REGISTRATION OF CROP CULTIVARS

Breeder seed will be maintained by Delta-Mississippi Agric. and Forestry Exp. Stn. Variety protection applied for under the Variety Protection Act, 35 U.S.C. 62 et seq., for the cultivar "Pacific." 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. It is better adapted to the turf 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.’ 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 Otth. 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 Bohnert, 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 COTTON

R. R. Bridge and J. F. Chism

‘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 F2 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 Tallassee, Ala. It is primarily adapted to conditions in the Mississippi Delta, but data from other states indicate it is well adapted to most of the southern United States. Oil content was 3.3% higher than DES 56. Micronaire values averaged 2.6% lower than DES 56. Fertilizer requirements are the same as DES 56.

Improved standards of this cultivar have been established in Mississippi Central trials. Oil percentage was determined for 22 of these tests. Culbert 79 and Culbert had the same iodine value of 189 in 14 North Central trials from 1975-1977. Culbert 79 averaged 1,391 kg/ha seed yield compared to 1,366 kg/ha for each of the cultivars Culbert, Linott, Wishek and Dufferin. Culbert 79 ranked first in seed yield and oil content among these cultivars.

Oil content 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 (Bolley) Snyd. and Hans. and to stripe rust disease by Puccinia striiformis Westend. F. lini (Bolley) Schlecht. f. lini (Bolley) Snyd. and Hans. and to Septoria liniola (Speg.) Gar. Culbert 79 is moderately resistant to flax wilt, caused by Septoria liniola (Speg.) Gar. The flowers are blue and intermediate to small. The flowers are blue and intermediate to small.

Culbert 79 is adapted to the north central flax-growing region of the United States. Seed classes of Culbert 79 are breeder, foundation, and certified. United States Plant Variety Protection Certificate No. 7500058 has been issued for Culbert 79.

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