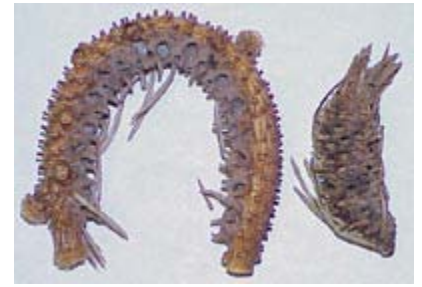


# SPRUCE GALL ADELGIDS

There are two spruce gall adelgids. One is the Cooley and the other is the eastern. The Cooley spruce gall adelgid (*Adelges cooleyi*) attacks Sitka, Oriental, and Colorado blue spruce and Douglas fir. The immature female over-winters becoming mature in the spring. She lays several hundred eggs on side branches. After the eggs hatch, the young migrate to the base of needles on the new growth. The feeding induces the plant to envelop the individual adelgids as a group thus forming a gall.



The gall tends to go out to the tip of the shoot. The shoot may curve as a result of the gall being on only on side of the shoot. The entire new shoot may be one long gall too. By late June – July the adelgids emerge from the galls. The females become winged and fly to Douglas fir or other spruces. Several life cycles later and through most of another growing season, the adelgids return to the spruce trees. It takes two full growing seasons for the adelgids to make one complete cycle between both hosts.

On the spruce, galls are evident. On the fir, there is no gall but severe infestation does cause yellow spots to appear on the needles. Eastern spruce gall adelgids (*Adelges abietis*) attacks mainly Norway spruce but can be found on Colorado blue, white, and red spruces. In the Chicago area, they are found more often on Colorado blue spruce. Over-wintering as immature females, the females mature in the spring and lay between 100 and 200 eggs next to buds ready to open. The young feed on needles and eventually move to the base of the needles. A gall develops. The gall looks like a tiny pineapple near the base of the shoot. After leaving the galls in late June – early July, they become mature flying females. She lays her eggs in unprotected masses near the tips of needles. The cycle then starts again.



Check with your local land grant university (Cooperative) Extension Service for recommended insecticide. Apply insecticide in late September or in spring just before bud break. Dormant or summer oils will turn "blue" spruces green till the following year when new growth emerges.

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