Registration of Germplasms

REGISTRATION OF ML-48-65 WHITE CLOVER GERMPLASM
(Reg. No. GP 8)

D. A. Cooke and L. G. Sonmor

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.

REGISTRATION OF NINE GERMPLASM LINES OF NECTARILESS COTTON
(Reg. No. GP 27 to GP 35)

William R. Meredith, Jr. and R. R. Bridge

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.

<table>
<thead>
<tr>
<th>Reg. No.</th>
<th>Identification</th>
<th>Parentages</th>
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<tbody>
<tr>
<td>GP 27</td>
<td>DES 7A ne</td>
<td>'Stoneville 7A' × nectariless</td>
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<tr>
<td>GP 28</td>
<td>DES DK ne</td>
<td>'Dixie King' × nectariless</td>
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Eight of the strains, DES 7A ne, DES DK ne, DES 16 ne, DES 508 ne, DES 9608 ne, DES 413-66 ne, DES 3967 ne, originated from a backcross program that included the nectarless trait into Stoneville 7A, Dixie King, Smoothleaf, Deltapine 16, Stoneville 508, New Mexico 9608, Coker 413-66, and PD 3967, respectively. The first four are the nectarless bulk of approximately 50 BCgF. plants. The remaining five are the bulk of a similar number of BCgF plants. The ninth nectarless strain, DES 24-8 ne, is a nectariless plant selection from the DES 16 ne backcross program.

Nectarless cotton is caused by the double recessive genotype (ne ne, n-fie ne) and has no extrafloral nectaries on either the leaves or floral parts. Therefore, intercrossing with nectarless stock such as these produces only nectarless plants.

Nectarless cottons have been reported to suffer from infections of both tarnished plant bugs Lygus lineolaris (Palisot de Beauvois) (1, 3) and cotton fleahoppers, Pseudatomoscelis seriata (Beauvois) (1, 3), and to reduce damage to bollworms, Pectinophora gossypiella (Saunders) (4). The extracellular flower and boll nectaries also reduce boll rot caused by organisms entering through the nectaries (1). The yield and fiber properties of nectarless cottons are, in general, equal to their nectaried recurrent parents (1).

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

REFERENCES


REGISTRATION OF B68195-25 SAFFLOWER GERMPLASM
(Reg. No. GP 13)

G. H. Abel

B68195-25 safflower (Carthamus trinctorius) was developed cooperatively by the ARS-USDA and the Arizona Agric. Exp. Stn. It was released 11 February 1975. It develops heavy foliage, with lower leaves that are green throughout the flowering period. Other cultivars begin lower-leaf firing in early flower. Plant height averages 110 cm which is about 10 and 20 cm taller than 'Royal' and 'White Royal', respectively. Following adequate weed control during the later stages of growth and inhibition of weed growth in late summer, the yields and maturity characteristics are acceptable to the grower.