REGISTRATION OF GERMLASMS

REGISTRATION OF C-20 ZIGZAG CLOVER GERMPLASM
(Reg No. GP 28)

Noel Faust and Heinz Gasser

C-20 zigzag clover (Trifolium medium L.) germplasm pool was developed by six cycles of recurrent selection on material originating from Canada, Yugoslavia, and the USSR. Fertility, as measured by the percentage of florets setting seed, was increased from 7 to 15%. C-20 is winterhardy and intermediate in maturity. By the 2nd year of growth average spread and height of spaced plants was 0.66 m and 15 cm, respectively. Over 94% of the plants were semi-erect for growth habit. Average forage yield over 11 station-years was 4,781 kg/ha. C-20 flowers profusely and flower color ranges from pale to dark red. Cuttings from the 50 best ecotypes were grown to develop a composite of Upland cotton male sterile lines. These lines were crossed onto male sterile segregates from three of the six tolerant to male sterility lines with G. harknessii cytoplasm. In addition to the previously identified fertility restorer factor from G. harknessii, DES-146-C possesses a strong fertility-restorer gene which appears to be stable under environmental stress. Seed for the present release is from F7 generation of the intercross population produced by six cycles of recurrent selection on material originating from Canada, Yugoslavia, and the USSR.

REFERENCES


REGISTRATION OF DES-146-C COTTON GERMPLASM
(Reg. No. GP 155)

Vesta C. Meyer

DES-146-C is a cotton (G. hirsutum L.) germplasm developed at the Delta Branch of the Mississippi Agric. and Forestry Exp. Stn., Stoneville, MS 38776. DES-146-C possesses a strong fertility-restorer gene useful for producing hybrid cotton based on the Brandegee cytoplasmic male sterility. DES-146-C is derived from a cross in which the male parent was an F1 hybrid between G. hirsutum ‘M8’ and G. arboreum (Standley) Skovsted, and the female parent had G. hirsutum germplasm and a complex pedigree that includes backcrosses to Upland cotton. The resulting male-sterile lines with G. harknessii cytoplasm were used as a male-sterile parent in the development of a high yielding, male-fertile hybrid. The resulting hybrid possesses a strong fertility-restorer gene from G. harknessii. In test-crosses grown in 1979, it produced progeny from 95% of the plants. DES-146-C possesses a strong fertility-restorer gene which appears to be stable under environmental stress. Seed for the present release is from F7 generation of the intercross population produced by six cycles of recurrent selection on material originating from Canada, Yugoslavia, and the USSR.

REFERENCES

3. 'Geneticist, Delta Branch, Mississippi Agric. and Forestry Exp. Stn., Stoneville, MS 38776.

REGISTRATION OF THREE GERMPLASM LINES OF COTTON
(Reg. No. GP 156 to GP 158)

R. R. Bridge

Three breeding lines of cotton (Gossypium hirsutum L.) germplasm (GP 156), DES 04-11 (GP 157) and DES 04-606 (GP 158) with glyphosate tolerance were developed at the Delta Branch of the Mississippi Agric. and Forestry Exp. Stn., Stoneville, MS 38776. DES 04-11 (GP 157) and DES 04-606 (GP 158) have been selected for resistance to the herbicide glyphosate.

REFERENCES

3. ‘Geneticist, Delta Branch, Mississippi Agric. and Forestry Exp. Stn., Stoneville, MS 38776.