

Update to the 2021-2023 Cranberry Chart Book

Prepared March 2022 as an addendum to the 2021-2023 Chart Book

UMass Cranberry Station <http://ag.umass.edu/cranberry>

REFER TO 2021-2023 CRANBERRY CHART BOOK FOR ADDITIONAL INFORMATION

Special Labels: You must have a copy of all labels when applying any pesticide product. This includes special labels (Section 18 or 24c Special Local Needs). These labels can be obtained where you purchase your pesticides and are also available on the UMass Cranberry Station website: <http://ag.umass.edu/cranberry/services/special-pesticide-labels>.

PAGE 6 WARNINGS - Note that Echo 720, Echo DF and Echo Zn should be listed as compounds that require a respirator with an organic-vapor removing cartridge.

DISEASE MANAGEMENT 2022

New Biological Fungicide: **Howler**, an OMRI (Organic Materials Review Institute) listed BM02 Group fungicide (active ingredient *Pseudomonas chlororaphis* strain AFS009) is registered for cranberry disease management. During our 2020 and 2021 fruit rot studies at the UMass Cranberry Station, Howler showed efficacy in managing fruit rot.

- Recommended application rate: 5 lb/A + NIS at 0.25% v/v. Repeat at 7 to 21 day intervals as needed. PHI = 0 days
- For best activity, apply Howler later in the bloom as part of the fungicide regime with other fungicides applied at early and mid-bloom.
- Do not apply Howler by aerial application. Recommended application methods are foliar spray, soil drench or chemigation. Always read the label and communicate with handlers for making fungicide decisions.

Correction to Mastercop rate (typo in Chart Book 2021-2023 on pg. 20):

Mastercop – correct rate for a single application is **3 pts/acre** (NOT 3-9 pts/acre) starting from late bloom and can be applied up to 3 times at 10-14 day intervals (maximum total annual rate of 9 pts/A).

INSECT MANAGEMENT 2022

Chlorpyrifos cancelled – All food uses of chlorpyrifos have been cancelled. **Do not use** any existing stock. The tolerance has been revoked and any applications are now considered unlawful. All formulations (Lorsban 4E, Chlorpyrifos 4E AG, Lorsban Advanced, Lorsban 75 WG) should be considered hazardous waste at this time.

Fanfare (active ingredient *bifenthrin*) - newly registered in Nov 2021, IRAC Group 3. Fanfare is a pyrethroid and has a different mode of action from all our other insecticides

- **Check with your handler prior to use for restrictions.** Most handlers are heavily restricting use, with a **120 day PHI for export**, and a **45 day PHI for domestic** use, use only **ONE application**.
- **Only target cranberry weevil in MAY with this compound** (FIFRA 2EE recommendation). While Fanfare is broad-spectrum and labeled for many insects (including cranberry fruitworm, black-headed fireworm and Sparganothis fruitworm) we are discouraging any use except for managing resistant weevil.
- Fanfare is extremely toxic to fish and aquatic invertebrates. Do not apply to flow through bogs. Before applying, drop ditch water, place flume boards, check the weather for rain, and hold water for 3 days at least and longer if possible.

- Recommended application rate: 6.4 fl oz/A. 12 hr REI. 2 formulations available in MA – Fanfare EC and Fanfare ES. Chemigation is allowed. Must have supplemental label allowing use on cranberry. FIFRA 2ee recommendation allows use targeting cranberry weevil.

Weevil Management: Use **Avaunt** if it still works for you. Switch to **Actara** (thiamethoxam) if you're seeing Avaunt failures, add **Fanfare** as your next option. It is critical to alternate among available compounds for resistance management.

Always alternate Fanfare with Actara when managing weevil.

Avaunt is still an excellent choice for cutworm and spanworm issues and may give some weevil activity.

WEED MANAGEMENT 2022

Zeus XC – Special Local Needs 24(c) for the use on MA cranberry farms for control of moss and other susceptible weeds. A Special Local Needs (SLN or 24c) label allows cranberry growers in Massachusetts to use FMC product Zeus XC (EPA Reg. No. 279-3220, 39.6% sulfentrazone) for control of moss and other susceptible weeds.

Since we first obtained the 24c in 2020, many growers have now used Zeus with good results. This herbicide can damage cranberry plants if applied too late. You **MUST** apply to plants that are spring dormant (bud scales closed, no potential for herbicide to contact tender new growth inside bud). It is more important to time this herbicide for cranberry safety than it is to time it for the weed growth stage! Zeus is Zone II restricted but is our only option for moss, so can be used in Zone II. Just remember you still need to complete the MDAR notification if you use it in a Zone II. See Chart Book for more info about Zeus.

Special Local Needs 24(c) to chemigate Intensity One for grass control. Intensity One is the ONLY clethodim formulation that can be chemigated in MA. Chemigation of Intensity is no longer allowed.

Special Local Needs 24(c) for timing of Intensity One and Intensity. We have a special label that removes the application timing restriction (other labels prohibit applying between hook and fruit set) for Intensity and Intensity One. Applications can be made any time grasses are actively growing, except within 30 days of harvest. This allows for a longer treatment window for poverty grass, which is actively growing during those cranberry growth stages. Although you can apply any time, we advise caution when applying any clethodim (includes Select, Select Max) product during roughneck as floral abnormalities can result.

Section 18 Emergency Exemption allows Kerb Use for Dodder Control is Renewed for 2022 (Active from April 15 through June 30, 2022). Kerb® SC (EPA Reg. No. 62719-397, 35.6% pronamide) can be used in Massachusetts **ONLY** for dodder control **ONLY**! If using Kerb in 2022, you must fill out an “Applicator Reporting Form” and return it to MDAR. A copy of the 2022 form will be available on our website with the special labels <https://ag.umass.edu/cranberry/services/special-pesticide-labels> and should also be available at the point of purchase.

- Kerb can be applied after the winter flood has been withdrawn and prior to dodder emergence.
- Kerb can be applied as a single application of 2.5 - 5.0 pints (1.0 - 2.0 lb a.i.) per acre. Alternatively, two applications may be made at a rate of 2.5 (1.0 lb a.i.) per acre. Total product applied must not exceed 5.0 pints (2.0 lb a.i.) per acre per year. Split applications must be separated by a minimum of 20 days. Kerb has a 75- day PHI and a 24-hr REI.
- **Check with your handler prior to use for restrictions.** There are no Kerb MRLs established for many foreign markets.
- Kerb is Zone II restricted! Contact Hilary if you want to use Kerb and you are in a Zone II.