

PI 536541-continued

**donor id:** R32. **origin:** Canada. **pedigree:** Mutation (M2 plant) from a population of OAC Rico treated with ethyl methane sulphonate. **other id:** GP-88. **group:** CSR-OTHER LEGUMES. **remarks:** Mutant germplasm with improved nodulation and nitrogen fixation in presence of nitrate-nitrate tolerant super-nodulation (ntsn). Recessive gene nod controls the nitrate super-nodulation in the shoot. Growth habit indeterminate, similar to OAC Rico. Nodulation superior. Hypocotyl green. Flowers white. Pod light brown at maturity. Seeds white with dull coat. Annual. Breeding Material. Seed.

PI 536542. *Phaseolus vulgaris* L. FABACEAE Pinto bean

**Donated by:** Kelly, J.D., Dept. of Crop and Soil Sciences, Michigan State University, East Lansing, Michigan, United States. **remarks:** Developed cooperatively by the Michigan Agric. Exp. Station and USDA-ARS and released in 1989. Received November 15, 1989.

**donor id:** P86299. **origin:** United States. **cultivar:** SIERRA. **pedigree:** Mutation (M2 plant) from a population of OAC Rico treated with ethyl methane sulphonate. **other id:** CV-84. **group:** CSR-OTHER LEGUMES. **other id:** PVP 9000108. **source:** Pending. **group:** PVPO. **remarks:** Upright, midseason type. Plants type II with short vine. Single stem tendency under high plant density. Plants 20cm taller than commercial cultivars with improved lodging resistance. Pod placement high. Yield high. Maturity 95 days. Direct machine harvest. Seed weight 39g/100. Moderate resistance to anthracnose. Tolerant to halo blight. Resistant to rust. Field tolerance to potato leafhopper. Annual. Cultivar. Seed.

PI 536543. *Hordeum vulgare* L. POACEAE Barley

**Donated by:** Ullrich, S.E., Dept. of Agronomy & Soils, Washington State University, Johnson Hall 201, Pullman, Washington, United States. Received December 01, 1989.

**donor id:** Sel. 1574-77. **origin:** United States. **cultivar:** HUNDRED. **pedigree:** Sel. from 2196-68(Luther/Hudson)/2509-65(Alpine/Svalof//WW/TBM-305). **other id:** WA 066739. **remarks:** Semi-dwarf, 6-rowed non-malting type. Yield high. Lodging resistance good. Winterhardiness very good. Heads club, erect. Awns rough. Aleurone white. Adaptation dryland or irrigated conditions in eastern Washington and adjacent areas of Idaho and Oregon. Used for feed. Composition favorable. Winter Annual. Cultivar. Seed.