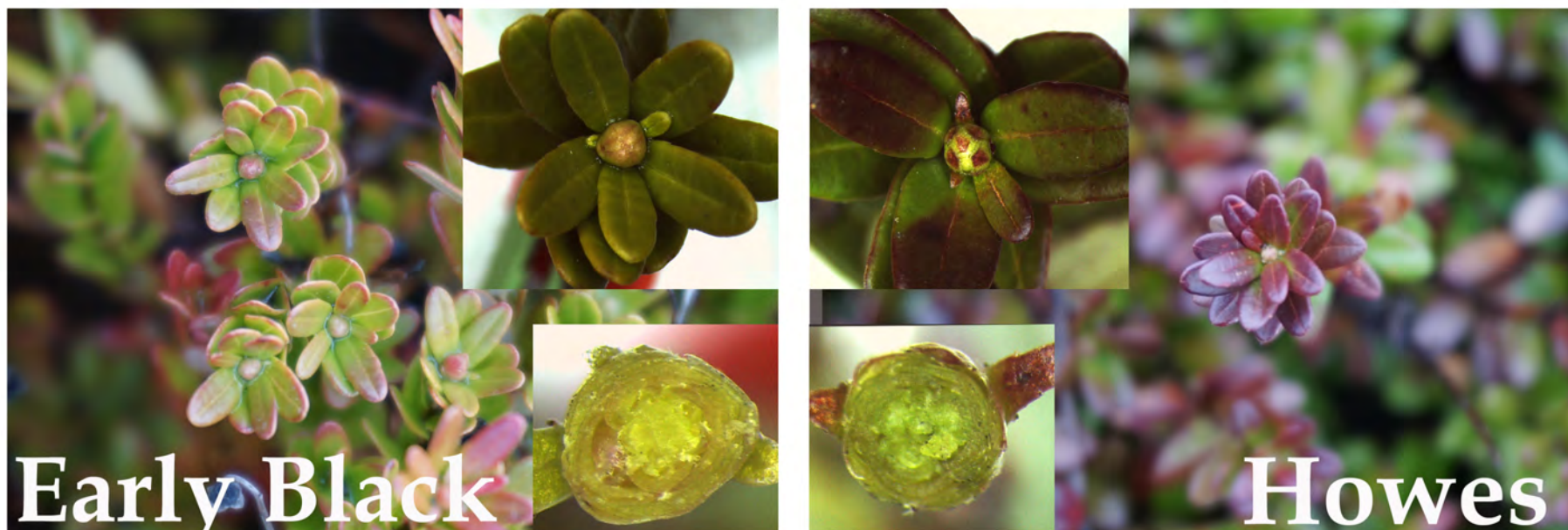
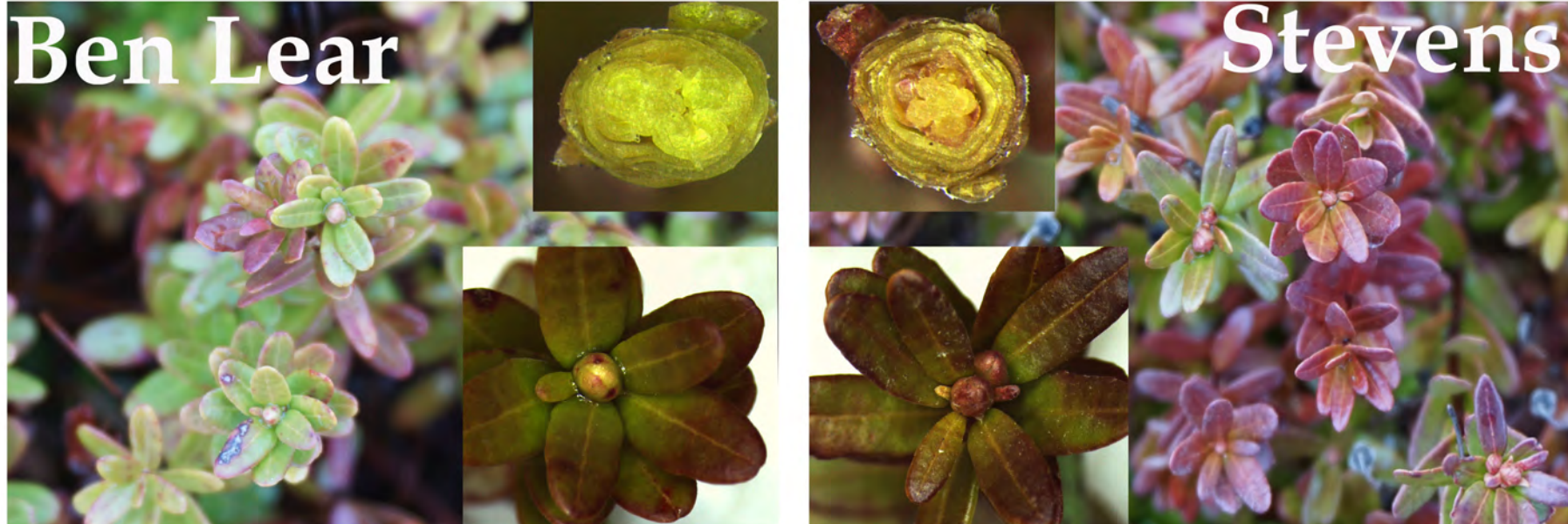


April 25, 2017

- 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 bud swell stage
- Buds were slightly larger than last week, have lost most or all of their red hue, and are beginning to expand with loosening of the bud scales
- Bud swell tolerances are 22°F for Early Black and Howes; 25°F for Stevens, Ben Lear and new hybrids
- Buds observed at State Bog on the 25<sup>th</sup> were similar to those observed at Rosebrook
- Next check scheduled for May 1<sup>st</sup>

# Frost check at Rosebrook on April 25, 2017

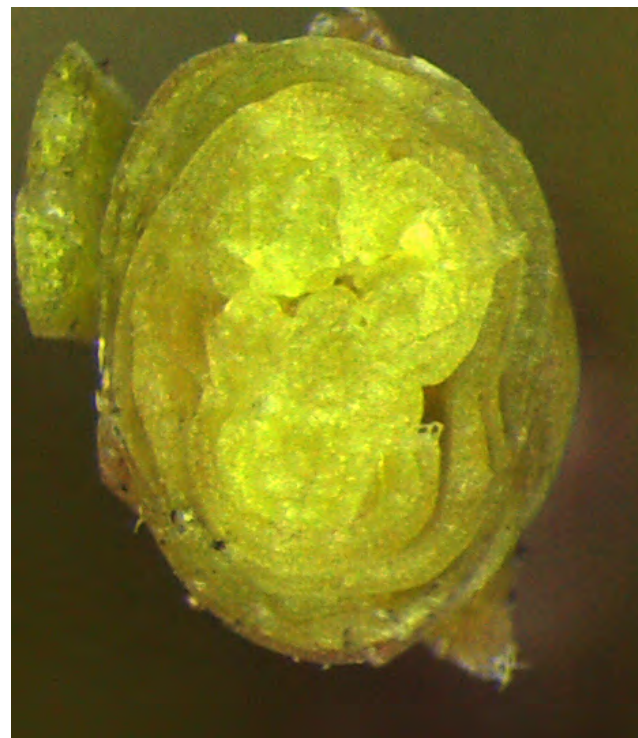




Buds at State Bog  
April 25, 2017  
Tolerance 25°F

Ben Lear (and Stevens)  
is slow to lose  
its red hue but scales  
on the bud are  
separating – look at the  
top of the buds to  
observe this.

Buds are opening upward  
but not yet as round as  
at cabbage-head stage.

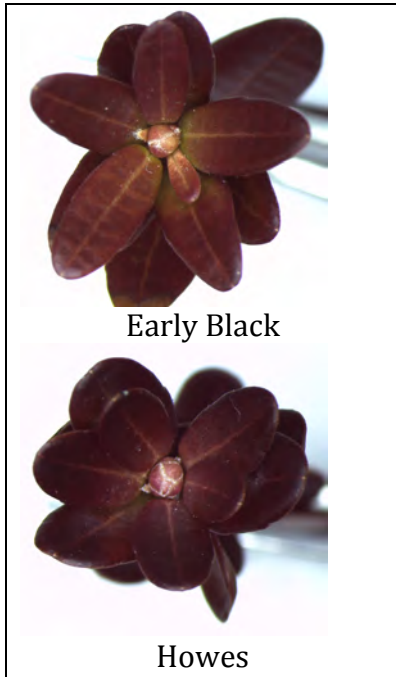


Ben Lear cut buds. Left bud shows damage to two floral initials (tissue that would become a flower) – see arrow. Bud on the right is undamaged.

## 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



Spring Dormant 18°F



White Bud Stage 20°F



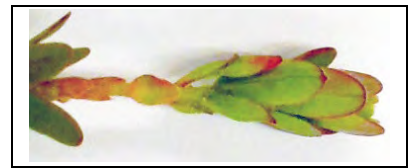
Bud Swell Stage 22°F



Cabbage Head Stage 25°F



Bud Elongation 27°F



29.5°F

## Spring Frost Tolerances - Ben Lear and Stevens

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.

