and fusarium wilt (Fusarium oxysporum f. sp. vasinfectum (Atk.) Synder and Hanson), early maturity, high fiber yield, large bolls, fiber length and fiber strength. Habit of growth varies between determinate and indeterminate. Storm resistance is adequate for spindle-type machine harvesting. Fiber length and strength are above average, fineness of fiber is optimum, and yarn strength is significantly higher than for varieties now grown in Missouri. 

Delcot 277 is sometimes sensitive to cercospore and alternaria leaf blight, associated with potash deficient and moisture stressed soils. Light to moderate stalk curvature is sometimes noted with a heavy crop of bolls, but plants become erect as bolls mature.

Breeder seed will be maintained by the Foundation Seed Stocks, Department of Agronomy, University of Missouri, Columbia, Missouri, 65201.


REGISTRATION OF ELAN OATS

Darrell D. Morey, Acton R. Brown, and Morris J. Bitzer

'ELAN' oats (Avena sativa L.), C.I. 8443, Tifton 6161, was developed at the Georgia Coastal Plain Experiment Station and released by the Georgia Agricultural Experiment Stations in 1970. It is a short oat with strong straw. It has produced high yields of grain during 5 years of testing and has good disease resistance. Elan is medium-early in maturity which makes it suitable to precede soybeans or grain sorghums in double cropping systems. It is fall sown and has good winter hardiness for an early oat, and is adapted to the Coastal Plain and Piedmont areas of Georgia and contiguous states.

Elan was selected from the cross ('Suregrain' × LMHJA) × 'Coker 57-11'. The first cross of Suregrain × LMHJA was made at Tifton, Georgia in 1953. Suregrain was obtained from Coker's Pedigreed Seed Company, Hartsville, South Carolina. LMHJA was a rust resistant selection obtained from the Minnesota breeding program and is 'Landhafer' × 'Joanette' × 'Andrew'. An F2 selection from the first cross was hybridized with Coker 57-11 in 1958. Coker 57-11 is 'Arlington' × 'Delair' × 'Tripernia' × 'Woodgrain'. The best selection from the second cross was hybridized with Florida 500 in 1969 to complete the pedigree.

Elan is resistant to races 208, 216, 290, and 326 of crown rust. It is resistant to races 7A9 and 8AF of stem rust, is resistant to Victoria blight and has not been seriously damaged by Helminthosporium associate. It is not susceptible to soil-borne mosaic virus which would tend to limit its use north of the Coastal Plain area. Elan is susceptible to barley yellow dwarf virus (BYDV), but has no more so than other varieties commonly grown. Suit has not been reported in Elan.

Agronomic and disease characteristics as well as morphological description of Elan oats have been described previously.

Breeder seed of Elan oats will be maintained by the Agronomy Department, Coastal Plain Experiment Station, Tifton, Georgia.

REGISTRATION OF FENN FIELD PEA

A. E. Sinkard and G. A. Murray

'FENN' field pea (Pisum sativum subsp. arvense (L.) Poir) is a pure line selection from 'Austrian Winter' field pea. It has a higher seed yield, larger seed and a higher protein content than 'Austrian Winter' field pea. It was developed by the University of Idaho in 1971 and released in August 1971. 'FENN' field pea is characterized by yellow cotyledons, speckled seed coat, purple blossoms, an indeterminate flowering habit and a preponderance of single-podded and single-flowered pods. It is winterhardy and moderately resistant to the Ascochyta species found in northern Idaho. Cultural experiments indicate that maximum seed yields are obtained in northern Idaho by planting 67 to 88 kilograms per hectare (60 to 75 lb per acre) about September 15.

'FENN' is widely adapted and is expected to replace Austrian Winter field peas as a winter green manure crop in the Cotton Belt. Seed production of 'FENN' will be limited to three generations of increase from breeder seed, namely, one of foundation, registered and certified seed. A limited supply of breeder seed will be maintained by the Idaho Agricultural Experiment Station, Moscow, Idaho 83843.

1 Registered by Crop Science Society of America. Research supported cooperatively by the Idaho Pea and Lentil Commission and the Idaho Agricultural Experiment Station, Research paper no. 879 of the Idaho Agricultural Experiment Station. Received Nov. 4, 1971.

2 Associate Agronomist and Assistant Agronomist, respectively, Department of Plant Sciences, University of Idaho, Moscow, Idaho, 1963.


REGISTRATION OF VIRGINIA 72R PEANUTS

Morris W. Alexander and R. Walton Moreing

'Virginia 72R' peanut (Arachis hypogaea L.) is a large-seeded cultivar of the Virginia botanical and market type, with about the same maturity as 'N.C. 5' (160 days). It was developed by the Virginia Agricultural Experiment Station from a cross between 'Virginia 61R' and 'Virginia A89-15,' a very large-seeded Virginia bunch line. Progeny of selected F2 plants were grown in bulk to Fs. Among the Fs reselections from this line, 61-24-7 had high yield and market grade characteristics when grown on coarse textured soils and was released as Virginia 72R on July 1, 1971.

Virginia 72R plants are vigorous and prostrate in growth habit. Pods are usually two-seeded and slightly constricted between seeds and have a thick hull which prevents excessive kernel damage during harvesting and cleaning procedures. The seed are elongated with a pink-colored testa. The results of 2 years testing, at six locations in the Virginia-Carolina peanut production belt, show that when grown on coarse textured soils, such as Norfolk loamy fine sand, 'Virginia 72R' produced 71% sound mature kernels (undamaged seed graded over a 5.95 × 25.4-mm screen) and 35% extra large kernels (seed held on a 8.53 × 25.4-mm screen) compared to 69% and 35%, respectively, for N.C. 5. The yield and value per acre have averaged approximately 11% higher than N.C. 5.

Crude protein of Virginia 72R at 30.1% is essentially equal to N.C. 5 and oil at 47% is about 1% less. Iodine number averages 100.

This cultivar was released to fill a need for a late maturing variety that produces well on coarse textured soils.

The Tidewater Research Station, Virginia Polytechnic Institute and State University, Hollins, Virginia, 23931 will maintain breeder seed of Virginia 72R.

1 Registered by Crop Science Society of America. Received Oct. 30, 1971.

2 Assistant Professor and Instructor of Agronomy, respectively, Tidewater Research Station, Virginia Polytechnic Institute and State University, Hollins, Virginia, 23931.