

May 1, 2019

- ALWAYS check the tolerance at your bog. A fact sheet showing all spring tolerances is available in the fact sheet section of the Cranberry Station website. Hard copies are available at CCCGA and at the Station.
- At Rosebrook Bog, based on visual assessment, Stevens are at White Bud Stage; Ben Lear, Early Black and Howes have reached the Bud Swell Stage. At State Bog, all varieties were at Bud Swell. New cultivars were similar in appearance to Ben Lear.
- In the Dee model, degree days predicting the Bud Swell Stage have been reached (>150 GDD).
- At the White Bud Stage, the buds have lost their dormant red color and appear noticeably white or green, bud scales remain tight. At the Bud Swell Stage, buds have begun to expand/enlarge and bud scales have begun to loosen or separate.
- White Bud Stage tolerance is 22°F for Stevens. Bud Swell Stage tolerances are 22°F for Early Black and Howes; and 25°F for Ben Lear and new hybrids.
- On-bog photos by Erika Saalau Rojas and Giverson Mupambi; close-ups by Carolyn DeMoranville.
- Next check is scheduled for May 6th.

Degree Day Models

- This spring we are looking at degree day models for when the buds break dormancy and thus should be protected from cold temperatures. In other words, we were hoping to use these models to determine when to begin the spring frost protection season.
- There are 3 models. The 'Dee model' developed for MA conditions predicted that in 2019 the 20°F tolerance on Early Black and Howes should be reached around April 21. The 2 other models (from WI) were predicted to reach their trigger (start to protect for 23°F) on about that same date. These outcomes are in rough agreement with what we saw in the field on April 22rd.
- Note: in WI they protect beds for 23°F around the White Bud Stage, while in MA we protect that stage for 20°F.
- **The Dee model predicts that the Bud Swell Stage (22°F tolerance for Early Black and Howes) is reached at 150 degree days. In 2019, that number was reached on April 25th.**

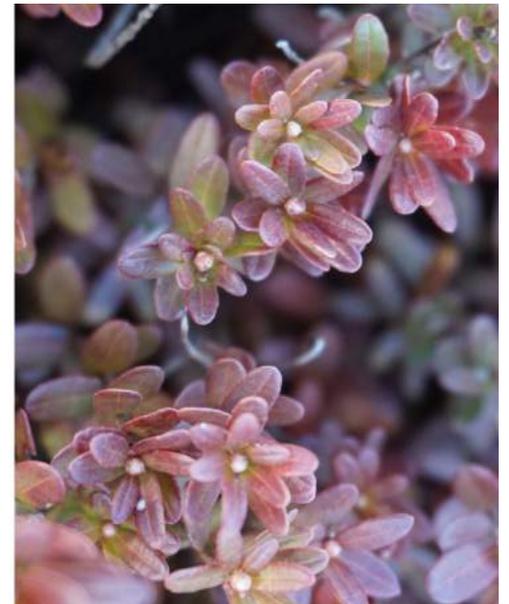
Ben Lear
Rosebrook
25°F



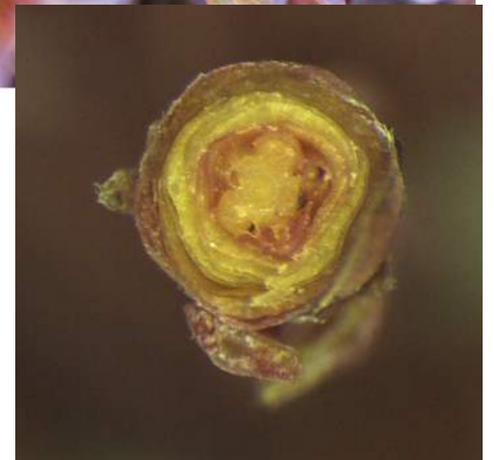
Early Black
Rosebrook
22°F



Stevens
Rosebrook
22°F



Note tight bud scales



Howes
Rosebrook
22°F

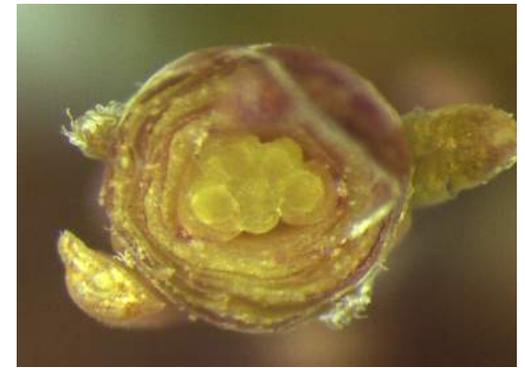


Additional bud photos from State Bog May 1, 2019

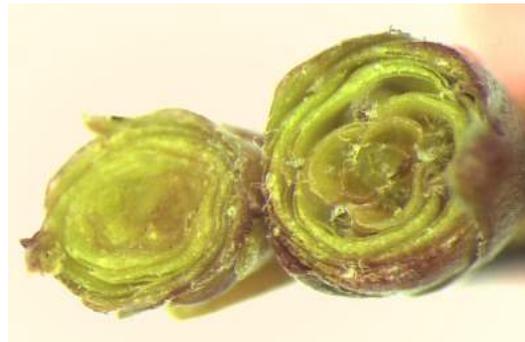
All are at Bud Swell Stage

Early Black 22°F

Howes 22°F



Stevens 25°F



Bud scales on buds are loosening, buds have a 'lumpy' appearance.

Additional bud photos from State Bog May 1, 2019

All are at Bud Swell Stage

Ben Lear 25°F



Note damaged flower initial

Demoranville 25°F



Crimson Queen 25°F



Mullica Queen 25°F

