

CRANBERRY STATION NEWSLETTER

June 15, 2022 Vol. 23:4



UMass
Cranberry
Station

Research
& Extension



1 State Bog Road
East Wareham, MA 02538
508-295-2212
ag.umass.edu/cranberry

IN THIS ISSUE:

Final Keeping Quality Forecast
News from IPM/Weed Lab
Station News

Final Keeping Quality Forecast

By Leela Uppala and Peter Jeranyama

The final forecast is **POOR** keeping quality.

We obtained 4 points out of a possible 16 to arrive at this keeping quality forecast for the 2022 Massachusetts cranberry crop. This score makes the final keeping quality poor.

The final keeping quality score of 4 was based on (i) The total of sunshine hours for March for the present year is more than the 50-year average (179 hr) for that month (196 hr): 2 points. (ii) Total precipitation for March for the present year is less than the average of East Wareham and Middleboro mean of 4.39 inches (3.51 inches): 1 point. (iii) The total precipitation for April for the present year is less than the average of East Wareham and Middleboro of 6.70 inches (6.34 inches): 1 point.



Implications

- This suggests that the fruit rot incidence could be high unless timely and effective disease management strategies are employed.
- Fruit quality will be sacrificed if you reduce your fungicide use drastically.
- Be conservative...
If the beds are cultivated for fresh fruit.
If the beds were not managed or sprayed with fungicides last year.
if the beds had significantly higher fruit rot in the previous year.

Additional Notes

- Follow ALL label instructions, including application interval, recommended rates, water-holding time, and pre-harvest interval.
- Alternate fungicides with different modes of action. Use FRAC (Fungicide Resistance Action Committee) codes on the labels to determine the mode of action. Fungicides from the same FRAC codes have similar modes of action.
- Above normal sunshine hours during June, July, and August (especially July) have been associated with good or better quality than predicted.

News from the IPM/Weed Lab

By Hilary Sandler and Katie Ghantous

**Photo 1****UNEXPECTED CRANBERRY RESPONSES TO ZEUS**

Zeus (sulfentrazone) is a very new tool for us, and we are still learning how it works in the real world on cranberry beds. Your observations and comments on what you see on your farms are really important for refining the best use patterns for Zeus.

It was clear from our initial experiments on small plots that Zeus can (and probably will) injury cranberry buds if it is applied after the bud scales loosen. The type of injury that results from timing the application too late in the season shows up as injured/dead apical buds, delayed elongation, or short and stunted new growth.

This year we have heard a few reports of patchy injury (not uniform or widespread throughout the beds) that growers suspect is from Zeus and does NOT seem to be related to timing. In all the cases we have seen so far, the grower has treated many beds on the same property at the same time and has only seen symptoms on a single or few beds.

In some cases, the old leaves in the affected areas look dark red as though they never emerged from dormancy. We do not think the old leaves will recover, but in most spots the buds appear to be developing normally (see photos 1 and 2) and new growth seems unaffected. It is unknown if yields in these spots will be impacted.

As the season progresses and the new growth fills in, the affected areas are less apparent.

On another bog (photos 3 and 4), both the buds and the old leaves are showing symptoms in a localized area. We will follow the affected areas through the growing season to see if they recover.



Photo 2



Photo 3 taken 5/25/2022 – stressed vines over tile drains



Photo 4 taken 2 weeks later 6/8/2022-dark areas are mainly dead moss visible on areas with thinner vines

In the cases we have seen so far, there have been other factors that caused stress to the vine (recent pruning, previous scale infestation, areas over tile drains that may be excessively wet and have poor root development, etc.). It is possible that unlike healthy vines, the stressed vines were less able to tolerate the additional stress that an herbicide can cause. Please reach out and let us know if you suspect injury so we can learn more about what factors might make a bed prone to injury.

Some growers have used Zeus 2 years in a row and are reporting good crop safety. We have some plot work that showed 2 years in a row did not reduce yields. We do not have any data on using it for 3 years and currently would not recommend using it three years in a row. In general, it is always a good practice for both crop safety and resistance management to rotate your herbicides and especially true for Zeus since it does have the potential to injure cranberry plants.

Please let us know (Hilary: 413-800-6531 or Katie: kghantous@umass.edu) if you are seeing symptoms in the field. Aside from possible injury, we would also like to know if you are happy with the moss control and if you are noticing other weeds being controlled.

JAPANESE KNOTWEED – BE ON THE LOOKOUT!

We are hearing of more instances of Japanese knotweed (JKW) near or on cranberry bogs. It is thought to have been introduced to the United States as early as the 1800's. This is an invasive weed that has been established in our area for years and is widespread. While not a new weed in our area, the incidence of JKW on cranberry farms seems to be increasing and must be dealt with as soon as you see it to keep it from getting established on your farm. We have heard from several growers that they have seen it around farm edges for a long time, but this year are seeing it for the first time on cranberry beds. For more information, see our new fact sheet at <https://ag.umass.edu/cranberry/fact-sheets> and go to the bottom under "Weeds". The best way to control Japanese knotweed is to dig up small plants or wipe them with glyphosate before stands are established to prevent further spread. Once plants are established, they are much more difficult to eradicate. For larger plants, mowing and cutting can be effective if used in combination with an herbicide. Removing the above ground section of the plant in early June and allowing stalk regeneration before treating improves success of chemical treatment.

If you think you might have JKW, call us and/or send a photo so we can confirm the identification and get you on a management plan. This is not a weed to ignore!



Characteristic mottled stem of a new shoot. Stems of JKW are hollow.



Young JKW seedling

Station News

By Hilary Sandler, Director

STATION UPDATE

The 2022 season is well underway, and the UMass Cranberry Station team remains committed to serving you while we are under renovation and construction. The Admin Building is open, and scientists are working between the temporary trailer on-site, the tin building and the bog. If you plan to visit, please park outside of the fenced area, and use caution. The best way to reach us is through email or by cell phones. You can reach Hilary at 413-800-6531 or Robyn at 413-800-7470.

CONSTRUCTION AND RENOVATION UPDATE

The new building is taking shape! We anticipate that the roof should be ready for shingles within the next week or so. The electrical upgrade is ongoing, and the IT upgrade should happen over the next 3-4 weeks. The majority of the finish work in the lab building should be completed by the end of June; commissioning of the HVAC and plumbing should occur in July. We anticipate being able to be officially "back in business" in the Lab Building by August 1.

BOGSIDE WORKSHOP

We will be holding a bogside workshop on **Wednesday, June 29, 2022 (on Zoom) from 8:00 – 10:00 AM** and 2 pesticide contact hours will be offered. To attend, please contact Robyn Hardy 413-800-7470 or rmhardy@umass.edu to get the Zoom link.

CRANBERRY IPM MESSAGE

The Cranberry IPM Message has begun! To access the weekly Cranberry IPM Message online, please go to our website: <https://ag.umass.edu/cranberry> and the IPM Message link is on the right-hand side of the home page. You can also call in to listen to the recorded IPM message, please call: **508-258-9191**.



Framing the new building



Inside the new mechanical room

UMass
Cranberry
Station

Research
& Extension



CRANBERRY STATION NEWSLETTER

IN THIS ISSUE:

Final Keeping Quality Forecast

News from the IPM/Weed Lab

Station News

UMass Cranberry Station
1 State Bog Road
East Wareham, MA 02538
OFFICIAL BUSINESS