Registration of ‘CP 97-1944’ Sugarcane

‘CP 97-1944’ (Reg. no. CV-126, PI 639109) sugarcane (a complex hybrid of *Saccharum officinarum* L., *S. barberi* Jeswiet, *S. spontaneum* L., and *S. sinense* Roxb. amend. Jeswiet) was selected from progeny of a polycross made at Canal Point, FL, in November 1994 with ‘CP 80-1743’ (Deren et al., 1991) as the female parent. CP 97-1944 was developed through cooperative research conducted by the USDA-ARS, the University of Florida, and the Florida Sugar Cane League, Inc. and was released to growers in December 2004.

CP 97-1944 has no pubescence along the leaf sheath, short auricles (<0.5 cm), and a nearly cylindrical internode. It has moderate wax bloom, a loosely adhering leaf sheath, and a dark purple stalk, both exposed and under the leaf sheath. The buds of CP 97-1944 project below purple growth rings, and its purple root bands usually have two rows of root primordia.

Stalk weights of CP 97-1944, averaged over the plant-cane, first-ratoon, and second-ratoon crops, were 12.9% lower on organic soils and 17.1% lower on sand soils than the corresponding stalk weights of ‘CP 70-1133’ (Rice et al., 1978), the commercial check. CP 97-1944 has an average fiber content of 10.9% compared with 10.4% for CP 70-1133.

On organic soils, CP 97-1944 was evaluated at nine locations over a three-crop cycle (nine plant-cane, nine first- and six second-ratoon crops) where its cane yield (Mg cane ha$^{-1}$) was 2.0% higher than that of CP 70-1133. Theoretical recoverable sucrose (kg sucrose Mg$^{-1}$ cane) of CP 97-1944 was 6.4% higher than that of CP 70-1133. Its sucrose yield (Mg sucrose ha$^{-1}$) was 8.4% higher than that of CP 70-1133. The theoretical economic index, which integrates the costs of harvesting, hauling, and milling the cane produced with sucrose content (Deren et al., 1995) of CP 97-1944 was 15.6% higher than that of CP 70-1133 on organic soils.

On sand soils, CP 97-1944 was evaluated at two locations across a three-crop cycle (two plant-cane, two first- and one second-ratoon crops). The cane yield of CP 97-1944 in these tests was 4.5% lower than that of CP 70-1133. Theoretical recoverable sucrose content for CP 97-1944 was 7.0% higher and its sucrose yield was 1.8% higher than that of CP 70-1133. The theoretical economic index on sand soils for CP 97-1944 was 7.9% higher than that of CP 70-1133.

CP 97-1944 has shown field resistance in Florida to eye spot [caused by *Bipolaris sacchari* (E.J. Butler) Shoemaker]; rust (caused by *Puccinia melanocephala* Syd. & P. Syd.); smut (caused by *Ustilago scitaminea* Syd. & P. Syd.); and Sugarcane mosaic virus strain E. CP 97-1944 is susceptible to yellow leaf virus, and is moderately susceptible [caused by *Xanthomonas albilineans* (Ashby) Dowson] and complex hybrid of *Saccharum officinarum* L., *S. barberi* Jesratoon stunting disease (caused by *Leifsonia xyli* subsp. wiet, *S. spontaneum* L., and *S. sinense* Roxb. amend. Jeswiet) Evtushenko et al.). Susceptibility to ratoon stunting disease was selected from progeny of a CP 97-1944 has no pubescence along the leaf sheath, short auricles (<0.5 cm), and a nearly cylindrical internode. It has moderate wax bloom, a loosely adhering leaf sheath, and a dark purple stalk, both exposed and under the leaf sheath. The buds of CP 97-1944 project below purple growth rings, and its purple root bands usually have two rows of root primordia.

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The levels of leaf scald on CP 97-1944 were similar to those of ‘CP 70-1133’ (Rice et al., 1978), the commercial check. CP 97-1944 has an average fiber content of 10.9% compared with 10.4% for CP 70-1133.

**References**

