Registration of ‘Tifrunner’ Peanut

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‘Tifrunner’ (Reg. no. CV-93, PI 644011) is a runner-type peanut (Arachis hypogaea L. subsp. hypogaea var. hypogaea) cultivar that was released by the USDA-ARS and the Georgia Agricultural Experiment Stations in 2005. It was developed at the University of Georgia Coastal Plain Experiment Station, Tifton, GA, and was tested under the experimental designation C34-24.

Tifrunner originated from a cross of F439-16-10-3 and PI 203396. F439-16-10-3 is a component line of the cultivar, ‘Florunner’ (Norden et al., 1969). The original population was advanced to the F4 generation using single seed descent. Individual F4 plants were harvested and the population was subjected to selection pressure for resistance to late leaf spot (Cercosporidium personatum Berk. & M. A. Curtis) and spotted wilt caused by Tomato spotted wilt virus (TSWV) for the next three generations. During this same time, the population was also subjected to selection for desirable pod shape, seed size, testa color, growth habit, maturity, high yield, and grade characteristics.

Tifrunner is a runner market-type in seed and pod size. It has a spreading runner growth habit with an erect mainstem that is prominent throughout the growing season and at harvest. It has a high level of resistance to TSWV, and moderate resistance to early (Cercosporidium arachidicola Hori) and late leaf spot. It is a late maturity class peanut, with about 150 d needed for optimal maturity. Averaged over three years of irrigated tests in Alabama, Tifrunner had a seed size of 56 g 100⁻¹ seed (Bostick et al., 2006). In the same tests, the runner cultivars ‘C-99R’ (Gorbet and Shokes, 2002) and ‘Georgia Green’ (Branch, 1996) had seed sizes of 69 and 53 g 100⁻¹ seed, respectively. Tifrunner has a tan testa coat) with percent meat comparable to other runner cultivars.

Tifrunner had significantly higher resistance than the moderately resistant cultivar, Georgia Green, in field trials. In six field studies using reduced fungicide, Tifrunner had significantly less leaf spot severity and a higher yield in comparison to the susceptible cultivar, Georgia Green. In two-year field tests using different scenarios varying fungicide, Tifrunner was similar to the late maturing leaf spot resistant cultivar, C-99R in level of resistance (Gorbet et al., 2006). It has an oleic to linoleic fatty acid ratio, and roasted flavor similar to the current standard runner cultivar, Georgia Green.

Breeder seeds of Tifrunner will be maintained by the USDA-ARS at the Coastal Plain Experiment Station, Tifton, GA. Foundation seeds will be available from the Georgia Seed Foundation, 2420 S. Milledge Avenue, Athens, GA. Foundation seeds will be available from the Georgia Seed Foundation, 2420 S. Milledge Avenue, Athens, GA 30605.

References