REGISTRATION OF ‘CP 78-1247’ SUGARCANE

‘CP 78-1247’ sugarcane (a complex hybrid of Saccharum officinarum L., S. spontaneum L., S. barberi Jeswiet, and S. sinense Roxb. amend. Jeswiet) (Reg. no. 75) (PI 512291) was selected from progeny of the cross ‘CP 68-1067’(1) × CP 57-614’(2), which was made at Canal Point, FL, in December 1974. The cultivar, CP 78-1247 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 in the fall of 1986.

CP 78-1247 has high sucrose early in the harvest season and flowers in early December. Averaged over plant, first-, and second-ratoon crops at seven locations, individual stalk weight was 1.7 kg for CP 78-1247 compared to 1.6 kg for ‘CP 63-588’ (3) and 1.4 kg for ‘CP 70-1133’ (4), the commercial checks.

In 21 replicated tests (7 plant cane, 7 first ratoon, and 7 second ratoon crops), CP 78-1247 averaged 21% more cane per hectare than did CP 63-588, and 95% as much as CP 70-1133. Sugar per ton of cane for CP 78-1247 exceeded CP 63-588 and CP 70-1133 at early harvest (last 2 wk in October) by 11 and 5% and at the regular harvest dates by 9 and 13%, respectively. Regular harvest dates range from late October through March with older ratoon crops usually harvested first and plant cane harvested latest. Sugar yield per hectare for CP 78-1247 exceeded that of CP 63-588 and CP 70-1133 at early harvest by 45 and 2%, and at regular harvest by 28 and 4%, respectively. CP 78-1247 has a millability rating of 0.957 compared to 1.00 for CP 63-588 and 0.960 for CP 70-1133. Fiber content of CP 78-1247 was 9.69% for CP 63-588, and 10.20% for CP 70-1133.

‘CP 78-1247’ has adequate resistance to rust (caused by Puccinia striiformis West.), susceptibility to leaf rust (caused by Puccinia horwnex Desm.f.sp.tritici), black chaff (caused by Xanthomonas translucens f.sp.undulosa), and kernel blight (caused by Alternaria species).

In 10 station yr of testing in the Idaho irrigated nurseries, Treasure has averaged 349.8 and 316.1 kg ha~’ more than Owens and Dirkwin, respectively. In 10 station yr of testing in the Idaho irrigated nurseries, Treasure has averaged 349.8 and 316.1 kg ha~’ more than Owens and Dirkwin, respectively. The grain volume weight of Treasure has averaged 752 kg m~’3 on dryland.

The milling and pastry quality of Treasure is superior to that of the other currently grown soft white cultivars. Seedcane of CP 78-1247 will be maintained by USDA-ARS at the Sugarcane Field Station, Canal Point, Florida, to sugarcane mosaic virus, eye spot [caused by Clavibacter xylosinum], and leaf scald [caused by Xanthomonas albilineans (Ashby) Dow]. CP 78-1247 should be monitored closely in the future.

References and Notes

3. M. S. Kang, and J. R. Orsenigo (5)

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