

MITES

European Red, McDaniel, Blister/ Gall, Spruce, Two-Spotted, Cyclamen, Rust, Broad, and Privet

Description

Mites are tiny spider-like pests that are almost invisible without magnification. They feed on all kinds of host plants causing speckling, bleaching, or bronzing of the foliage. Common mite pests include European red, McDaniel, two-spotted, eriophyid blister, eriophyid gall, and eriophyid rust, cyclamen and spruce mites.

Specific Mites

Two-Spotted Spider Mite (*Tetranychus urticae*)

These mites can be identified by their two dark, lateral spots. They are pale green to orange in colour. Adult mites are barely visible with the naked eye. They feed mostly on the undersides of leaves, sucking juices. Leaves become speckled at first, then brown, and brittle, until eventually they drop. Webs formed by the mites, as they move about, cover the surface of affected areas. In a severe infestation, webs may enclose the entire plant.

Life Cycle

In hot weather, spider mite populations can increase very rapidly, with a life cycle taking from 5 to 7 days. More time is required in colder conditions. Some species overwinter as eggs, others as adults. As temperature and day length decrease, overwintering female mites go into a state of hibernation known as diapause. They turn a reddish colour and crawl into a crack, crevice or other dark place where they hide until conditions are more favourable, usually the next spring. When in diapause, mites are very resistant to chemicals, therefore, control measures can only be taken when they emerge. On emerging, the female lays eggs, and starts the cycle over again.

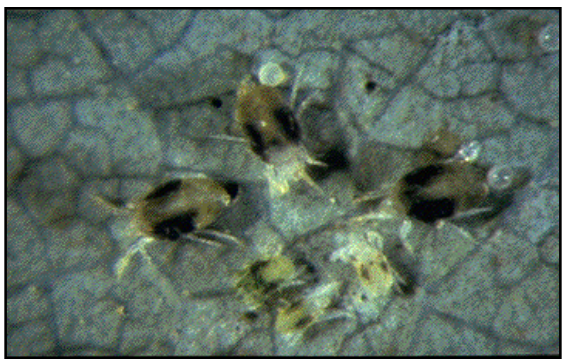
Broad Mite (*Polyphagotarsonemus latus*)

These are very small. They malform terminal leaves and flower buds; blooms abort and plant growth is distorted. Development time is about 5 days at 25°C.



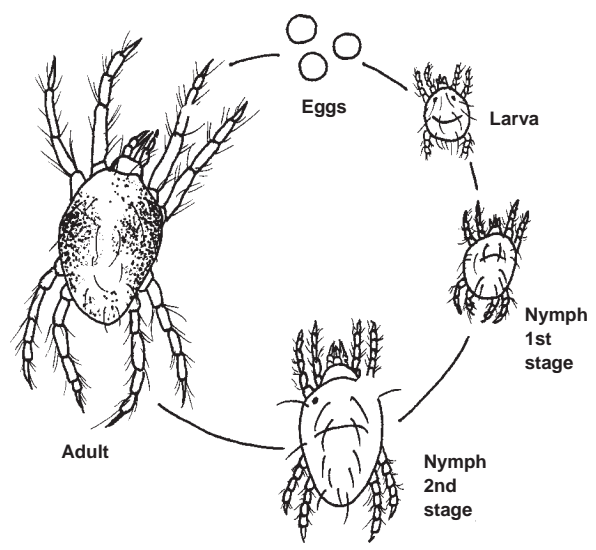
H. Thislewood

Two-Spotted Spider Mites



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Two-Spotted Spider Mites

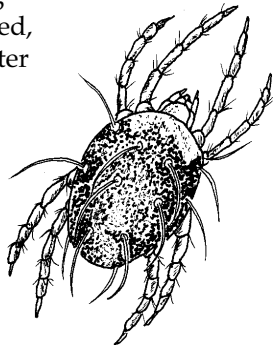


Cyclamen Mite (*Steneotarsonemus pallidus*)

These pale, amber coloured mites congregate within unopened buds and folded leaflets where they suck sap and deposit their eggs. The females usually lay about 3 eggs per day. Infested plants have curled twisted and brittle leaves covered with scabs. Flowers may have dark spots or discoloured areas.

European Red Mite (*Panonychus ulmi*)

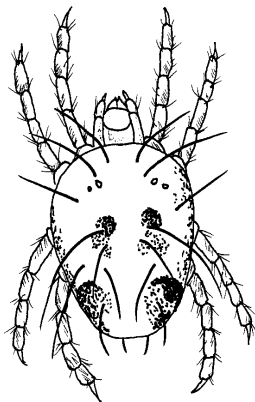
They affect mainly trees, causing leaves to appear cupped, distorted, and chlorotic. The eggs overwinter on the bark and hatch out some time in April. After this, the adults deposit their eggs on foliage where they feed until late summer. All stages from egg to adult are dark red. Up to 7 generations of this mite may occur in a year.



European Red Mite

McDaniel Mite (*Tetranychus mcdanieli*)

During spring and summer they are translucent green to greenish-yellow in colour with three small dark spots on each side near the middle and two spots near the end. They cease feeding in the fall and females overwinter in protected places. Like the two-spotted spider mite, this mite also spins webs. It does not have as wide a host range as the two-spotted mite does. One of the more common hosts is Malus.

**Privet Mite (*Brevipalpus obovatus*)**

The privet mite is orange to dark red and feeds on the undersides of leaves. It may cause severe bronzing and reddening of the foliage.

Spruce Mite (*Oligonychus unungius*)

They resemble two-spotted spider mites in their appearance as well as in their damage. They prefer to feed on old needles, causing flecking, stippling, and bleaching. Leaves turn reddish brown and eventually fall off. Both the immature and adult mites spin webbing of fine silk around the twigs, which protects the mites from dislodgment and some of their natural enemies. The pest overwinters as reddish eggs under loose bud scales and at the bases of the needles, hatching in late April. Several successive generations are produced annually.



Spruce Mites

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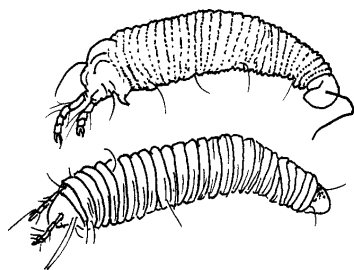


Spruce Mites

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Blister, Gall, and Rust Mites

They belong to the Eriophyid Family. They are microscopic, slow moving mites, affecting a large variety of hosts.



Blister Mites

They cause discoloured blisters on leaves and russetting and deformity of fruit. Affected areas on the underside of the leaves become thickened with a corky growth. The blisters at first are light green, gradually darkening to reddish-brown and eventually black. Mites are hidden within blisters and cannot be controlled with any spray during the growing season. Control should be implemented at bud burst time when mites are more vulnerable.



Pear Leaf Blister Mites

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Gall Mites

They cause red or green pocket gall patches as well as various shapes, and sizes of galls, and leaf distortions. Newly formed galls are a yellowish-green color. Towards the end of June they turn a rose color and later in the season they turn black. In spring the mites crawl to the unfolding leaves where feeding results in irregular wart-like growth of the leaf tissue in that area. As a gall is formed, the mite is enveloped and ends up within the gall. On conifers, needles become chlorotic, dwarfed, distorted, or shortened, resulting in premature defoliation.



Mite Damage



Eriophyid Mite



Betula with Eriophyid Mite

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Pear Leaf Blister Mites

Rust Mites

They are microscopic mites that cause bronzing, browning or silvering of the leaf surface. They overwinter under bud scales, and emerge as soon as new leaves develop. Numerous overlapping generations occur from early spring into early summer.

Trisetacus camponodus

A tiny mite about 0.3 mm long, slow moving, and yellowish-white in colour. They live in colonies in needle sheaths, where they damage the outer needle tissue. Eventually the entire needle surface is destroyed, becoming brown, necrotic and sometimes calloused. The needle then becomes chlorotic, stunted, and often twisted or crinkled. Infested needles may drop. Damage is restricted to distortion and loss of current year's needles. Young lodgepole and ponderosa pine are susceptible.

Hosts

Blister and Gall Mites

- Acer*
- Cedrus*
- Cotoneaster*
- Fagus*
- Carya*
- Juglans*
- Juniperus*
- Malus*
- Pinus*
- Populus*
- Pyrus*
- Quercus*
- Rhus*
- Sorbus*
- Tilia*
- Ulmus*

Broad Mite

- Begonia*
- Cyclamen*
- Fuchsia*
- Gerbera*

Cyclamen Mite

- Aconitum*
- Begonia*
- Chrysanthemum*
- Cyclamen*
- Dahlia*
- Fuchsia*
- Gerbera*

Cyclamen Mite *continued*

- Impatiens*
- Pelargonium (geranium)*
- Saintpaulia*

European Red Mite

- Robinia*
- Rhamnus*
- Crataegus*
- Juglans*
- Malus*
- Prunus*
- Rosa*
- Sorbus*
- Ulmus*

Privet Mite

- Azalea*
- Fuchsia*
- Lantana*
- Pelargonium (geranium)*
- Saintpaulia*
- Tagetes*

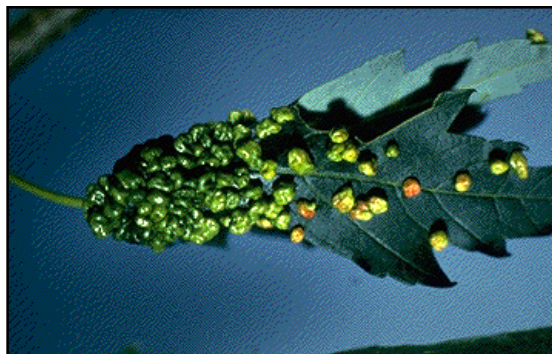
Rust Mite

- Abies*
- Betula*
- Camelia*
- Picea*
- Pyrus*
- Tsuga*



Acer with Eriophyid Mites

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Maple Bladder Gall Mite

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Spruce Mite

- Abies*
- Juniperus*
- Larix*
- Picea*
- Pinus*
- Thuja*
- Tsuga*

Two-Spotted Spider Mite

Many ornamentals plants.

Trisetacus camponodus

- Pinus*