lower than ND474), ND304W was released as a source of early maturity in white dent breeding programs. This inbred has not been evaluated for resistance to specific insects or diseases or for tolerance to specific herbicides. Breeder seedstocks are maintained by the North Dakota Agricultural Experiment Station and can be obtained in germplasm quantities (25 kernels) from H. Z. Cross, Agronomy Dep., North Dakota State Univ., Fargo, ND 58105.

H. Z. CROSS (1)

References and Notes

1. Professor of agronomy, North Dakota State Univ., Fargo, ND 58105.

REGISTRATION OF TIFTON-8 PEANUT GERMPLASM

TIFTON-8 (Arachis hypogaea L. subsp. hypogaea var. hypogaea) (Reg. no. GP 39) was developed and released cooperatively by USDA-ARS, and the Virginia and Georgia Agricultural Experiment Stations. Tifton-8 has resistance to Cylindrocladium black rot caused by Cylindrocladium crotalariae (Loos) Bell and Sobers (1,10,11), leafspots caused by Cercospora arachidicola Hori and Cercosporidium personatum (Bert. & Curt.) Deighton (11), southern corn rootworm (Diabrotica undecimpunctata howardi Barber) (2), tobacco thrips (Frankliniella fusca Hinds) (2,5,6,7), velvetbean caterpillar (Anticarsia gemmatalis Hubner) (4), and drought (3,4). The larger than average root system (volume or dry weight) may contribute to its ability to escape drought (3). The genotype is also less susceptible than the major cultivars 'Florigiant' and/or 'Florunner' to corn earworm (Heliothis zea Boddie) (5,6,7), Diplodia collar rot caused by Diplodia gossypina Cooke (12), and Aspergillus parasiticus Speare (8). These pathogens, insects, and drought are of economic importance in the major peanut producing states. Such a wide degree of multiple pest resistance and stress tolerance will make Tifton-8 useful in most peanut breeding programs.

Tifton-8 originated as a pure-breeding virginia-type plant found in 1961 in a spanish-type introduction (PI 261976) from Paraguay. Progeny from the plant were maintained by bulking in succeeding generations. Tifton-8 is a large-seeded virginia-type peanut with a spreading-bunch growth habit. Seed have a tan seedcoat color, and average 9% fewer g/100 seed than Florigiant (78 g vs. 83 g). Pods have moderate constriction and reticulation, slight pubescence, and have slightly fewer fancy pods than Florigiant (80% vs. 86%). Two-seeded pods are most frequent, but a few single-seeded and an occasional three-seeded pod occur. Tifton-8 matures in 110 days from emergence. It has purple flowers, brown pubescence, brown pods, and seeds with dull yellow coats and black hilas. It is 8 days earlier than 'Century'. In comparison with 1983. It was evaluated in Preliminary Test IIA of the Uniform Soybean Tests, Northern states during 1983.

SOYBEAN [Glycine max (L.) Merr.] line LN80-7579 (Reg. no. GP 51) was released as parent stock for soybean genetics programs because it has a high resistance to brown stem rot (BSR) [caused by Helminthosporium oryzae (Berk.) Sacc. ex. C.A. Clark] in Illinois. It was selected at the Illinois Agric. Experiment Station cooperatively with the University of Illinois. LN80-7579 is an F₄ plant selection from 'Century' × A76-304020 which was made at the Illinois Agric. and Home Economics Experiment Station. It is a BSR resistant line selected from the cross AP68-1016(XL15 × 'Calland'). AP68-1016 is from a line moderately resistant to BSR from Clark × P184946-2. L15 is a high-yielding single-seeded line selected from the backcross 'Wayne' × L15. The F₄ and F₅ generations were advanced.