Frost tolerances - Fall 2019 #5
October 3, 2019

On October 3, photos of Ben Lear, Stevens, Howes, and Early Black were taken at Rosebrook Bog. Photos of those 4 varieities plus Crimson Queen, Mullica Queen, and Demoranville were 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.

Ben Lear has reached its full tolerance (24°F) at both locations, as have Crimson Queen, Demoranville, and Mullica Queen (all 24°F) at State Bog. Stevens (23°F) and Early Black (23°F) were similar at both locations. However, Howes color was more advanced at Rosebrook compared to State Bog (see photos and captions).

ALWAYS CHECK THE TOLERANCE ON <u>YOUR</u> BOGS.

Early Black, 23°F, Rosebrook Bog, 10/3.
Maroon.

Early Black, 23°F, State Bog, 10/3.
Maroon.

Howes, 23°F, Rosebrook Bog 10/3.
Deep red stage.

Howes, 24°F, State Bog 10/3. Dark red stage.

Ben Lear, 24°F, Rosebrook Bog, 10/3.
Maroon.

Ben Lear, 24°F, State Bog, 10/3.
Maroon.

Stevens, 23°F, Rosebrook Bog 10/3.
Deep red stage.

Stevens, 23°F, State Bog 10/3.
Deep red stage.

Crimson Queen, 24°F, State Bog 10/3.
Maroon.

Demoranville, 24°F, State Bog 10/3.
Maroon.

Mullica Queen, 24°F, State Bog 10/3.
Maroon.