REGISTRATION OF NC-FLA 14 PEANUTS
(Reg. No. 17)

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'NC-Fla 14' is a large-seeded Virginia-type peanut (Arachis hypogaea L.) cultivar released jointly by the North Carolina and Florida Agricultural Experiment Stations. It is a sister line of 'NC 17,' tracing to a cross between 'Jenkins Jumbo' and a 'Florisan' derivative (F364A-3-5-5-1). The cross and early selections were made in Florida and the final evaluations were made in North Carolina with the assistance of the Virginia-North Carolina Variety Evaluation Program. NC-Fla 14 was known as Fla 993-2-1-2-4-3 and NC 15714 in the breeding programs in Florida and North Carolina, respectively (1, 2, 3, 4).

NC-Fla 14 has an erect bunch growth habit and the plant is somewhat larger than NC 17. In trials in North Carolina and Virginia, it matured earlier but held its fruit and leaves longer than NC 17. It is comparable in maturity to 'Florigiant' in North Carolina, Virginia, and Florida, requiring approximately 140 days to mature. However, because of weaker peg attachment, NC-Fla 14 is harvested a few days earlier than Florigiant in Florida.

NC-Fla 14 has larger fruit and seed sizes than those of Florigiant, but it has somewhat smaller seeds than NC 17. The percent of damaged seed and the pod disease and seedling vigor ratings for NC-Fla 14 and Florigiant have been similar in Florida. NC-Fla 14 has a significantly thicker hull than Florigiant and lower percentages of sound mature seed. Florigiant seed have smoother seed coats and branch somewhat easier than NC-Fla 14.

The larger yields of NC-Fla 14 tend to compensate for the lower shelling percentage. The market value per unit of area for the harvested crop of NC-Fla 14 was greater than that of NC 5 or Florigiant in 6 years of study at Rocky Mount and Lewiston, North Carolina and considerably higher than that of NC 17 in six county tests conducted in North Carolina and Virginia in 1969 and 1970 (2). Florigiant had slightly greater market values per unit area than NC-Fla 14 in 5-year trials at Holland, Virginia (1).

NC-Fla 14 tends to be more productive in central Florida (Gainesville) than in north Florida (Marianna) (1).

The oil content of NC-Fla 14 is high and comparable to the oil content of NC 17 and Florigiant. The oil quality of NC-Fla 14 can be considered superior to that of NC 17 and Florigiant due to its lower iodine value (averages approximately six points lower than NC 17). NC-Fla 14 compares favorably with Florigiant and NC 17 in flavor. Protein content estimates of NC-Fla 14, ranging from 31.0 to 32.7% in early diggings and 30.6 to 31.3% in late diggings, place it above all competing varieties in the North Carolina-Virginia area.

Extensive evaluations of insect and disease resistance have not been made for NC-Fla 14 but preliminary tests in 1971 and 1972 show that it is susceptible to Southern Stem Rot disease (Sclerotium rolfsii) and tolerant to Southern Corn Rootworm (Diabrotica undecimpunctata howardi Barber).

Both the North Carolina and Florida Agricultural Experiment Stations maintain breeder seed.

REFERENCES


REGISTRATION OF BRANDES SWEET SORGHUM
(Reg. No. 116)

Dempsey M. Broadhead and O. H. Coleman

'Brandes' is a sirup-type sweet sorghum [Sorghum bicolor (L.) Moench] developed cooperatively by the Mississippi Agricultural and Forestry Experiment Station and the Agricultural Research Service, USDA.

Brandes was selected from the progeny of 'Collier 706-C' and PI 154844 (MN 1500), Beltsville, Maryland. The cultivar was selected in 1954 at Meridian, Mississippi and the breeding number Mer. 59-1. Brandes has a medium length and semi-compact to irregularly compact panicle. The brown glumes have acute apices, extending about one-third the length of the seed. The chartaceous marginal glume are usually hirsute, but the main body has many hairs deciduous, giving the appressed surface. The lemma is awnless. The elliptical stamens are pointed at the embryo end. They are about the same size of 'Tracy,' with white chalky seed coat and brown subcoat (testa). The endosperm is mealy.

Brandes matures in 120 to 140 days. It is strong in lodging resistance. The cultivar has a erect, even when subjected to breaking stresses during a storm. The stalks are covered with a heavy waxy bloom. Brandes is resistant to leaf anthracnose [Colletotrichum G. W. Wils.], rusk [Puccinia purpurea Ckes. (Sclerospora sorghi Weston and Uppal), and rust (U. S. Sugar Crops Field Station, Beltsville, Maryland). The cultivar was selected from an F, progeny in 1954 at Meridian, Mississippi and the breeding number Mer. 59-1. Brandes has a medium length and semi-compact to irregularly compact panicle. The brown glumes have acute apices, extending about one-third the length of the seed. The chartaceous marginal glume are usually hirsute, but the main body has many hairs deciduous, giving the appressed surface. The lemma is awnless. The elliptical stamens are pointed at the embryo end. They are about the same size of 'Tracy,' with white chalky seed coat and brown subcoat (testa). The endosperm is mealy.

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Brandes was released for sirup production in the United States in 1968. It produces sirup with flavor, good color, and excellent quality. In the production of Brandes in Mississippi has been significant.

Breeder seed will be maintained by the Foundation Seed Propagation and the U. S. Sugar Crops Field Station, Mississippi State, MS 39762. Received Jan. 7, 1974.