Sidney Selection 87-14-6 was selected in 1965 for Alternaria leaf spot (caused by *Alternaria carthami*) resistance from a 1964 bulk composite of 555 safflower introductions from the 1960 USDA-ARS safflower collection. S-208 was developed by Seedtec International, Woodland, CA, and has the *olol* gene that produces approximately equal amounts of linoleic and oleic acid, but the relative amounts of each fatty acid are greatly influenced by growing temperature. S-208 was developed by Seedtec International, Woodland, CA, and is a normal white hull seed variety and has the OLOL gene. A white flowered individual plant from S-208 was used as one of the parental lines. UC-1 was developed by the California Agricultural Experiment Station in 1966. It has the OLOL gene resulting in the first commercial high oleic acid safflower cultivar (2). Oleic Leed is a high oleic acid cultivar released by the USDA-ARS and the California Agricultural Experiment Station in 1974 (3). The high oleic acid gene olo in Oleic Leed was obtained from UC-1 crossed to Leed and backcrossed to Leed two times (4). Th-5 is a parental line developed by the ARS-USDA and the Utah Agricultural Experiment Station in 1970 and carries the ths gene pair that governs the reduced-pericarp trait. The line was released for use as a female parent in hybrid development programs. *C. nitidus* is a species related to *C. tinctorius* with 12 chromosome pairs. OL41-1 was obtained from A. L. Urie, ARS-USDA, in 1974. It is an individual plant selection with the partial hull trait and an iodine value of 141 (high linoleic acid content). This plant was obtained from a line segregating for linoleic gene OL and oleic gene ol. US-10 was developed by the ARS-USDA and the California Agricultural Experiment Station in 1959 and has the OLOL gene (5). A white flowered individual plant from US-10 was used as one of the parental lines.

Individual plant selections for oil quality were made during the F₁, F₂, F₃, F₄, and F₅ generations. Gas chromatograph determinations were made each generation to select for low total saturated fatty acids and over 80% oleic acid content. Montola 2000 was developed and released exclusively for Montana and the Dakotas and is recommended for dryland production in this region for the high oleic acid oil and birdseed market. The cooler climate of this region generally results in lower oleic acid percent than in warmer climates. Montola 2000 has been granted (PVP Certificate no. 900084).

**References and Notes**


**Registration of Montola 2001 Safflower**

'Montola 2001' (Reg. no. CV-22, PI 577808) safflower (*Carthamus tinctorius* L.) was developed at the Eastern Agricultural Research Center, Montana Agricultural Experiment Station, Sidney, MT as a cooperative effort with the Williston Research Extension Center, North Dakota Agricultural Experiment Station, Williston, ND. Montola 2001 was released by the Montana Agricultural Experiment Station in 1993.

Montola 2001 was tested as 87B3779 and derived from a single F₁ plant selection from the cross 'Frio'/'Sidney Selection 87-14-6' x a multi-cross involving '79AZ9543-1', 'S-204', 'S-208', 'UC-1', 'Oleic Leed', 'Th-5', *C. nitidus* Boiss, 'OL41-1', and 'US-10'. A total of 19 crosses with recurrent selections were made in the breeding of Montola 2001. Frio safflower, with the OLOL gene that produces high linoleic acid, was developed by the Arizona Agricultural Experiment Station and the USDA-ARS and released in 1965 (1).

Sidney Selection 87-14-6 was selected in 1965 for Alternaria leaf spot (caused by *Alternaria carthami*) resistance from a 1964 bulk composite of 555 safflower introductions from the 1960 USDA-ARS safflower collection. 79AZ9543-1 is an experimental white flowered high oleic acid line obtained in 1980 from the Arizona Agricultural Experiment Station.