

experimental designation of Pacific was BM-10. It was released in 1973 and certified seed was first harvested in 1974.

Pacific has wider leaves, is more prostrate in growth habit, is slightly darker green in leaf color, and begins spring growth earlier than 'Merion.' It has some decumbent leaves in turf plantings. Seedling vigor and density of the two bluegrasses are approximately equal. Pacific maintains its green color well under conditions of low soil fertility, and is quite drought tolerant.

Pacific is slightly more resistant to some races of stripe smut caused by *Ustilago striiformis* (Westend.) Niessl than Merion. In Pennsylvania and Oregon, it has shown tolerance to leaf spot and crown rot disease caused by *Helminthosporium vagans* Drechsler. It has shown moderate resistance to leaf rust disease caused by *Puccinia poae-nemoralis* Oth. and to stripe rust disease by *Puccinia striiformis* West. in seed production fields in Oregon.

Seed of Pacific was made available for turf evaluation in California, New Jersey, Oregon, and Pennsylvania. It is adapted for lawns, parks, tees, fairways, and athletic fields in most areas where other Kentucky bluegrasses are used. Its seedstalks are stiff, and are taller with longer and larger panicles than Merion, although its maturity is about 7 days later. Its seed yield has been intermediate between that of Merion and 'Scenic' Kentucky bluegrass, and it has good tolerance to herbicides registered for use in seed production fields.

Breeder and foundation seeds are maintained by Otto Bohner, 4270 Grant Road, Central Point, OR 97502. Seed production is on the generation system, and includes breeder, foundation, and certified classes. United States Plant Variety Protection Certificate No. 7500058 has been issued for Pacific.

REGISTRATION OF DES 422 COTTON¹

(Reg. No. 80)

R. R. Bridge and J. F. Chism²

'DES 422' cotton (*Gossypium hirsutum* L.) was developed at the Delta Branch, Mississippi Agricultural and Forestry Experiment Station, Stoneville, Miss. DES 422 originated from a single plant selection in the F₃ generation of a cross between 'Deltapine 55' and DES 2134-018. DES 2134-018 is a sister line of 'DES 56' (Reg. No. 70 and P.V. No. 7800041).

DES 422 is an early maturing, rapid fruiting cotton of about the same maturity as DES 56, but produces approximately 4% higher lint yields. The lint percentage of DES 422 is 1.3% higher than DES 56. Boll size and fiber length are approximately the same, but DES 56 has larger seed, stronger fiber, and a higher micronaire value. DES 422 is approximately 7.6 cm shorter in stature, fruits lower, and has more interior fruit than DES 56. Over a 3-year period (1979-1981) DES 422 showed less *Fusarium* wilt symptoms than DES 56 (17 vs. 23%) in the Regional Fusarium Wilt Nursery at Tallahassee, Ala. It is primarily adapted to conditions in the Mississippi Delta, but data from other states (Arkansas, Louisiana, Tennessee, and Texas) show it to have good adaptability.

Mississippi Foundation Seed Stocks will produce foundation seed which will be sold on a pro rata basis to breeding firms and individuals meeting all standards of the Mississippi Seed Improvements Association for the production of registered seed. When the demand of Mississippi producers has been met, foundation seed may be released to other states provided their qualifications meet those required of Mississippi producers.

¹Registered by Crop Sci. Soc. Am. Published as Journal Paper 5114 of the Mississippi Agric. For. Exp. Stn. Accepted 22 Apr. 1982.

²Plant breeder and assistant agronomist, respectively, Delta Branch, Mississippi Agric. For. Exp. Stn., Stoneville, MS 38776.

Breeder seed will be maintained by Delta Branch, Mississippi Agric. and Forestry Exp. Stn. Variety protection has been applied for under the Variety Protection Act, Public Law 91-557.

REGISTRATION OF CULBERT 79 FLAX¹

(Reg. No. 36)

C. L. Lay²

'CULBERT 79' flax (*Linum usitatissimum* L.), CI 2838, was released jointly by the South Dakota Agricultural Experiment Station and USDA-ARS in March 1979. Culbert 79 is the progeny of a single plant which had the highest oil content among approximately 300 F₃ plants bulked by V. E. Comstock, Univ. of Minnesota, to form 'Culbert' flax.³ Culbert originated from an F₄ plant selected from the cross 'Windom' × 'Bison 70'.

Culbert 79 ranked first in seed yield and oil content in three years of testing in the North Central Regional Flax Trails. In 46 trials from 1975-1977 Culbert 79 averaged 1,383 kg/ha seed yield compared to 1366 kg/ha for each of the cultivars Culbert, 'Wishek' and 'Dufferin' while 'Linott' averaged 1,351 kg/ha. Oil percentage was determined for 22 of these tests. Culbert 79 averaged 41.6% compared to 41.1% for Culbert. Both Culbert 79 and Culbert had the same iodine value of 189 in 14 North Central trials.

Culbert 79 has the L⁶ gene which conditions resistance to all known North American races of rust, caused by *Melampsora lini* (Ehrenb.) Lev. Culbert is predominantly L⁶L⁶N¹N¹. Like Culbert, Culbert 79 is moderately resistant to flax wilt, caused by *Fusarium oxysporum* Schlecht. f. *lini* (Bolley) Snyd. and Hans. and pasmo, caused by *Septoria linicola* (Speg.) Gar. Culbert 79 flowers the same day as Culbert, one day later than Linott, is medium in plant height being the same as Culbert, Linott and Wishek and 4 cm shorter than Dufferin. It is moderately resistant to lodging. Seeds are brown, of average size (approx. 5 g/1,000). The flowers are blue and intermediate to small in size.

Culbert 79 is adapted to the north central flax-growing region of the United States. Seed classes of Culbert 79 are breeder, foundation, registered and certified. Breeder seed is maintained by the South Dakota Agric. Exp. Stn., Foundation Seed Stock Division, P. O. Box 2207-A, Brookings, 57007.

¹Registered by the Crop Sci. Soc. Am. Cooperative investigations of South Dakota Agric. Exp. Stn. and USDA-ARS. Accepted 30 Apr. 1982.

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³Comstock, V. E. and J. H. Ford. 1977. Registration of Culbert flax. Crop Sci. 17:823.

REGISTRATION OF VIRGINIA 81 BUNCH

PEANUT¹

(Reg. No. 25)

T. A. Coffelt, D. M. Porter, and R. W. Mozingo²

'VIRGINIA 81 Bunch' peanut (*Arachis hypogaea* L.) is a large seeded virginia-type developed jointly by USDA-ARS and the Virginia Agricultural Experiment Station from a single plant selected in the F₃ generation from a cross of F 392-8 × 'GA 119-

¹Registered by the Crop Sci. Soc. of Am. Cooperative investigations of USDA-ARS and the Virginia Agric. Exp. Stn. Accepted 15 Apr. 1982.

²Research geneticist, USDA-ARS; supervisory plant pathologist, USDA-ARS; and assistant professor of agronomy, respectively, Tidewater Research and Continuing Education Ctr., Suffolk, VA 23437.