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Signs/Symptoms

Treatment

Cedar-Apple Rust



In the autumn, greenish-brown, spherical to kidney shaped galls appear on twigs. In the spring, the galls become gelatinous and bright orange-yellow.

Avoid overhead irrigation. Plant resistant varieties.

Cedar-Hawthorn Rust



In the autumn, greenish-brown, spherical to kidney shaped galls appear on twigs. In the spring, the galls become gelatinous and bright orange-yellow.

Avoid overhead irrigation. Plant resistant varieties.

Cedar-Quince Rust



Cigar shaped galls on small twigs; in the spring, galls become gelatinous and bright orange-yellow.

Avoid overhead irrigation. Plant resistant varieties.

Spittlebug, Juniper



In May and June, shiny spittlelike masses develop mainly on new growth; a pale nymph is embedded in each. Brownish, mottled adults remain on foliage through the summer. Control is rarely needed, although the nymphal spittle masses can be a nuisance. Natural enemies greatly help to reduce spittlebug numbers. Dislodge spittle masses with a strong jet of water. In cases where foliage is yellowing, apply an insecticide.

Weevil, Pales (Adults)



Small holes chewed in the bark of trunks, branches or twigs, which become covered with hardened resin. Seedling trees die; larger trees show flagging at branch tips. Remove stumps, or grind down and cover them with soil as they are primary sites for weevil infestation from which adults emerge and attack trees. To monitor, look for fresh resin or use sticky traps. Spray trees in spring when adults are present.

Signs/Symptoms

Treatment

Bagworm



Early in the season the bags are quite small and foliage appears desiccated and riddled with small holes. In late summer, bags are large, and severe defoliation occurs around them.

Remove the previous year's bags on the host before May 1. Treat larvae while bags are small, before July 1. Use *Bt* or appropriate insecticides to conserve natural enemies. Later in the season, treat hosts with thorough coverage; effectiveness may be poor.

Black Vine Weevil, Adult



Needles close to base of plant have numerous notches and feeding scars. Foliage may appear stressed, yellowed or desiccated from larval feeding below-ground. Black vine weevils are active at night. Since adults crawl and cannot fly, pick off adults in the early morning on small host plants. Treat larger plantings in the evening with a persistent or systemic insecticide with thorough coverage, especially toward the base.

Leafminer, Arborvitae



Tips of foliage turn uniformly brown in the autumn. Affected foliage is hollow and contains fecal pellets and greenish larvae, which overwinter in leaf mines and resume feeding in early spring. Tiny silvery-tan moths deposit eggs on foliage in late spring into early summer; monitor with yellow sticky traps to properly time adult insecticidal treatment. Treat with a systemic insecticide in the spring to control larvae in leaf mines.

Scale, Fletcher



In late spring, look for rounded, globular, brown "shells" (adult female scales) attached to twigs. Infested branches are yellowed and have sticky honeydew and sooty mold growth.

Apply an insecticide or insecticidal soap in early summer when newly hatched nymphs ("crawlers") have emerged from beneath adult female scales. Apply a systemic insecticide as a soil drench in late autumn or early spring to control older scales.

Scale, Juniper



Dirty-white, circular, flat scales or encrustations occur on needles. Branches and twigs turn yellow or die. In heavy infestations entire plants can be killed. Prune out heavily infested and dead branches. Employ cultural practices that reduce plant stress. Monitor for newly hatched nymphs in June, and apply an oil spray, insecticidal soap or insecticide. Apply a systemic insecticide in May as a foliar spray.

Signs/Symptoms

Treatment

Spider Mite, Spruce



Stippling of needles becomes evident on older foliage in early spring. By early summer, infested portions turn yellow or brown and appear dried out. Dirty, fine webbing is evident.

Monitor regularly for early damage in April. Treat infestations with vigorous sprays of an insecticidal soap or an insecticide/miticide. Thorough coverage is important, and re-treatment is often necessary. By mid summer, infestations naturally decline; do not treat.

Cercospora Blight



First appears on inner branch needles and in lower portions of tree. Needles are dull brown or red and eventually drop. Small, hair-like fungal structures are visible on dead needles. Prune out affected areas. Improve air circulation. Avoid over-fertilization. Avoid overhead irrigation. Plant resistant varieties. Apply foliar fungicide between early June and early July.

Kabatina Tip Blight



Terminal 2 to 6 inches of branches turn dull green and then red or yellow. Small, ash gray to silver lesions dotted with black fruiting bodies are present at the base of the needle, tips eventually turn brown and drop.

Prune out affected areas. Improve air circulation. Avoid over fertilization. Avoid overhead irrigation. Plant resistant varieties.

Phomopsis Tip Blight



Foliage is dull red or brown; foliage eventually turns an ash-gray. Small gray lesions on the foliage; small, black fruiting bodies develop within the lesion. Branch tips may become girdled. Repeated blighting can cause witches' broom, discoloration of foliage, stunting and plant death.

Prune out affected areas. Improve air circulation. Avoid over fertilization. Avoid overhead irrigation. Plant resistant varieties. Apply foliar fungicide at bud break and repeat according to label instructions.

Salt Injury



Foliage is yellow or brown with damage often closest to roads, sidewalks or other areas where salt is applied. Often appears in the spring, once temperatures begin to increase. Leaf or twig dieback.

Prune out affected area.

Signs/Symptoms

Treatment

Winter Injury



Foliage is reddish-brown with damage at terminal ends of foliage (commonly needles). Damage mostly on outer portion of the branches and often more severe on side of the plant facing the wind.

Prune out affected area.

Black Vine Weevil, Larvae



Mature larvae are legless, creamy-white, over one-half inch long and have a brown head. Their feeding on roots and in crowns cause wilting, dessication or death of host plants. In spring, first confirm the presence of actively feeding larvae, then drench the soil around host plants with a water-soluble insecticide according to label directions. Parasitic nematodes are practical and effective in moist conditions for single shrubs or potted plants.