

Yavapai County

Bulletin #37

Spider Mites of Conifers



Spider mites are pests which are closely related to spiders; they are not insects. They feed on many kinds of conifers including pines, spruces, firs, junipers, and cypress. Under hot, dry conditions, they may become serious pests on shade and ornamental trees.

Injury and detection: Spider mites have sharp-pointed, piercing

mouthparts with which they suck sap from foliage and tender stems of plants. This results in a mottled, bleached discoloration of the foliage. Severely infested foliage becomes yellowish or brownish and may fall prematurely. The mites spin a webbing of fine silk around twigs and foliage. Dust, skin castings, eggs and pollen in the webbing add to the unhealthy appearance of the trees. The webbing becomes more abundant as the season progresses and is best seen when the branches are raised and viewed from the underside. If twigs are tapped sharply over a sheet of white paper, mites may appear as minute moving specks on the white surface.

Description: These pests are very small, 1/50th of an inch or less (1/4 the size of the period at the end of this sentence) and have four pairs of legs when mature. Spider mites vary in coloration from green to yellow to red, often with black or dark pigmented patterns.

Life Cycle: Spider mites are extremely prolific, with a possible seven or more generations per year. Eggs are laid at the base of the foliage or along the underside of twigs. Hatching of the first generation begins in the spring; the second generation begins to appear in early summer. They are most abundant right before the summer rainy season. Succeeding generations are produced until early fall. Mites disperse on wind currents and by adults crawling from tree to tree. Over-wintering eggs are laid on stems and twigs in September—October.

Cultural control: Maintain healthy vigorous trees as they are less susceptible to mite attack. Strong winds accompanied by heavy rains and prolonged high humidity limit abundance of spider mites. Weekly spraying of trees with a strong stream of water will wash away some of the mites and prevent construction of webbing which protects the eggs and young.

Chemical control: Pesticides should be used only if the trees are relatively small and being seriously damaged. Improper use of pesticides may aggravate the problem. Petroleum and summer oils can be used, but may cause discoloration of blue spruce. Insecticidal soaps should be applied in the spring after eggs hatch.

Kelthane (dicofol) is a miticide with relatively low mammalian toxicity; it is selective in that it causes little harm to beneficial insects.



No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned. Pesticides are poisonous. Always read and carefully follow all label instructions for safety, use, and disposal given on the container label

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