

Pest Update (April 16, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

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 inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular 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 product identified in this publication.

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Plant development



We are way ahead of plant development this year with the warm late winter and spring. The Dolgo crabapples are in bloom in Brookings, about three weeks ahead of normal. This means that we have to move up the chock on a number of gardening tasks, and yes, expect to start spraying a little earlier and you might even be too late this year to start some treatments. However, spraying for mountain pine beetles is not one of them. The beetles are not flying, nor are they about to fly so treatment during April and May is still appropriate.

Current tasks



Clearwing ash borer treatment with an insecticide containing permethrin as an active ingredient can begin in another week. The adults are usually out flying about a week or so after Vanhouttee spireas begin to bloom, probably a week away. You know when the adults are flying out from an infested tree by the papery pupal skins and sawdust left in or around the emergent hole.

Diplodia tip blight treatments should be started now. This is probably the most



common disease of pines, particularly Austrian pine. Symptoms in early summer are the new needles becoming brown and stunted. Twigs may be infected and become stunted and deformed. The treatment is a fungicide containing thiophanate-methyl, propiconazole or chlorothalonil (labeled for control of this disease) just before the buds sheaths have opened, timing is critical, and repeat the treatment in 10 to 14 days. The bud sheaths

are just beginning to open now throughout the state so try to get the first application on in the next week.

Spruce spider mites become active as silver maple leaves are expanding – now across much of the state. Spruce spider mites are cool season mites meaning they are active in the spring and fall, not during the summer heat. The mites will go dormant once the temperatures consistently reach into the mid 80's. While

the mites will begin feeding soon, the damage to the needles, bronzing and



and browning, does not typically show up until summer just as the mite populations begin to decline. Treatment options are very limited for homeowners, horticultural oils and insecticidal soaps being the two most common. These are really suppression treatments, not eradication, and the webbing often prevents these pesticides, particularly the soap, from penetrating. They should be applied now and then another treatment next week, about 7 to 10 days after the

first treatment to kill the mites as they hatch from eggs. Be aware of the cautions to the use of these products, particularly for blue spruce, as applications of oils or soaps can result in the loss of blue or silvery color to the foliage. You can make a *blue* spruce, a *green* spruce, very quickly, so read and follow label directions very carefully. The other common spray that homeowners can buy has the active ingredient acephate but this kills more insects than just mites and sometimes has limited effectiveness. Insecticides containing this active ingredient are also becoming difficult to find in our state, Ortho Systemic Insect Killer is the most common pesticide available that contains acephate and only a few distributors in the state have this product on their shelves. Acephate should also be applied in two treatments spaced 10 days apart. Homeowners with large spruce trees, or trees that are heavily infested should consider hiring a professional service. They have the equipment and chemical products that can truly provide some control of mites.

Current Concerns

The recent cold snap has resulted in some wilted foliage and dieback in shrubs, such as Amur maples, that broke bud a little too early. The warm



weather we experienced in March, 60's and 70's, triggered the wake-up call for some plants to begin their spring growth, particularly plants along the south sides of buildings. The recent cold weather, where temperatures dropped into the teens, damaged this tender tissue leaving shrubs and some trees with blackened expanded buds and leaves. There is no cure for this damage and many plants will leaf again later this

spring though the plant will be stressed by this delay and exhaustion of its food reserves. Other plants affected by the cold snap were recently delivered nursery stock. Many of these plants arrived at the local garden centers and nurseries either in leaf or with the buds expanded and many of these same plants now have brown needles or blackened leaves. These plants will also recover this spring though some of the evergreen may lose their newly expanding foliage. This is a severe stress to an evergreen and recovery is doubtful.



The case of the Meyers spruce (that was not). I was called to look at some Meyers spruce (*Picea meyeri*) that were showing symptoms of decline and cytospora canker. Since Meyers spruce has had relatively few problems in planting across the state I was puzzled by the description of the damage and drove up to meet Craig Brown, a forester with the South Dakota Department of Agriculture, and inspect the trees. The declining spruce were not Meyers spruce

but instead just Colorado (blue) spruce. I have seen this problem with misidentification on a number of other plantings where people thought they were buying Meyers spruce but instead received Colorado spruce. One major difference is when you “shake hands” with the spruce, put your hand around a shoot, the Meyers needles will be soft to the touch (pictured above) while the Colorado spruce needles will be like a pin prick. The Colorado spruce needles are typically longer, about 20-30 mm, while Meyers spruce needles are only 8-18 mm, about half the size. The cones differ as well with Colorado spruce cones having a toothed or notched tip to each scale and Meyers spruce cones looking a lot like larger Black Hills spruce cones. The spruce at the edge of the property were from a different planting, doing well and they were Meyers spruce.

E-samples



Oystershell scale on aspen. I received a couple of great pictures of oystershell scale on a quaking aspen tree in the Black Hills from Dave Hettick, a forester with the South Dakota Department of Agriculture. Apparently these trees are not natives; they were brought in from Washington many years ago and planted. The tree is a little chlorotic (leaves turning yellow) and there are bark cracks, both common symptoms associated with severe infestations of scale. The actual oystershell scale is a hard, somewhat tear-shaped bump on the bark. The “bump” is the now dead mom that has many

eggs surrounding her body. The eggs hatch about the time lilac flowers begin to fade but the crawlers continue to hatch for a few weeks. The best control is an application of a horticultural oil to smother the newly hatched crawlers. Other pesticides such as those containing carbaryl and permethrin can be used but these often kill the natural enemies that keep scale populations in check while the oils tend to mostly kill just the crawlers.





Sapsucker injury on spruce is becoming a problem, not that spruce need any more problems. I received this interesting picture of the spruce top killed back and beneath the dead top a ring of pitch. The “holes” in the pitch are very shallow, just what is created by sapsuckers as they feed. Sapsuckers killing the tops of conifers are still unusual but I have been seeing more of this in the past couple of years.



Water, water everywhere. Well as least last year. The wet soils that occurred about a year ago in much of the tree are still taking their toll on conifers. Many areas of the state were wet from the summer of 2010 to the summer of 2011 and the saturated soils resulting in spruce needles becoming discolored and dropping prematurely. The needles were also abnormal short last year. There is not much that can be done to correct the injury at this time.

Samples received

Beadle County FL1200007
base.

The tree has a swelling at the

This is the graft union, the joint between the cultivar and the rootstock. Almost all the tree we purchase these days (except for conservation stock) is grafted and sometimes the rootstock grows a little faster than the top so a swelling occurs. It is not a problem and will not harm the tree.

Clay County

The tips of our pine trees are turning brown and we are seeing more and more of this occurring in our trees.

The most common reason for browning needles in our area is the shoot blight, Diploidia tip blight, which results in brown and stunted tips. However the sample submitted did not show this problem and instead the shoot had boring dust and a small hole. The damage here is due to tip moths, small insects that burrow into the tips of branches. They can be treated with an application of a pesticide containing permethrin as the active ingredient (that also listed tip moths on the list of pests) applied as the buds expand, now, and a second application in a couple of weeks. Tip moths alone are rarely a tree killed so there may be other factors as well killing your tree. I have a call into the tree owner asking for more information.

Hamlin County FL1200003

We noticed the spruce turning yellow then rusty brown and eventually the needles fell off. This spring now the pines are doing the same thing.

This is water-related, spruce and pines are very sensitive to water and even living in wet soils for a season or two can result in dieback and death.

Lawrence County FL1200008

What is wrong with my pear tree? The margins of the leaves are turning black.

This is frost injury. Pears tend to leaf out earlier than apples and are more sensitive to cold weather injury in the spring. Often the leaf is not killed but the margins turn black.

McCook County FL1200004

This tree is about 3 years old and is dying. I used a herbicide near the tree last year and now the tree is sucker at the base.

Most likely the herbicide did not harm the tree though I always recommend caution when applying any herbicide near trees as many do injury or kill trees. However, in this instance the problem is most likely our winters as Rainier cherry is not reliable hardy to our state and are better adapted to the mild climate of western Washington and Oregon where orchards of these trees occur. The top died from our winters and the tree is suckering up from the base. The suckers are not the same cultivar as the top so they will not produce the Rainier cherries and the tree should be removed.