COLORADO AGRICULTURAL EXPERIMENT STATION
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO

REGISTRATION OF THREE PINTO BEAN BREEDING LINES

The Colorado Agricultural Experiment Station announces the release of three pinto bean (Phaseolus vulgaris L.) breeding lines. They are CO-22625, CO-33142, and CO-81-12001.

CO-22625 is a high-yielding line characterized by a semivine growth habit (Type III), from the cross Olathe/Nebl made in 1978. Mean plant maturity during 3 years at Fort Collins, CO was 92 d compared to 94 d for 'UI 114'. Seed weights and yields were 30.3 g 100^-1 seeds and 2890 kg ha^-1 for CO-22625, and 30.7 g 100^-1 seeds and 2496 kg ha^-1 for UI 114 respectively, based on 10 location-years of testing in eastern Colorado. Rust [Uromyces phaseoli (Reben) Wint. Var. typica Arth.] reaction is similar to 'Bill Z'.

CO-33142 is a large-seeded, semivine (Type III) line from the crossing scheme 16/2207(5517-2)//A56240(6B)//13B/M067(7016) made in 1978. Mean plant maturity during 1984-87 at Fort Collins, CO was 96 d which was equal to UI 114. Seed weights and yields were 36.0 g 100^-1 seeds and 2367 kg ha^-1 for CO-33142, and 30.7 g 100^-1 seeds and 2496 kg ha^-1 for UI 114 respectively, based on 10 location-years of testing in eastern Colorado. White mold (WM) [Sclerotinia sclerotiorum (Lib.) deBary] variety trial results from the University of Nebraska, 1988, indicated that CO-33142 had 50% WM infection compared to the mean of 59% among 26 entries tested. Rust reaction is similar to Bill Z.

CO-81-12001 is an upright growth habit (Type II) line from the cross Ouray/Aurora (7342-1) made in 1977. This line is unique and commercially unacceptable in dry pack sales in that it has a pink hilar ring rather than the normal yellow. Mean plant maturities, seed weights and yields were 95 d, 32.17 g 100^-1 seeds, 2530 kg ha^-1 for CO-81-12001 compared to 95 d, 36.40 g 100^-1 seeds and 2853 kg ha^-1 for UI 114 respectively, during 1984-85 at 10 location-years in Colorado.

Seed stocks will be maintained by the Colorado Agricultural Experiment Station for five years. Requests for seed should be addressed to Mark Brick, Department of Agronomy, Colorado State University, Fort Collins, CO 80523, FAX 303-491-0564.


References and Notes