

**NDSU Carrington Research Extension Center**  
**2010 Variety Trial Data**

**Non Oilseed Sunflower**

**Carrington**

\*\* The 2010 CREC Non-Oil Sunflower Hybrid Performance Test was significantly influenced by an infestation of sunflower midge. The high level of damage caused by the sunflower midge has an impact on how the information from this hybrid evaluation should be utilized. The traditional information provided by this study related to hybrid yield potential, seed size, harvest moisture and selected other hybrid traits is compromised by the midge damage. However, we believe this hybrid performance test does provide some very useful information related to hybrid reaction to sunflower midge, rust and days to bloom.

Brand	Hybrid	Plant Height inch	Days to Bloom	Days to PM	Rust Severity <sup>1</sup> %	Midge Incid <sup>2</sup> %	Midge Severity <sup>3</sup> 0 to 9	Harvest Moist. %	Test Weight lb/bu	Seed Yield lb/ac
Mycogen Seeds	8C451	61	69.0	118.8	10.03	28.8	3.8	8.5	21.0	1569
Croplan Genetics	179	63	71.3	126.3	7.70	93.8	5.5	9.2	19.3	1017
Red River Commodities	2215 CL	64	71.3	123.3	7.05	50.0	4.3	8.3	21.0	1017
Red River Commodities	2215	64	69.0	120.3	7.93	46.3	4.3	9.3	21.8	1108
Red River Commodities	2217	64	70.5	120.5	8.45	57.5	4.8	8.2	21.5	1185
Dahlgren & Company	9530	66	70.0	122.5	6.20	58.8	4.8	8.6	21.1	929
Dahlgren & Company	9530CL	70	71.8	123.8	7.65	45.0	4.8	10.1	20.2	824
Dahlgren & Company	9592	60	69.0	120.5	8.88	45.0	4.5	8.1	20.5	1030
CHS	RH3126RT	68	72.0	131.0	1.08	97.5	6.5	11.9	19.0	574
CHS	RH400CL	62	68.3	117.5	14.25	46.3	4.5	8.5	20.2	943
Seeds 2000	Jaguar	60	67.0	116.8	9.93	12.5	4.5	8.1	21.5	1279
Seeds 2000	Panther DMR	63	65.3	121.0	7.88	45.0	4.0	8.0	24.1	1144
Seeds 2000	X3607	68	71.8	117.5	13.12	38.8	4.5	8.4	20.6	886
Seeds 2000	X4367	68	69.8	119.3	9.00	40.0	4.3	8.3	20.6	1077
Triumph	747C	63	67.0	129.8	0.45	91.3	3.0	13.1	19.9	869
USDA	924	58	67.0	122.5	5.63	90.0	5.0	9.7	21.6	673
	MEAN	63.2	68.9	121.8	7.83	53.5	4.5	9.1	21.1	1006
	C.V. (%)	7.5	2.0	1.7	45.2	28.0	12.8	23.1	4.6	22.0
	LSD 0.05	6.7	1.9	3.0	5.08	21.3	0.8	NS	1.4	315

Planting Date = May 20 ; Harvest Date = October 20 ; Previous Crop = Soybean

<sup>1</sup> Rust severity is the mean pustule coverage on the upper four fully-expanded leaves of ten randomly selected plants per plot.

\* The composite rust race on 50 randomly selected leaf samples was race 336.

\*\* Rust data collected by S. Markell et al.

<sup>2</sup> The incidence of plants within hybrid evaluation plots where Sunflower Midge had infested the head, reported as a percent of total plants.

<sup>3</sup> Sunflower Midge Severity: Scored on 0 to 9 scale, where 0 = no symptom to 9 = head fully cupped.