

Sunflower Irrigated Hybrid Trial--High Oleic, NuSun, 2005

Willie Wieck Farm, Sherman Co., Texas, 2005

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Planted 24 June 2005, Harvested 17 Oct 2005

Harvested 17 October 2005 Four replications per hybrid, harvested area 2-30" rows X 25'



| Brand | Hybrid | Oil Type | Average plants/A | Height (feet) | Days to 1/2 bloom | Test Wt. (lbs./bu) | %Oil Content @ 10% H2O | Oil Yield per acre (lbs.) | Yield @ 10% H2O (lbs./A) | Crop Value† per Acre \$ |
|------------|-------------|----------|------------------|---------------|-------------------|--------------------|------------------------|---------------------------|--------------------------|-------------------------|
| Croplan | 340HO | HO | 21,800 | 5.8 | 58 | 27.6 | 35.6 | 549 | 1,543 | \$179 |
| Croplan | 343DMR HO | HO | 16,700 | 5.3 | 58 | 29.4 | 35.0 | 722 | 2,067 | \$237 |
| Croplan | 378HO | HO | 20,500 | 6.2 | 60 | 28.3 | 38.9 | 650 | 1,671 | \$208 |
| Pioneer | 64H41 | HO | 24,100 | 6.2 | 55 | 33.9 | 38.6 | 713 | 1,847 | \$229 |
| Seeds 2000 | Defender HO | HO | 25,000 | 5.8 | 56 | 27.5 | 35.4 | 673 | 1,903 | \$220 |
| Seeds 2000 | Sierra | HO | 21,100 | 6.6 | 61 | 25.6 | 34.9 | 520 | 1,487 | \$170 |
| Triumph | 820HO | HO | 27,100 | 5.9 | 56 | 30.3 | 40.2 | 506 | 1,259 | \$161 |
| InterState | HyOleic 120 | HO | 21,500 | 5.8 | 57 | 29.4 | 40.6 | 554 | 1,365 | \$176 |
| Pioneer | 63M80 | Nu | 23,700 | 5.6 | 56 | 27.8 | 36.6 | 533 | 1,457 | \$170 |
| Pioneer | 63M91 | Nu | 27,800 | 6.4 | 57 | 33.7 | 41.5 | 1114 | 2,682 | \$346 |
| Triumph | s672 | Nu, SS | 18,200 | 3.8 | 57 | 32.4 | 41.8 | 551 | 1,317 | \$171 |
| Triumph | 645 | Nu | 20,800 | 6.1 | 57 | 26.2 | 42.9 | 758 | 1,767 | \$234 |

| | | | | | | | | |
|--|---------------|------------|-----------|-------------|-------------|------------|--------------|--------------|
| Grand Average | 22,400 | 5.8 | 57 | 29.3 | 38.5 | 654 | 1,697 | \$208 |
| Average (High Oleic) | 22,200 | | | 29.0 | 37.4 | 611 | 1,643 | \$198 |
| Average (Mid Oleic) | 22,600 | | | 30.0 | 40.7 | 739 | 1,806 | \$230 |
| P-Value, Test Criteria | 0.0204 | | | <0.0001 | <0.0001 | | <0.0001 | |
| Fisher's Protested Least Signif. Diff. (0.10)‡ | 5,000 | | | 0.9 | 1.0 | | 250 | |
| Coefficient of Variation (%) | 22.6 | | | 9.5 | 7.6 | | 25.9 | |

†Oilseed--2:1 premium/discount vs. 40% oil--mid-oleic @ \$11.25/cwt, high oleic @ \$12.50/cwt; confectionary--\$21/cwt large seed, \$13/cwt small.

‡Numbers in the same column that vary by more than the least significant difference are significantly different at a 90% confidence level.

Trostle commentary: A large range of yields were measured among both high oleic and NuSun hybrids. Oil contents are significantly lower for high oleic in this first-year Texas Panhandle sunflower trial. Triumph s672 was partially shaded due to short stature. High variability is reported in the CV for yield, and producers are advised to place minimal emphasis on yield data with %CV > 15%.