

Safflower Variety Descriptions

| Variety | Origin ¹ | PVP ² | Hull Type ³ | Oil Type ⁴ | Irrigated Yield ⁵ | Dryland Yield ⁵ | Test Weight ⁵ | Oil ⁵ | Maturity | Tolerance ⁶ | |
|--------------|---------------------|------------------|------------------------|-----------------------|------------------------------|----------------------------|--------------------------|------------------|----------|------------------------|----|
| | | | | | | | | | | Alt | BB |
| Cardinal | MSU/NDSU | yes | N | high lino | v good | v good | high | fair | med | T | MT |
| Finch | MSU/NDSU | no | N | lino | good | v good | v high | fair | m early | MS | T |
| Hybrid 1601 | STI | yes | STP | high oleic | v good | v good | med | good | m late | MT | MT |
| Hybrid 9049 | STI | yes | N | high oleic | v good | v good | v high | fair | med | MT | MT |
| MonDak | MSU/NDSU | yes | N | high oleic | good | v good | high | fair | m early | T | MT |
| Montola 2000 | MSU/NDSU | yes | N | high oleic | m good | good | med | good | early | MS | MS |
| Montola 2001 | MSU/NDSU | yes | STP | high oleic | good | fair | med | good | med | MT | MT |
| Montola 2003 | MSU/NDSU | yes | N | high oleic | v good | v good | m high | good | m early | MT | MT |
| Montola 2004 | MSU/NDSU | yes | N | high oleic | good | good | m high | good | m early | MS | MT |
| Morlin | MSU/NDSU | yes | STP | high lino | v good | good | med | good | m late | T | T |
| Nutrasaff | MSU/NDSU | yes | RED | lino | good | good | med | high | med | T | MT |

¹ MSU = Montana State University, NDSU = North Dakota State University, STI = Safflower Technologies International

² PVP = Plant Variety Protection. "yes" indicates the variety is protected and the seed may be sold for planting purposes only as a class of certified seed (Title V option).

³ STP = striped, N = normal, RED = reduced.

⁴ Lino = linoleic.

⁵ Relative ratings of yield, test weight and oil will vary under conditions of moderate-severe disease infestation.

⁶ Alt = Alternaria leaf spot disease, BB = bacterial blight, S = susceptible, MS = moderately susceptible, MT = moderately tolerant, T = tolerant.

Safflower Variety Trial at Minot

| Variety | Days to Bloom | Plant Height | Test Weight | Oil Content | Seed Yield | | | | | |
|-----------------------|------------------|--------------|-------------|-------------|-----------------|------|------|--------|--------|--|
| | | | | | 2014 | 2015 | 2016 | 2 Year | 3 Year | |
| | DAP ¹ | inches | lbs/bu | % | pounds per acre | | | | | |
| Linoleic Types | | | | | | | | | | |
| Cardinal | 70 | 23 | 44.6 | 33.3 | 893 | 2185 | 2228 | 2207 | 1769 | |
| Finch | 69 | 24 | 44.5 | 35.4 | 686 | 2085 | 2378 | 2231 | 1716 | |
| NutraSaff | 69 | 25 | 36.9 | 42.7 | 703 | 1834 | 1545 | 1689 | 1361 | |
| Oleic Types | | | | | | | | | | |
| Hybrid 1601 | 69 | 25 | 39.7 | 34.3 | 693 | 2969 | 3213 | 3091 | 2292 | |
| Montola 2003 | 71 | 22 | 40.8 | 35.5 | 1143 | 2685 | 2194 | 2440 | 2007 | |
| MonDak | 70 | 24 | 38.3 | 35.7 | 832 | 2074 | 2269 | 2171 | 1725 | |
| Trial Mean | 69 | 24 | 40.6 | 34.7 | 833 | 2265 | 2305 | -- | -- | |
| C.V.% | 1.2 | 7 | 3.1 | 2.4 | 8.4 | 6.7 | 5.1 | -- | -- | |
| LSD 5% | 1 | NS | 1.8 | 1.9 | 105 | 220 | 175 | -- | -- | |
| LSD 10% | 1 | 2 | 1.5 | 1.6 | 85 | 183 | 144 | -- | -- | |

¹ Days after Planting NS = no statistical difference between varieties.

Planting Date: May 17

Harvest Date: September 14

Seeding Rate: 300,000 PLS/A (approx. 20 lbs/A)

Previous Crop: 2013 = durum, 2014 = soybean, 2015 = hrsw

Tillage: Minimum till

Soil Type: Williams Loam