REGISTRATION OF ‘SUNRUNNER’ PEANUT

The ‘SUNRUNNER’ peanut (Arachis hypogaea L. subsp. hypogaea, var. hypogaea), (Reg. no. 29) was developed by the Florida Agricultural Experiment Station and released in 1982. It was tested experimentally as UF75102 and F519. Sunrunner was derived from a cross made in 1966 between a component line of ‘Florunner’ (UF490-16-10-1-1) (5) and an experimental Virginia-type line (UF393-7-1). The male parent (UF393-7-1), selected from a 1951 cross between a ‘Florispans Runner’ (1) derivative (UF334A-3-5-5-1) and ‘Jenkins Jumbo’ (2), has a runner growth habit and large Virginia market-type pods and seed. Pedigree selection was practiced among and within F2 through F6 generation plants and plant rows for growth habit, reproductive traits, uniform size and shape of pods and seed, disease resistance, and chemical quality.

Sunrunner is a multiline cultivar formed from compositing three sister lines (F519-9, F519-10, and F519-11). It is similar to Florunner in maturity, disease and insect resistance, growth habit, leaf color, leaf size, and other physical characteristics. In replicated performance trials conducted at two locations in Florida during the period 1974 to 1981, Sunrunner yields were 6% higher than Florunner for the first 3 yrs, and averaged 3% higher over the 8 yr period (3, 4). The pods and seed of Sunrunner are slightly larger than those of Florunner. Using farmer’s stock market-grade standards, Sunrunner averaged 18% fancy pods, 29% extra large seed, and 63 g/100 seed, compared with 12.2%, 25%, and 62 g/100, respectively, for Florunner. Sunrunner and Florunner are similar for the grade components, other seed, sound splits, shelling percentage, damaged seed, and total sound mature seed. Both cultivars are characterized by a high shelling percentage (80%) and a low percent seed damage (0.3% visible and 0.2% concealed). In additional shelling tests conducted by the National Peanut Research Laboratory, Dawson, GA (J.L. Davidson, 1984, personal communication), bulk density, pod shape, hull thickness, milling quality, and seed count of Sunrunner and Florunner were approximately the same.

However, Sunrunner was superior to Florunner for shellability in the first stage sheller (72 vs. 62%), outturn of premium seed, and in seed shape uniformity.

The average iodine value of Sunrunner (91.9) was slightly lower than Florunner (94.9), an indication that products from Sunrunner may have a longer shelf-life. The oil percentage and oleic:linoleic ratios were similar for the two cultivars, with a 6 yr mean of 50.6 and 51.2% oil, and 2.3 and 2.1 linoleic:oleic ratio for Sunrunner and Florunner, respectively. Total protein content of Sunrunner (443 mg g⁻¹) was slightly higher than Florunner (406 mg g⁻¹). The essential amino acids, methionine and lysine, were also higher in Sunrunner. Sunrunner had 4.8 mg g⁻¹ methionine and 15.6 mg g⁻¹ lysine, vs. 4.3 and 14.5 mg g⁻¹, respectively, for Florunner. Sunrunner was equal to or better than Florunner in flavor and blanchability.

Sunrunner is adapted to the same environments and production practices as Florunner. Inquiries concerning the availability of Sunrunner foundation seed should be addressed to the Florida Peanut Producers Foundation, P.O. Box 309, Greenwood, FL 32443. Breeder seed of the three component lines will be maintained by the University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, FL 32611.

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References and Notes

REGISTRATION OF ‘TEBONNET’ RICE

‘TEBONNET’ rice (Oryza sativa L.), (Reg. no. 70), PI 487195 a very-short-season, high-yielding, long-grain cultivar, was developed jointly by the Arkansas Agricultural Experiment Station and the USDA-ARS. It was officially released on 17 Sept. 1984, by the Agricultural Experiment Stations of the University of Arkansas, Fayetteville; the University of Florida, Gainesville; Mississippi State University, Mississippi State; the University of Missouri, Columbia; and by USDA-ARS.

Tebonnet was tested in the Arkansas Rice Performance Test and the Regional Uniform Rice Nursery during the 6-yr-period, 1978 to 1983, under the designation RU780101. Data have previously been reported on Tebonnet by Kuenzel et al. (6), Huey and Kuenzel (2), and McKenzie et al. (7).

Tebonnet was derived from the cross ‘Bonnet 73’/CI9841 (Cross no. 72SP25-1) made at the Rice Research and Extension Center, Stuttgart, AR, in 1972. Early evaluation was made under the experimental designation STG 75VS4259 starting with F2 seed from the 1975 panicle row VS4259. Bonnet 73 was described by Johnston et al. (5).

CI9841 is a high-yielding line from the cross ‘Vegold’/CI9556/‘Dawn’. Vegold was described by Johnston and Adair (3). The long-grain parent CI9556 is from the cross CI943/C19187. CI9187 is a medium-grain sister selection of ‘Nova’ (4). CI9187 is a high-yielding long-grain selection which was also in the parentage of Bonnet 73. Dawn, a blast-resistant, long-grain cultivar, which has been widely used in crosses, was described by Bollich et al. (1).

Tebonnet, with an average rough rice grain yield of 6596 kg ha⁻¹ produced 5% higher grain yields than ‘Lebonnet’ in 45 Arkansas and Cooperative Regional Uniform Nursery Tests conducted in Arkansas, Louisiana, Mississippi, and Texas, from 1978 to 1983. Data from 29 Arkansas tests during the same period showed that Tebonnet’s average yield of 6821 kg ha⁻¹ compared favorably with Lebonnet’s at 6731 kg ha⁻¹. When compared with ‘Labelle’ in tests conducted from 1981 to 1983, Tebonnet produced a 10% higher yield in 18 Arkansas tests (7067 kg ha⁻¹ vs. 6894 kg ha⁻¹) and in 25 Cooperative Regional Uniform Nursery tests (6078 kg ha⁻¹ compared to 6361 kg ha⁻¹).

Tebonnet matures approximately 6 days earlier than Lebonnet and 3 days later than ‘Bond’ and Labelle. Plant heights of Tebonnet, Labelle, Lebonnet, and Bond are respectively, 109, 108, 106, and 92 cm. Tebonnet plants have a more erect plant type and sturdier straw than Labelle...