PI 559480-continued

origin: United States. **developed:** C.C. Jan. **origin institute:** Agricultural Research Service -- USDA, Northern Crop Science Laboratory, Fargo, North Dakota 58105 United States. **cultivar:** TETRA P21. **pedigree:** Colchicine treatment of P21. Sib-pollination of chromosomally doubled heads or sectors of heads produced 4 X P21. Self-pollination of sib-pollination of 4 X P21 to produce seed. **other id:** GS-1. **source:** Crop Sci. 32(6):1520 1992. **group:** CSR-SUNFLOWER. **restricted:** CSR. **remarks:** Self-compatible. 47% pollen stainability and averaged eight seeds per head upon self- or sib-pollination. Seeds black with few grey stripes, 1000 seed weight of 66g. Reduced meiotic chromosome pairing and cytologically less stable than diploid P21 progenitor. Spring Annual. Genetic Material. Seed.

PI 559481. Helianthus annuus L. ASTERACEAE Sunflower

Donated by: Jan, C.C., Agricultural Research Service -- USDA, Northern Crop Science Lab, Fargo, North Dakota 58105-5677, United States; **and** North Dakota Agr. Exp. Sta.. **remarks:** Sunflower Amphiploid Germplasm ANN-BOL-AMP1. Received January 10, 1991.

origin: United States. **developed:** C.C. Jan. **origin institute:** Agricultural Research Service -- USDA, Northern Crop Science Laboratory, Fargo, North Dakota 58105 United States. **cultivar:** ANN-BOL-AMP1. **pedigree:** Colchicine treatment of P21 X H. bolanderi (acc. 096-009), F1 seedlings. Sib-pollination of chromosomally doubled F1 heads to produce F2 (amphiploid) seeds. Sib-pollination of F2 amphiploids to produce F3 amphiploids. **other id:** GP-176. **source:** Crop Sci. 32(6):1513 1992. **group:** CSR-SUNFLOWER. **restricted:** CSR. **remarks:** Morphologically intermediate to its parents, P21 and H. bolanderi. Possesses 50% cultivated H. annuus and 50% H. bolanderi nuclear genes in P21 (H. annuus) cytoplasm. Annual, branched, fertile, self-incompatible. Plant height 2.0m. Seeds black with white stripes, 1000 seed weight of 51g. Spring Annual. Breeding Material. Seed.

PI 559482 to 559483. Sorghum bicolor (L.) Moench POACEAE Grain sorghum

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., University of Georgia, Griffin, Georgia 30223-1797, United States; **and** Colorado Agr. Exp. Sta.. **remarks:** GC103 and GC104 Sorghum Germplasms. Received January 10, 1991.