



# Sugarcane 'CP 08-1110' - Improved Yield

USDA Sugarcane Field Station, Univ. of Florida, & Florida Sugar Cane League

The 'CP 08-1110' sugarcane cultivar was developed to produce much higher cane and sucrose yields—including acceptable commercial recoverable sucrose—compared to other commercial cultivars grown on mineral/sandy soils in Florida. This cultivar was additionally bred for resistance to multiple diseases affecting Florida sugarcane.



Photo by Scott Bauer, USDA-ARS Image Gallery

Tasseled sugarcane growing near Canal Point, Florida

## PROJECT GOALS

- ✓ Develop high-yielding cultivars with enhanced disease resistance
- ✓ Ensure tolerance to biotic and abiotic stresses for sandy soils in Florida

## Problems Addressed

Commercial sugarcane cultivars grown on sandy soils in Florida were susceptible to a wide range of diseases including smut, leaf scald, brown rust, orange rust, sugarcane mosaic virus, and ratoon stunting. Furthermore, sugarcane grown in these conditions produced poor cane and sucrose yield as well as low levels of acceptable commercial recoverable sucrose, contributing to cane yield reduction of 18.5% to 24.9% and sucrose yield reduction of around 30%.

## Solutions Developed

'CP 08-1110' was derived from a long-term recurrent selection program at Canal Point, Florida. It is a complex hybrid, arising from a total of 21 individual genetic sources, with a pedigree tracing back to commercially successful great-great-grand-parents. 'CP 08-1110' showed adequate disease resistance, and when compared to two check cultivars grown on sand soils, 'CP 89-2143' and 'CL 88-4730', 'CP 08-1110' had higher cane yields, higher sucrose yields, and a higher economic index. 'CP 08-1110' was therefore released to growers as a new cultivar for sandy soils in Florida.



Written by: A. Mahama, S. Gray, W. Suza, K. Chen (editor)

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