THE GRAPEVINE **FOR RELEASE: April 27, 2017**

Larry Crouse
Extension Horticulture Agent

EUROPEAN PINE SAWFLY

European pine sawfly, Neodiprion sertifer larvae were detected feeding on my "indicator pine" in Manhattan, KS (I was totally excited!) on April 17. Young caterpillar-looking larvae are 1/4 inch in length and olive-green in color with a black head. Mature larvae are >1.0 inch long with green stripes. The larvae are gregarious or feed in groups on needles of a variety of pines, especially Scotch, red, and mugo pine. When disturbed, each individual larva will arch their head and abdomen (last segment of an insect body) back, forming a "C-shape," which is a defensive posture to ward-off predators. Eventually, larvae will strip the needles of mature foliage, leaving only the central core, which is white and then turns brown. In general, larvae complete feeding by the time needles emerge from the candelabra. Therefore, those needles are not damaged. There really is only a minor threat of branch or tree death resulting from sawfly larval feeding. However, the loss of second- and third-year needles will be noticeable in landscape trees; thus ruining their aesthetic appearance. Sawfly larvae are not caterpillars, therefore, the bacterial insecticide, Bacillus thuringiensis subsp. kurstaki (sold as Dipel) will not directly kill sawfly larvae. Dealing with sawfly larvae involves hand-picking (you can wear gloves if you wish) or dislodging larvae from plants by means of a forceful water spray. If necessary, there are a number of insecticides that may be applied to suppress European pine sawfly populations including: acephate (Orthene), azadirachtin, carbaryl (Sevin), spinosad (Captain Jack's DeadBug Brew and Conserve), and any pyrethroid insecticide (e.g., bifenthrin, cyfluthrin, and lambda-cyhalothrin). Be sure to read the insecticide label to make sure that sawflies are listed.

Termites or Ants

Both termites and ants are able to swarm and may have wings during part of their lives. Since these insects are close to the same size, people often misidentify flying ants as termites. Since flying ants do not attack wooden structures like termites, it is helpful to be able to tell the difference. Fortunately, there are several differences that can easily distinguish the two. For example, ants have a thin waist; the waist of a termite is thick. Also, ants' antennae are elbowed, while termites' are not. Thirdly, termites have two pairs of wings that are of equal length. Ants also have two pairs of wings, but theirs are of unequal length. Homeowners who find signs of termite activity should shop for a reputable pest control firm.

Dothistroma Needle Blight on Pines

If you are having problems with the needles on pines turning yellow, check for Dothistroma Needle Blight (Mycosphaerella pini) as it has been very common this spring. This fungal disease causes the tips of needles to turn yellow, and yellow to tan bands to form along the needle. The black fruiting bodies have erupted through the surface of the needle. Needle blight is most serious on Austrian and Ponderosa pines and also can affect Mugo pines. Scots pine is considered resistant. Winter desiccation can cause these same needle-yellowing symptoms, including banding, but does not exhibit the black fruiting bodies. This also is very common this year likely due to the extreme cold we had on December Tip blight, another disease, can affect Austrian, Ponderosa, Scots, and Mugo pines, but Austrians are most susceptible. This disease normally kills tips of branches when the needles are about half grown in the spring. This disease results in the death of the entire needle, not just the tips. If the tips of branches are dead and the needles on these branches are shorter than normal, suspect this disease. Some copper-containing fungicides can be used for control of Dothistroma needle blight. A single fungicide application in early June normally will protect foliage from infection. There is some risk in a single application because susceptible older needles are not protected in late May. I recommend three applications if possible, the first part of May, the middle of May and again in late May or early June to provide a more complete and dependable control. Make sure all needles are thoroughly covered with the fungicide. It is a good idea to spray adjacent susceptible pines. It may take multiple years of application to bring the disease under control. Copper fungicides are suggested for control such as Junction, Kocide, Camelot, Bonide Liquid Copper Concentrate, and Monterey Liqui-Cop. Collection and removal of diseased needles on the ground around individual trees may reduce the severity of infection the following year. Nevertheless, sanitation probably will not eliminate the disease because diseased needles bearing fruiting structures of the fungus sometimes remain attached to the tree. Removal of dead needles is impractical in windbreak plantings.

Field Bindweed Control
Field bindweed is difficult to control, especially for homeowners, but there are options.

Home Vegetable Gardens: Weed control requires taking the treated portion of the garden out of production for a time. Glyphosate - Glyphosate is sold under a wide variety of names, the most common being Roundup. Take the garden out of production when treating.

1. Glyphosate is a non-selective herbicide that will kill whatever it hits but is inactivated when it contacts the soil.
2. Glyphosate is most effective when applied to bindweed that is at or beyond full bloom. You can treat earlier but don't skip the late summer to fall application.
3. Do not apply to bindweed that is under moisture stress or not growing well. The better the bindweed is growth, the more herbicide is taken up and the better the kill.

Turf: Selective herbicides are available. A herbicide with the active ingredient of quinclorac is now packaged in homeowner combination herbicides such as Fertilome Weed-Out with Q, Ortho Weed-B-Gon Max + Crabgrass Control, Monterey Crab-E-Rad Plus and Bayer All-in-One Lawn Weed and Crabgrass Killer. Commercial applicator products include Drive, Eject, Facet and Paramount, all of which contain quinclorac. Combination products containing quinclorac include Q4, Quincept and Quinstar. Products with quinclorac work better than glyphosate and are selective. Note that lawns treated with quinclorac should not use clippings in compost or as mulch as quinclorac is very stable on grass clippings. We recommend clippings be returned to the lawn anyway but if they are bagged, they should be discarded. Do not apply products with quinclorac over exposed roots of trees and ornamentals. It would be best to avoid spraying beneath the canopy of any trees to avoid possible damage. If there are plans to convert a section of lawn to a vegetable garden, do not use quinclorac on that area. Eggplants can be damaged if planted within 12 months of areas treated with quinclorac, and tomatoes can be damaged if planted within 24 months.

Shrub Beds: Use a spray of glyphosate between plants. Use a shield if spraying near plants to keep spray from contacting green plant material. Remember, glyphosate will hurt your shrubs if it contacts green tissue. It is possible to control field bindweed by pulling, but you must be extremely persistent. There was a study in the 1940s that found that bindweed produces enough energy to start strengthening the roots when it reached the six-leaf stage. So, if pulling, never allow plants to produce more than six leaves.