Arlington 23 originated as a single head row in breeders seed production that survived a severe epiphytotic of Helminthosporium, causal agent of "culm rot." It has superior resistance to soil-borne oat mosaic virus and is resistant to Helminthosporium victoriae. It is susceptible to prevalent races of crown rust and some smut races. Arlington 23 is like the parent variety in height, maturity, and straw strength. It was adapted particularly to the Piedmont areas of the Carolinas and Georgia, and its primary value was as a forage variety. It has been replaced in South Carolina by the variety 'Century.'

REGISTRATION OF SPANCROSS PEANUTS

(Reg. No. 3)

Ray O. Hammons

'Spancross' (Arachis hypogaea L.) is a Spanish-type peanut derived from an interspecific cross between P. I. 121070-1 and the wild annual, decumbent species Arachis monticola Krap. et Rigoni. P. I. 121070-1 is a selection from the plant introduction P. I. 121070, which became the 'Argentina' variety. The cross, made in 1958, gave rise to a single productive Spanish-type plant in F2. Rigid selection was practiced for uniformity in pod and seed size and shape, early maturity, and reproductive characteristics. Later generations involved quality and sensory measurements and chemical constituent analyses. Spancross is known experimentally as Georgia C 92 S.

Spancross is the first peanut variety in the world to be derived from an interspecific hybridization program.

Spancross is an early maturing bunch peanut with typical Spanish pods and seed. Plants are fully fertile: 2n = 40. Spancross was tested in Georgia area variety trials and in the national peanut variety tests in 1967-69. In nine tests under diverse conditions at three Georgia locations, Spancross outyielded 'Starr' by 7.4% and topped Argentine by 3.5%. Starr and Argentine are the two most widely grown Spanish peanuts in Georgia and elsewhere in the United States. Spancross appears adapted to production wherever Spanish peanuts are grown. In nine national regional tests in Alabama, Florida, and Texas, Spancross exceeded Starr by 3.5% and Argentine by 2.5%. At five locations in Oklahoma, the 9-test average for Spancross was 5.2% over Starr and 3.8% above Argentine.

Pod shape for Spancross is intermediate between Starr and Argentine. Seed are about equal in size with Argentine and larger than for Starr. A higher proportion of Spancross seed ride the standard grading screen than for Starr, and those that ride the screen are more uniform in maturity and size. Spancross is similar to Starr and Argentine in protein content, iodine value, oleic/linoleic acid ratio, and percentages of the eight constituent fatty acids of the oil. Spancross is fully the equal of Starr and Argentine in shelling and processing quality as determined by objective and subjective tests.

Spancross plants have some resistance to damage from leaf-eating insects. The variety is suitable for modified or multi-row planting patterns, and is adapted to mechanical harvesting.

Spancross was released in 1970 by the University of Georgia College of Agriculture Experiment Stations, the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, and the Oklahoma Agricultural Experiment Station.

The Georgia Coastal Plain Experiment Station maintains breeder seed.

REGISTRATION OF TIFSPAN PEANUTS

(Reg. No. 4)

Ray O. Hammons

'Tifspan' peanut (Arachis hypogaea L.) is a Spanish-type peanut, derived from a single productive Spanish-type plant in F2. Rigid selection was practiced for uniformity in pod and seed size and shape, early maturity, and reproductive characteristics. Later generations involved quality and sensory measurements and chemical constituent analyses. Spancross is known experimentally as Georgia C 92 S.

Spancross is the first peanut variety in the world to be derived from an interspecific hybridization program.

Spancross is an early maturing bunch peanut with typical Spanish pods and seed. Plants are fully fertile: 2n = 40. Spancross was tested in Georgia area variety trials and in the national peanut variety tests in 1967-69. In nine tests under diverse conditions at three Georgia locations, Spancross outyielded 'Starr' by 7.4% and topped Argentine by 3.5%. Starr and Argentine are the two most widely grown Spanish peanuts in Georgia and elsewhere in the United States. Spancross appears adapted to production wherever Spanish peanuts are grown. In nine national regional tests in Alabama, Florida, and Texas, Spancross exceeded Starr by 3.5% and Argentine by 2.5%. At five locations in Oklahoma, the 9-test average for Spancross was 5.2% over Starr and 3.8% above Argentine.

Pod shape for Spancross is intermediate between Starr and Argentine. Seed are about equal in size with Argentine and larger than for Starr. A higher proportion of Spancross seed ride the standard grading screen than for Starr, and those that ride the screen are more uniform in maturity and size. Spancross is similar to Starr and Argentine in protein content, iodine value, oleic/linoleic acid ratio, and percentages of the eight constituent fatty acids of the oil. Spancross is fully the equal of Starr and Argentine in shelling and processing quality as determined by objective and subjective tests.

Spancross plants have some resistance to damage from leaf-eating insects. The variety is suitable for modified or multi-row planting patterns, and is adapted to mechanical harvesting.

Spancross was released in 1970 by the University of Georgia College of Agriculture Experiment Stations, the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, and the Oklahoma Agricultural Experiment Station.

The Georgia Coastal Plain Experiment Station maintains breeder seed.

REGISTRATION OF NC2 PEANUTS

(Reg. No. 5)

W. C. Gregory

'NC2' (Arachis hypogaea L.) is a Virginia type from a cross between 'Ga 207-2' ('Bassey' x 'Spanish 18-38') and 'Spanish 18-38'. Final selection was made in the field in 1964. The variety was released by the University of Georgia, College of Agriculture Experiment Stations, the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, and the Oklahoma Agricultural Experiment Station.

Tifspan is a high-yielding Spanish peanut of bunch growth habit, and good quality. It matures in 120 days in Georgia when planted between April 10 and 16.

In nine tests under diverse environments at Tifton in Georgia from 1967 to 1969, Tifspan produced 9.0% more than 'Starr' which is grown on one-third of the peanut acreage in Georgia and in the United States. In the same tests, Tifspan yielded 5.6% more than Argentine, the only other widely grown Spanish variety. Tifspan is well-adapted in all regions where Spanish peanuts are grown. It outyielded Starr by 6.7% and Argentine by 5.6% in the nine national tests in Alabama, Florida, and Texas in 1967-69. Tifspan exceeded Starr by 4.3% and Argentine by 2.9% in nine comparisons.

Seeds of Tifspan are slightly larger than those of both other varieties and intermediate in shape. Linoleic acid and iodine value of oil of Tifspan were slightly lower, and oleic/linoleic acid were slightly higher than for Starr. Objective and subjective evaluations indicate no differences in the shelling and processing qualities of the oil.

The variety is adapted for mechanical harvesting, has produced well under both natural rainfall and irrigation, and can be grown in multi-row planting patterns.

Breeder seed is maintained by the Georgia Coastal Plain Experiment Station.

1 Registered by the Crop Science Society of America. Received April 30, 1970. Cooperative investigations by Georgia, by the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, and by Georgia College of Agriculture Experiment Stations, Coastal Plain Experiment Stations, and Georgia College of Agriculture Experiment Station.

2 Research Geneticist, Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, College of Agriculture Experiment Stations, Coastal Plain Experiment Stations, and Georgia College of Agriculture Experiment Station.