April 18, 2017

- ALWAYS check the tolerance at your bog [tolerance photos for all stages are shown at the end of this file]

- All cultivars at Rosebrook are at the white bud stage

- Buds were slightly larger than last week and have lost most or all of their red hue

- White bud tolerances are 20°F for Early Black and Howes; 22°F for Stevens, Ben Lear and new hybrids

- Buds observed at State Bog on the 18th were similar to those observed at Rosebrook

- Next check scheduled for April 25th
Frost check at Rosebrook on April 18, 2017

Ben Lear

Stevens

Early Black

Howes
Buds at State Bog
April 18, 2017
Tolerance 22°F

Ben Lear is slow to lose its red hue but scales on the bud are separating.

Demoranville looks less red than others but in 2016 tests, had similar tolerance to Ben Lear, as did the other Rutgers hybrids shown.
Frost tolerance check protocol 2017

• Tolerance check team:
  Glenn Reid, Carolyn DeMoranville [CCCGA frost committee]
  Anne Cote, Patti Silvia [CCCGA frost program]
  Erika Saalau Rojas, Peter Jeranyama [UMass Cranberry Station]
  Other growers attend from time to time

• Visit Rosebrook Bog in Wareham:
  Observe buds of Early Black, Howes, Ben Lear, Stevens
  Take in-field photographs, collect buds to bring to the lab
  Agree on current frost tolerance

• In the lab at the Station:
  Take close up photos of buds
  Cut buds and photograph
  Post photos and tolerance report to the UMass Cranberry Station web site
Spring Frost Tolerances - Early Black and Howes

- Early Black
  - Spring Dormant: 18°F

- Howes
  - White Bud Stage: 20°F
  - Bud Swell Stage: 22°F

- Cabbage Head Stage: 25°F

- Bud Elongation: 27°F

- Roughneck Stage: 29.5°F

- Hook Stage (L), Bloom (R): 29.5°F
Tolerances for large-budded hybrids are assumed to be similar to these. Crimson Queen, Mullica Queen, and Demoranville have been observed to develop in a similar timeline as Ben Lear.