PI 531502 to 531503. Helianthus annuus L. ASTERACEAE Sunflower

Donated by: Auld, D.L., Department of Plant, Soil and Entomological Science, University of Idaho, Moscow, Idaho, United States. **remarks:** Developed and released by University of Idaho in cooperation with USDA-ARS Oilseeds Research Group and SIGCO Research Inc. Received May 3, 1989.

PI 531502 **origin:** United States. **pedigree:** Composite of 13 S4 families from populations similar to those used to develop ND-EBLYS. **other id:** GP-108. **group:** CSR-SUNFLOWER. **other id:** ID-EBLYC. **remarks:** Early B-line yield composite population with high yield, early maturity, and adaptation to cool regions of NW United States. Across two locations, plants short (63-127cm), vigorous, early flowering (58-66 days). Oil seed content (dry weight basis) ranged from 34.1 to 55.2% using NMR. S4 population has substantial variation in branching,expression of male sterility and other phenotypical characteristics. Annual. Breeding Material. Seed.

PI 531503 **origin:** United States. **pedigree:** Composite of 33 S4 families from populations similar to those used to develop ND-LRLYS. **other id:** GP-109. **group:** CSR-SUNFLOWER. **other id:** ID-LRLYC. **remarks:** Late R-line yield composite population with high yield, early maturity, and adaptation to cool regions of NW regions of NW United Stations. Across two locations, plants short (53-117cm), early flowering (57-61 days). Oil seed content (divb) ranged from 33.7 to 58.3% using NMR. S4 population has substantial variation in branching, expression of male sterility and other phenotypic characteristics. Annual. Breeding Material. Seed.

PI 531504. Medicago sativa L. FABACEAE Alfalfa

Donated by: Sorensen, E.L., USDA-ARS, Department of Agronomy, Kansas State University, Manhattan, Kansas, United States. **remarks:** Released by USDA-ARS and the Kansas Agricultural Experiment Station in March 1989. Received May 3, 1989.