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Admes Mite

Eurytetranychus admes Pritchard and Baker

Order- Acari; Family- Tetranychidae

Hosts - White, Colorado blue, and Norway spruce

Biology -

Admes mites are larger than spruce spider mites. Admes mites have a dark red or brown body with light tan legs. Adults can be found resting on the underside of the needles with their legs stretched out in front and back. When immature mites molt, they line up in a row on a needle. The exoskeletons left behind are visible and look like white flocking on the needles. This interesting molting behavior is relatively unique and a good way to determine that Admes mites are present. Eggs of Admes mites are red and can be seen with the naked eye. If you look at the eggs under a microscope, you can see shallow but distinct ridges running from the base to the center of the egg. Most eggs will be found at the base of needles. Occasionally eggs are seen on the underside of needles or on the bark of twigs. This mite has several generations a year. Mites overwinter as eggs on the host.

Damage symptoms -

Feeding by Admes mites causes yellow stippling or bronzing of the foliage, similar to damage caused by other spider mites. When damage is heavy, some of the needles turn brown and eventually drop.

Biological control — Several natural enemies feed on spider mites including small, black ladybird (ladybug) beetles, lacewing larvae, minute pirate bugs, and predatory mites. Because mite predators are extremely susceptible to many insecticides (especially conventional pesticides), do not apply pesticides until the health or appearance of the plant is threatened by the mites. Biological control options include horticulture oil, insecticidal soap or Neem oil



Female in characteristic resting position on needle Photo: Pennsylvania Department of Agriculture



Molted exoskeletons and adult mites on needle Photo: Pennsylvania Department of Agriculture



Mite eggs at base of needle Photo: Jill O'Donnell, MSU Extension

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Chemical control - If insecticides must be used, spray only the trees that are severely infested. This will help conserve the beneficial natural enemies of the mites. Products include: abamectin, bifenthrin*, chlorpyrifos*, clofentezine, hexythiazox, oxydemeton-methyl*, propargite*, spirodiclofen. * restricted use

Note: Predatory mites are important biological control agents for plant-feeding mites like spruce spider mites and Admes mites. It is important to conserve and protect the populations of native predatory mites that will be present in your Christmas tree plantation. Broad spectrum insecticides may control plant-feeding mites but are very harmful to populations of predatory mites. If a pesticide is needed to control damaging levels of mites, it is preferable to choose a mitecide that won't harm predatory mites and predatory insects.



Predatory mites Courtesy- Dave Cappaert

Source; Eurytetranychus admes Pritchard and Baker, Rayanne Lehman, Pennsylvania Department of Agriculture

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