

- PI 564814 **origin:** United States. **developed:** M.F. Kolding. **origin institute:** Oregon Agric. Exp. Station, Columbia Basin AREC, Pendleton, Oregon United States. **origin institute id:** FW88-PA-004. **pedigree:** Bulk selection from BYDV-Root Rot-Early Seeded complex Field P-A, HAREC AES OSU. **remarks:** Mid-short, mid-season, winter. Spike awnleted, lax. Glume white. Kernel mid-long, brown, semi-hard, elliptical. Germ small, Crease wide, deep. Cheek tends to angular. Brush small, medium long. Excellent yield, and tolerance to BYDV and root diseases. Fair hardiness. Good test weight. Poor quality. Winter Annual. Breeding Material. Seed.
- PI 564815 **origin:** United States. **developed:** M.F. Kolding. **origin institute:** Oregon Agric. Exp. Station, Columbia Basin AREC, Pendleton, Oregon United States. **origin institute id:** FW88-PA-010-7. **pedigree:** Bulk selection from BYDV-Root Rot-Early Seeded complex Field P-A, HAREC AES OSU. **remarks:** Mid-short, mid-season, winter. Spike awned, linear near oblong, lax, erect spikes tend to shorter than 10cm. Awns white mid-long to 10cm. Glume white, mid-long, mid-wide. Shoulder wanting. Beak narrow, acuminate 2-8mm long. Kernel soft, brown, short, tend to ovate. Crease mid-deep, narrow. Cheeks rounded. Germ mid-size. Brush long mid-size. Excellent yield and tolerance to root diseases and BYDV. Winter Annual. Breeding Material. Seed.
- PI 564816 **origin:** United States. **developed:** M.F. Kolding. **origin institute:** Oregon Agric. Exp. Station, Columbia Basin AREC, Pendleton, Oregon United States. **origin institute id:** FW88-PA-101-2. **pedigree:** Bulk selection from BYDV-Root Rot-Early seeded complex Field P-A, HAREC AES OSU. **remarks:** Mid-short, mid-late, winter. Spike awnleted, lax. Glume white. Kernel brown/red, semi-hard, mid-short, elliptical. Germ small. Crease wide, mid-deep. Cheeks tend to angular. Brush medium, mid-long. Excellent yield and tolerance to root diseases and BYDV. Winter Annual. Breeding Material. Seed.
- PI 564817 **origin:** United States. **developed:** M.F. Kolding. **origin institute:** Oregon Agric. Exp. Station, Columbia Basin AREC, Pendleton, Oregon United States. **origin institute id:** FW88-PA-E9001. **pedigree:** Bulk selection from BYDV-Root Rot-Early Seeded complex Field P-A, HAREC AES OSU. **remarks:** Mid-short, mid-season, winter. Spike awnleted, lax. Glume white, narrow, mid-long. Shoulder narrow, tend to elevate. Kernel mid-long, red/brown, semi-hard, elliptical. Germ small. Crease wide, mid-deep. Cheeks tend to rounded. Brush small, short. Excellent yield and tolerance to root diseases and BYDV. Winter Annual. Breeding Material. Seed.