



## Agronomic & Test Information: Ellis County (Bardwell), TX Oilseed Hybrid Sunflower Trial, 2011

TEST: 2011 Rainfed Oilseed Sunflower Hybrid Trial

LOCATION: Near Bardwell, Ellis Co., Texas

COOPERATORS: Bob & Steven Beakley

TEST COORDINATORS: Mr. Dennis Pietsch, Texas AgriLife Research Crop Testing

Program, College Station; Mr. Glen Moore, Ellis-Navarro Co. Extension IPM agent; Dr. Calvin Trostle, Texas AgriLife Extension

Service agronomist, Lubbock

SOIL TYPE: Houston black clay

ROW WIDTH: 30"

PREVIOUS CROP: Wheat

LAND PREPARATION: Limited tillage (disk and field cultivator)

DATE PLANTED: March 11, 2011

SEEDING RATE: Overplanted at ~27,000 seeds/A then thinned to about 1 plant per

10" (21,000 plants/A); all doubles were thinned to singles

PLANTED AREA: 4 rows x 30'

FERTILIZER: 7 gallons/A of 6-24-6 with a pint of zinc in furrow at planting,

then sidedressed with 225 lbs./A of 32-0-0 after emergence

(total N-P-K per acre, 77-19-5)

HERBICIDE: 1.2 pints/A Dual Magnum

INSECTICIDE: Cobalt, 24 oz./A, first spray at ~10% bloom, second spray ~6 days

later.

RAINFALL: January = 3.5"; February = 2.5"; March = 0.2"; April = 2.9"; May =

2.7"; June = 2.2"; July = 0.0"; Total = 14.0" (subsoil moisture

adequate at planting)

DATE HARVESTED: July 18, 2011 (by hand, then threshed with stationary thresher)

SIZE HARVESTED PLOT: Two 30" rows X 17' 4"

TEST DESIGN: Randomized block (by rep)

NUMBER ENTRIES: 11

NUMBER REPLICATIONS: 4

TEST YIELD MEAN: 1,725 lbs./A yield (corrected to 10% moisture) with an average

\$509/acre after adjustment for seed oil content. Yield range was

1,360 to 2,109 lbs./A.

TEST YIELD C.V.: 13.1%

TEST %OIL MEAN: 42.1% (range 36.7 to 48.8%; C.V. = 9.7%)

COMMENTS: Overall the in-season production conditions were dry to droughty with substantial heat, however, sunflower actually yielded comparable to the previous year's confection yield which was 1,478 lbs./A (March-July rainfall 12.0"). In this test 6" of rainfall in January & February would have stored significant soil moisture for the cropping season. Exceptional oil content of over 48% was noted for two hybrids (oil premium of over \$4.50/cwt.), whereas four hybrids were slightly below 40% oil resulting in a discount.

Sunflower head moth control was very good with little to no webbing on the heads at season's end. The test was sprayed two times with Cobalt as part of the standard spraying of the surrounding field.

An adjacent confectionary sunflower hybrid trial (10 hybrids) yielded 1,703 lbs./A with average crop value \$473/A before oil premium was calculated.

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For further information about this report or for the Texas AgriLife Research Crop Testing Program, contact Mr. Dennis Pietsch, Crop Testing director, Texas AgriLife Research, College Station, TX, (979) 845-8505, <a href="mailto:dpietsch@ag.tamu.edu">dpietsch@ag.tamu.edu</a>

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

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