Pest Profile





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Common Name: Cooley Spruce Gall Adelgid

Scientific Name: Adelges cooleyi

Order and Family: Hemiptera; Adelgidae

Size and Appearance:

	Length (mm)	Appearance
Egg		 Eggs are oblong Covered with a protective cottony wax Laid near terminal buds
Larva/Nymph		 Tiny, flat, oval Black in color with white, waxy, cotton-like threads along body margins on Douglas-fir trees Greenish gray in color and covered in a powdery wax on spruce trees
Adult	~ 1 mm	Winged and winglessDark greenish black to black
Gall	Length: 38-76 mm Diameter: 17-19 mm	 Elongated and cone-like Found at base of new shoots Light green to dark purple in color

Type of feeder (Chewing, sucking, etc.): Both larvae and adults have sucking mouthparts.

Host plant/s: Spruce and Douglas-fir

Description of Damage (larvae and adults): Feeding by nymphs on new shoots cause galls to form on needles as well as yellowing and twisting of needles. Damage is most severe in Christmas tree

plantations due to the reduction of aesthetic value caused by unsightly galls on spruces and needle discoloration and deformation in Douglas-fir.

First generation nymphs become "stem mothers" that are covered with a white, cottony wax covering that they lay their eggs under. These coverings result in reduced aesthetic value.

References:

- Cranshaw, W. (2004). *Garden insects of North America: the ultimate guide to backyard bugs*. Princeton, NJ: Princeton University Press.
- Maine Department of Agriculture, Conservation and Forestry. (2000, April). COOLEY SPRUCE GALL ADELGIDAdelges cooleyi (Gill.). Retrieved April 05, 2017, from http://www.maine.gov/dacf/mfs/forest_health/insects/cooley_spruce_gall_adelgid.htm
- Saskatchewan Minstry of Environment. (2013). Forest Pest Fact Sheet: Cooley Spruce Gall Adelgid, Adelges cooleyi and Spruce Gall Adelgid, Adelges lariciatus [PDF]. Regina, Saskatchewan: Government of Saskatchewan.