Frost tolerances #2 - Spring 2015
May 1, 2015

On May 1, 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. Based on internal and external appearance, BL, MQ, and CQ were the most advanced. While a few buds remained at the white bud stage, all cultivars had at least some uprights where buds had reached the bud swell stage.

The transition from white bud to bud swell (or loosening) involves the slight rounding of the bud and lifting of the bud scales. Buds have enlarged but are not yet at cabbage head (2 mm diameter).

At the white bud stage, tolerance for EB and H is 20°F; tolerance for BL and ST is 22°F. At the bud swell stage, tolerance for EB and H is 22°F; tolerance for BL and ST is 25°F. Based on appearance, new hybrids should be assumed to have the same tolerance as BL.

ALWAYS CHECK THE TOLERANCE ON YOUR BOGS.
BL bud swell, 25°F, State Bog 5/1

ST bud swell, 25°F, State Bog 5/1

MQ bud swell, 25°F, State Bog 5/1


H cut bud, State Bog 5/1

ST cut bud, 5/1. Note damaged flower initial in upper right quadrant