus corticalis*, *Micreremus brevipes*.



Tiliaceae

Tilia americana L.

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulella tiliarum*.

Acariform mite species: *Aculus ballei* (Nalepa), *Eotetranychus tiliarium*, *Eriophyes exilis* (Nalepa), *Phytoptus abnormis* Garman, *Phytoptus erinotes* (Nalepa).

Tilia cordata Mill.

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Galendromus longipilus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*, *Neoseiulus agrestis*, *Paraseiulus incognitus*, *Paraseiulus soleiger*, *Phytoseius plumifer*, *Typhlodromus tiliae*.

Acariform mite species: *Aculus ballei*, *Czenspinksia transversostriata*, *Dendroptus flexus*, *Eotetranychus pruni*, *Eotetranychus tiliarium*, *Eriophyes exilis*, *Eriophyes lateannulatus* Schulze, *Eriophyes leiosoma* (Nalepa), *Eriophyes nervalis* (Nalepa), *Eriophyes tiliae* (Pagenstecher), *Lorryia bathorii*, *Lorryia ocellata*, *Phytoptus abnormis*, *Phytoptus erinotes*, *Phytoptus stenoporus* (Nalepa), *Phytoptus tetratrachus* (Nalepa), *Tarsonemus nodosus*, *Tarsonemus waitei*, *Tetranychus turkestanii*, *Tetranychus urticae*, *Tydeus caudatus*, *Tydeus californicus*, *Zetzellia mali*.

Tilia × *euchlora* K. Koch

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Eotetranychus tiliarium*, *Eriophyes tiliae*, *Mediolata mariaefrancae*, *Phytoptus tetratrachus*, *Tydeus caudatus*.

Tilia europaea L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Eotetranychus tiliarium*, *Eriophyes leiosoma*, *Tarsonemus waitei*, *Tydeus californicus*.

Tilia japonica (Miq.) Simonk.

Acariform mite species: *Phytoptus tetratrachus*.

Tilia × *juranyiana* Simonk.

Acariform mite species: *Phytoptus abnormis*, *Phytoptus erinotes*.

Tilia miqueliana Maxim.

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulella tiliarum*, *Paraseiulus incognitus*, *Paraseiulus soleiger*, *Typhlodromus athiasae*.

Acariform mite species: *Eriophyes tiliae*, *Zetzellia mali*.

Tilia mongolica Maxim.

Acariform mite species: *Phytoptus tetratrachus*.

Tilia platyphyllos Scop.

Parasitiform mite species: *Euseius finlandicus*, *Galendromus longipilus*, *Neoseiulella tiliarum*, *Phytoseius plumifer*, *Typhlodromus pyri*, *Typhlodromus tiliae*.

Acariform mite species: *Aculus ballei*, *Czenspinksia transversostriata*, *Eotetranychus tiliarium*, *Eriophyes exilis*, *Eriophyes leiosoma*, *Eriophyes tiliae*, *Lorryia bathorii*, *Lorryia pulchra*, *Phytoptus abnormis*, *Phytoptus bursarius* (Nalepa), *Phytoptus erinotes*, *Phytoptus stenoporus*, *Phytoptus tetratrachus*, *Tarsonemus stammeri*, *Triophthyeus triophthalmus*, *Tydeus calabrus*, *Tydeus californicus*, *Zetzellia mali*.

Tilia sp.

Parasitiform mite species: *Amblyseius meridionalis* Berlese, *Amblyseius obtusus* (Koch), *Euseius finlandicus*, *Galendromus longipilus*, *Kampimodromus aberrans*, *Neoseiulella tiliarum*,



Neoseiulus herbarius, *Paraseiulus soleiger*, *Paraseiulus talbii*, *Phytoseius macropilis*, *Typhlodromus involutus*, *Typhlodromus rhenanus*, *Typhlodromus rivulus* (Karg).

Acariform mite species: *Aculus ballei*, *Brevipalpus obovatus*, *Brevipalpus tiliae* De Leon, *Cenopalpus pulcher*, *Eriophyes exilis*, *Eriophyes leiosoma*, *Eriophyes tiliae*, *Phytoptus tetratrichus*.

Tilia tomentosa Moench

Parasitiform mite species: *Amblyseius andersoni*, *Euseius finlandicus*, *Kampimodromus aberrans*, *Phytoseius plumifer*.

Acariform mite species: *Aculus argenteae* (Farkas), *Aculus ballei*, *Bryobia tiliae* Bagdasarian, *Charletonia cardinalis*, *Czenspinksia transversostriata*, *Eotetranychus tiliarium*, *Eriophyes exilis*, *Eriophyes leiosoma*, *Eriophyes tiliae*, *Eriophyes tiliaetomentosae* Nalepa, *Lorryia mali*, *Lorryia paraobliqua*, *Mediolata ronaldi* Laniecka, *Panonychus ulmi*, *Phytoptus abnormis*, *Phytoptus erinotes*, *Phytoptus stenoporus*, *Phytoptus tetratrichus*, *Rhyncaphytoptus ulmivora* Farkas, *Tydeus californicus*, *Zetzellia mali*.

Ulmaceae

Celtis australis L.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Reckella celtis* Bagdasarian.

Celtis occidentalis L.

Parasitiform mite species: *Euseius finlandicus*, *Neoseiulella tiliarum*, *Paraseiulus soleiger*, *Typhlodromus tiliae*.

Acariform mite species: *Neopronematus solani*, *Tetranychus urticae*.

Celtis sinensis Pers.

Parasitiform mite species: *Euseius finlandicus*.

Ulmus americana L.

Acariform mite species: *Aceria campestricola* (Frauenfeld).

Ulmus glabra Huds.

Parasitiform mite species: *Euseius finlandicus*.

Acariform mite species: *Aceria campestricola*, *Aceria filiformis* (Nalepa), *Anthocoptes lorica-tus* (Nalepa), *Anystis baccarum*, *Criotacus mastigophorus* (Nalepa), *Rhinophytoptus concinnus-sypsilophorus* Farkas, *Rhyncaphytoptus ulmivagrans* Keifer, *Rhyncaphytoptus ulmivora*, *Shevtchenkella ulmi* (Farkas), *Tetra concava* (Keifer), *Tydeus caudatus*, *Zetzellia mali*.

Ulmus laevis Pall.

Parasitiform mite species: *Kampimodromus aberrans*.

Acariform mite species: *Aceria campestricola*, *Aceria filiformis*, *Anthocoptes lorica-tus*, *Homeopronematus staerki*, *Rhinophytoptus concinnus-sypsilophorus*, *Rhyncaphytoptus ulmivora*, *Trioph-tydeus triophthalmus*, *Tydeus caudatus*, *Tydeus californicus*.

Ulmus minor Mill.

Parasitiform mite species: *Euseius finlandicus*, *Typhlodromus pyri*.

Acariform mite species: *Abacoptes ulmivagrans* (Keifer), *Aceria campestricola*, *Lorryia incrustata*, *Rhyncaphytoptus ulmivagrans*.

Ulmus pumila L.

Acariform mite species: *Aceria filiformis*, *Zetzellia mali*.

Ulmus sp.

Acariform mite species: *Bryobia ulmophila* Reck.



Zelkova serrata (Thunb.) Mak.

Parasitiform mite species: *Euseius finlandicus*.

Vitaceae

Parthenocissus tricuspidata (Sieb. et Zucc.) Planch.

Acariform mite species: *Brevipalpus lewisi*, *Tetranychus turkestanii*, *Tetranychus urticae*.

CONCLUSIONS

Based on the literature records, a total of 444 mite species of 33 families were found on 283 ornamental tree and shrub species belonging to 45 families. On the 88 native woody ornamentals a total of 42 parasitiform and 286 acariform mite species, while on the 195 introduced trees and shrubs 33 parasitiform and 231 acariform mite species were recorded.

The highest number of mite families are known from the hardwood trees and shrubs of families Rosaceae (21), Salicaceae (20) and Oleaceae (17) (Table 1). While the greatest number of mite species were found on the woody species of families Salicaceae (99), Rosaceae (98) and Fagaceae (63).

Out of the two main lineages of mites, i.e. the superorders Parasitiformes and Acariformes, the former taxon are represented by the highest number of species on the families Tiliaceae (20), Rosaceae (19) and Salicaceae (19), while the later taxon on families Salicaceae (80), Rosaceae (79) and Aceraceae (53).

Concerning the predatory mites (Parasitiformes and Acariformes), the greatest number of mite species were detected on the representatives of the families Salicaceae (33), Rosaceae (30) and Tiliaceae (24).

Within the strictly phytophagous mites (Tetranychidae, Tenuipalpidae, Phytoptidae, Eriophyidae and Diptilomiopidae), most mite species were recorded from the families Rosaceae (48), Salicaceae (42) and Fagaceae (31).

The third plant-inhabiting mite group, the so-called indifferent mites (not phytophagous, not predatory mites; algivorous, fungivorous or omnivorous, e.g. Acaridae, Algophagidae,

Table 1. Mite fauna of 10 selected woody plant families

Plant family	Number of plant species	Number of mite families	Number of parasitiform mite species	Number of acariform mite species	Total number of mite species
Aceraceae	11	11	9	53	62
Caprifoliaceae	11	10	3	21	24
Corylaceae	6	16	12	35	47
Cupressaceae	22	12	12	31	43
Fagaceae	9	12	15	48	63
Oleaceae	15	17	8	51	59
Pinaceae	13	16	12	46	58
Rosaceae	49	21	19	79	98
Salicaceae	35	20	19	80	99
Tiliaceae	11	12	20	41	61



Iolinidae, Oribatida, Tarsonemidae, Triophtydeidae, Tydeidae, Winterschmidtidae) the highest number of species are known from the families Salicaceae (25), Aceraceae (22) and Rosaceae (19).

A total of 37 species of family Tetranychidae had been reported from 89 woody ornamentals of 25 families (Table 2). The highest number of spider mite species were recorded from the families Rosaceae (11), Pinaceae (10), Salicaceae (7) and Corylaceae (7).

Tetranychus urticae was recorded from the highest number of host plants, i.e. 39 species belonging to 17 plant families. Severe infestation was caused by *T. urticae* on *Celtis occidentalis* and *Fraxinus excelsior*; *Eotetranychus tiliarium* on *Tilia cordata*, *Tilia platyphyllos* and *Tilia tomentosa*; *Eotetranychus populi* on *Populus × canescens*; *Schizotetranychus schizopus* on *Salix alba*; *Eotetranychus coryli* on *Corylus avellana* and *Corylus colurna*.

Table 2. Number of recorded mite species per family on woody ornamentals in Hungary

Superorder	Order	Family	Number of species	
Parasitiformes	Mesostigmata	Phytoseiidae	49	
		Ascidae	1	
		Melicharidae	1	
Acariformes	Trombidiformes	Bdellidae	3	
		Cunaxidae	3	
		Tydeidae	27	
		Triophtydeidae	4	
		Iolinidae	10	
		Anystidae	2	
		Erythraeidae	3	
		Trombidiidae	3	
		Stigmaeidae	8	
		Eupalopsellidae	1	
		Camerobiidae	2	
		Cheyletidae	4	
		Tetranychidae	37	
		Tenuipalpidae	16	
		Phytoptidae	11	
		Eriophyidae	199	
		Diptilomiopidae	23	
		Tarsonemidae	21	
		Sarcoptiformes	Hemisarcoptidae	1
			Winterschmidtidae	1
			Algophagidae	1
			Acaridae	3
			Oribatida	Camisiidae
Ceratozetidae	1			
Cymbaeremaeidae	2			
Micreremidae	1			
Neolioididae	1			
Oribatulidae	1			
Schelorbitidae	1			
Scutoverticidae	1			



16 mite species representing the family Tenuipalpidae were recorded from 42 ornamental trees and shrubs belonging to 11 families. *Cenopalpus pulcher* is known from 16 species of 5 families. *C. pulcher* was frequently found on the members of family Rosaceae, while *Pentamerismus oregonensis* on families Cupressaceae and Pinaceae, *Pentamerismus taxi* on family Taxaceae.

Dendrofilous eriophyoid mites were recorded from 175 host plants of 32 families. Out of the 233 recorded mite species, 11, 199 and 23 belong to families Phytoptidae, Eriophyidae and Diptilomiopidae, respectively. Phytoptid species were reported from 21 host plants of 5 families, eriophyid mites from 165 host plants of 31 families, and diptilomiopid species from 22 host plants of 13 families. Among Acari, Eriophyidae was the most frequent mite family and hit the highest richness with 199 species.

The highest number of eriophyoid species were recorded from the families Rosaceae (33) and Salicaceae (33), and Fagaceae (25). *Stenacis triradiatus* (13), *Aculus tetanothrix* (10) and *Aceria populi* (9) were recorded from the highest number of host species.

In Hungary several new species for the science were described from woody ornamentals, e.g. *Abacarus korosicsomai*, *Acaphyllisa rakoczi*, *Anthocoptes hungaricus*, *Anthocoptes scythiacus*, *Eriophyes avaricus* and *Rhinophytoptus szechenyii*.

Considerably large number of mite species were detected for the first time in the European fauna from ornamental trees and shrubs, e.g. *Aceria fraxiniflora*, *Aceria ligustri*, *Aceria marshalli*, *Aculus knowltoni*, *Anthocoptes transitionalis*, *Calepitrimerus occithujae*, *Eriophyes brownei* and *Eriophyes burtsi*.

Severe infestation was caused by *Eriophyes tiliae*, *Phytoptus tetratrichus* and *Aculus ballei* on *Tilia* spp., *Stenacis palomaris*, *Stenacis triradiatus*, *Anthocoptes salicis* and *Aculus gemmarum* on *Salix* spp., *Aceria populi* and *Aculus mogeri* on *Populus* spp., *Aceria fraxiniflora*, *Aceria fraxinivora* and *Tegolophus califraxini* on *Fraxinus* spp., *Shevtchenkella serrata* on *Acer* spp., *Aceria petanoviccae* and *Tetraspinus lentus* on *Syringa* spp.

Within Phytoseiidae, 49 species are associated with woody species. As regards number of species, after Eriophyidae (199) Phytoseiidae (49) is the second. They were recorded from 125 species of 34 plant families. Phytoseiidae was the most frequent predatory mite family with the highest species richness.

Euseius finlandicus proved to be the most widespread mite species. It is known from 78 species of 26 plant families being the most frequent dendrofilous mite. Behind *E. finlandicus*, *Kampimodromus aberrans* was the second most frequent phytoseiid species, found on 38 woody species of 14 families, followed by *Neoseiulella tiliarum*, *Paraseiulus soleiger* and *Typhlodromus tiliae*, which were recorded on 15 host species each. The highest number of phytoseiid species were found on the plants of families Tiliaceae (20), Salicaceae (18) and Rosaceae (18).

A new species, *Neoseiulus populi* was described from Hungary. First occurrence of the following species viz. *Neoseiulus huron*, *Neoseiulus versutus*, *Typhlodromus ernesti*, *Typhlodromus intercalaris*, *Typhlodromus repens* and *Typhlodromus rhenanus* was reported from woody ornamentals.

Eight species of family Stigmaeidae were reported from 63 woody ornamentals of 23 plant families. Out of them *Zetzellia mali* proved to be the most frequent stigmaeid species recorded from 60 species of 22 families. After *Euseius finlandicus* and *Tydeus californicus*, it is the third mite species found on the highest number of host plants. It is frequently found especially on willow, linden, maple, oak and hazel species. It prefers the plants having trichomes on the lower side of the leaves.



Altogether four species of family Cheyletidae were reported from 25 plant species of 13 families. Out of them the predatory mite *Cheletogenes ornatus* was the most frequent species known from 24 host plants of 11 families. In most cases it co-occurred with armored scale insects, e.g. *Pseudaulacaspis pentagona*, *Quadraspidiotus gigas* and *Quadraspidiotus ostreaeformis* (Hemiptera: Coccoidea). On foliage it was reported two times only. Three other cheyletid species were reported feeding on armoured scale insects, too, viz. *Cheletacarus raptor* on *Chionaspis salicis* and *Q. ostreaeformis*, *Prosocheyla traubi* and *Prosocheyla ripkai* on *Q. gigas*.

In total, occurrence of 27 species of family Tydeidae was verified on ornamental trees and shrubs. Among arboreal mites, tydeids are the most frequent indifferent mites: they were found on 97 plant species of 31 families. The three most frequent tydeid species are as follows, *Tydeus californicus* from 64 host species of 25 families, *Tydeus caudatus* from 23 species of 10 families and *Lorryia ocellata* from 11 species of 7 families. Tydeid mites are widespread members of the acarine fauna of families Aceraceae, Oleaceae, Rosaceae, Salicaceae and Tiliaceae. Tydeids usually live on the underside of the leaves, in leaf domatia, close to the midribs and erinea caused by eriophyoid mites. Several new species have been described from Hungary collected on woody species, e.g. *Lorryia bathorii*, *Lorryia hungarica*, *Lorryia sanctikingai* and *Tydeus clavimaculatus*. No tydeid mites caused symptoms on host plants.

Four species of family Triophtydeidae are known from 49 plant species belonging to 20 families. *Triophtydeus immanis* was the most frequent species occurring on 27 host plants of 16 families. On pinaceous hosts no triophtydeid mites were reported.

Ten species of family Iolinidae were reported from 28 species from 16 plant families. The most frequent species was *Neopronematus solani* collected from 15 species of eight families. Most host plants belong to families Caprifoliaceae and Oleaceae.

In Hungary the first occurrence of *Lorryia ocellata*, *Lorryia electra*, *Triophtydeus immanis*, *Triophtydeus fragarius*, *Paratriophtydeus elegans*, *Proctotydeus oblongus*, *Pronematulus vandus* and *Pronematus sextoni* was reported from ornamental trees and shrubs.

Within Tarsonemidae, 21 species are known from 58 tree and shrub species of 23 families. The highest number of tarsonemid species were recorded from the plants of families Salicaceae (13) and Oleaceae (7). *Tarsonemus nodosus* occurred on 25 host plants of 11 families, followed by *Tarsonemus waitei* (16 host species) and *Tarsonemus karli* (11). On Coniferales only six tarsonemid species were reported.

Tarsonemus populi, which is a new species for the science, was collected in Hungary. *Dendroptus flexus*, *Dendroptus willmanni*, *Tarsonemus bachmaieri*, *Tarsonemus karli* and *Tarsonemus nodosus* were reported for the first time for the fauna of Hungary from ornamental trees and shrubs.

Majority of the tarsonemid mite species was found in galls, erinea and on leaves with pubescent lower side. They caused no symptoms on the hosts.

Only three species of family Acaridae viz. *Michaelopus corticalis*, *Tyrophagus putrescentiae* and *Acotyledon paradoxa*, were reported from 35 ornamental tree and shrub species belonging to 14 families. *Michaelopus corticalis* was collected under the scales of dead armored scale insects, also in bud and twig galls from 31 plant species of 11 families.

Hemisarcoptes budensis (Acariformes: Hemisarcoptidae) is known from 13 woody plant species of 7 families. In Hungary it was described as new species for the science. It occurred on five armoured scale insect species.



Three species of family Trombididae were reported from 11 species of 7 families. Out of them *Allothrombium pulvinum* was the most frequent species detected on 11 woody hosts of 7 plant families. In each case, the aphid parasitic larvae of *A. pulvinum* were collected.

Two *Anystis* species (Acariformes: Anystidae) were reported from 20 woody ornamentals of 12 families. *Anystis baccarum* occurred on 15 species from 12 plant families. The fast-moving predatory mite *Anystis salicinus* was collected mostly from the canopy of willow species.

Up to now, three species of family Erythraeidae are known from five host species of five plant families. Larvae of *Charletonia cardinalis* were found on one species each of families Rosaceae, Tiliaceae and Salicaceae, while *Charletonia krendowskyi* was collected from *Quercus cerris*. The parasitic larva of *Erythraeus budapestensis* was described as new species for the science from *Aphis fabae* (Hemiptera: Aphididae) living on the leaf of *Ptelea trifoliata*.

Czenspinksia transversostriata (Acariformes: Winterschmidtidae) was recorded from 11 species of seven families. It lives on the lower side of the leaves, frequently found in low number close to the galls and erinea caused by eriophyoid mites.

Ten species from eight oribatid families viz. Camisiidae, Ceratozetidae, Cymbaeremaeidae, Micreremidae, Neoliodidae, Oribatulidae, Schelorbitidae, Scutoverticidae were found on 14 plant species of eight families. All of them were collected from the bark of the host plants, frequently near armoured scale insects. They were present in botanical gardens, parks and cemeteries. Presence of Oribatida should be considered as accidental in street trees.

Specimens of *Hericia hericia* (Acariformes: Algophagidae) were found on the trunk of London plane tree below the peeling of bark pieces. The mites suck the sap of the tree dripping from the splits.

The greatest diversity of mites was found on *Acer campestre* and *Prunus spinosa*, i.e. 37 mite species each. Both communities were dominated by plant parasitic mites.

From *Acer pseudoplatanus*, *Tilia cordata* and *Salix alba* 33, 33 and 31 species were published, resp.

Hazel species have diverse mite communities, i.e. 29 and 25 species on *Corylus avellana* and *Corylus colurna*, resp.

The mite assemblages of *Quercus cerris*, *Quercus robur*, *Populus × canescens*, *Tilia tomentosa*, *Tilia platyphyllos* and *Salix elaeagnos*, consist of 27, 26, 26, 25, 24 and 24 species, resp. Majority of the mite species found on *Tilia tomentosa* are phytophagous, with definite dominance of eriophyoid mites.

The species composition differed among the plant taxa.

The highest number of Phytoseiidae were reported from *Corylus avellana* (11), *Tilia cordata* (10), *Quercus cerris* (8) and *Prunus spinosa* (8), while the maximum number of phytophagous mite species were found on *Salix alba* (19), *Prunus spinosa* (18) and *Acer campestre* (16).

Comparing the frequency of mite species living on native and alien host plants, the presence of *Euseius finlandicus*, *Tydeus californicus* and *Zetzellia mali* has been confirmed from 36, 27 and 30 indigenous, and 42, 37 and 30 introduced host species, resp.

The results herein obtained support the hypothesis: mite communities are different on different plant taxa. The results demonstrate that woody ornamentals have a high diversity of mite communities and the assemblages seem to be affected by the host plant and the environment.

First occurrence of high number of mite species was revealed from woody ornamentals, e.g. *Aceria fraxiniflora*, *Aceria granati*, *Aceria kuko*, *Aceria petanovicae*, *Aculops allotrichus*,



Aculops gleditsiae, *Bambusacarus longipalpis*, *Calepitrimerus occithujae*, *Epitrimerus cupressi*, *Eriophyes browni*, *Oligonychus karamatus*, *Platyphytoptus sabinianae*, *Platytetranychus libocedri*, *Platytetranychus thujae*, *Reckella celtis*, *Rhyncaphytoptus negundivagrans*, *Rhyncaphytoptus platani*, *Shevtchenkella brevisetosa*, *Tenuipalpus szarvasensis* and *Vasates quadripedes*. They represent at least the 18% of the species.

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I dedicate this paper to the memory of Dr. Ferenc Kozár, the well-known Hungarian scale insect specialist who passed away ten years ago.

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