

BotryStop[™]

Biofungicide for Grapes

 BotryStop, (*Ulocladium oudemansii* U3 Strain) a living micro-organism, provides protection against Botrytis bunch rot infection from flowering to pre-bunch closure by colonizing senescing floral tissue and preventing Botrytis establishment.

Best Practices for Grapes

For successful use of BotryStop, the following practices should be carried out:

- Ensure that your sprayer is correctly calibrated
- Ensure that good canopy management is complete prior to the first application to achieve effective bunch/cluster coverage in vigorous sites (e.g. shoot thinning and or light leaf removal)
- Time BotryStop applications to ensure that Botrytis is out-competed early. (NOTE 1)
- Use the correct surfactant for the volume of water per acre. (NOTE 5)
- Use at least 50 gallons of water or more per acre. Higher water volumes improve coverage
- Mix with ONLY ONE tank mix partner*

APPLICATION NOTES:

1. Timing of BotryStop applications

a. Regions with higher humidity

Three applications are the minimum required:

- Early flowering: apply at no later than 2-5% cap fall. Note, this is earlier than a chemical fungicide would normally be applied because it is a biological with a different preventative mode of action
- Late flowering (80% cap fall)
- Two-weeks post-flowering or earlier if there is an infection period

b. Regions with lower humidity

Two applications are the minimum required:

- Early flowering: apply at no later than 2-5% cap fall. Note, this is earlier than a chemical fungicide would normally be applied because it is a biological with a different preventative mode of action
- Late flowering (80% cap fall)

A third application is required

2-weeks post flowering when:

- Botrytis pressure is likely in cool wet springs or earlier if there is an infection period
- the block is at high risk of infection (e.g., a Botrytised wine was made from the block in the previous season)

In either region, a fourth application at pre-bunch closure may be made if continuing the season with biological or natural products. Otherwise, use alternative botrytis fungicides from pre-bunch closure, as required, to maintain protection of ripening berries.

2. Apply BotryStop at 3 – 4 lb/acre in at least 50 gallons of water. Most commonly used rate is 3 lb/acre
3. Store BotryStop refrigerated, away from direct sunlight. Store in original packaging with excess air removed and bag tightly closed preferably away from non-compatible fungicides *
4. Add granules directly to a clean, well-rinsed spray tank with agitation running: no pre-mixing is necessary
5. Add a suitable surfactant to the spray tank to assist product wetting/spreading *
(NOTE: For certified organic grapes use an approved organic adjuvant)
6. BotryStop is most effective when applied at high water volumes (50 gal/acre or greater)
7. BotryStop can be tank mixed but only with ONE other compatible tank mix partner*
Do not tank mix with two or more fungicides (e.g., Do not mix BotryStop with copper AND sulfur)
8. When tank mixing BotryStop with another compatible fungicide use the manufacturer's recommended rate. Mixtures are best applied at high volume
9. Once mixed, the product should be used immediately
10. For improved results, make applications in the early morning or late evening when temperatures are cooler and dew may be on leaves. Avoid application under hot, dry conditions, for example, midday.
11. Use a well calibrated/set up sprayer and ensure good coverage of the bunch/cluster zone
12. To ensure that thorough coverage is achieved, check spray deposition with spray sensitive papers (for at least the first application). Place papers in the internal bunch/cluster zone on a spray pole, otherwise paper clip or use a toothpick to hold papers adjacent to at least 5 internal and 5 external bunches to assess the volume of product reaching the target. A cheaper option would be to spray the sunscreen Surround[®] WP onto a few bays, dramatically showing where the spray has and has not reached. The key advantage of the spray papers is that a permanent record can be made.
13. Maintain tank agitation until spraying is complete
14. Rinse out the tank spray lines and nozzles after application
15. BotryStop is a Botrytis specific product. Use alternate fungicides to control other diseases as required*
16. Use alternative fungicides from pre-bunch closure up to harvest as required to maintain protection of ripening berries

**Refer to compatibility sheet.*