

Frost tolerances #4 - Spring 2015
May 11, 2015

On May 11, buds were examined from the following cultivars: Early Black (EB), Howes (H), Ben Lear (BL), Stevens (ST), Gregleski #1 (GH), Demoranville (DE), Mullica Queen (MQ), and Crimson Queen (CQ). These buds were collected at State Bog in East Wareham. All cultivars and locations had at least some uprights with buds that had advanced to the **elongation** stage with the remainder at **cabbage head** stage.

The transition from **cabbage head** to **elongation** involves the upward or outward growth of the bud - in side view the bud is no longer round in appearance (as it is in the **cabbage head** stage).

At the **cabbage head** stage, tolerance for EB and H is 25°F; tolerance for BL and ST is 27°F. At the **elongation** stage, tolerance for EB and H is 27°F; tolerance for BL and ST is 29.5°F. Based on appearance, new hybrids should be assumed to have the same tolerance as BL.

ALWAYS CHECK THE TOLERANCE ON YOUR BOGS.



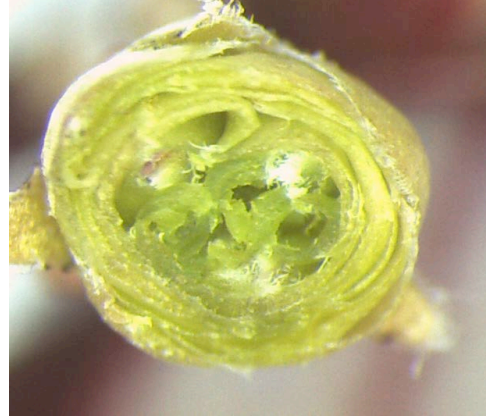
EB elongation stage, 27°F, State Bog
5/11



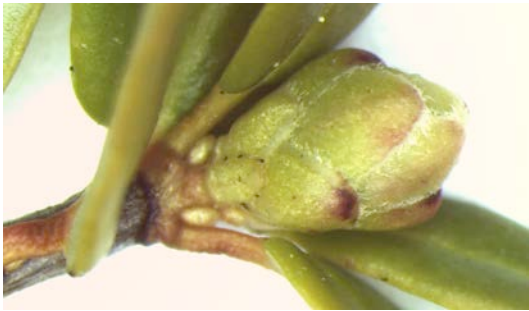
EB elongation stage cut bud - cut is
near the base. State Bog 5/11



H elongation stage, 27°F, State Bog 5/11



H elongation stage cut bud - cut is half way from tip. State Bog 5/11



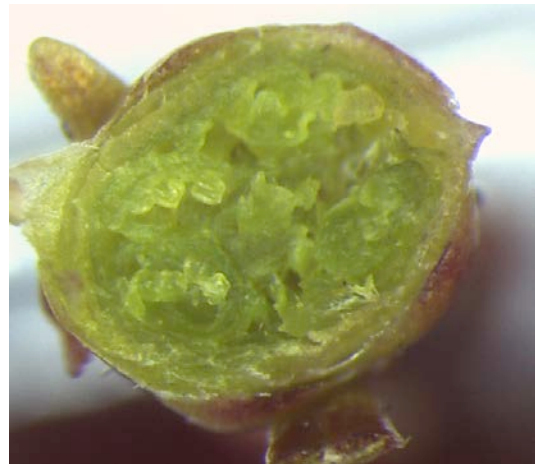
BL elongation stage, 29.5°F, State Bog 5/11



BL elongation stage cut bud - cut is about 2/3 down from tip. State Bog 5/11



ST elongation stage, 29.5°F, State Bog 5/11



ST elongation stage cut bud - cut is half way from tip. State Bog 5/11



CQ elongation stage, 29.5°F, State Bog 5/11



DE elongation stage, 29.5°F, State Bog 5/11



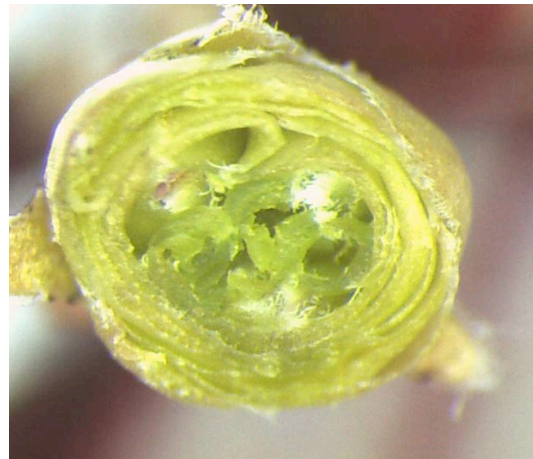
MQ early elongation stage, 29.5°F, State Bog 5/11



MQ late elongation stage, 29.5°F, State Bog 5/11



GH elongation stage, 29.5°F, State Bog 5/11



GH elongation stage cut bud - cut is 1/3 down from from tip. State Bog 5/11