

PI 560141 to 560147-continued

PI 560145 **origin:** United States. **developed:** J.F. Miller. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. **cultivar:** RHA 377. **pedigree:** RHA 299 / / Sorem HT 58 / RHA 801. **other id:** GP-173. **source:** Crop Sci. 32(5):1298 1992. **group:** CSR-SUNFLOWER. **restricted:** CSR. **remarks:** Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (*H. petiolaris*, French) cytoplasmic male sterility. Upper stem branched, multiple heads. Resistant reaction to downy mildew race 2 (*Plasmopara halstedii*). Oil content 525g kg-1. Plant height 123cm. 60-105 days from planting to plant stages R5.1 and R9.0. Breeding Material. Seed.

PI 560146 **origin:** United States. **developed:** J.F. Miller. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. **cultivar:** NMS 274. **pedigree:** BC5F4-derived sib-mated population between green, nuclear male-sterile plants and anthocyanin-pigmented, fertile plants. **other id:** GP-174. **source:** Crop Sci. 32(5):1298 1992. **group:** CSR-SUNFLOWER. **restricted:** CSR. **remarks:** Provides nuclear male-sterility sources for crossing and testcrossing. Available for use in sunflower breeding & hybrid development programs. Seeds produce approx. 50% green, sterile plants (tt,msms) & 50% anthocyanin-pigmented, fertile plants (Tt,MSms). Male sterility maintained by crossing green, sterile plants with anthocyanin-pigmented, fertile plants. Anthocyanin pigment detected in hypocotyl tissue when in V4 plant stage or in later stages in leaf venation. Anthers & stigmas also pigmented at anthesis. Small amount of pollen may be found on male-sterile plants. Breeding Material. Seed.