

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crops Research Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crops Research Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 02/14/1994.

PI 578008. Helianthus annuus L.

Breeding. RHA 386. GP-193. Pedigree - S6 fertility restorer line selected from population 82 Rom. R-line Bulk. Homozygous for resistance to Race 2 downy mildew (*Plasmopara halstedii*). Hybrids with cmsHA 89, cmsHA 821, and cmsHA 372 exhibited 160cm plant height, 66 days from planting to flowering, 104 days from planting to maturity, and oil content (dry weight basis) 476g kg⁻¹. Upper stem branching conditioned by a recessive gene. Genes for fertility restoration of PET1 cytoplasm male sterility.

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PI 578009. Helianthus annuus L.

Breeding. RHA 387. GP-194. Pedigree - F5-derived F7 fertility restorer line selected from cross RHA 274/83 Rom. R-line Bulk. Homozygous for resistance to Race 2 downy mildew (*Plasmopara halstedii*). Hybrids with cmsHA 89, cmsHA 821, and cmsHA 372 exhibited 168cm plant height, 63 days from planting to flowering, 103 days from planting to maturity, and oil content (dry weight basis) 478g kg⁻¹. Upper stem branching conditioned by a recessive gene. Genes for fertility restoration of PET1 cytoplasm male sterility.

PI 578010. Helianthus annuus L.

Breeding. RHA 388. GP-195. Pedigree - F5-derived F7 fertility restorer line selected from cross RHA 274/Felix. Homozygous for resistance to Race 2 downy mildew (*Plasmopara halstedii*). Hybrids with cmsHA 89, cmsHA 821 and cmsHA 372 exhibited 165cm plant height, 65 days from planting to flowering, 101 days from planting to maturity, and oil content (dry weight basis) 478g kg⁻¹. Upper stem branching conditioned by a recessive gene. Genes for fertility restoration of PET1 cytoplasm male sterility.

PI 578011. Helianthus annuus L.

Breeding. RHA 389. GP-196. Pedigree - S6 fertility restorer line selected from Cycle 3 of Downy Mildew Resistant R-line Synthetic (DMRRS). Homozygous for resistance to Race 2 downy mildew (*Plasmopara halstedii*). Hybrids with cmsHA 89, cmsHA 821, and cmsHA 372 exhibited 170cm plant height, 66 days from planting to flowering, 104 days from planting to maturity, and oil content (dry weight basis) 484g kg⁻¹. Significantly higher oil content than check hybrids-894 and cmsHA 821/RHA 274. Upper stem branching conditioned by a recessive gene. Genes for fertility restoration of PET1 cytoplasm male sterility.

The following were developed by William Branch, University of Georgia, Coastal Plain Experiment Station, Department of Agronomy, Tifton, Georgia 31793-0748, United States. Received 02/14/1994.

PI 578012. Arachis hypogaea L.

Genetic. CURLY-LEAF; Georgia Peanut GS-97. GS-3. Pedigree - Arose as aberrant off-type plant in progeny row of Chico/ Florigiant. Single