

# CONIFER SPIDER MITES



## WHAT IS THE THREAT:

Spider mites have the capacity to infest a variety of hardwood and conifer species, including pines, spruce, hemlocks, arborvitae and others. Mites feed externally on tree leaves/needles. They use piercing-sucking mouthparts to puncture the plant tissue and feed on the liquid within the cells.

Spider mites are tiny and difficult to see with the naked eye. A convenient detection technique is to hold a sheet of white paper under a branch and then shake or tap the branch against the paper. The mites, if present, will show up as tiny, slow-moving specks on the paper.

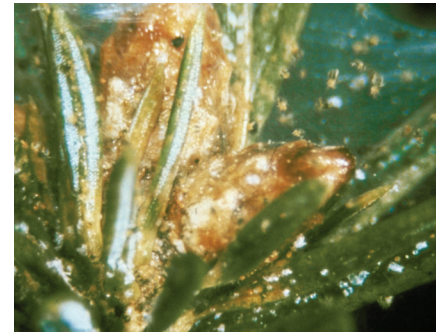
## WHERE IS THE THREAT:

Spider mites occur throughout the United States and Canada. The twospotted spider mite is a species of "warm season" mite that favors hot, dry weather and drought conditions. Adults and nymphs are white with two dark greenish spots (summer coloration). This mite has been reported from over 180 different plants including many garden and landscape plants. Mites become active in April and May and are active the rest of the summer. Severe damage usually appears in late summer after a period of hot, dry weather.

The spruce spider mite is a common "cool season" mite found on all types of conifers (spruces, pines, junipers and arborvitae). Spruce spider mites are active in the spring and fall. They become dormant during the heat of the summer and survive as "resting" eggs. These eggs and adults resume activity in the fall when cooler temperatures return.

## SYMPTOMS:

Spider mites can damage plant foliage in a variety of ways. Some species cause leaves to curl, twist, or become brittle in texture. While others, causes the foliage to be discolored with very tiny yellowish-green speckles. Severe damage causes "bronzing" eventual browning and needle drop. Close examination of infested foliage may reveal very fine webbing on the stems at the base of the needles.



*Symptoms of mite infestation on spruce*



*Symptoms of mite infestation on spruce*



*Spruce spider mite damage*

**Photo Credit: Header Spider Mites:** taken by John A. Weidhass, Virginia Polytechnic Institute and State University, [www.forestryimages.org](http://www.forestryimages.org). **Symptoms:** taken by USDA Forest Service - Region 4 - Intermountain Archive, USDA Forest Service, Bugwood.org **Symptoms 2:** taken by John A. Weidhass, Virginia Polytechnic Institute and State University, [www.forestryimages.org](http://www.forestryimages.org). **Damage:** taken by Petr Kapitola, Central Institute for Supervising and Testing in Agriculture, Bugwood.org

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## HOW TO TREAT:

Make sure watering is adequate. Arborjet suggests an application of ACE-jet™ at the first sign of mite feeding to reduce or eliminate the existing population of spider mites on the tree. ACE-jet moves quickly and easily throughout the tree and provides rapid control. However, ACE-jet has limited residual value and may require more than one application to protect against re-infestation. TREE-äge® G4 injection can provide excellent control of mites for up to two years on conifer trees. Eco-1® Garden Spray is also an available option for treating spider mites on hardwoods and conifers. It's an EPA 25(b) botanical product that's used as a spray.



*Multiple life stages. Adult, exuviae, and empty eggs*

Photo Credit: Multiple Lifecycles: taken by Bruce Watt, University of Maine, Bugwood.org

TREE-äge® Insecticide is a Restricted Use Pesticide and must only be sold to and used by a state certified applicator or by persons under their direct supervision.