VEGETABLE CROPS HOTLINE

A newsletter for commercial vegetable growers prepared by the Purdue University Cooperative Extension Service

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GREEN JUNE BETTLE - *(Frankie Lam)* - Growers have reported numerous ***green June beetles*** flying in their fields. The beetles fly in grassy areas and feed on open melons. The growers I spoke to were concerned about possible damage to vegetables.

The adult ***green June beetle*** is about 1-inch long, dull velvety green above with deep yellow margins, and metallic green below. Some people call this beetle a "June bug" or "June beetle". One should not confuse the ***green June beetle*** with the ***June beetle*** (a.k.a. the May beetle) and the Japanese beetle. The ***June beetle*** is usually brown in color, whereas the ***Japanese beetle*** is metallic green and about 1/2 inch long. The ***June beetle*** usually feeds at night, while the ***Japanese beetle*** and ***green June beetle*** are often active during daytime. During flight the ***green June beetles*** give off a buzzing sound, which sounds like a bumblebee. However, all these beetles belong to the same family of beetle.

The adult ***green June beetles*** feed on ripening fruits with thin skin, including apricots, peaches, nectarines, grapes, blackberries, raspberries, plums, prunes, apples, and pears, and occasionally become a pest of fruit. The larvae are white grubs, commonly called "richworms", because they prefer soil with high levels of organic matter. The grubs feed on dead and decaying materials, as well as plant roots. The grub is one of the main pests in turf. Grassy areas with high organic matter and fields with hay bales, manure piles, or bark mulches are highly preferred by the females for egg laying. The beetle completes one generation each year; the late larval stage over-winters in soil. The adult ***green June beetle*** flies from June through September; the peak occurs in mid-July.

Adult ***green June beetles*** may rest on all kinds of vegetations, however, no direct damage on melons and vegetables by the beetles has been reported. Last week I did see some ***green June beetles*** land on my tomato fields at the Southwest Purdue Agriculture Center, but no feeding on the leaves or fruits was observed. Both adult and grub can be controlled by the application of insecticides. Most insecticides, including Sevin and Merit, which control ***Japanese beetles***, also control the ***green June beetles***. Fall application of soil insecticides in the grassy areas where the adults appeared in summer can control the young grubs. Read the labels carefully before applying any pesticides.

NEW SITE FOR AGRICULTURE NEWS AND INFORMATION - *(Matt Weber and Chris Gunter)* - The Indiana Tobacco Community Partnership released a new website dedicated to providing agriculture news, information and educational resources <www.intoag.org>.

The website features:

- Up-to-date tobacco and agriculture news;
- Reports on value-added and community supported agriculture;
- An extensive collection of valuable links and educational resources;
- A section on community farmers' markets featuring an online bulletin board for community organizers and producers to ask questions and exchange ideas.

"The content on this site is very valuable for agriculture and economic development," said Wendy Dant Chesser, Executive Director of the Indiana Rural Development Council. "By locating so many resources in one place, the Indiana Tobacco Community Partnership is providing a tremendous service to both farmers and community economic developers - two groups that rarely work together but have a common goal of benefiting local economies."

The website is one of several projects that the Indiana Tobacco Community Partnership is working on throughout Southern Indiana. The mission of the Indiana Tobacco Community Partnership is to provide structured communications between tobacco stakeholders and community leaders and to provide an organized approach to exploring alternative economic development in tobacco producing counties. In addition, the Indiana Tobacco Community Partnership will develop effective pilot projects to help replace the loss of tobacco revenue in Southern Indiana.

For information on the Indiana Tobacco Community Partnership, contact the Southern Indiana Rural Development Project (SIRDP) at 800-816-0019 or info@intoag.org.

CORN EARWORMS - *(Rick Foster)* - Pheromone trap catches of corn earworm moths are on the increase. In my trap near Lafayette, my counts have increased from 4 moths per night to 8 moths per night in the last week. Although this is still below the threshold level of 10 moths per night, experience has shown that the catches will go above 10 per night very soon. The key time for management of corn earworms is when moths are active (catches above 10 per night) and sweet corn is in the vulnerable stage, green silks. Don't make your first application until you have at least 70% of the plants silking in your field. If no silks are present, you haven't received any benefit from the spray. At the population levels we are currently seeing, a 4 to 5 day spray interval should suffice. If numbers of moths caught dramatically increases, the interval should be shortened. Also, don't make your spray decisions for corn earworms independent of your decisions about European corn borer (see the following article). The insecticides that

control one will also control the other. Many years of experience has shown that the two insecticides that are clearly superior for sweet corn insects are Warrior and Capture. Either will do an excellent job. Tomato growers should also begin sprays for tomato fruitworm (= corn earworm) soon.

European Corn Borers - *(Rick Foster)* - Second generation European corn borers have been active for a couple of weeks. Corn borer moths will lay eggs at any stage of corn development, so the larvae will usually be found feeding in the whorl of vegetative stage corn. Once the tassel starts to emerge, the larvae will migrate to the tassel, stalk, or ear. Prime time for the first corn borer spray is when the tassel are just about to emerge, the stage we call "pre-row tassel." After that, a five-day spray schedule is usually adequate. Again, Warrior and Capture are the insecticides of choice. Pepper and snap bean growers should also be aware of the potential for corn borer infestations. The probabilities of infestation depend greatly on the stage of field corn nearby. If corn was planted late in your area and is still fresh and green, the chances of infestation are reduced because the moths prefer green corn. If the corn is starting to dry down, the moths will look for something green, such as peppers and snap beans. Particularly with fresh market peppers, be sure to look at the preharvest intervals for the pesticides you are considering. It may be that you will want to select an insecticide that is not quite as effective as some others because it will allow you to pick sooner.

Powdery Mildew on Pumpkin – *(Dan Egel)* – Powdery mildew has begun to show up on pumpkins. This article reviews management of this disease and introduces a new fungicide: Procure 50 WS.

Growers who fight powdery mildew every year should be aware that there is partial resistance to powdery mildew in a few varieties. If susceptible varieties are used, many growers will find it necessary to use fungicides. The strategy behind powdery mildew control on Midwestern pumpkins is based on protecting vines from infection through mid-September. Fungicides are much more effective when applied before powdery mildew is observed. In the following list of fungicides labeled for use on pumpkins against powdery mildew, fungicides with a similar mode of action are offset with commas and should not be used back-to-back: Topsin 85WDG (4 oz./acre), Flint (1.5 to 2.0 oz./acre) and Quadris 2.08 SC (11.0 to 15.4 fl. oz./acre), Nova 40 W (2.5 to 5 oz./acre) and Procure 50 WS (4 to 8 oz./acre). Procure is also labeled for powdery mildew on cucumbers, muskmelons, honeydews, squash and watermelon. No more than 40 oz. of Procure 50 WS should be used per acre per season. Applications can be made up to the day of harvest. Procure 50 WS has a 12 hour re-entry period.

Initial applications of one of the systemic fungicides above should be made when earliest pumpkins are still green and are 1/2 their estimated full size, (mid-late July). Repeat applications at 2-week intervals through early September. Both Flint and Quadris recommend shorter application intervals. Please note that powdery mildew, unlike many diseases, does not need leaf wetness to infect. Please read the label carefully.

Specialty Tomato Variety Plot Tour - *(Liz Maynard)* - A tour of specialty tomato variety plots at Pinney-Purdue Ag Center is scheduled for Monday, August 26, 2002, from 6:00 to 8:00 p.m. Pinney-Purdue is located just north of U.S. 30 on County Line Rd between Porter and LaPorte Counties. If you grow or are thinking of growing specialty tomatoes, this is a great opportunity to see varieties in the field. There are over 30 open-pollinated and hybrid tomato varieties, including types with red, orange, yellow, green and white fruit. We'll spend some time talking about the growing season and varieties, and then take time to walk through the plots. For more information, or if you have a disability that requires special assistance for your participation in this event, call 800-872-1231, ext. 5673, or 219-785-5673. Hope to see you there!

Phytophthora Fruit Rot on Pumpkin Reported - *(Dan Egel)* - The first symptom of this disease is often a water-soaked spot or depression in the fruit. The portion of the fruit in contact with the ground is often the first to be affected. Later, fruit may have a cottony white mold. Vines may wilt as a result of infections along the stem.

Management options-Avoid poorly drained fields, especially those with a history of the disease. Use rotations of at least 4 years without tomatoes or peppers. The use of raised beds can help control this disease in some crops. Limit irrigation as much as possible. Fumigation has been effective in some cases. The use of preventative fungicide applications from the start of the season may also be useful. No fungicide will provide adequate control without also using the cultural controls discussed above.

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