

# Fir



		<b>Plant Problem</b>																				
November 21-30	November 1-10																					
October 21-31	October 11-20																					
September 21-30	September 11-20																					
August 21-31	August 11-20																					
July 21-31	July 11-20																					
June 21-30	June 11-20																					
May 21-31	May 11-20																					
April 21-30	April 11-20																					
March 21-31	March 11-20																					
March 1-10	March 1-10																					
		Adelgid, Balsam Woolly																				
		Aphid, Balsam Twig																				
		Gall, Cooley Spruce																				
		Scale, Pine Needle																				
		Spider Mite, Spruce																				
		Sirococcus Tip Blight																				
		Cankers																				

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

**Plant Problem**

**Signs/Symptoms**

**Treatment**

*Adelgid, Balsam Woolly*



Branches, trunk and crown are covered with woolly material in which aphids are feeding. Affected branches may suffer dieback; tips become swollen and hard. Trees may die.

Monitor trees for infestations from April through early autumn. Apply a contact insecticide with a vigorous spray that penetrates the woolly material. Or apply a systemic insecticide as a soil drench. Fir foliage is sensitive to insecticidal oils or soaps.

*Aphid, Balsam Twig*



Fluffy white substance mingled with blueish-gray aphids feeding on buds and developing candles. Needles are deformed, twisted and sticky with aphid honeydew secretions.

Examine buds in April for first signs of aphids. Lady beetles and other natural enemies often find colonies early and help to control their populations. For control, blast terminals with a strong water spray. New needles are sensitive to soaps and oils.

*Gall, Cooley Spruce*



Douglas-fir is an alternate host. In the spring, needles at branch tips become discolored with yellow cross-bands and are distorted in growth. No cone-like galls develop in firs.

Monitor branch terminals for infestations of these woolly aphid-like insects called adelgids. Reduce populations with a strong jet of water directed to branch tips, or apply an insecticide. New needles are sensitive to insecticidal soaps or spray oils.

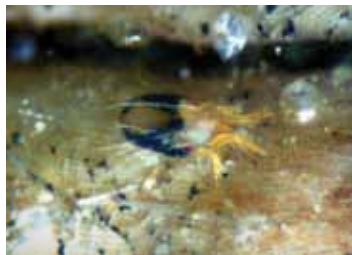
*Scale, Pine Needle*



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. New needles are sensitive to soaps and oils; spray well after candling. 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.

# Fir

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## Plant Problem

## Signs/Symptoms

## Treatment

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### *Sirococcus Tip Blight*



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

Avoid overhead irrigation. Increase light penetration. Apply foliar fungicide when new shoot and needles are starting to emerge.

### *Cankers*



Discolored, sunken bark with brown, dead cambium underneath. Resinosis and fungal fruiting bodies may occur in canker margins. Small branches may be girdled.

Prune out affected areas.