Finger Lakes Grape Program

April 30, 2014

GDDs

Finger Lakes Vineyard Update

Early Budswell

Hans Walter-Peterson



Early budswell in Marquette at the Teaching Vineyard.

The brief spurts of warm, sunny weather that have teased us over the past couple of weeks have helped a few varieties in some locations, including our teaching vineyard, to reach early budswell. We have been seeing buds swelling in Catawba, Chardonnay and Marquette. Buds on Jupiter (one of our table grape varieties) are at the point of starting to show pink tips. Cooler and cloudy conditions are supposed to be the primary weather pattern for the next several days, so buds should continue to push but probably not too rapidly.

Post-Emergence 2 Upcoming Events 4

Links To

IPM – Climbing Cutworm and Grape Flea Beetle



Source: http://news.cahnrs.wsu.edu/



Source: http://nysipm.cornell.edu/factsheets/grapes/

Tailgate Meetings Fox Run Vineyards

May 13, 2014

Spring Grape IPM Meeting Standing Stone Vineyards

May 22, 2014

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Early Budswell (continue from page 1)

The arrival of early budswell means that growers have their first "opportunity" to scout for pests. <u>Climbing cutworm</u> and grape flea beetle (or steely beetle) are two pests that both feed on swelling buds. As shoots develop and move past budbreak, the insects may continue to feed to an extent but damage is not as significant as it is during budswell. In 2012, steely beetles caused significant damage in several vineyards around the area, mostly on Concord. Fortunately, they did not return in nearly the same numbers in 2013, but the lesson is that higher populations can emerge in some years unexpectedly, so a little bit of scouting early on in the season can be beneficial.

In most years and in most vineyards, damage is not significant enough to warrant a spray for these pests. If scouting indicates the need for a spray application, however, materials and rates for both pests can be found on page 54 of the 2014 Grape IPM Guidelines.

Post-Emergence Weed Control In Vineyards

Alice Wise and Andrew Senesac, Long Island Horticulture Research & Extension Center

Note: With the amount of winter damage in the Finger Lakes this year, growers will need to balance their standard weed management program with the need to retain suckers to replace injured trunks. This will be a minimal issue for growers with native varieties like Concord and Catawba which suffered relatively little damage this year, but will be an important consideration for growers with significant bud damage (and therefore likely some trunk damage) in vinifera varieties.

Growers who are planning on retaining suckers for trunk renewal this year should be sure to make any applications of post-emergence materials before the sucker shoots start to emerge.

Post-emergence herbicides are used for control of established weeds. There are two types of post-emergence herbicides: those that burn back the above-ground portion but typically do not kill the root and those that are absorbed and are translocated through the plant, killing the root as well. It is feasible to eliminate use of pre-emergence herbicides and manage weeds with several well-timed post-emergence applications. The trick is to make sure weeds are no taller than 6". In the majority of vineyards, May is the best time to start as weed seed in soil has germinated and weeds are still small and vulnerable.

Check the DEC list of NYS registered pesticides and the Cornell PIMS website to verify product registration for grapes in NY and to obtain a NY approved label.

Glyphosate (Roundup and several other trade names) is a non-selective systemic herbicide, meaning the spray must not contact green grapevine tissue. If that occurs, the active ingredient may be translocated throughout the plant, particularly devastating to young vines. Uptake is enhanced after bloom so that avoiding contact with grape foliage is even more important. Shielded sprayers help to minimize contact. About 30 GPA water are used for application, except for CDAs (controlled droplet applicators), which use 5-10 GPA. With repeated use over time, certain weed species may develop resistance. Thus relying exclusively on glyphosate long term is ill advised.

Aim (carfentrazone) is a post-emergence herbicide that controls several annual broadleaf weed species (actively growing weeds up to 4" tall) but it does not con- trol grasses or sedges. Aim is also an effective suckering agent. Aim is used at a maximum use rate of 2.0 fl. oz. / acre, maximum of 7.9 fl. oz. per season in a minimum of 10 GPA water. In trials conducted by Cornell emeritus weed scientist Rick Dunst on Concord and DeChaunac, Aim was more effective than Gramoxone in burning off sucker growth, and a tank mix of the two was more effective than either applied alone. Use non-ionic surfactant or crop oil concentrate as per label recommendations.

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Post-Emergence Weed Control In Vineyards (continue from page 2)

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Paraquat is a nonselective contact herbicide. Two formulations are registered for grapes in NY: Gramoxone Inteon and Gramoxone SL (same a.i.'s but different inert ingredients). Use of an NIS or COC is recommended. Paraquat materials must not contact green grapevine tissue unless sucker control is intended. Short distance translocation through grapevine shoots is possible, though less likely. The contacted tissue however will be killed. Gramoxone is a restricted use chemical with a Danger label due to applicator safety concerns.

Sethoxydim (Poast) is a selective post-emergence herbicide labeled for bearing and non-bearing vineyards (50 days PHI). It is most successful when applied on annual grasses \leq 6" tall. Broadleaves and nutsedge will not be controlled. Drought-stressed weeds will be more difficult to control. Add a COC (1% v/v) for optimal control.

Scythe is an herbicidal soap (pelargonic acid) that ruptures the cells within green tissue. The initial effect on weeds is seen rapidly (within minutes), but the ultimate level of control may not be known for several days. As with the other products, do not contact green grapevine tissue. Make applications when both grasses and broadleaves are very small. Scythe will not work well if applied to a dense, well-established carpet of weeds. For best results, use more than 60 gallons/acre of water, meaning low volume CDA sprayers are not suitable for Scythe. The label suggests combining Scythe with other post-emergence materials such as glyphosate for quicker burndown results. No additional surfactants are necessary.

Organic post-emergence herbicides have been tested in vineyards with varying success. Weed Pharm (a.i is acetic acid) has a DANGER precaution on the label because of applicator safety concerns. Make sure you have the commercial product/label, not the residential label. Matran EC (a.i. clove oil) and Greenmatch (a.i. lemongrass oil) are minimum risk products, thus do not require an EPA number but a label is required. Make sure agriculture is a stated use on the label. All three products are organically approved. They are best applied to weeds <6" with volumes of water sufficient to thoroughly cover plant surfaces (>30 GPA). There may be control of top growth but there is no translocation of the product so that weeds will regrow. The need for relatively high rates/frequent reapplication makes these types of materials a more ex- pensive option. Their best use might be in combination with other weed control techniques such as cultivation and under trellis mowing. Actually, these might be useful for treatment of weeds around the base of the trunk in those vineyards using under trellis mowing.

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Upcoming Events

Don't forget to check out the calendar on our website (http://flgp.cce.cornell.edu/events.php) for more information about these and other events relevant to the Finger Lakes grape industry.

FLGP Tailgate Meetings

Held every other Tuesday, beginning May 13

5:00-6:30 PM

Tuesday, May 13: Fox Run Vineyards

Our annual series of tailgate meetings will be starting up again on Tuesday, May 13, with our first meeting taking place at Fox Run Vineyards on Route 14, about 10 minutes south of Geneva.

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season. Last year's meetings were each approved for 0.75 pesticide recertification credits, and we anticipate offering the same again this year.

The rest of this year's locations will be announced next week. Watch the 'Events' section of our website for details.

Spring Grape IPM Meeting

Thursday, May 22 4:00 – 6:00 PM

Standing Stone Vineyards

9934 NY Route 414

Hector NY 14841

Hear ye, hear ye! Time once again to recharge your IPM knowledge at the Spring Grape IPM Meeting. This year's meeting will be at Standing Stone Vineyards in Hector NY on Thursday May 22, starting at 4:00 PM. Come hear the latest and greatest hits from some of your favorite pest management gurus – Wayne Wilcox, Greg Loeb, and Andrew Landers. Also on the program is an update on bird control measures (including those air-filled flapping arm guys that were placed in a few vineyards last year) and some important reminders on PPE and tractor safety.

As always, dinner will be provided after the program, so be sure to plan and stick around for some social time and good food.

There is no registration fee for growers who are enrolled in the FLGP for 2014, and a \$10 fee for those who are not enrolled. Growers will be eligible to receive 1.5 pesticide recertification credits at this meeting.

You can register online for the meeting at our website by going to http://flgp.cce.cornell.edu/event_preregistration.php?event=141, or by calling our office at 315-536-5134. If you would like to receive credits, please provide us with your pesticide applicator number when you register.

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2014 GDD Accumulation

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
4/17/2014	40.2	55.6	0.00	0.0	42.3
4/18/2014	48.0	60.9	0.00	0.0	42.3
4/19/2014	44.1	50.5	0.00	0.0	42.3
4/20/2014	49.7	67.7	0.00	0.0	42.3
4/21/2014	61.4	77.7	0.00	11.6	53.9
4/22/2014	57.4	62.7	0.06	3.9	57.8
4/23/2014	40.9	44.9	0.19	0.0	57.8
4/24/2014	43.1	52.3	0.00	0.0	57.8
4/25/2014	49.7	65.4	0.21	1.0	58.8
4/26/2014	46.5	51.3	0.18	0.0	58.8
4/27/2014	44.4	50.5	0.00	0.0	58.8
4/28/2014	46.9	57.2	0.00	0.0	58.8
4/29/2014	48.2	54.0	0.21	0.0	58.8
TOTAL			0.85	16.5	

GDDs as of April 29, 2013: 57.5

Rainfall as of April 16, 2013: 1.78"

The NEWA station at Geneva is being replaced with a new Rainwise machine. Once it is up and reporting data again, we will start our annual comparisons to the long-term averages for GDDs and rainfall for the season.

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Additional Information







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Become a fan of the Finger Lakes Grape Program on Facebook, or follow us on Twitter (@cceflgp) as well as YouTube. Also check out our website, "The Grape Lakes – Viticulture in the Finger Lakes" at http://entropy.cce.cornell.edu.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the NY Grape & Wine Classifieds website today!

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