South Dakota State University Extension

Tree Pest Alert

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In This Issue

Samples

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of plants or insects from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the listing of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions as the label is the final authority for a product's use on a pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such, but it is the reader's responsibility to determine if they can legally apply any products identified in this publication.

Reviewed by Master Gardeners: Carrie Moore and Dawnee Lebeau

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Plant development for the growing season

The weather is going to be HOT! Temperatures are expected to be in the high 80s and 90s this weekend.

This is our current growing degree day (GDD-base 50) accumulation for communities around the state. We are still ahead of last year and rate is acerating with this heat.

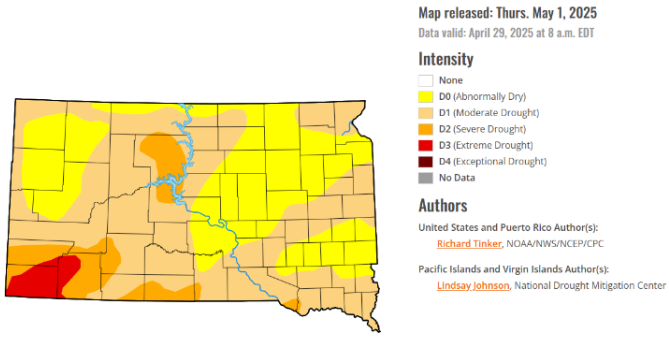
Aberdeen	291
Beresford	430
Chamberlain	434
Rapid City	319
Sioux Falls	391

The switch to hot weather has meant that the blooming season is becoming condensed. I am seeing magnolias and common lilacs in bloom – usually these flower several weeks apart!

Drought monitor

We do not have rain in the forecast for the next week. I expect this will increase the drought intensity across the state. have had some nice soaking rains crossing the state.

Here is the current map from the National Drought Mitigation Center at the University of Nebraska-Lincoln.



Treatments to Do Now

Water, water, water.

Any recently planted bare-root or container woody plants will need water this coming week. Bare-roots tree and shrubs seedlings will need a quart of water per day for the next two weeks.

Recently planted larger bare-root trees (4 to 6 ft tall) will need 1 gallon of water for every inch of caliper – the diameter of the tree at 6 inches above the ground. If the tree is 2-inch caliper, that means 2 gallons each watering. Recently planted bare-root trees also need to be watered daily for the next two weeks. If the tree is a 2-inch caliper, water with 2 gallons every day for the next two weeks,

Container trees can be watered the same amount – 1 gallon per inch caliper but watered every other day as the container soil will hold moisture. The water should be placed at the base of the trunk, not out beyond the planting hole.

Emerald ash borer

The injection season starts as the ash tree begins to leaf out. Ash creates a new plumbing system each spring. The water pipes need to be built and working before the leaves can begin to expand.

Ash leaves are unfolding in the southeastern part of the state. The optimum period for injection is between leaf out and early June. The pesticide will be carried throughout the tree as the leaves begin to force water up the tree through transpiration. It will be in the leaves when the adults emerge. Since mom needs to feed on leaves for a week or so before laying eggs, having the insecticide in the foliage will reduce the number of eggs.

The insecticide will also be carried throughout the vascular tissue of the tree. Any larvae that do hatch from eggs will be killed in the phloem before they do much damage.

Timely Topics

Emerald ash borer update

Emerald ash borer pupae are beginning to form in ash trees south of Sioux Falls. During the last few weeks, the J-shaped overwinter larva shrunk and straightened to become pre-pupae. These are now formed into pupae. Some of the pupae have already developed eye spots.

The pupal stage can take three weeks or so to develop. They will gradually develop recognizable features. They will also darken and harden as they become adults.

If the development trend continues at the current rate, adults may begin flying before Memorial Day from Sioux Falls to Dakota Dunes. Some of these areas are at 430 GDD and the adult emergence starts at 550.

Development is a little farther behind north of Sioux Falls. Adults will begin emerging in Brookings just after Memorial Day.

E-samples

Winter desiccation injury in conifers

The pictures are coming in several times a day now. The trees are small evergreens – 4 to 6 feet tall – that have red to brown needles that are rapidly being shed.

This is winter desiccation injury. The rapid switch to hot weather caused the dry needles to turn color and drop every quickly. While people might think they watered enough last fall, many did not. The trees are showing symptoms now.

Many of the trees are beyond hope. Watering conifers will not cause new needles to suddenly appear. If the trees are just showing some discoloration, watering may restore its health but still expect some needle loss.

Samples received/Site visits

Aurora County, Struggling Colorado spruce

This was a stop to look at a Colorado spruce that was struggling. Many of the shoots had needles with normal color and retention but other shoots were appearing thin from needle loss.

The good news is the tree seems to be recovering as there were numerous buds on the shoots – even the thin ones – that were beginning to open. This is a good sign.

There were no signs of insects or pathogens. Considering the abundant cone crops on the adjacent spruce I suspect it is drought. This tree and the neighbors could just a good drink – several times a week this spring.

Brookings County, Pine wilt disease in Scotch pine

The hot temperature is having some Scotch pines that were infected last year but were lingering to turn completely tan over the past few days. These are trees that were infected in 2025, but not all branches presented symptoms during the past fall.

They are now! The high temperatures and degraded plumbing system in the tree has resulted in sudden, uniform discoloration. Every twig and needle will snap at the slightest touch.