**REGISTRATION OF CULTIVARS**

**Registration of ‘CP 81-1238’ Sugarcane**

‘CP 81-1238’ sugarcane (a complex hybrid of *Saccharum* spp.)

(Reg. no. CV-95, PI 578048) was selected from a polycross made in November 1978 with CP 71-1027 as the female parent. The male parent could be any one of the five clones in the polycross. CP 81-1238 was developed through cooperative research by the USDA-ARS, the Institute of Food and Agricultural Sciences of the University of Florida, and the Florida Sugar Cane League, Inc., and was released to growers in Florida in the fall of 1992.

A typical stalk of CP 81-1238 is light green under the leaf sheath and yellow in areas exposed to the sun. CP 81-1238 normally flowers about the same time as 'CP 70-1133' (1) and =1 wk earlier than 'CP 72-1210' (2), the two commercial check varieties. Its stalk weight averaged over a three-crop cycle (plant cane and first and second ratoon) was 1.73 kg, compared with 1.38 and 1.35 kg for CP 70-1133 and CP 72-1210, respectively.

CP 81-1238 is recommended for production on sand soils. On these soils, at early harvest (late October) it had 96.5 and 99.0% of the sugar content of CP 72-1210 and CP 70-1133, respectively. However, due to its higher cane yield (103% of CP 70-1133 and 109% of CP 72-1210), CP 81-1238 produced higher sugar yields (106% of CP 70-1133 and 107% of CP 72-1210). On sand soils, averaged over the 3-crop cycle at regular harvest dates (November–March), the economic index (3) for CP 81-1238 was 11 and 10% greater than the economic indices for CP 70-1133 and CP 72-1210, respectively.

On muck soils, the sugar content (kg sugar Mg⁻¹ cane) of CP 81-1238 was about midway between CP 70-1133 and CP 72-1210 at both early and late harvests. Cane yields (Mg ha⁻¹) for CP 81-1238 were only 86% of those for CP 70-1133, but were 96% of those of CP 72-1210. Although sugar yields per hectare were lower for CP 81-1238 (89%) than for CP 70-1133, the economic indices were equal, because CP 81-1238 had a higher sugar content at regular harvest. The economic index of CP 81-1238 was only 75.4% of that for CP 72-1210; therefore, CP 81-1238 is not being recommended for planting on muck soils.

CP 81-1238 has shown adequate resistance for commercial production in Florida to the sugarcane mosaic virus (Strain E), eye spot (caused by *Bipolaris sacchari* (E.J. Butler) Shoe-maker), and smut (caused by *Ustilago scitaminea* Syd. & P. Syd.). Low levels of sporulating pustules of rust (caused by *Puccinia melanocephala* Syd. & P. Syd.) have been observed on this cultivar; however, we have seen no evidence of economic impact. Plants of CP 81-1238 have been found naturally infected with leaf scald (caused by *Xanthomonas albilineans* (Ashby) Dowson), but infection levels were lower than in the commercial check, CP 72-1210. CP 81-1238 has a millability rating of 0.991 and a fiber content of 9.45%, compared with 0.98 and 10.41% for CP 70-1133 and 0.965 and 10.22% for CP 72-1210, respectively.

Seed cane of CP 81-1238 will be maintained by the USDA-ARS at the Sugarcane Field Station, Canal Point, FL.

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References and Notes


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**Registration of ‘CP 84-1198’ Sugarcane**

‘CP 84-1198’ sugarcane (a complex hybrid of *Saccharum* spp.)

(Reg. no. CV-96, PI 578049) was selected from progeny of the cross ‘CP 70-1133’ (1) × ‘CP 72-2086’ (2) made at Canal Point, FL, in December 1981. CP 84-1198 was developed through cooperative research by the USDA-ARS, the Institute of Food and Agricultural Sciences of the University of Florida, and the Florida Sugar Cane League, Inc., and was released to growers in Florida in the fall of 1992.

Typical stalks of CP 84-1198 are greenish under the leaf sheath, brownish in exposed areas, and have a large diameter. Dry leaf sheaths tend to cling to the stalks. The mean stalk weight for the three-crop cycle (plant cane and first and second ratoon) was 1.60 kg, compared with 1.38 and 1.26 kg for the commercial checks CP 70-1133 and ‘CP 72-1210’ (3) respectively.

In 19 replicated yield trials on muck soils (7 plant cane, 6 first-, and 6 second-ratoon crops) harvested at the end of October, CP 84-1198 averaged 10 and 7% higher sugar content (kg sugar Mg⁻¹ cane) than CP 70-1133 and CP 72-1210, respectively. Sugar yields (Mg ha⁻¹) at early harvest were equal for CP 84-1198 and CP 70-1133, but CP 84-1198 yielded more than CP 72-1210 by 26%. Cane yields of CP 84-1198 were only 90% of those of CP 70-1133, but were 120% of those of CP 72-1210. At regular harvest dates (November–March), CP 84-1198 had 7.9 and 9.5% higher sugar content than CP 70-1133 and CP 72-1210, respectively. Sugar yields at regular harvest dates for CP 84-1198 were 97.2% of that of CP 70-1133, but were 124% of CP 72-1210. The economic index (4) of CP 84-1198 at regular harvest dates on muck soils was 8.7 and 34.7% higher than that of CP 70-1133 and CP 72-1210, respectively.

In six replicated yield trials on sand soils (two plant cane, two first-, and two second-ratoon crops) harvested at the end of October, CP 84-1198 had a sugar content equal to that of CP 70-1133 and 6% higher than that of CP 72-1210. Sugar yields at early harvest dates for CP 84-1198 were equal to CP 70-1133 and 23.8% higher than CP 72-1210. Cane yield at regular harvest dates was only 92% of CP 70-1133, but CP 84-1198 yielded 13% higher than CP 72-1210. The sugar content for all three cultivars was essentially equal at regular harvest; therefore, sugar yields at regular harvest dates for CP 84-1198 were relative to the cane yields. The economic index for CP 84-1198 was only 95.6% of that for CP 70-1133, but exceeded that of CP 72-1210 by 19.9%.

CP 84-1198 has shown adequate resistance for commercial production in Florida to the sugarcane mosaic virus (Strain E), eye spot (caused by *Bipolaris sacchari* (E.J. Butler) Shoe-maker), rust (caused by *Puccinia melanocephala* Syd. & P. Syd.)