tent is retained until late in the season if late harvest is desired. Cl. 54-1910 is susceptible to mosaic (virus), if inoculated mechanically, but escapes the disease under field conditions in Florida. It is susceptible to red rot (Physalospora tucumanensis Esp.) and moderately susceptible to pokkab boeng [Cochliobolus stenosporus (Drechs.) Mat. and Yam.] and to ratoon stunting disease.

The commercial growing of Cl. 54-1910 is currently restricted to the plantations of United States Sugar Corporation.

REGISTRATION OF H 59-3775 SUGARCANE

Don J Heinz and Rokuro Uraga

Clone 'H 59-3775' (Saccharum sp. hybrid) was selected and propagated as a single cone selection from the cross 'H 50-7209' X 'H 49-5' produced by the Experiment Station, Hawaiian Sugar Planters' Association. It has germplasm from S. officinarum L., S. sinense Roxb. var. amurense, S. barberi Jess., S. spontaneum L., and S. robustum Brandes and Jess. ex Grasl.

H 59-3775 is a recumbent, high-tonnage, 24-month crop clone. It is a rapid grower and is sparse in tillering during the first 6 months, with a heavy flush of tillers 7 or 8 months after germination. Its ability to germinate is average, and it is equal in ratooning ability to H 49-5 and H 50-7209. It is a high sucrose, light flowering clone, very tolerant to the substituted urea and triazine herbicides and susceptible to drought.

In replicated yield trials it outyields (sugar per acre) H 49-5, H 50-7209 and 'H 53-263' on the Island of Hawaii and was equal to or better than H 50-7209 on the Island of Oahu and Kauai. In field blocks this clone has yielded equal to or better than the present commercial varieties with an average yield increase of 10%.

The ecological adaptation of this clone is the widest of any current commercial clone in the Hawaiian industry. It does well in the unirrigated regions of Hawaii as well as the irrigated areas of Oahu and Kauai.

H 59-3775 is resistant to eye spot [Helminthosporium sacchari (van Breda de Haan) Butler], leaf scald [Xanthomonas albilineans (Ashby) Dowson], red rot (Physalospora tucumanensis Esp.), pineapple disease [Ceratocystis paradoxa (de Seynes) Moreau] in standing cane, and mosaic (virus, Hawaiian Strain), and is intermediate in resistance to ratoon stunting disease (virus) and brown spot (Cercospora longipes Jesw.).

In cooperation with the Taiwan Sugar Experiment Station it was shown to be susceptible to Leptosphaeria tainwanensis (Yen et Chi); resistant to red rot and downy mildew (Sclerotinia sacchari Miy.). In field blocks this clone has yielded equal to or better than the present commercial varieties with an average yield increase of 10%.

REGISTRATION OF PRONTO WHEAT

J. A. Wilson

'Pronto', a hard red winter wheat (Triticum aestivum L. em. Thell.), Cl. 14078, was developed by DeKalb AgResearch, Inc. and released in 1970. It originated from an F1, head row selection from the backcross: 4*¹ 'Tascosa'/²'Norin' derivative. This variety originated from crosses involved with transferring the semidwarf character into adapted, high quality wheat. The male parent, introduced by DeKalb for breeding purposes, is a semidwarf, poor quality, nominal yielding, hardy Norin derivative that is believed to contain 50% hard red winter germplasm.

Prono is distinguished by the following characteristics: winter habit, very early, short; stem white, strong; spike awned, oblong to fusiform, mid-long, erect to inclined; glumes glabrous, brown, mid-long, mid-wide to wide, oblique to square; beaks mid-wide, acuminate, 2 to 5 mm long; awns brown, 2 to 7 mm long; kernels red, mid-long, hard, ovate; germ midsize; crease mid-wide, shallow; cheeks rounded; brush midized, short.

Although Prono has semidwarf breeding in its pedigree, it is not a semidwarf. On the average, it is more than 2 inches shorter and 2 days earlier in heading than Improved Triumph. It is the earliest wheat to be commercially grown in the southern hard red winter region. It has significantly better standability and disease resistance than Improved Triumph. It is very resistant to shattering. In winter hardness, it is similar to Improved Triumph. It carries resistance to soil born disease and its earliness generally allows it to escape serious leaf rust damage. It appears to have a 7 to 10% improvement in yield over Improved Triumph. It has the highest test weight of any variety that we have tested.

The grain quality and flour quality are excellent in meeting hard red winter wheat standards. The grain is hard and produces a high yield of flour with low ash. The flour has strong gluten and high water absorption. Loaf volume and texture are excellent.

Prono is adapted to all areas of the southwest where Triumph wheats are grown. DeKalb AgResearch, Inc. is the source for registered seed.