AGRONOMIC AND TEST INFORMATION:

TEST:	**2009 Irrigated Confectionary Sunflower Performance Test**
LOCATION:	Texas AgriLife Research North Plains Research Field, **Etter, Texas** (Moore County, 10 miles north of Dumas)
COOPERATORS:	Dr. Calvin Trostle, Extension agronomist; Dillon Spradley, research assistant
SOIL TYPE:	Sherm clay loam
ROW WIDTH:	30”
PREVIOUS CROP:	Wheat (2008)
LAND PREPARATION:	Field cultivator, rolling cultivator (for listing)
DATE PLANTED:	Replanted 7/8/09 with cones mounted on a JD Max-Emerge planter
SEEDS PER ACRE:	Seeds dropped at 1.2 seeds per foot of 30” row (20,900 seed/A), and any doubles were thinned to 1 plant
PLANTS PER ACRE:	Population for actual plant stand was calculated for the harvest area; trial average 15,400 plants per acre
PLOT LENGTH:	4 rows X 25’
FERTILIZER:	100 N—30 P_2O_5—0 K_2O
HERBICIDE:	Trifluralin, 0.75 qts./A
INSECTICIDE:	3.84 oz. pyrethroid (Warrior T) 8/28, 9/2, & 9/8 using a 4-row hand boom & back pack sprayer
RAINFALL:	July, 2.7”, August, 1.9”, Sept. 0.8”, Oct. 1-20, 0.1”; Seasonal total, 5.5”.
IRRIGATIONS:	Three row waterings, ~5” each
DATE HARVESTED:	11/12/09
SIZE HARVESTED PLOT:	2 middle rows X 22’
TEST DESIGN:	Randomized complete block
NUMBER ENTRIES:	8
NUMBER REPLICATIONS:	4
NUMBER ROWS/PLOT:	4

TEST MEANS:	2,092 lbs./A; yield corrected to 10% moisture; average seed >20/64", 86%
TEST C.V.:	12.2%
SISTER TRIAL SITES?:	No. Trial at Halfway, TX failed due to carryover cotton herbicides.

COMMENTS:

The trial was originally planted 19 June 09, but was damaged severely by jackrabbits. We were unable to replant until July 8, which was 3 days past Extension's last recommended planting date for the area. This conservative date likely ensures that in just about any year a sunflower crop reaches adequate maturity. Maturation concerns were made worse by nighttime low temperatures of 26ºF the night of Oct. 10-11. Visually, it appeared that most hybrids did reach sufficient maturity although some test weights were slightly reduced. The average confectionary hybrid at Etter reached half bloom than the adjacent oilseed hybrid trial (33 hybrids).

The test was harvested by hand, and then threshed through a stationary thresher after seed samples had dried considerably. A clipper machine was used to clean trash from all samples.

Yield was good averaging 2,092 lbs./A in spite of the late planting and October freeze (PLSD of 308 lbs./A). Crop value averaging $460/A was calculated using $23/16/cwt for large/small seed which reflected 2009 regional crop prices.

For comparison, an oilseed hybrid trial (33 hybrids) to the side and managed the same yielded 2,646 lbs./A, with an average crop value of $534/acre.

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For further information about this test, contact Dr. Calvin Trostle, Extension agronomy, Lubbock, (806) 746-6101, ctrostle@ag.tamu.edu
For further information about the Texas AgriLife Research Crop Testing Program, contact Mr. Dennis Pietsch, Crop Testing Director, Texas AgriLife Research, College Station, TX, (979) 845-8505, croptest@neo.tamu.edu
Please visit the Crop Testing webpage at http://varietytesting.tamu.edu
For further sunflower production resources for Texas visit our sunflower page at http://lubbock.tamu.edu/sunflower

2009 Irrigated Confectionary Sunflower Hybrid Test
Etter, Moore Co., Texas

CONFECTIONARY, 2009		Lodg-		Avg.	Days to	Test	% Seed Retained Over Screen			Seed Yld ,@ 10% H_2O	Crop Value
Company or Brand	Hybrid	ing %	Height (ft.)	Plants/ acre	Half Bloom	Weight (lbs./bu)	>22/64"	>20/64"	>18/64"	(lbs./A)	($/acre)‡
Croplan	CG179	1.5	5.8	14,700	52	20.5	23	62	89	1,883	384
Red River	RRC 2215	0.5	6.1	16,500	54	20.9	54	85	96	2,282	501
Red River	RRC 2216	1.8	6.2	16,100	53	20.4	59	87	96	2,443	539
Red River	RRC 2217	0.0	6.3	14,200	54	18.5	71	92	97	2,106	472
Seeds 2000	Jaguar CL†	3.2	6.2	15,700	53	19.0	64	91	96	2,017	452
Seeds 2000	Panther II	1.4	6.3	15,000	55	19.4	61	80	90	2,126	459
Seeds 2000	Rhino	4.7	6.1	14,800	54	18.7	84	93	96	1,857	418
Triumph	777C	1.8	6.8	16,100	55	19.3	85	95	98	2,024	458
	Average	*1.9*	*6.2*	*15,400*	*54*	*19.6*	*62.7*	*85.6*	*94.7*	*2,092*	*460*
P-Value (Hybrid)		0.2597	<0.0001	0.4259	0.003	<0.0001	<0.0001	<0.0001	0.0034	0.0108	0.0055
Fisher PLSD (0.05)¶		NS	0.2	NS	1.1	0.9	11.5	6.8	4.6	306	69
Coeff. of Variation, CV (%)		136	4.9	10.3	2.0	5.1	31.6	12.7	4.4	12.2	13.0

†Clearfield (herbicide tolerant) hybrid

‡Confectionary, $23/cwt for seed >20/64", $16/cwt. all other seed (most common 2009 TX High Plains price).

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

Replanted 8 July 2009; harvested 12 November 2009

~20,900 seeds/A (1.2 seeds/ft. on 30" rows), all doubles thinned to 1 plant

Rainfall, 7/1-10/15, 5.5"; Furrow irrigation, ~15"; Fertilizer, 100N-30P $_2O_5$-0K.

Harvested area: 4 reps, 22' X middle 2 rows

Trial Notes: The trial was originally planted 19 June 09, but was damaged severely by jackrabbits. We were unable to replant until July 8, which was 3 days past Extension's last recommended planting date for the area. This conservative date likely ensures that in just about any year a sunflower crop reaches adequate maturity. Maturation concerns were made worse by nighttime low temperatures of 26ºF the night of Oct. 10-11. Visually, it appeared hybrids did reach sufficient maturity although some test weights were slightly reduced.

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