funds appropriated to the OARDC-OSU and the USDA-ARS. The mention of firm names or trade products does not imply that they are endorsed or recommended by OSU or the USDA over other firms or similar products not mentioned. Registration by CSSA. Accepted 31 Mar. 1994. *Corresponding author.

Published in Crop Sci. 34:1418-1419 (1994).

CROP REGISTRATIONS

Registration of OhS12(Cl) Maize Germplasm

OhS12(Cl) is a maize (Zea mays L.) synthetic population (Reg. no. GP-296, PI 573100) developed by the Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, OH 44691. Date of release was 13 Dec. 1991.

OhS12(Cl), a broad-based synthetic population, was developed by crossing OhS3267LAN with the Arizona Arid Environment Maize Germplasm population (AAEMG) (1). OhS3267LAN is an unreleased synthetic population comprised of 24 pre-1950 U.S. Corn Belt inbreds, primarily of 'Reid Yellow Dent' and 'Clarage' origin, and nine U.S. 'Lancaster Surecrop'-derived inbreds. The AAEMG population is a composite population consisting of diverse land races collected on the Hopi, Navajo, and Papago Indian reservations during the period 1950 to 1956. Individual plants of OhS3267LAN and AAEMG were selected for drought tolerance, low plant and ear height, grain moisture, resistance to root and stalk lodging, resistance to foliar and ear diseases, prolificacy, and minimal tillering, near Wooster, OH, in 1988 at approximately 1 and 5% selection intensity, respectively. Thirty-six full-sib (FS) progenies from selected OhS3267LAN plants, and 54 FS progenies from AAEMG were selected for the same traits, except drought tolerance, in Puerto Rico in 1988-1989. Thirty selected OhS3267LAN FS progenies and 22 FS AAEMG progenies were selected for intercrossing. Each AAEMG progeny row was crossed with at least one, and as many as four, OhS3267LAN FS progenies.

A total of 70 OhS3267LAN × AAEMG FS intercrosses were planted near Wooster, OH, in 1983, and selection pressure was exerted for the agronomic characteristics selected in the preceding winter nursery. A total of 32 FS intercrosses were crossed with Corn Belt adapted germplasm to increase the proportion of Corn Belt-adapted germplasm in the breeding material to 75%. Twenty-three intercrosses were made with inbred W552, and 31 intercrosses with the synthetic population [Early Lancaster × MOSQB (Cycle 1)] released by South Dakota State University. The hybrids were self-pollinated in the greenhouse, and 84 S0 populations were evaluated in two replicated performance tests in 1990 near Wooster, OH. Forty-four populations were derived from crosses to the Early Lancaster synthetic and 40 were derived from crosses to inbred W552. Twelve S0 populations were selected (15% intensity) for yield, lodging resistance and grain moisture. Five selected populations were derived from the Early Lancaster synthetic and seven were derived from the inbred W552. Five S1 progenies were derived from the selected populations and self-pollinated. These progenies were advanced through three generations of inbreeding to produce Cycle 2. The seven most lodging-prone S2 populations were selected for commercial production in heat and drought stress-prone production environments. Breeder seed will be distributed in 500-g (0.5-kg) lots by the Maize Germplasm Service, Department of Agronomy, OSU, OARDC, 1680 Madison Ave., Wooster, OH 44691. Recipients of seed are asked to make appropriate recognition of the source of the germplasm if it is used in the development of a new cultivar, germplasm, parental line, or similar products not mentioned. Registration by CSSA. Accepted 31 Mar. 1994. *Corresponding author.

Published in Crop Sci. 34:1418-1419 (1994).

Registration of 19 Second-Cycle Midaltitude Maize Germplasm

Nineteen tropical midaltitude maize (Zea mays L.) germplasm lines (Reg. no. GP-270 to GP-288, PI 561618) (Table 1) were jointly developed by the Institute of Tropical Agriculture (ITA) and The Ohio State University (OSU). The germplasm lines were developed to increase the proportion of such germplasm in the breeding material to 75%. These lines were advanced through three cycles of inbreeding to produce Cycle 2. The seven most lodging-prone S2 populations were selected for commercial production in heat and drought stress-prone production environments. Breeder seed will be distributed in 500-g (0.5-kg) lots by the Maize Germplasm Service, Department of Agronomy, OSU, OARDC, 1680 Madison Ave., Wooster, OH 44691. Recipients of seed are asked to make appropriate recognition of the source of the germplasm if it is used in the development of a new cultivar, germplasm, parental line, or similar products not mentioned. Registration by CSSA. Accepted 31 Mar. 1994. *Corresponding author.