

**MORPHOLOGICAL AND YIELD CHARACTERIZATION AND
SUPERIORITY TESTING OF SEVERAL HYBRID SWEET CORN
VARIETIES (*Zea mays L. saccharata Sturt*)**

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ABSTRACT

Sweet corn (*Zea mays L. saccharata Sturt*) is a horticultural crop that is popular with the public for processing and consumption. One effort to increase sweet corn production is through plant breeding to create new, superior varieties. This research aims to determine the morphological characters and yield potential of several genotypes of corn plants and determine their advantages. The research was a field experiment using a Complete Randomized Block Design (RAKL) with 7 treatments and 4 blocks. The data obtained was then analyzed for diversity using the F test and continued with the DMRT test at 5% level. The results of the research showed that the characteristics of sweet corn genotypes G1, G2, G3, and G4 had a bent leaf shape, small panicle branching type, and POOP seed type. The sweet corn character of genotype G4 has a seed color of 5Y 8/2, the cob shape of G2, G3 and G4 is cylindrical, and G1 is flat cylindrical. Sweet corn genotype 10-2A X KD 1-3 (G4), although based on sugar content, is not significantly different from the others, it has the advantage of potential cob length without husks and can be proposed as a candidate for a new hybrid variety.

Keywords: *Sweet corn, characterization, superiority test*