Dear IPM,

My cotoneaster leaves are all rolled and webbed, my plants look terrible! What is causing this and what can I do to stop it?

You probably have leaf rollers!

Leaf rollers are one of the most common pests of ornamental plants in the Anchorage area. A general term, “leaf roller” applies to the larval stage (caterpillars) of a number of different moth species that are frequently a pest of ornamental shrubs and trees. Although leaf rollers are frequently seen around Alaska, a healthy tree or shrub can withstand several years of heavy infestation before plant health declines.

Life Cycle:
Adult moths lay egg masses on plant material in the fall where they overwinter. Eggs hatch into larvae in mid May – early June and begin to feed. Moth larvae of this type roll leaves and bind them together in a protective leafy tube with webbing. Mid summer these caterpillars pupate and drop to the ground. Adults hatch late summer and early fall to lay overwintering eggs.

Larvae are generally a dark greenish-blue with a dark brown or reddish head. They are found in rolled leaves of many species: cotoneaster, birch, cherry, aspen, apple and other ornamental trees.

Getting a large population of leaf rollers under control takes time, continual observation, and patience. The best time to take action is in mid-late May when the caterpillars first hatch, as they are most vulnerable before they begin rolling leaves and feeding heavily. Two products are useful in controlling leaf rollers, Bt (the bacterium Bacillus thuringiensis) or NEEM oil (also called AzaMax) are biorational pesticides. These products target and affect the pest species while having a minimum impact on the beneficial predators that feed on leaf rollers. More conventional pesticides destroy beneficial insect populations and often make the pest problem worse in the long run.

NEEM oil and Bt products are most effective when applied early in the growing season so close monitoring of trees in May is very important. Larvae should be sprayed in the first two weeks after emergence and the product needs to be reapplied 7-10 days later as not all leaf rollers emerge at once. It is against U.S. law to use any product in a manner inconsistent with its labeling. Remember to always follow the instructions exactly as listed on the product.

NEEM and Bt can be applied later in the season, but are less effective since the caterpillars have “rolled” by then and both products need to be ingested by the larvae in order to work.

Physical controls such as picking off rolled leaves or simply squishing the caterpillars inside the leaves can be effective all season. Raking underneath the affected shrubs or trees midseason can also help destroy the pupae, which in turn can reduce the eggs laid on your plants in the fall. Even if you miss the window for effective control early in the
season, any control efforts you complete this season lowers the reproductive population for next year!

If you have more questions or would like more information on Birch Aphids, contact the Cooperative Extension Service Integrated Pest Management Office at: 786-6300
Or send an inquiry form [here](#).