
Registration of 'HoCP 85-845' Sugarcane

'HoCP 85-845' (Reg. no. CV-94, PI 575700) sugarcane, a BC₄ progeny of an interspecific hybrid of *Saccharum officinarum* L., *S. spontaneum* L., and *S. barberi* Jeswiet and a *S. spontaneum* clone, US 56-15-8, was developed through cooperative research by USDA-ARS, the Louisiana Agricultural Experiment Station of the Louisiana State University Agricultural Center, and the American Sugar Cane League of the USA. 'HoCP 85-845' is a product of the cross 'CP 72-370' (1)/'CP 77-403' made at Canal Point (CP), FL, in 1980 and selected at Houma (Ho), LA, in 1985.

Yield data from a total of 55 mechanically harvested, replicated trials on both light- and heavy-textured soils indicated that 'HoCP 85-845' was superior to 'CP 70-321' (2), the principal commercial cultivar, in yield of total recoverable sugar per hectare (kg ha⁻¹) in the plant-cane crop and yield of cane (Mg ha⁻¹) and number of millable stalks in the plant-cane, first-, and second-ratoon crops. 'HoCP 85-845' is similar to CP 70-321 in recoverable sugar content (kg Mg⁻¹) and stalk of 'HoCP 85-845' is light green under the leaf sheath and dark green to light red in areas exposed to the sun. Its weight averaged over the three crops was 0.95 kg for CP 70-321.

Desirable attributes of 'HoCP 85-845' are moderate fiber content (13.05%), its good milling factor (1.016), and erect growth, which lends itself to mechanical harvesting, thus reducing the losses associated with mechanical harvesting. 'HoCP 85-845' is similar to another commercial cultivar, 'CP 70-321' (3).

The cultivar is moderately resistant to sugarcane mosaic virus, smut caused by *Ustilago scitaminea* Syd. & P. Syd., and rust caused by *Puccinia melanocephala* H. & P. Syd. under Louisiana field conditions. 'HoCP 85-845' is moderately resistant to ratoon stunting disease (*Clavibacter xyli* subsp. *xyli*). In one inoculated test, the disease caused significant reductions in yield of cane (Mg ha⁻¹) and total recoverable sugar per hectare (kg ha⁻¹) in the first-ratoon crop. Plants of 'HoCP 85-845' have been found naturally infected with *leaf scald* (caused by *Xanthomonas albilineans* (Ashby) Dowson) in the field; however, infection levels were lower than in the commercial check, CP 74-383. 'HoCP 85-845' is resistant to infestation by the sugarcane borer, *Diatraea saccharalis* Fabricius; preliminary data suggest that the cultivar is also resistant to damage when infested.

'Seed cane of 'HoCP 85-845' will be maintained at the Sugarcane Research Unit, USDA-ARS, Houma, LA.


References and Notes


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