Watch for virus infected canna

Alan Windham, University of Tennessee

Editor’s note: This article was originally published in the University of Tennessee’s Ornamental Pest and Disease newsletter in May 2010.

This has been a great spring for bedding plants and woody trees and shrubs. The variety of plant material in nurseries and garden centers is impressive. Equally impressive is the health of this year’s crop. I have seen very little of the usual suspects (impatiens necrotic spot virus, hosta virus x and root rots). However, I have spotted canna infected with canna yellow mottle virus, especially in the Tropicanna series. Look for abnormal, brown streaks in infected leaves.

Infected plants often grow slower than healthy plants. I would not expect infected plants to perform very well in the landscape. In some big box stores, infection rates were 50 percent. Remember, if it doesn’t look quite right, there’s usually a reason; don’t buy diseased plants.

Watch for virus infected canna

CaYMV infected plants left, healthy Tropicanna Gold canna, right.

Brown streaks parallel with leaf veination is a common symptom of CaYMV.
applicators, landscape and nursery professionals, and anyone interested in improving their ability to diagnose landscape issues. Two MDA credits for either private or commercial core, category 3A, category 3B or category 6 have been applied for. See the registration brochure posted on the Genesee MSU Extension website at www.msue.msu.edu/genesee. Our instructors are Dr. Dave Smitley, MSU Entomology and John Stone, MSU Pesticide Safety Education. For more information, please call 810-244-8512.

Red thread appears in turf
Kevin Frank, Crop and Soil Sciences

Appearing this week in turf — red thread. It seems that every year we see a bit of red thread, especially following the seedhead production period when the plant is probably looking for a little extra food. Fine fescues and perennial ryegrass typically are susceptible to some red thread infestation, but I’ve been seeing it in Kentucky bluegrass. Red thread is easily identified by the pinkish-red mycelium that is threadlike and surrounds the leaf blade. In some extreme cases it might remind you of miniature balls of pink cotton candy. The areas infected by red thread will die and the turf may appear wilted. Red thread can be mistaken for dollar spot in turf as the patchy type kill is very similar. This is one of those diseases you need to get on your hands and knees to check out to make sure you know that it is red thread. Fungicide applications are usually not necessary in dealing with red thread; a fertilizer application will often help the turf outgrow the damage.

Heat tracks in turf
Kevin Frank, Crop and Soil Sciences

The hot, dry weather we experienced the week prior to the Memorial Day weekend (May 29-31) resulted in heat tracking on turf. I see heat tracks every year, usually from mower traffic on heat stressed turf, but any vehicle driving on turf can do the damage. In many ways, this is very similar to damage produced by trafficking turf when frost is present. The good news, this damage is short lived, and the recent rains and cool temperatures should help the turf recover quickly.

Spruce bud scale attack several types of spruce
Jill O’Donnell, Christmas Tree Senior ICM educator

Spruce bud scale (Physokermes piceae) is usually found mainly on Norway spruce, but it will attack other spruces. This past week, I found a pretty heavy population in a field of Colorado blue spruce and Norway spruce. We noticed this population because the trees were coated with “glistening” honeydew. Spruce bud scale may often go unnoticed since their size and color can cause them to be mistaken for buds. They are round, reddish-brown in color and are often clustered in groups of three to eight at the base of new shoots. Lower branches are more often attacked than higher.
branches. Severe infestations can produce lots of honeydew that will allow sooty mold to grow.

On trees that are already weak or stressed, severe infestations may cause lower branches to die. There is only one generation per growing season. Young females overwinter on the underside of the needles. In the spring, females move onto the twigs to complete their development. Usually, we see eggs hatch and tiny crawlers move around the twigs and branches in June or early July (700 to 1,150 GDD base 5). With insect activity being ahead of schedule, growers should be checking your fields now. As with other scale insects, wait to apply treatments until you find the crawlers are active. IPM

Scout for pine tortoise scale crawlers

Jill O'Donnell, Christmas Tree Senior ICM educator

If you grow Scotch pine and had high populations of pine tortoise scale (Toumeyella parvicornis (Cockerell)) last year, you should be scouting your trees for the crawlers. Particularly check trees that had black sooty mold last year. If you have trees that are within two years of harvest, you don’t want to let pine tortoise scale build up to high levels. These scales secrete huge amounts of sugary honeydew. Black sooty mold grows on the honeydew and can make the trees unacceptable to sell when scale populations are very high.

If you had some “black scale” last summer and need to apply a horticultural oil or insecticide spray, you should time the spray to coincide with this crawler stage. Crawlers begin to hatch around 400-500 GDD base 50 and continue through 1,000-1,200 GDD base 50. The crawlers are pinkish-red and can easily be seen moving about on the shoots and needles. We have found that emergence of crawlers occurs over a month long! The key to control this scale is to remove trees heavily invested, get good coverage with spray materials and continue to scout trees in June and July for crawler emergence. IPM

Fishing spiders

Howard Russell, MSU Diagnostic Services

We had a run on fishing spiders brought into the lab over the past two weeks or so. The one we see most often is the dark fishing spider, Dolomedes tenebrosus, (Araneae: Pisauridae), which is one of our largest spiders. Females, which are quite a bit bigger than males, may measure over an inch, not including the legs, and over three inches when the legs are included. And, they’re hairy and most people tend to think that big and hairy spiders are the most dangerous spiders, which is not true. Fishing spiders do not spin webs to capture their prey. They overwhelm their prey with speed and cunning. They typically live near water where they lie in ambush at the edge of a pond or stream; waiting for prey to come within striking distance. They are capable of running over the surface of the water in pursuit of aquatic insects, tadpoles and even small fish. When threatened, they may dive underwater and wait for the danger to pass.

Unlike other members of the genus Dolomedes, dark fishing spiders seem willing to travel quite far from water in search of prey. Some find their way into homes where they have been found in basements, kitchens and even bedrooms, much to the dismay of the human occupants. The people who brought them to the lab over the past few days were quite excited and shocked to find such a big, hairy spider in their homes. Despite their size (and hairiness), fishing spiders are not particularly dangerous to people or pets.

Female fishing spiders routinely attack and kill males before, during and after mating. This behavior is sometimes referred to as sexual cannibalism and is relatively widespread among invertebrates, and is particularly prevalent amongst arachnids. It is pretty easy to understand the benefits to the female of eating her partner after mating, i.e., a tasty meal that will nourish and enhance the survival of her developing eggs. But why would a female fishing spider attack and eat a potential partner before mating? Mating systems ecologists (yes, there are such people out there) offer three possible explanations.
First is the suggestion that sexual cannibalism may simply be the byproduct of mistaken identity, and generally, aggressive females attack males as prey items before realizing their value as mates. Sort of like, “Oops, sorry, Honey, I didn’t recognize who you were before I killed and ate you.” Second, females may use their aggression towards potential mates as an extreme mechanism of mate refusal and selection. In this case, males are quickly sized-up, and those who don’t make the grade make for a good snack. No, most emphatically, means no. The last theory as to why a female might eat a potential mate before mating is that females make a choice about what they need more, a mate or a meal. This is essentially an economic model suggesting that females adaptively weigh a courting male’s value as a mate versus his value as a food item.

Whatever the reason, just be grateful you’re not a male fishing spider. \textit{IPM}

### Agricultural labor statistics for spring 2010

\textit{Vera Bitsch, Agricultural, Food, and Resource Economics}

During this past April, the total number of hired workers is estimated at 997,000 individuals; that is up 10 percent from a year ago. Of these individuals, 737,000 were hired directly by farm operators. The average number of hours worked stood at 39.8, down one percent from a year ago.

The general trend of rising agricultural wages has not continued. Wage rates were down from a year ago in most regions. The largest decreases in wage rates occurred in the Corn Belt II (Iowa and Missouri), Northeast II, Corn Belt I, Lake, Pacific (Oregon and Washington) and Appalachian I (North Carolina and Virginia) regions. The average wage rate was $10.83 per hour, down one cent from a year ago.

The hourly wage rates in the Lake region were $10.55 for all farms and $10.07 for other crop farms – excluding supervisors and other workers. Wages for field crop farms were not disclosed due to privacy concerns. During last year’s reference week, the wages in the Lake region were $10.88 for all farms, $12.17 for field crop farms and $10.71 for other crop farms. In conclusion, wages in the Lake region by type of farm are lower than last year for all groups and on average.

The average hourly wage rates in 48 states, excluding Alaska and Hawaii, during this April’s reference week were $10.13 overall, $10.56 for field crop farms and $10.14 for other crop farms. Last year those rates were $10.07, $10.54, and $9.90, respectively.

To read Dr. Bitsch’s complete newsletter go to her website at \url{http://www.msu.edu/user/bitsch}. Under “News” click on “Agricultural Labor Issues in Michigan” for a list of available newsletters. For more details, the NASS release is available at \url{http://www.nass.usda.gov/}. On the right, under “NASS Publications,” “Title,” search for “Farm Labor.” \textit{IPM}

### Weather news

\textit{Jeff Andresen, Agricultural Meteorology and Geography}

Latest medium range forecast guidance suggests that the ridging feature currently building over the region will transition back to relatively west to east zonal flow by the middle of next week. Both 6-10 day (for June 16-20) and 8-14 day outlooks (for June 18-24) call for near normal mean temperatures...
Landscape Alert - June 11, 2010

Precipitation totals during both periods are forecast to range from near normal levels across Lower and eastern Upper Michigan to above normal totals over the western Upper Peninsula. Given differences between some of the computer-generated forecast guidance, forecaster confidence is considered less than normal for the season.

### ACTUAL AND PREDICTED DEGREE-DAY ACCUMULATIONS SINCE MARCH 1, 2010

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* Since weather data for some agricultural stations are not available prior to April 1st, GDD values for those stations during February and March are estimated with closest available station data.** District normals were calculated as the mean of daily GDD totals at several stations within each district for the period 1951-1980. Report generated at 09:00, 06/11/10
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