

INDETERMINATE VERSUS DETERMINATE VARIETIES  
UNDER IRRIGATION  
DALE HANSON

Objective: To determine and document the effect on profitability of the use of an indeterminate variety (Pioneer 9272) versus the use of a determinate variety (Hobbit 87) under irrigation.

INDETERMINATE VARIETY

DETERMINATE VARIETY

Treatment:

Treatment:

Discing

Discing

Discing

Discing

Field Cultivation

Field Cultivation

Planting: Pioneer 9272, planting rate of 54 pounds per acre.

Planting: Hobbit 87, planting rate of 72 pounds per acre.

Herbicide: banded 2 quarts Lasso MT and ½ pounds Sencor.

Herbicide: banded 2 quarts Lasso MT and ½ pound Sencor.

Cultivation

Cultivation

Cultivation

Cultivation

Irrigation

Irrigation

Costs:

Costs:

Seed                      \$14.00

Seed                      \$9.50

Comparative cost      \$14.00

Comparative cost      \$9.50

## ON-FARM RESEARCH COMPARISON RESULTS – DALE HANSON

VARIABLE	1990	1991	1992
Early population			
Indeterminate	137000	118000**	132000**
Determinate	153000	166000	184000**
Final population			
Indeterminate	114000*	115000**	129000**
Determinate	139000	152000	172000**
Population loss			
Indeterminate	19.4%	1.5%	2.0%
Determinate	11.8%	6.6%	6.8%
Plant height			
Indeterminate	33.2***	30.1***	33***
Determinate	20.3"	21.8"	25.7***
Pod height			
Indeterminate	4.4"	3.8"	4.6***
Determinate	4.8"	4.4"	8.0***
Moisture			
Indeterminate	8.6%**	10.2%**	10.8%**
Determinate	11.2%	9.4%	11.4%**
Sample weight			
Indeterminate	56.3	57.2**	56.6**
Determinate	56.0	56.5	55.1**
Yield (13%)			
Indeterminate	53.6	53.6**	50.7*
Determinate	52.3	55.1	52.1**

\* - significantly different at 95% confidence level

\*\* - significantly different at 99% confidence level