

West Central Region Forest Pest Update – 6/4/2008

(Todd Lanigan)

Topics covered:

Insects:

Pine Spittlebug

Diseases:

Leaf/Needle Diseases

Pine Gall Rusts

Cedar-Apple Rust

Other:

Pesticide Website

Insects:

Pine Spittlebug – Pine Spittlebug nymphs are now present. The spittle masses are fairly small at this time but can be seen on the shoots and/or trunk. I have not seen many spittle masses so I do not know if their population will be high this year or not. Pine Spittlebug usually causes very little damage to trees. You may see some branch flagging from the feeding of the nymphs and adults.



Diseases:

Leaf/Needle Diseases - With the wet weather we have been having so far this year, you can expect to see fungal diseases popping up soon, if you have not seen some already. Here are some diseases you may be seeing. This is by far not a complete list of diseases or tree species that are susceptible to the diseases. For homeowners, the easiest control is to rake up whatever falls to the ground and get that material away from the tree(s).

Hardwoods

- **Anthracnose** – large brown areas of dead leaf tissue. Leaves will curl and/or shrivel up. Ash, maples, oaks (generally white), etc. are susceptible to this disease. If the disease is severe enough you may get some twig/branch dieback.
- **Leaf Blotch** – scattered brown areas of dead leaf tissue. If on the margin of the leaf, they can also curl up. Aspen, birch, maple, oaks, etc. are susceptible to this disease.
- **Leaf Spot** – small scattered brown areas of dead leaf tissue. Aspen, birch, maple, oaks, etc. are susceptible to this disease.
- **Tar Spot** – raised black spots on the leaf. Looks like tar dripped on the leaf. Silver maple very susceptible.
- **Apple Scab** – brown blotches on the leaves and possibly the fruit later on.
- **Leaf Blight** – new growth will turn black and the shoot can have a “Shepherd’s Crook” shape to it. Young aspen very susceptible.
- **Frost Damage** – leaves will be black in color and look somewhat wet or slimy. All hardwoods and conifers are susceptible.

Conifers

- **Diplodia Shoot Blight** – new growth killed and shoot can have a “Shepherd’s Crook” shape to it, or dead needles on the branches. Black fruit bodies may be present on the needle or under the needle fascicle. Jack, red, Scotch, and White pines, and Colorado blue spruce are susceptible to this disease. (Can resemble red pine shoot moth damage – check for hollowed out shoots on red pine).
- **Pine Needle Rust (Goldenrod Rust)** – cream colored blisters on the needles of red pine seedlings. Normally this disease does not kill the seedlings.
- **Cyclaneusma Needlecast** – cream colored blisters on the needles of Scotch pine. Needles will turn brown and drop off.
- **Lophodermium Needlecast** – black football shaped fruit bodies on the needle with a slit down the middle. Needles will turn brown and drop off. Scotch and white pines are susceptible.
- **Rhizosphaera Needlecast** – needles turn purple in color and have small black fruit bodies in the stomata. Colorado blue spruce very susceptible.
- **Spruce Needle Drop (Sneed)** – small black fruit bodies on the needles and twigs. Foliage is chlorotic and trees just look bad. It is not known if this is a primary or secondary pathogen. So far researchers have not been able to fulfill Koch’s Postulate with this fungus.
- **Fir Needle Rust** - cream colored blisters on the needles of Balsam and Fraser firs. Needles turn brown and will drop off.
- **Lirula Needlecast** – needle discoloration on Balsam and Fraser firs. Depending on the species of *Lirula*, there can be a single or double row of fruit bodies on the underside of the needle.

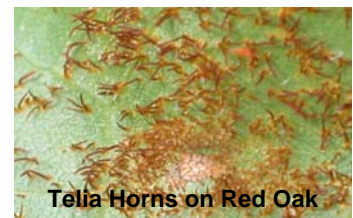
Pine Gall Rusts – Eastern and Pine-Pine (= Western) Gall Rusts are currently producing spores. The spore producing galls will be orange in color. If the gall from either species of rusts completely girdles a branch or the main trunk, the tree dies from that point up. The galls also cause a weak spot at the point where they are growing. If the gall is on the main trunk, the tree can snap off at that point in severe weather - high winds, wet heavy snow, ice storms, etc.



Eastern Gall Rust

Eastern Gall Rust galls are globose in shape. The spores being produced now will infect red oak leaves, the alternate host for this rust.

Later this summer in mid June to July, the oak leaves will produce telia horns (hair-like structures) on the underside of the leaf that produce spores that re-infect either Jack or Scotch pine.



Telia Horns on Red Oak



Pine-Pine Gall Rust

Pine-Pine Gall Rust galls are spindle shaped. At times the galls look like a string of pearls on the tree, they can be one on top of the other. Pine-Pine Gall Rust goes from pine to pine (no alternate host), again infecting Jack or Scotch pine.

Cedar-Apple Rust - I have had a few phone calls and photos e-mailed to me asking about this orange slimy glob in their red cedar. It turned out to be Cedar-Apple Rust. The rust produces globose galls in spring and the galls produce orange telia horns where spores are produced and released. These galls cause twig dieback in cedar. The alternate hosts for this rust disease are apples and crabapples. This is where the problem is. The spores released by the galls in spring from the red cedar infect apple leaves, and the fruit. This can cause severe fruit infection, premature leaf drop, and a loss of apple production in highly susceptible apple species.



Other:

Pesticide Website – Here is the link to the CDMS website. If you need label or MSDS information for pesticides, this is the site I use. It has a pretty complete list of products, but it does not have all products. Also some generic products are not listed, but if you know the brand name, you can get the information that way, e.g. Element 3A - generic, not listed, but Garlon 3A – brand name, listed. You need to enter in the “Trade Name” (e.g. Roundup) in the search box. In the case of Roundup, if you use the “Chemical Name” (N-(phosphonomethyl) glycine) or the “Common Name” (glyphosate) you will not get any matches for that product.

<http://www.cdms.net/>

Arthropod Proverbs/Sayings: (Irish)

The three most difficult to understand; the mind of a woman, the labor of the bees and the ebb and flow of the tide.

Previous issues of this update and regional forest health updates from NOR, NER, SCR/SER, and WCR are available from the WI DNR Forestry website at:

<http://dnr.wi.gov/forestry/fh/inthenews/>