On April 26 at Rosebrook Bog and State Bog, 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).

At Rosebrook, H and ST were at the bud swell stage; EB and BL had reached cabbage head stage.

At State Bog, H, ST, CQ, and DE were at bud swell; EB and GH were at cabbage head; BL and MQ were elongating.

At the bud swell stage, tolerance for H is 22°F; tolerance for ST, CQ, DE is 25°F.

At the cabbage head stage, tolerance for EB is 25°F; tolerance for GH is 27°F.

At the bud elongation stage, tolerance for BL and MQ is 29.5°F.

Based on appearance, new hybrids should be assumed to have the same tolerance as BL for any given stage. Tolerance for the CCCGA frost warning is based on Rosebrook observations.

ALWAYS CHECK THE TOLERANCE ON YOUR BOGS.

We next plan to check tolerance and update photos if necessary on April 29.
H bud swell, 22°F, State Bog 4/26

BL elongation 29.5°F, State Bog 4/26

ST bud swell, 25°F, State Bog 4/26

H bud swell, 22°F, Rosebrook 4/26

BL cabbage head, 27°F, Rosebrook 4/26

no photo taken


MQ elongation, 29.5°F, State Bog 4/26

CQ bud swell, 25°F, State Bog 4/26

GH bud swell, 25°F, State Bog 4/26
Comparison of stages.

At bud swell stage, the bud has begun to enlarge slightly and the scales are loosening. When the bud reaches ~2 mm in diameter and looks like a small cabbage, it has advanced to the cabbage head stage. In the elongation stage, the bud begins to grow outward (or up).
Photos of damaged buds (below). EB collected on 4/24. Note green center but brown areas surrounding the center. The brown areas would have become the flowers - these buds would produce leafy growth but no crop.

Compare to this healthy bud photographed in 2012.