

Agronomic & Test Information:  
**Etter, Moore Co., TX Oilseed Hybrid Sunflower Trial, 2011**

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TEST:	<b>2011 Irrigated Oilseed Sunflower Hybrid Trial</b>
LOCATION:	Texas AgriLife Research North Plains Research Field, <b>Etter, Texas</b> (Moore County, 9 miles north of Dumas)
TEST COORDINATORS:	Dr. Calvin Trostle, Texas AgriLife Extension Service agronomist, and Mr. Sean Wallace, Extension assistant, Lubbock; Mr. Dennis Pietsch, Texas AgriLife Research Crop Testing Program, College Station
SOIL TYPE:	Sherm clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Grain sorghum
LAND PREPARATION:	Field cultivator, rolling cultivator (for listing)
DATE PLANTED:	June 23, 2011
SEEDING RATE:	Overplanted at ~26,000 seeds/A then thinned in mid July (4-6" tall) to about 1.25 plants per foot; all doubles were thinned to singles.
PLANTED AREA:	4 rows x 25'
FERTILIZER:	100 N—30 P <sub>2</sub> O <sub>5</sub> —0 K <sub>2</sub> O, applied pre-plant
HERBICIDE:	Treflan (pre-plant), Spartan Charge (pre-emerge)
INSECTICIDE:	Two sprays (Aug. 19 & 25) by airplane (3.5 gal/A).
RAINFALL:	June = 0.0"; July = 0.5"; August = 1.2"; September = 1.0"; Total = 2.7"
IRRIGATION:	One pre-plant irrigation (7") plus four furrow irrigations averaging ~5" each; 27" total.
DATE HARVESTED:	October 14 & 17, 2011 (by hand, then threshed with stationary thresher in November)
SIZE HARVESTED PLOT:	Two 40" rows X 22' (65 square ft.)

TEST DESIGN: Randomized block (by rep)

NUMBER ENTRIES: 28

NUMBER REPLICATIONS: 4

TEST MEAN: 2,230 lbs./A yield (corrected to 10% moisture) with 41.3% average oil content. Average crop value = \$640/A.

TEST YIELD C.V.: 13.9%

COMMENTS: The trial was fenced after planting to protect from jack and cottontail rabbits, and due to the drought oilseeds were netted to protect from birds which had little else to feed on due to the drought. Sunflower head moth control was good with little to no *Rhizopus* development. Additional hand hoeing was needed to control pigweed.

This was a record drought in 2011 for West Texas. Total 2011 rainfall at the Etter Station was 6.2", the driest ever recorded (average is 18"). The test was irrigated heavily, including a 7" preplant irrigation. Statistical analysis separated out major differences among hybrids in yield (range 1,758 to 2,718 lbs./A) and in oil content (38 to 46% among commercial hybrids). Also, two- and three-year averages (2,586 lbs./A) were good.

As a whole, Clearfield and ExpressSun herbicide tolerant hybrids had yields that were slightly reduced from non-herbicide tolerant lines. Any possible significant differences may gradually disappear as companies improve the yield of these herbicide trait hybrids. High oleic yields and oil content were comparable to NuSun.

Hybrids advertised as short stature (41 to 44" tall) averaged 13" shorter than conventional height hybrids.

An adjacent confectionary sunflower hybrid trial (12 hybrids) yielded 2,398 lbs./A (86.4% large seed >20/64") with an average crop value of \$775/A.

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For further information about this report or for sunflower production in Texas, contact Dr. Calvin Trostle, extension agronomist, Lubbock, (806) 746-6101, ctrostle@ag.tamu.edu or visit <http://lubbock.tamu.edu/sunflower>

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, dpietsch@ag.tamu.edu

Please visit the Texas AgriLife Crop Testing Program webpage at <http://varietytesting.tamu.edu>