

### Safflower Variety Descriptions

Variety	Origin <sup>1</sup>	PVP <sup>2</sup>	Hull Type <sup>3</sup>	Oil Type <sup>4</sup>	Irrigated Yield <sup>5</sup>	Dryland Yield <sup>5</sup>	Test Weight <sup>5</sup>	Oil <sup>5</sup>	Maturity	Tolerance <sup>6</sup>	
										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

<sup>1</sup> MSU = Montana State University, NDSU = North Dakota State University, STI = Safflower Technologies International

<sup>2</sup> 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).

<sup>3</sup> STP = striped, N = normal, RED = reduced.

<sup>4</sup> Lino = linoleic.

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

<sup>6</sup> 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 DAP <sup>1</sup>	Plant Height inches	Seed Yield				
			2017	2018	2019	2 yr Avg.	3 yr Avg.
Linoleic Types							
Cardinal	78	30	2165	1671	2277	1974	2038
NutraSaff	78	28	2257	1541	2055	1798	1951
Finch	77	29	2074	1391	2111	1751	1859
Chickadee	78	29	--	1706	2310	2008	1339
Rubis Red	77	28	--	1518	2117	1818	1212
Oleic Types							
Hybrid 1601	78	28	3020	1894	2144	2019	2353
MonDak	79	28	2582	1622	2016	1819	2073
Montola 2003	80	26	2120	1544	2075	1809	1913
Hybrid 200	79	29	--	2054	2083	2068	--
Hybrid 446	77	29	--	1480	2162	1821	--
Trial Mean	78	28	2435	1642	2135	--	--
C.V.%	1.0	5.0	12.4	11.6	5.8	--	--
LSD 5%	1	2	528	326	214	--	--
LSD 10%	1	2	433	269	177	--	--

<sup>1</sup> Days after Planting

Planting Date: May 6

Harvest Date: September 19

Tillage System: Minimum till

Note: The 2019 trial had severe sprout damage which affected test weights and oil contents (data not shown).

Seeding Rate: Hybrids = 18 lbs/A, non-hybrids = 25 lbs/A

Previous Crop: 2016 = soybean, 2017 & 2018 = hrsrw

Soil Type: Williams Loam