

Agronomic & Test Information:  
Lubbock, TX Confectionary Hybrid Sunflower Trial, 2010

---

TEST:	<b>2010 Irrigated Confectionary Sunflower Hybrid Trial</b>
LOCATION:	Texas AgriLife Research & Extension Center, Lubbock, Texas
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:	Amarillo fine sandy loam
ROW WIDTH:	40"
PREVIOUS CROP:	Soybean
LAND PREPARATION:	Limited tillage (disk and field cultivator)
DATE PLANTED:	June 30, 2010
SEEDING RATE:	Overplanted at ~30,000 seeds/A then thinned in late July (6-10" tall) to about 1.5 plants per foot; all doubles were thinned to singles; the resulting stand was still thicker than desired as a better target would have been ~15,000 plants per acre.
PLANTED AREA:	2 rows x 25'
FERTILIZER:	109 lbs. N/A as urea, 32-0-0 (60 N preplant June 28, 40 N on July 26, and 9 N from P fertilizer), 30 lbs./A P <sub>2</sub> O <sub>5</sub> as 10-34-0 June 28.
HERBICIDE:	Treflan (pre-emerge). Extreme levels of pigweed emerged after the large rains on July 7-8, and hand weeding continued until mid-August.
INSECTICIDE:	Three complete sprays with Hero at full rate. In addition, two early blooming hybrids were sprayed on Aug. 17 in advance of the first full spray on August 19.
RAINFALL:	June = 1.3"; July = 6.2"; August = 0.4; September = 1.6"; Total = 9.5"
IRRIGATION:	Four furrow irrigations (the first applied ~June 20 to provide planting moisture) averaging ~4" each; 16" total.

DATE HARVESTED: October 8, 2010 (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: 9

NUMBER REPLICATIONS: 4

TEST MEAN: 2,008 lbs./A yield (corrected to 10% moisture) with 62% large seed (see note below). Average crop value = \$450/A.

TEST YIELD C.V.: 11.3%

COMMENTS: This trial was initially planted in mid-May then planted again in early June as an apparent unknown herbicide issue led to ~25% stand establishment. The trial was moved to a smaller test site (hence the 2-row plots rather than four row tests) and planted thick then thinned by hand.

Sunflower head moth pressure was moderate. Early blooming hybrids were sprayed by hand on August 17, and the first full spray occurred August 19<sup>th</sup> (four-row back pack sprayer, 15 gal/A). Two additional sprays occurred on 5-day intervals.

Good yields were obtained. Significant differences were obtained in yield, however, due to the range of seed >20/64" from 33% to 82%, major differences in crop value were based more on seed size than on yield.

An adjacent oilseed sunflower hybrid trial (22 hybrids) yielded 2,262 lbs./A (40.6% oil content) with an average crop value of \$354/A.

\*\*\*

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>