### DISEASE MANAGEMENT 2020

**Chlorothalonil Update:** The European Union revised Maximum Residue Limits for chlorothalonil in cranberry products from 5 parts per million (ppm) to default levels of 0.01 ppm.

**Check with your handler prior to use for restrictions**. Although chlorothalonil fungicides will continue to be legally available for purchase and use in the U.S., many handlers are restricting its use. Note that most handlers do allow early upright dieback applications.

**QuadrisTop** - newly registered in 2019 (active ingredients of both difenoconazole and azoxystrobin). FRAC Group 3 and 11.
- QuadrisTop® is a pre-formulated mixture with a control spectrum similar to that obtained by tank-mixing Indar and Abound for a fungicide application. Instead of Indar (fenbuconazole), it has a different conazole included.
- Recommended application rate: 10-14 fl oz/A. Cost for one application varies from $28-$33 per acre.
- For best activity, apply QuadrisTop® early in the season. Do not apply more than two sequential applications before alternating to a fungicide with a different mode of action. Do not apply within 30 days of harvest.
- Always read the label and communicate with handlers for making fungicide decisions. Some handlers have restricted QuadrisTop® usage completely and others restricted use to before full bloom for export market.

### INSECT MANAGEMENT 2020

- Exirel is similar to Altacor but cannot be applied during bloom.
- Exirel is labeled for cranberry fruitworm, black-headed fireworm and Sparganothis fruitworm. It may be more active than Altacor and may have activity against weevil.
- Recommended application rate: 10-20.5 fl oz/A.
- Check with your handler prior to use for restrictions. Some handlers are restricting use, others have a 50 day PHI.

**Weevil Management:** Actara (thiamethoxam) should be your first choice as we have seen much reduced activity with Avaunt (indoxacarb). Zone II growers may use Actara as it is now the only choice (complete notification to MDAR and keep this sheet for permission). Belay (clothianidin) is no longer available and restricted by most handlers.

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

**Invertid** is another formulation of methoxyfenozide, same as Intrepid but has sticker added.
WEED MANAGEMENT 2020

New Herbicide Special Labels: You must have a copy of all labels, including the special label (Section 18 or Special Local Needs), when applying any pesticide product. Labels can be obtained where you purchase your pesticides and also on the UMass Cranberry Station website: http://ag.umass.edu/cranberry/services/special-pesticide-labels.

Zeus XC – Special Local Needs 24(c) for the use on MA cranberry farms for control of moss and other susceptible weeds. We have obtained a Special Local Needs (SLN) label to allow cranberry growers in Massachusetts to use a product made by FMC named Zeus XC (EPA Reg. No. 279-3220, 39.6% sulfentrazone) for control of moss and other susceptible weeds.

- Applications can be made after the removal of the winter flood and prior to cranberry vines breaking dormancy (spring dormant through cabbagehead). Risk of injury is likely to increase if applications are made too close to when the vines break dormancy and start active growth. We recommend applying before the cabbagehead stage.
- Zeus can be applied as a single application at a rate of 8-12 oz/A through the chemigation system or by ground rig; do not apply more than 12 oz/A per year. The addition of an adjuvant is NOT recommended.
- Zeus XC is active in the soil. Irrigation (0.1-0.25") should follow a boom spray application; more irrigation might be needed for some chemigation applications if rinse times are short.
- REI is 12 hours. Please refer to the full (Section 3) label for complete details on PPE required for the use of Zeus.
- Check with your handler prior to use for restrictions.
- Use of the product includes release of FMC from any liability from damage that might occur with applications of the herbicide.
- Zone II restricted! - Zeus XC is a state-restricted use product since sulfentrazone is included on the Groundwater Protection List. The application of Zeus XC in a Zone II may be allowed if it is determined that there is no viable alternative. Call Hilary (508-295-2212 x 21) if you want to use Zeus XC and the application will be made in a Zone II.

Recommendations for Zeus XC in 2020. We have tested this product for two years on small plots and had good crop safety (no significant injury or impact on yield), but we do not have experience using it through commercial chemigation systems on a large scale. We recommend applying Zeus to limited acreage in 2020 to see how it works for you. We would appreciate any feedback you can provide regarding the use of Zeus on your farm (Hilary x21, Katie x47).

Special Local Needs 24(c) for Intensity and Intensity One.

In addition to the 24(c) that allows these products to be chemigated in MA, we also have a label that removes the application timing restriction. Previously, these products could not be applied between hook and fruit set. Applications can be made any time grasses are actively growing, except within 30 days of harvest. This will allow 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 2020 (Active from April 15 through June 30, 2020).

Kerb® SC (EPA Reg. No. 62719-397, 35.6% pronamide) can be used in Massachusetts ONLY for dodder control ONLY!

- Kerb applications can be made after the winter flood has been withdrawn and prior to dodder emergence. It can be applied by chemigation or boom application.
- Kerb SC acts mainly through root absorption; therefore, it is necessary to move Kerb SC into the root zone of germinating weeds to provide effective control. If applied by boom, 0.1 - 0.2 inches of irrigation are needed after application to incorporate the herbicide into the soil. If applied by chemigation, all adequate irrigation after application for soil incorporation.
- 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 split applications of Kerb® SC 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, whether resulting from a single or split application. 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 foreign markets yet.
- Kerb is Zone II restricted! Call Hilary (508-295-2212 x 21) if you want to use Kerb and you are in a Zone II.
- MDAR requires submittal of a Pesticide Use Form with any application of Kerb. These reports are due November 30, 2020 and are available at point of purchase or on the Station web site.