IOWA STATE UNIVERSITY

Extension and Outreach

Viticulture Newsletter

June 2020

Brought to you by:

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Find us online at:

<u>Extension Viticulture Website</u>

<u>Weekly Weather Station</u>

<u>Reports</u>

Podcast

June Updates

Well lowa Wine Month has wrapped up. We survived a May spring freeze event relatively unharmed across the state. We are off to the races this growing season and the governor has largely opened up the state for business. All fairly good news!

To top it off, the U.S. Court of Appeals for the Ninth Circuit vacated the labels for Xtendimax, FeXapan, and Engenia, essentially making sale and use of these products illegal. I will call that great news for specialty crop producers. However, the U.S. EPA released a statement with further guidance which states, use of existing stocks of these products already in the possession of applicators is legal (consistent with the previously-approved product label) through July 31, 2020. We encourage applicators to confirm with their insurer that liability coverage will still be provided should the product move off-target this growing season. After July 31, 2020, all use is prohibited. All sales and distribution of products is prohibited as of June 3 (exceptions detailed in the EPA cancellation order). Not so great news especially considering the amount of 2,4-D and dicamba damage I am seeing

this year. Much more to come I suspect.

Podcast Updates

The Iowa Viticulture Podcast is in full swing. Check out the latest discussions on:

- Japanese beetle
- Personal weather stations
- Effects of botrytis bunch rots with guest host Maureen Moroney, Midwest Wine and Grape Industry Institute

I am looking for weekly cohosts to drop in and talk about what is going on in the industry. If you are interested in joining me as a cohost, please drop me a note.

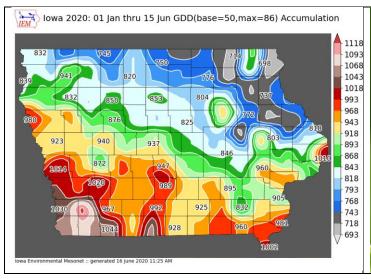
Pest Scouting Updates

Japanese beetle

Japanese beetle larvae are white grubs. They are in the soil from August until June where they feed on plant roots (especially turfgrass) and organic matter. The grubs are C-shaped and approximately 1.25 inches when full grown.

Adult beetles emerge in mid-June through July, starting at approximately 1050 growing degree days (gdd). They are similar to other Junebugs in general appearance, and 3/8 inch long and 1/4 inch wide. The head and thorax are shiny metallic green, and the wing covers are coppery red. The row of five tufts of white hairs on each side of the abdomen is a distinguishing feature.

Adult beetles eat the foliage, fruits and flowers of over 300 plants. Foliage is consumed by eating the tissue between the veins, a type of feeding called skeletonizing. Flowers and fruits are devoured completely, often by a horde of a dozen or more beetles at a time.





Japanese beetles are getting close to emergence across the state. The latest GDD map shows we are at or very close to initial Japanese beetle emergence (initial emergence about 1050 gdd). With warm temperatures this week, it won't be long before we begin to see them. When dealing with Japanese beetle, there are a couple things to note:

- Management of the larvae in the soil is not an effective method of management for adults. Adults are highly mobile and will find your vineyard regardless of whether or not larvae are present locally. Unless the grubs are destroying your sod, leave them be.
- Traps and lures for Japanese beetle serve as an attractant for this pest. Do not set traps out in the vineyard!

The Midwest Fruit Pest Management Guide (<u>free online</u>) lists products effective against Japanese beetle and I included a similar chart below for grapes. When looking at the IRAC code (family of each insecticide), you see that there are not a lot of options. You will also see that there are product application limits for several of the products listed below. Best suggestion is to have products from at least two different IRAC codes on hand for managing Japanese beetle. That allows you to provide control over a long emergence period if necessary.

Product	IRAC	Notes
Actara	4A	Do not exceed 7 oz . per acre per year
Assail	4A	Do not exceed 2 applications per year
Avaunt	22	Do not exceed 2 applications per year
Aza-Direct		
BeetleGone!	B.t. galleriae	
Belay	4A	Do not exceed 1 application per year .
Brigade	3A	Do not exceed XX oz per acre per year (varies by formulation)
Danitol	3A	Do not exceed 42 .7 fl . oz . per acre per year .
Imidan	1B	Requires pH adjustment of spray water to 6.0
Mustang Maxx	3A	
Platinum	4A	Soil-applied for systemic control . 60-day PHI
Pyganic		
Scorpion	4A	

That said, not all products are created equal. I strongly suggest choosing products from the 4A, 3A, and 1B categories.

- Aza-Direct. Aza-direct is a repellant and knockdown. It doesn't kill a lot of Japanese beetle and has a short effectiveness in the vineyard. I don't know why it is even listed as a control option in the Midwest Fruit Production (MWFP) guide.
- BeetleGone!. The MWFP guide lists effectiveness as good against Japanese. However, some of my certified organic friends in other crops would disagree. I am not sure if that is an efficacy issue or a application frequency issue.
- Pyganic. Pyganic is effective but has no residual requiring frequent (every couple of days) applications for management. Due to its expense and frequent application requirements...its not a great option unless you are certified organic.
- Neemix. Neemix is rated fair against Japanese beetle. However, reports from the field do not always support that claim. A combination of Neem + Pyganic seems to have better control than either alone. However, due to the cost of these two products and requirement for frequent applications, this is not a combination that I would recommend unless you are certified organic.
- Surround. Surround serves as a barrier that prevents feeding and a suffocation material. Its effectiveness is not great. Again, not something I would use unless certified organic.
- Sevin. Sevin is effective against Japanese beetle and is cost effective. However, Sevin (in addition to Danitol, Warrior, Proaxis, and Mustang Max) kills natural predators that keep two spotted spider mites in check. Spider mite outbreaks following multiple applications of Sevin are fairly common especially during warm, sunny weather (like the pattern we are in and likely to return to before Japanese beetle emergence).

If our hot, sunny temperature patterns continue, be aware that the residual effectiveness (not the contact effectiveness) of your insecticide application will be greatly reduced. You cannot expect more than a couple days of residual activity in this heat and sun that we are experiencing. You will have to apply regularly during emergence to keep them under control. For some, that may be a week...for others that may be a couple of weeks.

Check out the IA Viticulture Podcast for more details on Japanese beetle control at: https://www.extension.iastate.edu/viticulture/.

Grape Berry Moth

Unfortunately, I didn't get any input from the vineyards with the Mesonet weather stations across the state to determine a start date for calculating Grape Berry Moth emergence and thus no modeling will occur for this pest.

Field Days and Site Visits

As the University opens back up, at this time I am not planning on any field days. We'll see what things look like in August. However, after July 1st I will be able to start traveling and will be reaching out to vineyards to meet you and introduce myself in person.

Weather Station Report

Following this newsletter you will find weather station summary data from the 5 vineyard weather stations across the state. Data is assembled weekly and posted to the Viticulture website. For your convenience, data from the most weekly report will be included at the end of the Viticulture newsletter (or in this case as a separate attachment).

These reports are assembled by James Schrader, ISU Department of Horticulture. For questions on these reports, please feel free to contact him directly at jschrade@iastate.edu.

If you would like to receive this newsletter in your email, send Joe a note at jmhannan@iastate.edu to sign up!

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