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’ (UF439-16-10-1-1) and an experimental Virginia-type line (UF393-7-1). The male parent (UF393-7-1), selected from a 1951 cross between a ‘Florisan 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 F₁, F₂, F₃, 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, 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.A. 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 in the first stage sheller (72%) of premium seed, and in seed shape uniformity.

The average iodine value of Sunrunner was lower than Florunner (94.9), an indicator from Sunrunner may have a longer shelve-life. The oleic:linoleic percentage and oleic:linoleic ratios were similar for both cultivars, with a 6 yr mean of 50.6 and 51%, and 2.1 linoleic:oleic ratio for Sunrunner, respectively. Total protein content of Sunrunner (g kg⁻¹) was slightly higher than Florunner in essential amino acids, methionine and 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 environment as Florunner. Inquiries concerning the availability of Sunrunner foundation seed should be addressed to the Florida Foundation Seed Growers, Box 309, Greenwood, FL 32443. Breeder’s component lines will be maintained by the University of Florida, Department of Agronomy, Gainesville, FL 32611.


References and Notes

6. University of Florida, Department of Agronomy, University of Florida Foundation Seed Growers, Box 309, Greenwood, FL 32443.