

Fall Frost Tolerances Fall 2022 #1
September 14, 2022

On September 14, photos of Ben Lear, Stevens, Howes, and Early Black were taken at Rosebrook Bog and at State Bog. Photos of Demoranville, Crimson Queen and Mullica Queen were also taken at State Bog.

Fall frost tolerance is estimated based on the color of the fruit. That color development is a reflection of the internal biochemical changes in the fruit that lead to a tolerance of increasingly lower temperatures during the fall. Tolerance should be estimated by looking down into the canopy - do not remove fruit for examination. The photos below represent what you would see looking down at the fruit. Photos were taken using the camera on an iPhone.

All cultivars had developed some red color. Early Black at Rosebrook and Demoranville at State Bog had developed the most color, an overall **red** over the entire berry surface, and were estimated to have a tolerance of 25°F. Early Black at State Bog showed much less color development (see photos).

Ben Lear and Stevens at both locations had developed a deep red **blush** over the entire fruit surface, a 26°F tolerance. Howes at both locations and Mullica Queen at State Bog had the least color, a deep red **blush** on the **exposed** surface, thus their tolerance was estimated to be 25°F.

Next check scheduled for September 21.

ALWAYS CHECK THE TOLERANCE ON YOUR BOGS.

Photos: Rosebrook, C. DeMoranville; State Bog, P. Jeranyama

Early Black Rosebrook
Red Fruit Stage 25°F



Howes Rosebrook 27°F
Deep Blush on Exposed Surface



Rosebrook Ben Lear 26°F
Deep Blush over Entire Fruit
(approaching 25°F)



Rosebrook Stevens 26°F
Deep Blush over Entire Fruit



State Bog



Early Black 27°F
Deep Blush on Exposed Surface
(some fruit are more advanced,
compare to Howes)



Howes 27°F
Deep Blush on Exposed Surface

State Bog



Ben Lear 26°F
Deep Blush on entire fruit



Stevens 26°F
Deep Blush on entire fruit

State Bog



Crimson Queen 26°F
Deep Blush on Entire Fruit



Mullica Queen 27°F
Deep Blush on Exposed Surface



Demoranville 25°F
Red Fruit Stage