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EPA Bans the Use of Chlorpyrifos (Lorsban) On All Food Crops

By *Christelle Guédot*

After years of comments and deliberations, chlorpyrifos will no longer be available for use after 2021. This means that chlorpyrifos will not be allowed on food crops in 2022 and thereafter.

We have known for a long time that chlorpyrifos, the active ingredient in Lorsban and other products, was under scrutiny by the Environmental Protection Agency (EPA) and on August 18, 2021, the EPA announced that it was banning chlorpyrifos use on all food crops. See the Press release [here](#).

Chlorpyrifos has been used by cranberry growers, particularly in early season, for managing several insect pests, including cranberry fruitworm, sparganothis fruitworm, blackheaded fireworm, and spanworms. There are alternative insecticide options available to growers that can be found in the Cranberry Pest Management in WI guide for managing these pests. In addition, growers should consider alternative management strategies, such as a spring flood, for managing these pests prebloom.



Sunscald and Fruit Rot

By *Leslie Holland*

Heat management was certainly a challenge this growing season with prolonged periods of +90°F temperatures and drought conditions throughout Wisconsin. These conditions, high heat and low humidity, create the ideal environment for scald on the fruits. To combat these conditions and cool the cranberries many relied on irrigation during these hot and dry periods. Irrigation requires a steady balance between optimizing marsh conditions and not oversaturating the field which in turn can create conditions conducive to fungal diseases.

Typically, sunscald is observed on fruits in the upper canopy that are exposed to sunlight. Scald manifests as a physiological breakdown during the fruit stage of development and appears as circular or

oval-shaped lesions on the fruit surface (Figure 1). Recently planted beds and beds with sparse growth are especially susceptible to sunscald. Fungicide applications following sun scalding events are not recommended. Scald severity can differ based on the intensity of sun exposure, canopy temperatures, soil temperatures, and changes in wet or dry conditions. Once sunscald has occurred, berries and vines



Figure 1: Tan, circular lesions associated with sunscald.

become more susceptible to other injuries and pathogens. Minimizing stress on the vines now until harvest will help reduce the impact of berry damage.

Symptoms of fruit rot have become visible in marshes across the state. Infections that cause fruit rot occur during bloom and early fruit set, and fungicide applications are targeted during these critical periods to prevent infections. Some infections are latent (or asymptomatic) in the plants. Fungicide applications later in the season do not improve disease control, as rot that occurs later in the season is most likely from early-season infections that remained

dormant until fruit ripening. To reduce the impact of established fruit rot infections and minimize the risk of fruit rot issues post-harvest (ex. storage rots like black rot) there are several cultural practices that can be utilized:

- Manage canopy density: Very dense canopies can create a microclimate conducive to fungal infection. Over-fertilization can lead to heavy vine growth which can worsen fruit rot infections.
- Manage water: During harvest, minimize exposure time of the fruit to water to reduce disease incidence, this is especially crucial for storage rot.
- Minimize damage to the fruit: Wounded fruit provides an entry point for fungal pathogens.
- Storage temperatures below 5°C (41°F) are recommended to minimize fruit decay.
- Storage of fruit for processing at temperatures slightly above 0°C (32°F) can reduce the incidence of black rot.

Update from the Wisconsin Cranberry Research Station

By Wade Brockman

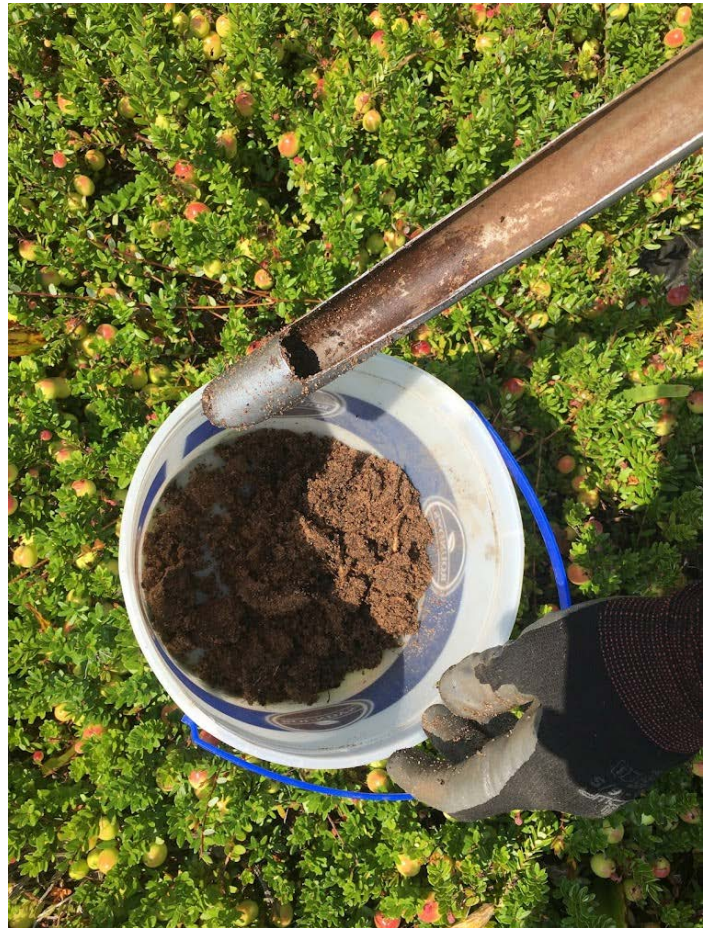
Another weekend of heavy rain, but no washouts this time. Getting equipment ready for harvest, and will hopefully be picking fruit by the 20th of September.

Two Weeks Left to Sample Tissues and Soils

By Allison Jonjak

It's that time again—when our dynamic, responsive cranberry plants are finally doing the same thing for an entire month. Throughout the growing season, cranberries are moving nutrients and carbohydrates throughout the plant—nutrients from roots to stems of leaves; carbohydrates from the production sites down to the roots—to fulfill the plant's growth, bud set, fruit set, and recovery needs. The period between mid-August and mid-September, when plants are focusing all their energy on filling fruit, is the only month-long period in the growing season that we can expect nutrient concentrations in the plant to be the same from one week to the next.

So (for those on an annual testing regimen,) now is the time to take our tissue samples. This allows us to compare our results year-on-year to see long term trends in sufficiency or insufficiency of particular nutrients in our plant tissue. You know the drill (see source 2): walk a diagonal path across a bed, stopping to collect uprights from 10-12 sites. At each site, choose 5 fruiting and 5 non-fruiting uprights, and clip off only the current year's growth. Do not include fruit, but do include the stem growth that is new this year. After you have passed through the bed, you should have roughly 1 cup of tissue. Label the bag. Label the soil samples you collected as well (3) and send them off to the lab!



When the lab returns your results, enter them into your spreadsheet or record-keeping system so that you can see long term trends, along with this year's comparison with the lab-established optimal levels. If you'd like help creating a long-term comparison spreadsheet, reach out to Allison Jonjak, Extension Cranberry Outreach Specialist. Combining your tissue test levels with your first-hand observations, your recent and prior year fertilizer applications, soil test results, and the optimal levels, you can evaluate and improve upon your fertilizer application practices. This can save on input costs by reducing waste, and it can improve your yield and yield stability over time.

We only get the opportunity to make year-on-year comparisons during this important time for our cranberry plants, so let's make the most of it!

Sources:

- 1: [Cranberry Tissue Testing for Producing Beds in North America](#)
- 2: [How To Take a Cranberry Tissue Sample](#)
- 3: [How to Take a Cranberry Soil Sample](#)

Grower Updates

Flying Dollar Cranberry

By Seth Rice

Summer is wrapping up and the fruit is starting to ripe and blush it's beautiful red color. Some marshes are doing battle with flea beetle and have taken a hard hit. With harvest right around the corner we think of cold nights and long days ahead. If there are any big projects that marshes are working on right now they are being wrapped up at this time. For most people the scouts for their "bug report" have done all they can for this year but occasionally they can do spot checking. Trying to stay dry between all this rain! Hope everybody is doing the same and have a safe harvest!

Cranberry Lake

By Karl Pippenger

We have had wonderful growing conditions all year, with most of the heavy rains staying in the central area of the state. The result is very large fruit that is coloring much earlier than normal. It is interesting to note that the fruit is coloring much earlier than normal despite there being very little need for frost protection. Some growers in the northern region are hoping to start harvest the week of September 13th on early varieties.

There have been several days this summer that have been hazy due to wildfires in Minnesota and Canada-some of which mitigated hot weather that was predicted.

Flea beetle continues to be an issue at some properties, predominantly in older beds and deep peat. Losing Diazinon would make this an extremely difficult pest to control, as all other products have an extended PHI.

The crop kept looking stronger every week this year. We seemed to have carried a lot of fruit, and the size is excellent. Bud set for next year appears to be very good. We finished out the year with 40-48 units of nitrogen on Stevens, Ben Lear and GH1. The vines are a healthy green with only a slight amount of overgrowth, which is the target at the end of each year.

