Amber Snails

While visiting a greenhouse grower last week we observed a small snail that was on the upper leaves of poinsettia plants. It was not just a few but many small snails on the upper foliage of the poinsettias. We sent pictures to a Canadian entomologist who happens to be a snail and slug expert. He identified the snail as amber snail. The snail lives in or near ponds and feeds on algae. Somehow this snail got into the greenhouse and since they were using ebb and flow floors the snails moved to the upper canopy of the plant.

Of all native terrestrial snails, amber snails have the closest connection to water, but still they never actually live in the water, although they may live on plants growing there. Over the years I have seen a lot of unusual things on poinsettias but this is a first finding amber snails on the plants. Control is not necessary since they feed on algae. Could be that the snails add to the value of the poinsettia – who knows?

Update on Neonicotinoids

By: Stanton Gill

While attending entomology/pathology meetings last week in North Carolina, we discussed neonicotinoid use on ornamentals. Dave Smitley, Michigan State University, had conducted trials in 2014 to measure the impact on bumble bees. Dave had his students treat potted annual plants in flower with imidacloprid. The plants were placed in netted outdoor cages and treated with the neonicotinoid, imidacloprid. Commercially available bumble bee colonies were placed in the netted tents. The different colonies were placed in tents treated with imidacloprid the same day. Honey bee colonies were also placed at varying intervals between treatment such as 1, 3, 7, 14 day after treatment. Untreated tents with the same plants were used as a control. After exposure he retrieved the bumble bee colonies. Their state apiculturist suggested counting the bumble bees and marking their thorax with a colored pen so they did not double count the bumble bees. It was suggested to handle the bees in a darkened room with only red light since supposedly the bees cannot see red light. Dave said after being stung 6 times in the room under the red light he was ready to quit the trial. The apiculturist suggested he try counting them in a room lit with red light and with cold temperatures such as a walk-in cooler that was cooled to 38 °F. This worked and they did not get stung. They compared the number of healthy bumble bees in each colony in the different treated intervals to the untreated control colony numbers. What he found is if plants were sprayed with imidacloprid and there was least a one week interval from time of spraying to time the bumble bees were exposed then there appeared to be not impact on the bumble bees. He suggests that a good safety margin would be to not apply foliar sprays of imidacloprid at least 2 weeks before the plants go outside.
PGRs: How Tall are Your Fall Pansies?
By: Joyce Latimer, Extension Specialist for Greenhouse Crops, Virginia Cooperative Extension, jlatime@vt.edu

Growth regulation of fall pansies can be a bit more tricky than spring pansies. It is easy to get too much control with your PGR applications, especially if you are growing them outside where temperature conditions are more variable at this time of the year. The lower temperatures and the higher light will provide a significant amount of your height control. If you have late plantings, begin PGR applications when the plants are 2 to 4” in diameter. But for earlier plantings, if you need additional growth regulation, start with the softer controls, such as a tank mixture spray of daminozide and chlormequat, especially for less vigorous varieties and where temperatures are cool. Remember this tank mix will provide only short term control – great for that crop nearing market time. Of course, there are stronger options, ancymidol, paclobutrazol, uniconazole, and flurprimidol (Topflor), for longer term or a greater degree of control. Ancymidol is still considered one of the “better” chemicals for pansies, but the cost is still a little high. As for the other PGRs, spray applications may be made before plant flowering, paclobutrazol at 5 to 7.5 ppm; uniconazole at 1 to 3 ppm; or flurprimidol (Topflor) at 2.5 to 5 ppm. Applied too close to flowering, these products may delay flower opening. Applied after flowering, these products may cause flower drop. Paclobutrazol drenches at 0.25 to 0.5 ppm may be used – again before plants are flowering. This will provide longer term control than the spray applications. However, avoid the drenches late in the crop cycle as the growth regulation will carry over into landscape establishment which doesn’t make for happy customers!

PGRs: Are Your Poinsettias on Target?
By Joyce Latimer, Extension Specialist for Greenhouse Crops, Virginia Cooperative Extension, jlatime@vt.edu

Hopefully you have your poinsettias right on target to meet your market height goals! But if not, be aware that you are pretty much past the deadline for spray applications of PGRs with the possible exception of chlormequat. Generally, after the start of short days, growers will switch to using PGRs only as drench applications to minimize reductions in bract size. So now you need to look at drench applications of paclobutrazol or flurprimidol (Topflor). Remember the whole discussion of early drenches vs. late drenches?

Early drenches are basically any drench application before the application of the late drench. If you think you need a PGR application after early October, then you would apply a drench instead of a spray. There is no cut-off date. The catch is that the rate must be REALLY LOW. Early drenches of paclobutrazol would be about 0.05 to 0.2 ppm per application, using the lower rates on the less vigorous cultivars and higher rates on the most vigorous cultivars. Pay attention to your drench volume to avoid over-application. Drench volume for a 6”-pot is only 4 fl.oz. Other PGRs may also be used as early drenches but most of the research and published studies have been completed with paclobutrazol. If you want to test flurprimidol or uniconazole, start with early drench rates of 0.05 to 0.1 ppm.

Late drenches are used to STOP elongation and hold the crop at the desired size. These rates are much higher. So the later you can wait to apply this late drench, the less it affects bract size. In general, the plants should be within 0.5” of the final desired height and there should be at least two bracts in full color before you make this final treatment. Late drench rates for medium vigor cultivars are 1 to 3 ppm ancymidol; 0.5 to 1.0 ppm paclobutrazol. Again, run your own tests for flurprimidol or uniconazole late drench rates in the 0.25 to 0.5 ppm range.

Important Note: Be aware, these drench recommendations for poinsettia height control are VERY low. Pay close attention to measuring, mixing and application details.
European Pepper Moths

Last year, European pepper moth caterpillars were found feeding on poinsettias in Maryland greenhouses. They also feed on bedding plants such as geranium and petunia. Be on the lookout for collapsing plants. The eggs are laid on foliage and hatching larvae initially feed on lower leaves near the soil level, making round or crescent-shaped holes. This damage can be monitored visually in an IPM scouting program. Older larvae consume whole leaves or they can feed on roots or at the base of the plant at soil level. In some cases they girdle the base of a plant. Later instar larvae burrow into soft woody or herbaceous stems causing damage in which fungi can enter. As the larvae prepare to pupate they web silk together, usually on foliage close to the soil.

Removing debris and lower leaves will reduce habitat for the larvae. Repeated sprays of *Bacillus thuringiensis* can be directed to foliage to kill larvae feeding on the foliage. Spinosad materials should also be effective in controlling the caterpillars. Acephate in preliminary trials has been shown to be one of the more effective materials for control.

Pheromone traps (lures are available from Koppert Biological Systems, 800-928-8827) are available for monitoring for adult moths. Place these traps in greenhouses. Also set out traps near compost areas since that seems to be a good breeding ground for them.

More details on the European pepper moth are available at
http://www.extension.umd.edu/learn/greenhouse-ipm-pest-alert-european-pepper-moth
Information for Poinsettia Growers
Electronic Grower Resources Online (also known as e-Gro) has posted several new fact sheets on poinsettias and nutrition written by Dr. Brian Whipker of North Carolina State University.

Check them out at: http://e-gro.org/alerts.php

Greenhouse Tour: Hillcrest Nursery, Millers, MD
October 23, 2014

The University of Maryland Extension and the Maryland Greenhouse Growers’ Association are organizing a greenhouse tour of Hillcrest Nursery in Millers, MD from from noon to 4:00 (lunch included) on October 23. Steve Hershfeld will speak on how to obtain organic certification for greenhouse herbs.

For details and to register, go to our conference web page at https://extension.umd.edu/ipm/conferences

College of Agriculture and Natural Resources Open House
October 11, 2014 (10 a.m. to 3 p.m.)

Location: Central Maryland Research and Education Center - Clarksville Facility
4240 Folly Quarter Road, Ellicott City, MD 21042

Find out more at http://agnr.umd.edu/openhouse

Come to our Open House at the farm and learn how our Academic, Research, and Extension programs benefit you. See the horses, cows, calves, and turtles...participate in birdwatching...see the beautiful butterflies...watch chicks hatch out of their eggs...check out the backyard poultry...take a hay wagon farm tour...visit the educational and interactive displays and exhibits on everything from nutrition to rural enterprise development...participate in the numerous hands-on activities...purchase some food from one of the student organization food tents...talk with an AGNR representative...and get your plant questions answered by a Master Gardener.

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