

May 10, 2022 Degree days through 5/9: Dee model 266; WI simple model 286; WI complex model 319

ALWAYS check the tolerance at your bog. A fact sheet showing all spring tolerances is available in the Frost Tolerance Reports section of the Cranberry Station website (under 2020). Access via the Frost Tolerance Report in Quick Links on the Home Page. Hard copies are available at CCCGA and at the Station.

Tolerances provided here are determined at Rosebrook bog in Wareham and confirmed at State Bog in East Wareham.

For comparison purposes, this year we are including photos from additional locations.

- On May 10, **at Rosebrook**, we see **at least Elongation Stage** on all varieties. We expect rapid development over the next week as temperatures rise.
- Elongation stage tolerance for Early Black and Howes is 27°F. **However, we increased tolerance to 29.5°F today as it has been 7 days at 27°F (see below).**

Elongation stage **and** all more advanced stages tolerance is 29.5°F for Ben Lear, Stevens, and newer hybrids.

NOTE: Once cabbage head stage is reached, internal changes continue regardless of bud appearance. For this reason, we advance tolerance every 5-7 days starting at cabbage head stage even if many buds have not changed visually.

- Degree day (GDD) models:
Spring dormancy ended prior to 4/10 according to the Dee model.
The Dee model (base 44) reached 100 (white bud stage) on 4/10; 150 (bud swell stage) on 4/15 and 200 (cabbage head stage) on 4/27.
The Wisconsin models (base 41) both passed 90 degree days (protect for 23°F) on 4/15. The complex and simple WI models reached 180 GDD (protect for 32°F) on 4/24 and 4/27, respectively.
- Bud closeups by Peter Jeranyama, UMass Cranberry Station; photos from the field by Erika Saalau Rojas, Ocean Spray Cranberries. **This is the last tolerance check and report for spring 2022.**



Stevens, Rosebrook 5.10.22
Elongation stage, tolerance 29.5°F



Ben Lear, Rosebrook 5.10.22
Elongation stage, tolerance 29.5°F



Photo from 5/3



Early Black, Rosebrook 5.10.22
Visual – elongation stage
Tolerance set at 29.5°F after 7 days at 27°F



Howes, Rosebrook 5.10.22
Visual – elongation stage
Tolerance set at 29.5°F after 7 days at 27°F

Bud photos, State Bog May 9, 2022



Early Black
29.5° F
(due to 6 days since 27°F)



Howes
29.5° F
(due to 6 days since 27°F)

Bud photos, State Bog May 9, 2022



Ben Lear
29.5° F

Stevens
29.5° F



Bud photos, State Bog May 9, 2022

Crimson Queen
29.5°F



Mullica Queen
29.5°F



Demoranville
29.5°F



'Stevens' Site #1
Elongation stage (29.5°F)
Rochester, MA
5.10.2022



'Stevens' Site #2
Early elongation stage (29.5°F)
Rochester, MA
5.10.2022



'Demoranville'
Elongation Stage (29.5°F)
Rochester, MA
5.10.2021

