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Registration of Germplasms

REGISTRATION OF ML-48-65 WHITE CLOVER GERMPLASM[1]

(Reg. No. GP 8)

D. A. Cooke and L. G. Sonmor[2]

ML-48-65 white clover (*Trifolium repens* L.) is the progeny from three of 15 introductions from the USSR grown at Melfort, Saskatchewan from 1949 to 1965. In 1949, 405 plants were established from the 15 seed lots. By 1952 only 16 plants from three of the seed lots remained alive. Selected plants were cloned and about 400 plants from each seed lot were transplanted to form a seed increase plot. Open-pollinated seed was collected each year from 1953 to 1965.

ML-48-65 is very winter-hardy and able to withstand close mowing or grazing. In general growth characteristics it is larger and more vigorous than 'White Dutch Clover' but smaller than 'Merit.' It has survived longer and yielded more than Merit, 'Pilgrim', 'Ladino' and all white clover introductions tested at Melfort since 1953.

ML-48-65 has been extensively tested as a component of irrigated pasture mixtures at Saskatoon and Outlook, Sask. In a test seeded at Saskatoon in 1971 this strain showed good stands after 5 years. In simulated pasture trials this clover showed dominance in mixtures with slender wheatgrass, bromegrass, and intermediate wheatgrass, and a near 50:50 balance with bluegrass.

ML-48-65 was first released for distribution in 1966 as a source of winter-hardy white clover. Small amounts of seed are available from the Agricultural Research Station, P.O. Box 1240, Melfort, Sask., Canada S0E 1A0.

[1] Registered by the Crop Sci. Soc. of Am. Accepted 4 Nov. 1976.

[2] Research scientists, Canada Dep. of Agric., Research Station, Melfort and Saskatoon, respectively.

REGISTRATION OF NINE GERMPLASM LINES OF NECTARILESS COTTON[1]

(Reg. No. GP 27 to GP 35)

William R. Meredith, Jr. and R. R. Bridge[2]

THESE nectariless cotton (*Gossypium hirsutum* L.) lines were developed cooperatively by the ARS-USDA, and the U.S. Delta States Agricultural Research Center, Stoneville, Miss.

Reg. No.	Identification	Parentages
GP 27	DES 7A ne	'Stoneville 7A' × nectariless
GP 28	DES DK ne	'Dixie King' × nectariless
GP 29	DES SL ne	'Deltapine Smoothleaf' × nectariless
GP 30	DES 16 ne	'Deltapine 16' × nectariless
GP 31	DES 508 ne	'Stoneville 508' × nectariless
GP 32	DES 9608 ne	'New Mexico 9608' × nectariless
GP 33	DES 413-66 ne	'Coker 413-66' × nectariless
GP 34	DES 3967 ne	'PD 3967' × nectariless
GP 35	DES 24-8 ne	'Deltapine 16' × nectariless

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[2] Research geneticist, ARS-USDA and plant breeder, U.S. Delta States Agric. Research Center, respectively, Stoneville, Miss.

Eight of the strains, DES 7A ne, DES DK ne, DES SL ne, DES 16 ne, DES 508 ne, DES 9608 ne, DES 413-66 ne, and DES 3967 ne, originated from a backcross program to incorporate the nectariless trait into Stoneville 7A, Dixie King, Deltapine Smoothleaf, Deltapine 16, Stoneville 508, New Mexico 9608, Coker 413-66, and PD 3967, respectively. The first three releases are the nectariless bulk of approximately 50 BC_8F_2 plants, while the remaining five are the bulk of a similar number of BC_5F_3 plants. The ninth nectariless strain, DES 24-8 ne, is a BC_3F_4 nectariless plant selection from the DES 16 ne backcross program.

Nectariless cotton is caused by the double recessive genotype (ne_1ne_1, ne_2ne_2) (2) and has no extrafloral nectaries on either the leaves or fruiting forms. Therefore, intercrossing of nectariless stock such as these produces only nectariless progenies.

Nectariless cottons have been reported to suppres populations of both tarnished plant bugs *Lygus lineolaris* (Palisot de Beauvois) (1, 3) and cotton fleahoppers, *Pseudatomosceles seriatus* (Reuter) (1, 3), and to reduce damage to bolls by pink bollworms, *Pectinophora gossypiella* (Saunders) (4) Elimination of the extrafloral flower and boll nectaries also results in elimination of boll rot caused by organisms entering through the nectaries (1). The yield and fiber properties of nectariless cottons are, in general, equal to their nectaried recurrent parents (1).

Small amounts of seed (100 to 200 seeds) of the nine stains are available from the ARS-USDA, Stoneville, Miss.

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REGISTRATION OF B68195-25 SAFFLOWER GERMPLASM[1]

(Reg. No. GP 13)

G. H. Abel[2]

B68195-25 safflower (*Carthamus trinctorius* L.) was developed cooperatively by the ARS-USDA and the Univ. of Arizona Agric. Exp. Stn. It was released 11 February 1976. B68195-25 develops heavy foliage, with lower leaves that resist firing throughout the flowering period. Other cultivars begin lower-leaf firing in early flower. Plant height averages about 130 cm, which is about 10 and 20 cm taller than 'Royal' and 'Gila', respectively. Following adequate weed control during early growth, plants with these characteristics of leafiness, delayed leaf firing, and greater plant height shade the soil surface during the later stages of growth and inhibit weed growth in late summer. The problem of green weed material in combine-harvested seed can be drastically reduced by this growth habit.

Flower color is yellow during bloom and orange when dry. Heads are medium-sized, average 2.6 cm in diameter, and contain about 35 seeds per head. Seed weight averages 2.7 g/100 seeds. Bracts extend above the head and guard seeds from feeding birds.

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[2] Research agronomist, ARS-USDA, Phoenix, AZ 85040.