

2014 Oilseed Sunflower Hybrid Trial Rio Farms, Monte Alto, Texas (Limited Irrigation, Lower Rio Grande Valley)



Planted February 20, 2014; harvested up to 10 days early on July 1, 2014 due to increasing bird feeding.

			Days to	Plant	Avg.	Lodg-	Test	% Oil	Oil	Seed Yield	Crop	2013-2014 Avg.	
	Company	Oil	Half	Height	Plants/	ing	Weight	Con-	Yield	,@10% H2O	Value‡	% Oil	Yield
Hybrid	or Brand	Type†	Bloom	(in.)	acre	(%)	(lbs./bu)	tent	(lbs./A)	(lbs./A)	(\$/Acre)	Content	(lbs./A)
08TR003	Biotek Seed LLC	Traditional [^]	73	52	18,000	15	31.5	40.4	338	837	157^		
8H412CPDM	Mycogen	CP, HO	87	77	18,125	1	33.6	43.9	750	1,702	343		
8H449CLDM	Mycogen	CL, HO	80	69	18,250	1	34.7	44.9	860	1,913	392		
8H570CL	Mycogen	SS, CL, HO	83	48	15,500	12	33.0	46.8	904	1,932	409		
8H859CL	Mycogen	CL, HO	87	74	18,625	3	34.4	44.3	614	1,383	280		
Camaro II	Nuseed Americas	CL, Nu	80	74	18,875	3	35.2	43.6	942	2,161	432	47.9	1,945
Cobalt II	Nuseed Americas	CL, HO	78	67	19,750	3	33.9	40.1	745	1,852	347	44.9	1,650
Falcon	Nuseed Americas	EX, Nu	83	71	17,500	6	34.2	44.7	809	1,804	369	48.7	1,656
Hornet	Nuseed Americas	CL, HO	80	70	18,500	20	29.7	40.3	837	2,077	390	45.5	1,642
Sierra	Nuseed Americas	HO	81	70	18,500	2	Hybrid	heavily damaged by sunflower head moth.					
NHK12M054	Nuseed Americas	CL, HO	81	71	18,250	0	34.9	41.5	650	1,569	301		
X6859	Nuseed Americas	CL, Nu	81	72	18,625	1	33.7	44.2	952	2,154	436	47.9	1,827
EX40HOCL	SunOpta	ConOil#/CL/HO	78	72	16,625	5	27.7	33.1	#	1,486	342		
		Average	81	68	18,100	6	32.6	41.6	764	1,739	350	47.0	1,744
		RangeHigh	87	77	19,750	20	35.2	46.8	952	2,161	436		
		Range-Low	73	48	15,500	0	27.7	33.1	338	837	280		

P-Value (Hybrid)	< 0.0001	< 0.0001	0.0375	<0.0001	< 0.0001	<0.0001	< 0.0001	<0.0001	< 0.0001
Fisher's Protected LSD (0.05)¶	4	3	2,100	7	1.1	2.4	135	271	61
Coefficient of Variation, CV (%)	5.2	12.6	9.1	138	8.4	10.5	21.4	17.1	17.3

†Nu = NuSun mid-oleic, HO = high oleic, EX = Express herbicide tolerant, SS = short stature, CL = Clearfield herbicide tolerant.

‡Pricing 2014 for South Texas oilseed is \$18.65/cwt. and 2-for-1 for oil content ±40%; ConOil is priced at flat rate \$23/cwt. (no oil adjust).

#ConOil hybrids are not crushed for oil but most likely used for whole kernels in the baking industry.

¶Numbers in the same column that vary by more than the least significant diff, (LSD) are significantly different at 95% confidence level.

^There is no current southern U.S. oil market for traditional (neither NuSun nor high oleic) oilseed hybrids (hence birdfood only with no oil check).

Trial Notes:

This trial received limited irrigation via furrow. The trial was harvested shortly after physiological maturity due to increasing bird feeding. Yields were adjusted for bird damage. The individual 50% bloom dates extended over two weeks and sunflower head moth spray using

Prevathon was extended over a period of ~30 days (3 sprays). Some plots had significant sunflower head moth damage, and for this reason the yields are not reported for Nuseed 'Sierra'. We initially thought that one moth spray might have been missed, but there was no correlation between 50% bloom date and sunflower head moth larvae damage ratings.

An adjacent confectionary sunflower hybrid trial (14 hybrids which excluded three heavily damaged by head moth) yielded 1,480 lbs./A with an average crop value of \$334/acre.

For further information about this test or the Texas A&M AgriLife Crop Testing Program, contact Mr. Dennis Pietsch, Crop Testing director,

Texas A&M AgriLife Research, College Station, TX, (979) 845-8505, dpietsch@ag.tamu.edu

Please visit the Crop Testing webpage at http://varietytesting.tamu.edu for sunflower and other crop hybrid information.

For additional sunflower production resources for Texas contact Extension agronomist Dr. Calvin Trostle, Lubbock, Texas A&M

AgriLife Extension Service, Lubbock, (806) 746-6101, ctrostle@ag.tamu.edu, or visit http://lubbock.tamu.edu/sunflower