is midwide and middeep. The milling and baking quality of W-504 is satisfactorily meets the standards for soft red winter wheat.

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 'Bluestem,' 'Abe,' and 'Knov 62.'

Funk Seeds Int., will be the sole source of registered seed of W-504. United States Variety Protection has been applied for.

**REGISTRATION OF C-2 KURA CLOVER GERMLASM**

(Reg. No. GP 7)

C. E. Townsend

C-2 kura clover (*Trifolium ambiguus* 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.


3 Contribution of ARS, USDA, in cooperation with the Colo. State Univ. Exp. Stn. and the ARS, USDA. Small quantities of seed may be requested from the Crops Res. Lab., ARS, USDA, Colo. State Univ., Fort Collins, CO 80523.

**REGISTRATION OF GT-CEW-RS8 MAIZE GERMLASM**

(Reg. No. GP 51)


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 (*Heliotris zea* [Boddie]). Breeder seed of the synthetic is maintained 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 resistance to earworm injury. Among the 423 single crosses, 66 with the highest levels of resistance to the earworm were selected, detasseled, and allowed to random-pollinate with the nonselected crosses. In the next generation, about 200 randomly selected plants among the 66 progeny rows were selfed and top crossed to each of two single-cross testers (GT112 × L578 and F44 × F6). Top crosses were evaluated for earworm injury. Progeny rows of the 200 selfed plants were planted in an isolated block, detasseled, and pollinated by male rows of random plants of the same 200 progeny rows. At harvest, seed was saved from the 20 detasseled rows (100 g) that were identified with the best respective top cross performance. In addition, selection for desirable agronomic traits was practiced within selected progeny rows. In the next generations, plants grown from these selected progenies were selfed and top crossed to the same single cross testers, and the selection process was repeated. GT-CEW-RS8 resulted from six cycles of this type of selection since the evaluation of the original 423 single crosses.

The GT-CEW-RS8 synthetic has earworm resistance, suitable ear height, and good yield potential. Cob colors range from red to white, and ears have either 14 or 16 kernel rows. Standability and seed quality are fair. Prolificacy is common when grown under favorable conditions. Maturity classification is about early AES 1200.

**REGISTRATION OF FOUR GERMLASM LINES OF PEANUTS**

(Reg. Nos. GP 5 to GP 8)

W. V. Campbell, D. A. Emery, and J. C. Wynne

'NC 10247,' 'NC 10272,' 'NC 15729,' and 'NC 15745' are four Virginia-type peanut (*Arachis hypogaea* L.) lines developed by the N.C. Agric. Exp. Stn. at Raleigh, and released in 1975.

NC 10247 (Reg. No. GP 5) and NC 10272 (Reg. No. GP 6) are late-generation selections from crosses 'F, #18' × 'Recurved' and 'NC Ac 4508' × 'Recurved,' respectively. F1, #18 and NC Ac 4508 are F2 segregates from 'NC Bunch' × 'PI 121007,' while 'Recurved' is an irradiation-produced macromutant selected from an inbred line, 'NC 4.' Final hybridizations were made in 1958.

NC 15729 (Reg. No. GP 7) and NC 15745 (Reg. No. GP 8) are late-generation selections from reirradiated progeny of 'C12' × 'A18.' C12 is an F3 segregate from NC Bunch × PI 121007, and A18 is an F3 segregate from NC 4 × 'Spanish 2B.' Final hybridizations were made in 1949, 'NC 15729' was selected after three irradiation treatments and NC 15745 after four irradiation treatments.

These four peanut germplasm sources are resistant to the potato leafhopper (*Empoasca fabae* Harris). The potato leafhopper attacks peanuts wherever grown in the United States.

1 Contribution of ARS, USDA, in cooperation with the Univ. of Ga. Coll. of Agric. Exp. Stns., Coastal Plain Station, Tifton, GA 31794. Received Apr. 14, 1975.

2 Research geneticist, ARS, USDA, Tifton, GA 31794; research agronomist, ARS, USDA, Beltsville, MD 20705; professor of agronomy, Purdue Univ., Agric. Exp. Stn., Dep. of Agron., Lafayette, IN 47907; research entomologist, ARS, USDA, Stillwater, OK 74074; and research entomologists, ARS, USDA, Tifton, GA 31794, respectively.

3 Registered by the Crop Sci. Soc. of Am. Received Apr. 18, 1975.

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