REGISTRATION OF B75 GERMPLASM LINE
OF MAIZE (ZEA MAYS L.)
(Reg. No. GP 62)

W. A. Ruthless

The germplasm B75 is a yellow dent line selected from Iowa Corn Borer Synthetic No. 3, a synthetic developed by intermating 16 inbred lines of U.S. North Central Corn Belt maturity that had good resistance to leaf feeding by the European corn borer. This single-eared line has been developed by selection and self pollination in the ear-to-row system for eight generations. The tassel has only one or two lateral branches, but the pollen production is satisfactory. Silk emergence, which occurs 2 to 3 days after the first shedding of pollen, is 2 to 3 days earlier than that of inbred B14A. The seed is relatively large and yield is good. It is highly resistant to leaf feeding by first-brood European corn borer, but is moderately susceptible to leaf-sheath and collar feeding by second brood. It has good field resistance to sorghum downy mildew, moderate resistance to southern corn leaf blight (race O) and northern corn leaf blight, and low-level resistance to maize dwarf mosaic and maize chlorotic dwarf. Evaluations in single-crosses have shown that B75 contributes average yield to hybrids, but does not contribute good root strength. Although it has good resistance to stalk rots, stalk strength in hybrids is only average. Maturity classification is late AES700. Breeder seed is maintained by the Iowa Agric. and Home Economics Exp. Stn.


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REGISTRATION OF OAT GERMPLASM
(Reg. Nos. GP 7 and GP 8)

Paul G. Rothman

Two oat lines (Avena sativa L.) have been released as germplasm resistant to stem rust (Puccinia graminis Pers. f. sp. avenae Eriks. and E. Henn.).

Reg. No. Experimental Designation C.I. Number

| GP 7 | MN 72106-124 | 9222 |
| GP 8 | MN 711029B | 9221 |

These lines were developed cooperatively by the Minnesota Agric. Experiment Station and ARS-USDA.

MN 72106-124 was selected from ‘Kyto’/‘SES Sel. 52.’ The line is a bulk of 19 F2 progeny rows derived from individual F1 plants and has the combination of stem rust genes pg-11 and pg-12. The adult plant type of stem rust resistance conferred by gene pg-11 of ‘SES Sel. 52’ (CIA 3034) was first reported in

Three white flowering processing breeding lines of Avena Sativum L.) were released by the College of Agriculture State Univ., Pullman, in 1975. Each line has a single dominant genes for resistance to races 1, 2, and 5 of Fusarium oxysporum Schlecht. f. sp. pisi (van Hans).

WSU (Reg. No. GP 12), a freezer pea, is a single crosses between ‘PI 203066’ (resistant to races 1 and 2) and WNR Hylite (Gallatin Valley variety resistant to race 2). This line, in the F2 generation, is approximately potted and blooms at the 15-15th node.

WSU 12 (Reg. No. GP 13), also a freezer pea, P.I. cross [(169606 × 164837) × (169606 × 162693)] Hylite. The multiple P.I. parent is the result of crosses at the Dep. of Plant Pathology, Univ. of Minnesota, resistant to races 2 and 5. WSU 12 is double podded, blooms at the 13-15th node, is in the F2 generation, segregating for resistance to race 2.

WSU 23 (Reg. No. GP 14), is a canning seed, two way P.I. cross (164837 × 169606 × New Brunswick). The line is in the F2 generation, resistant to races 1, 2, and 5.