

# Spruce



Plant Problem	November 21-30	November 11-20	November 1-10	October 21-31	October 11-20	October 1-10	September 21-30	September 11-20	September 1-10	August 21-31	August 11-20	August 1-10	July 21-31	July 11-20	July 1-10	June 21-30	June 11-20	June 1-10	May 21-31	May 11-20	May 1-10	April 21-30	April 11-20	April 1-10	March 21-31	March 11-20	March 1-10	
Gall, Cooley Spruce																												
Scale, Spruce Bud																												
Weevil, Pales (Adults)																												
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Bagworm																												
Rhizosphaera Needle Cast																												
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Spider Mite, Spruce																												
Spruce Needleminer																												
Sirococcus Tip Blight																												
Cankers																												

KEY: ■ fruit ■ flower ■ branches ■ leaves ■ trunk ■ crown ■ roots

# Spruce

## Plant Problem

## Signs/Symptoms

## Treatment

### *Gall, Cooley Spruce*



Swollen, cone-like galls perforated with openings develop and enlarge in mid spring to summer. Each cone is inhabited by numerous aphid-like insects called adelgids.

In May, check branches for woolly adelgids, and treat before galls form. Reduce numbers with a strong jet of water, or apply an insecticide. Blue spruce needles are sensitive to insecticidal soaps or spray oils. The galls are not harmful, but unsightly.

### *Scale, Spruce Bud*



Brown hemispherical scales are clustered on twigs and resemble buds. Lower branches are most severely affected. Foliage is covered with honeydew and sooty mold.

Prune out lower infested branches, if needed. Wash off sticky honeydew and sooty mold with water. Apply an insecticide, insecticidal soap or horticultural oil spray in early summer when newly hatched nymphs have emerged. Blue spruce is sensitive to spray oils.

### *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. Spray trees in spring when adults are present to prevent injury. To monitor, look for fresh resin, or use sticky traps.

### *Weevil, White Pine (Adults)*



Adults are one-quarter inch long and mottled red-brown with two white spots on the back. Terminals and the leader are riddled full of holes; leaders develop shepherd's crook.

Look for adults in mid spring, or monitor with sticky traps. Spray an insecticide to control adults, and again in late summer to kill the next generation of adults. In late spring, prune out and destroy dead leaders as soon as discovered, as they are infested with larvae.

### *Bagworm*



Early in the season the bags are quite small and foliage appears desiccated; needles have 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, but effectiveness may be poor.

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### *Rhizosphaera Needle Cast*



Needles, especially on lower branches, turn purplish-brown and fall from tree. Small black fungal fruiting bodies occur in regular rows (through stomata) on affected needles.

Minimize plant stress. Prune out affected areas. Apply foliar fungicide when new needles are half way elongated and repeat according to label instructions.

### *Scale, Pine Needle*



Small, flat, white, oblong scale coverings attached to needles, often in clusters. They look like splotches of white paint. Needles become yellow and drop off.

There are two generations per season. Check for crawlers in May and July and spray foliage with an insecticide. Insecticidal soaps and oil sprays are effective, but blue spruce is sensitive. A dormant season oil spray helps to smother eggs beneath scales.

### *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.

### *Spruce Needleminer*



Needles are matted together with webbing on lower branches, and in early spring, greenish-brown larvae are nesting among the needles. In June, tiny larvae mine the needles.

In early spring, rake out masses of needles and remove; partly grown larvae will be among them. In late May, adult moths lay eggs on needles. Apply an insecticide to discourage re-infestation. With signs of early nests, apply a microbial insecticide to kill young larvae.

### *Sirococcus Tip Blight*



Branch tips, especially on the current year's leader, turn brown and often curl over. Fungal fruiting bodies may be present at base of needles.

Avoid overhead irrigation. Increase light penetration. Foliar fungicide applications applied when new shoot and needles are starting to emerge.

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### *Cankers*



Branch dieback with sunken, discolored areas on branches or trunk, often oozing resin. Fungal fruiting bodies may be seen in canker margins.

Prune out affected area.