VegNet Vol. 11, No. 15, 16, 17 and 18, 2004

Special Edition: The last 4 newsletters together with the most recent on top
Update from southern Ohio Meigs County- Growers have missed most of the rains, only 1/4 inch on Saturday July 31, while when visiting upstate Ohio we received 3-5 inches in Alliance & Chardon. Tomatoes & melons are ripening well. Sweet corn is feeling the effects of lack of rain. Best corn is being irrigated, rest has shorter ears. Peppers continue to mature, into 2nd & 3rd picking. Few European corn borer (zero to 2 a week) being caught in helio traps. Corn earworm moths caught in helio traps increased in counts from 3 to 17 this past week.

Pumpkins are setting in pumpkin patches, some Phytophthora root rot found in wet fields where standing water & irrigation water had been trapped. This week hot and humid, expecting rain Wednesday night and cooler weather for the weekend.
Midwestern vegetable growers have reported increasing losses due to drop favorable for lettuce drop, caused by Sclerotinia minor, and in some areas called sclerotia that can survive for many years in soil. These structures are irregularly shaped and considerably bigger (about 1/16 to 1/4 inch x 1/8 to 3/4 inch) in disease, which has been managed in the past using applications of the fungi alternative products for effective, long-term management of this disease. New products for lettuce drop management. Research in 2002 and 2003 in Arizona (Dr. Mike Matheron, University of Arizona) has shown that caused by both S. minor and S. sclerotiorum in lettuce, and was more consistent from year to year than Ronilan or Rovral. In our on-farm trial in Ohio in 2003, under very severe disease pressure (60% incidence of drop) Rovral did not significantly reduce drop. In the Arizona trials, the biofung Stoneman (billstoneman@charter.net; 608-268-7040)), a fungus (mycoparasite highly effective in controlling drop caused by S. minor when combined with white mold (caused by S. sclerotiorum) of canola in Germany have shown that sclerotia are on the surface and can be readily attacked by the Contans fung Contans may take several years: deeply buried sclerotia may not be exposed sclerotia are continually mixed and brought to the soil surface through cultivation sclerotia numbers will decrease. According to the manufacturer, Contans N order to maximize contact of the mycoparasite with sclerotia. They also recommend incorporation) in order to allow plenty of time for the mycoparasite to find require a multi-year, multi-tactic approach to management. The high levels in many Midwestern growing areas have contributed to increasing number time to start thinking about managing lettuce drop for next year and years.
Editors Note: Downy Mildew has developed very rapidly in the past week since last Friday, August 6. The cool moist weather favors development of this disease.

Downy Mildew is developing rapidly on all vine crops in Ohio now. The fungus causing Downey Mildew will destroy foliage; it does not directly affect fruit. Loss of foliage can reduce yield and expose fruit to sunscald. Rapid foliage loss will prevent any fruit development and ripening.

Fungicides to control Downy Mildew need to be applied NOW. Strobiluron fungicides will give control. Chlorothalonil and EBDC fungicides will not. Since strobilurons need to be alternated with these materials, Ridomil Gold will need to be added to the chlorothalonil or EBDC sprays.

Symptoms: The disease is most important on cucumber and cantaloupe though all cucurbits are susceptible. Infected leaves first show a mottling followed by light yellow spots. These spots are angular and limited by the small veins of the leaf. These areas coalesce and turn tan to brown. A fine white to gray downy growth soon develops on the underside of the leaf but may not be easily seen during the day. During periods of high moisture this growth may turn to a gray or purple color. Infected leaves die while the edges of the leaf blade curl inward. Plants look as if they have been scorched or burned. Severe infection results in defoliation, stunted plants and poor fruit development. See our publication: Important Pests and Diseases of Pumpkin for pictures. Copies are available from: C. Welty, welty.1@osu.edu or 614-292-2803.
New adult moths of European corn borer began emerging in late July and emergence is not likely to be peaking yet. Egg masses were found on pepper leaves this week at Fremont, and eggs should be abundant on fresh-silking sweet corn also. Among our trap cooperators, the highest number of borer moths were caught in Wood County where a blacklight trap caught 227 borer moths in one night last weekend. Among pheromone traps, the highest catch is from Miami County where over 1,000 borer moths were caught in the past week. The next two weeks are predicted to be the best time for pepper growers to use Orthene, which is allowed for only two applications per year.

Moths of the corn earworm are being detected at several locations although in low to moderate numbers. Pheromone traps caught 10 in Miami County, 6 in Meigs County, 6 in Franklin County, 0 in Clark County, 0 in Huron County, and 2 in Sandusky County. Earworms can be prevented from infesting silking sweet corn if insecticides are used on a 5-day schedule. See sweet corn chapter of Ohio Vegetable Production Guide for more details about spray schedule based on trap catch and temperature.

Beet armyworm remains active in Ohio. Recent pheromone trap catches are 17 in Henry County, 75 at Clark County, 36 in Greene County, and 4 in Franklin County. Peppers and tomatoes should be scouted for beet armyworm if moths are caught in the area.

The Ohio Department of Agriculture has approved a FIFRA Section 24(c) Specific Local Needs label for the use of Ridomil Gold in Ohio to control downy mildew in Brassica greens including broccoli raab, collards,
Ridomil Gold [ must be applied in a tank mix (rate = 0.125 – 0.25 pt/A) with development of resistance in the downy mildew pathogen to the fungicide. l disease but before infection. Ridomil Gold may be applied as a foliar spray Ohio growers applying Ridomil Gold to Brassica greens must have the SLN website: http://pested.osu.edu/ Go to General Information, click on Ohio 24 download the PDF file.

Online Edition of the 2004 Ohio Vegetable Production Guide, N

Please note: The 2004 Ohio Vegetable Production Guide is available electronic documents is available, free of charge, from Adobe Systems

What's New At The VegNet Web Site

A pictorial comparison of Squash Vine borer damage and Bacterial Wilt in pumpkins. While the symptoms are similar, there are some key differences. Check it out. Click on the 'Problem of the Week' button of the left side.

VegNet Vegetable Schools
A series of slide presentations are now available in order to update you on the latest pumpkin and sweet corn research. We begin with 6 pumpkin topics in Pumpkins 101 and have 10 slide presentations available in Sweet Corn 101. In sweet corn, Powerpoint presentations and html online slide shows are available now. Go to the VegNet homepage.

Pumpkins 101
The use of trap crops and Admire for cucumber beetle control and New varieties for 2001. We have presentations on cover crops for disease control and pumpkin fungicide use.

Perimeter Trap Cropping. Online html slide show | Perimeter Trap Cropping. PPT, 7 Mbytes
See also the Research Results section on the home page for text version of the report.

Sweet Corn 101
Presently only Powerpoint presentations available. Coming Soon: Online HTML slide shows. Check back often Nine topics including:

Aspects of Variety Selection based on Disease Control [ ppt 40 KB]

Internet Link To "Reactions of Sweet Corn Hybrids to Prevalent Diseases" Dr. Jerald Pataky
www.sweetcorn.uiuc.edu

Producing Early Sweet Corn [ ppt 3.5 Mbytes ]

Managing Weeds in Sweet Corn [ ppt, 9 Mbytes ]
Sweet Corn Herbicides & Variety Sensitivity. [ppt 2Mbytes]

Sweet Corn Development and Critical Periods for Irrigation Management [ppt 1.6 Mbytes]

Flea Beetle Management in Sweet Corn [ppt 510 KB]

How To Keep Worms Out of Sweet Corn Ears [ppt 8.3 Mbytes]

Role of Bt Transgenic Hybrids in Sweet Corn Pest Management. [ppt 21.2 Mbytes]
Bt Sweet Corn Efficacy in OH, 1999-2000 [ppt, 208 KB]
We appreciate very much the financial support for this series of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

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