Registration of Sorghum Varieties, VIII\(^1\)

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The seventh report on the registration of sorghum varieties was published in November, 1954.\(^3\) Two applications for the registration of new varieties of sorghum have been approved during the past year and the descriptions of these varieties are included in this report.

Greenleaf, (Reg. No. 105)

Greenleaf is a new variety of Sudangrass which was released by the Kansas Experiment Station. It was selected and tested from 1940 to 1950 by R. C. Pickett and K. L. Anderson and released to certified seed growers in Kansas in 1953. The variety originated from an intercross of Sudangrass strains (Leoti-Sudan 2 × Leoti-Sudan 4) made by J. R. Quinby and R. E. Karper at the Texas Station.

Greenleaf has a sweet and juicy stalk, is leafy, freely tillering, and later in maturity than other present commercial varieties of Sudangrass. The glumes are mahogany colored, and when fully ripe a large percentage of the caryopes will thresh free from the glumes.

Because of lateness in maturity, the plants are vigorous and the yields are high under favorable soil and moisture conditions. Although the growth is slower in the spring than early strains and varieties, Greenleaf has more potential later growth and will remain green and growing longer.

The variety is resistant to leaf blight (Helminthosporium turcicum) and also to several of the bacterial foliage diseases. The Prussic acid potential is considered as medium-low, not significantly higher than Wheeler, an early strain of Common Sudangrass.

Tracy, (Reg. No. 106)

Tracy is a new mid-season variety of sorgo for sirup production released and distributed by the Mississippi Agricultural Experiment Station in 1953. The variety originated from a cross between White African and Sumac made by H. N. Vinall of the Division of Forage Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture, in 1923. Selection work that resulted in this variety was performed at the Texas Experiment Station at Chillicothe by H. N. Vinall, J. C. Stephens, and J. R. Quinby and the selection supplied to the U. S. Sugar Plant Field Station at Meridian, Miss., in 1938. Carl Grassl, Botanist, Division of Sugar Plant Investigations, purified the type for final culture and testing by I. E. Stokes and others at the Mississippi Station.

Tracy matures in around 100 days, has erect stalks of medium diameter. The panicle is small, erect, and compact. The glumes are reddish-brown, mostly deciduous at threshing. The seeds are small with a reddish-brown seed-coat and the brown nucellar layer is absent.

Cooperative tests for a number of years show Tracy to be a superior new mid-season variety for sirup production under a wide range of conditions in Mississippi. It is lodging-resistant and the straight stalks handle well at the mill and produce favorable yields of sirup per ton of stalks. A high percentage of juice is recovered, the sugar content of the juice is high and clarification is excellent resulting in light amber colored sirup with a pleasing flavor.

Tracy is comparable to White African in resistance to leaf anthracnose and red rot (Colletotrichum graminicolum), and also to rust and other bacterial foliage diseases.

The variety was named in memory of the late Dr. S. M. Tracy who served during the period 1888 to 1897 as the first director of the Mississippi Agricultural Experiment Station.