Northern Michigan FruitNet 2015 Northwest Michigan Horticultural Research Center

Special Update

Special FruitNet Report 08/05/15

Calendar of Events 2015

- 8/11 Grand Traverse County IPM Updates Wunsch Farm
- 8/27 2015 Open House Northwest Michigan Horticulture Research Center

Michigan brown marmorated stink bug report for August 4, 2015

First brown marmorated stink bugs captured this season from traps two urban sites and one apple orchard in Berrien and Kent counties at known hotspots.

Posted on August 4, 2015 by Julianna Wilson, MSUE News, Michigan State University Extension,



Four of the more than 60 traps in the monitoring network caught BMSB from Berrien and Kent counties (highlighted in green) in Lower Michigan. Counties highlighted in yellow are also being monitored, but have yet to capture any BMSB in traps this season.

This is the fifth weekly report of the <u>Michigan State University Extension brown marmorated stink</u> <u>bug</u> (BMSB) monitoring network. Our network of traps is being used to provide early warning should population increases of BMSB occur in areas where susceptible crops are grown. Based on what is currently known about the biology of BMSB and its favored crop and non-crop habitats, commercial fruit and vegetable plantings have been selected that are adjacent to riparian habitats, woodland, soybean fields, major transportation corridors or various combinations of these attributes. Traps are set up in apples, stone fruits including peaches, plums, sweet and tart cherries, blueberries, grapes, strawberries and a variety of vegetable crops. Several urban locations where BMSB were reported last year are also being monitored.

This week, traps placed at two sites in Berrien County – one urban site and one apple orchard – and one urban site in Kent County caught either BMSB nymphs or adults for a total of seven nymphs and two adults in four out of the more than 60 traps in the network. Locations where BMSB were caught this week are from known hotspots in the state, so finding BMSB here is no surprise. These numbers are similar to what we were finding this time last year at these sites, and are still far below levels that should concern growers in the region.

However, if you are a peach or apple grower in Berrien, Kent or nearby counties, you can and should be monitoring for BMSB in your orchard using traps, beat sampling such as jarring limbs over a light colored canvas or sheet and counting the number of BMSB that drop, sweep netting in adjacent vegetation, particularly in adjacent field crops, or some combination of these methods. Sampling along orchard edges close to woods and riparian areas is recommended because BMSB move into orchards from these areas, halting at the edge before moving further into the orchard.

Current programs for controlling apple maggots and other summer insect pests will provide some protection against BMSB, especially at current low levels. Populations of BMSB in Michigan are so low that control measures specifically targeting BMSB are not necessary at this time. In the next four to five years, we expect BMSB populations to build to a level that would cause concern and trigger targeted action, and so it is good to know there are a number of registered insecticides that will be effective when populations reach levels that would warrant control.

For more information, please refer to the MSU Extension Bulletin E0154, also known as the "2015 Michigan Fruit Management Guide."

To learn more about how to monitor for the brown marmorated stink bug, distinguish it from other similar-looking stink bugs, what crops it favors and management strategies should populations reach the threshold where management is necessary, visit <u>MSU's Brown Marmorated Stink Bug website</u>. This article was published by <u>Michigan State University Extension</u>. For more information, visit <u>http://www.msue.msu.edu</u>. To have a digest of information delivered straight to your email inbox, visit <u>http://bit.ly/MSUENews</u>. To contact an expert in your area, visit <u>http://expert.msue.msu.edu</u>, or call 888-MSUE4MI (888-678-3464).

Protect hail-damaged clusters from Botrytis infection

It is advisable to apply fungicides to hail-damaged grape clusters as soon as possible to control bunch rot.

Posted on **August 4, 2015** by <u>Annemiek Schilder</u>, MSUE News, Michigan State University Extension, Department of Plant, Soil and Microbial Sciences



Hail and high wind injury to grape fruit and foliage in the variety trial vineyard at the Northwest Michigan Horticulture Research Center.

Recent hail storms have caused serious damage to grapes in northwest Michigan. Canes have been gouged and blown off the trellis, leaves are tattered and berries have been split open. Wounds on leaves

and canes will probably not have any major further consequences unless crown gall bacteria present on the vines take advantage of the wounds to enter canes, therefore keep an eye out for possible crown gall development. However, injured berries are easy prey for rot organisms, particularly the fungus *Botrytis cinerea*, which causes Botrytis bunch rot.

While the injured berries themselves may not be salvageable and will eventually shrivel up, we don't want to invite Botrytis to establish itself in the cluster as it may cause problems later during fruit ripening. Botrytis is somewhat of an opportunistic pathogen, invading weakened, damaged or senescent plant tissues. The spores are ubiquitous in the air as the fungus is capable of abundant sporulation on dying plant tissues under humid conditions and the spores are easily windborne. The fungus may also already be present in the clusters as latent infections since bloom. It is therefore advisable to apply fungicides to damaged clusters as soon as possible, especially if rain or humid weather is in the forecast. The following fungicides are registered for bunch rot control on grapes. Systemic fungicides are recommended for better coverage and some "back action" in damaged grapes. Of the fungicides listed below, Luna Tranquility is probably the strongest material at this time with two active ingredients with Botrytis-specific activity. Use the highest labeled rate for curative activity and alternate fungicides in different chemical groups for fungicide resistance management. Remember that the biologicals are protectants only and have moderate activity against Botrytis while the conventional fungicides have good to excellent activity against Botrytis. Read the label for tank-mix compatibilities, recommendations for adjuvants and restrictions on the number of sprays per season.

Fungicides registered for bunch rot control on grapes									
Fungicide	Chemical group	Active ingredients	Rate per acre for Botrytis	Pre-harvest interval (days)	Comments				
Rovral	2	iprodione	1.5-2 pounds	7	Add a non-ionic spreader				
Elevate	17	fenhexamid	1 pounds	0	No comments				
Endura	7	boscalid	8 ounces	14	No comments				
Pristine	7+11	Pyraclostrobin + boscalid	18.5-23 ounces	14	No comments				
Luna Tranquilit y	7+9	fluopyram + pyrimethanil	16-24 fluid ounces	7	Add a light rate of a non-ionic spreader; for wine grapes only				
Scala	9	pyrimethanil	18 fluid ounces	7	Use 9 fl oz in tank mixes				
Vangard	9	cyprodinil	5-10 ounces	7	No comments				
Inspire Super	3 + 9	difenoconazole + cyprodinil	16-20 fluid ounces	14	Do not apply to Concord or Thomcord grapes; only the cyprodinil component is effective against Botrytis				
Switch	9+12	cyprodinil + fludioxonil	11-14 ounces	7	No comments				
Serenade Max	44	Bacillus subtilis	1-3 pounds	0	Biofungicide, for organic grapes; Add Nu-Film P				
Botector	NC	Aureobasidium pullulans	5-10 ounces	0	Biofungicide, for organic grapes				
Regalia	NC	Giant knotweed	1-4 quarts	0	Plant extract, for organic grapes				

For efficacy ratings and additional information, see the "2015 Michigan Fruit Management Guide" (Michigan State University Extension Bulletin E0154).

	extract		

This article was published by <u>Michigan State University Extension</u>. For more information, visit <u>http://www.msue.msu.edu</u>. To have a digest of information delivered straight to your email inbox, visit <u>http://bit.ly/MSUENews</u>. To contact an expert in your area, visit <u>http://expert.msue.msu.edu</u>, or call 888-MSUE4MI (888-678-3464).