

Fall Frost Tolerances Fall 2022 #2 September 21, 2022

On September 21, 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 (Rosebrook) or iPad (State Bog).

Color had generally advanced at both locations. Early Black at Rosebrook and Demoranville at State Bog had developed the most color, an overall **deep red** over the entire berry surface, and were estimated to have a tolerance of 24°F. Early Black at State Bog showed much less color development (see photos). In general, tolerance was less advanced at State Bog compared to that at Rosebrook Bog.

On some beds, there were areas with greater or lesser color development. This was most noticeable for Rosebrook Howes and State Bog Early Black and Ben Lear (see notes on photos below).

Next check scheduled for September 28.

ALWAYS CHECK THE TOLERANCE ON YOUR BOGS.

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

Early Black Rosebrook
Dark Red Stage 24°F



Howes Rosebrook 26°F
Deep Blush over Entire Fruit



Note: areas of the bed showed varied tolerance from Blush of Surface Only (27°F) on the left, through to Blush over the Entire Fruit (26°F) on the right. Middle photo is in between the two tolerances.

Rosebrook Ben Lear 25°F
Red Fruit Stage



Rosebrook Stevens 25°F
Red Fruit Stage



State Bog



Early Black 26°F
Deep Blush over Entire Fruit
(some fruit are more advanced, but note less color on fruit along left edge of photo)



Howes 27°F
Deep Blush on Exposed Surface

State Bog



Ben Lear 26°F
Deep Blush over the Entire Fruit
(Some fruit are darker, approaching 25°F tolerance)



Stevens 26°F
Deep Blush over the Entire Fruit

State Bog



Crimson Queen 25°F
Red Fruit Stage



Mullica Queen 25°F
Red Fruit Stage



Demoranville 24°F
Dark Red Stage