W-504 is resistant to stem rust races common to the soft wheat region and although it has a susceptible reaction to leaf rust, it is not usually seriously infected in the field. W-504 shows resistance to Wheat Spindle Streak virus, Hessian fly race E, and Soil-borne mosaic virus. Studies in South Dakota have shown W-504 to have resistance to Barley Yellow Dwarf virus showing considerably less damage than 'Blueboy,' Funk Seeds Int., will be the sole source of W-504. United States Variety Protection Act registration is pending.

Author acknowledges the quality evaluation contributions of M. L. Kiesewetter, manager of Funk Seeds Int., will be the sole source of registered seed.

Registration of Germplasms

REGISTRATION OF C-2 KURA CLOVER GERMPLASM
(Reg. No. GP 7)
C. E. Townsend

C-2 KURA clover (Trifolium ambiguum Bieb.) is the first generation progeny of 20 plants selected for vigor, susceptibility to nodulation, relatively dark-green color, and hexaploid condition from a 1,200 spaced-plant nursery. Sources of these plants were listed earlier. The number of nodules on an individual plant ranged from relatively few to many, but their color was reddish brown, which indicated the presence of the red hemoglobin pigment that is associated with effective N fixation. All parents possessed the leaf-mark, but the intensity was variable. Date of flowering ranged from June 7 to 21, and flowering was profuse. Plant spread was rapid under irrigation, and there was no evidence of foliar or root diseases. The initial selection for susceptibility to nodulation was done in the field at Beltsville, Maryland; all other selections and observations were made in the field at Fort Collins, Colo. The selected clones were grown in isolation, and an equal quantity of seed from each clone was bulked to form C-2.

C-2 was developed and released cooperatively by the Colo. State Univ. Exp. Stn. and the ARS, USDA. Small quantities (< 10 g) may be requested from the Crops Res. Lab., ARS, USDA, Colo. State Univ., Fort Collins, CO 80523.

REGISTRATION OF GT-CEW-RS8 MAIZE GERMPLASM
(Reg. No. GP 51)
W. V. Campbell, D. A. Emery, and J. C. Wynne

GT-CEW-RS8 is a mixed white and yellow kernel maize (Zea mays L.) synthetic developed cooperatively by the Ga. Coastal Plain Exp. Stn. and the ARS, USDA and was released as a breeding population in 1970 as a source of resistance to the corn earworm (Heliothis zea (Boddie)). Breeder seed of C-2 was developed and released by the Southern Grain Insects Res. Lab. at Tifton, GA 31794.

The genetic base of this synthetic was composed of 423 single crosses from 34 southern adapted inbred lines with highest levels of resistance to the earworm, tasseled, and allowed to random-pollinate to multiple testers. In the next generation, about 200 plants among the 66 progeny rows were selfed to each of two single-cross testers (GT112 × L578 and F44 × C-2). Top crosses were evaluated for earworm resistance. About 200 selfed rows of the 200 selfed plants were planted, detasseled, and pollinated by male rows of the same 200 progeny rows. At harvest, seed was saved from 20 detasseled rows (10%) that were identified with the best respective top cross performance. In addition, desirable agronomic traits were practiced within these selected rows. In the next generation, plants grown from the progenies were selfed and top crossed to the same single-cross testers, and the selection process was repeated. The selection resulted from six cycles of this type of selection, starting with the original 423 single crosses.

The GT-CEW-RS8 synthetic has ear height, ear length, and good yield potential. Cob color is to white, and ears have either 14 or 16 kernel rows. Standability and seed quality are fair. Prolificacy is excellent under favorable conditions. Maturity classification is about early AES 1200.