Technical Report

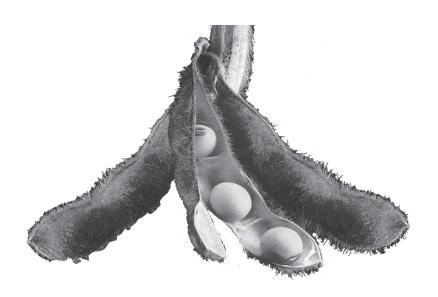
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Agricultural Experiment Station



College of Agricultural Sciences Department of Soil and Crop Sciences

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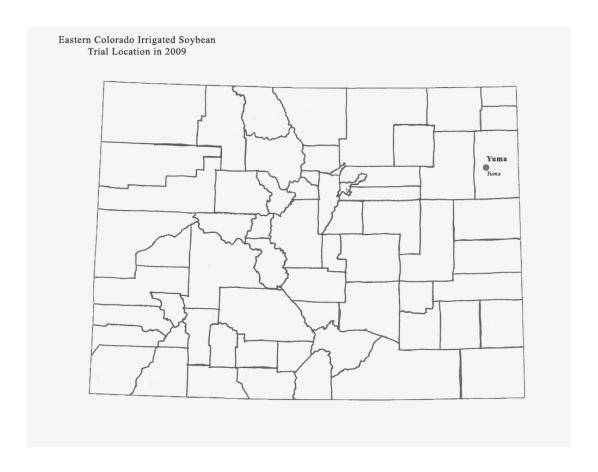


MAKING BETTER DECISIONS

1999-2009 Colorado Soybean Variety Performance Trials

Acknowledgments

The authors express their gratitude to Taylor Farms, our 2009 collaborating Yuma farmer, who, over the last four years has generously contributed the use of his land, equipment, and time to allow CSU to conduct these trials for the good of all Colorado soybean producers.



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1999-2009 Colorado Soybean Variety Performance Trial Results

Introduction

In recent history, CSU has conducted one or two soybean variety trials per year since 1999 and it is useful to provide seed companies, collaborating scientists and extension agents, and our producers with results that have been accumulated over the past ten years of experience. No results appear for 2004 due to loss of the trial to hail damage. The accumulated results for the past several years show that there is excellent potential for increasing soybean production in Colorado.

CSU conducts variety performance trials to provide unbiased and reliable information to Colorado producers so they can select the best varieties for their farming conditions. Variable climatic conditions, innovations from biotechnology, acquisitions and mergers of seed companies, and rapid evolution of new varieties means that up-to-date and timely unbiased crop performance information is increasingly important to Colorado soybean producers.

In 2009, Colorado State University personnel evaluated commercial soybean variety performance under 30-inch rows under fully irrigated conditions at Yuma. Unfortunately, only one company entered three varieties in the trial. The collaborating farmer provided the seed for four farmer check varieties that he wanted compared to our entries. Albeit irregular, we decided to conduct the trial and report the results. We feel that there is value in adding 2009 results to the results of the previous years so readers may comprehend full potential for soybean production in Colorado. All soybean trials have a randomized complete block experimental design with three replications. All soybean grain yields are reported in bu/ac and adjusted to 13.0% moisture content.

2009 Irrigated Soybean Variety Performance Trial at Yuma

| Hybrid | Yield | Test Weight | Grain Moisture | Plant Height |
|-----------------------|--------------|--------------|----------------|---------------|
| | <u>bu/ac</u> | <u>lb/bu</u> | <u>%</u> | <u>inches</u> |
| Farmer-1 [*] | 73.2 | 56.7 | 10.5 | 33 |
| Farmer-2 | 67.7 | 56.3 | 11.0 | 31 |
| Farmer-3 | 67.1 | 56.7 | 10.6 | 35 |
| AG2403 | 64.8 | 56.0 | 9.8 | 27 |
| Farmer-4 | 58.8 | 57.1 | 10.6 | 32 |
| AG3005 | 57.8 | 56.0 | 13.5 | 35 |
| DKB27-52 | 56.5 | 55.8 | 11.1 | 28 |
| Average | 63.7 | 56.4 | 11.0 | 32 |
| LSD _{0.30} | 3.8 | | | |
| LSD _{0.05} | 7.6 | | | |

 ${\rm LSD_{0.30}}$ is most useful for producers using these results to select a variety but some collaborators find ${\rm LSD_{0.05}}$ useful.

Experimental Design: randomized complete block design with 3 replications.

Plot size: 6' x 30'
With 10" row spacing
Site Information

Collaborator: Taylor Farms Soil Type: Weld silt loam

Previous Crop: corn Planting Date: 6/1/09

Seeding Rate: 165,000 seeds/ac

Irrigation: sprinkler

Fertilization: 1.5 g/ac foliar Kugler solution

Herbicide: Round-up, Select Harvest Date: 10/19/2009

Yields are corrected to 13% moisture

^{*} Due to the low number of trial entries the collaborating farmer provided 4 farmer check varieties

2008 Irrigated Soybean Variety Performance Trial at Yuma

| | | Test | Grain | Plant |
|-----------------------|--------------|--------------|----------|---------------|
| Variety | Yield | Weight | Moisture | Height |
| | <u>bu/ac</u> | <u>lb/bu</u> | <u>%</u> | <u>inches</u> |
| Dyna-Gro Seed 38G23 | 72 | 55.0 | 13 | 31 |
| Dyna-Gro Seed 39R29 | 64 | 53.8 | 19 | 33 |
| Asgrow DKB29-09 | 62 | 54.0 | 17 | 35 |
| Dyna-Gro Seed 37T26 | 62 | 53.9 | 16 | 38 |
| Asgrow DKB22-52 | 61 | 53.6 | 13 | 29 |
| Dyna-Gro Seed 37Y21 | 59 | 55.9 | 12 | 30 |
| *Farmer Check | 57 | 55.7 | 14 | 34 |
| Asgrow DKB27-52 | 56 | 54.1 | 14 | 34 |
| Asgrow AG2906 | 56 | 55.2 | 14 | 34 |
| Dyna-Gro Seed 31D20 | 54 | 54.9 | 12 | 32 |
| Dyna-Gro Seed 31F23 | 53 | 54.4 | 13 | 27 |
| Dyna-Gro Seed 34Y25 | 52 | 54.5 | 14 | 32 |
| Average | 59 | 54.6 | 14 | 32 |
| LSD _(0.05) | 12 | | | |
| LSD _(0.30) | 6 | | | |

 $LSD_{(0.30)}$ is most useful for producers using these results to select a variety but some collaborators find $LSD_{(0.05)}$ useful.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31' **Site Information**

Collaborator: Bob Taylor Soil Type: Sampson loam Previous Crop: corn Planting Date: 5/29/08

Seeding Rate: 165,000 seeds/ac

Irrigation: sprinkler

Fertilization: 1 1/2 gal Kugler Solution (minor elements)

Herbicide: Round-up Insecticide: none Harvest Date: 9/25/08

Yields are corrected to 13% moisture.
*Midwest Seed Genetics GR2934

2 Year Average Irrigated Soybean Variety Performance Trial at Yuma in 2007-2008

| Hybrid | Yield | Test Weight | Moisture |
|---------------------|--------------|--------------|----------|
| | <u>bu/ac</u> | <u>lb/bu</u> | <u>%</u> |
| Dyna-Gro Seed 37Y21 | 79.2 | 56.2 | 10.4 |
| Dyna-Gro Seed 37T26 | 68.6 | 54.5 | 12.5 |
| Dyna-Gro Seed 31D20 | 65.7 | 55.7 | 10.2 |
| Average | 71.2 | 55.4 | 11 |

2007 Colorado Soybean Performance Trials

2007 Irrigated Soybean Variety Performance Trial at Yuma

| | | | Test | Plant |
|------------------------------------|--------------------|----------|--------------|---------------|
| Hybrid | Yield ² | Moisture | Weight | Height |
| | bu/ac | <u>%</u> | <u>lb/bu</u> | <u>inches</u> |
| Dyna-Gro 37Y21 | 99.4 | 8.8 | 56.4 | 30 |
| NK Brand S28-B4 | 88.1 | 8.6 | 56.0 | 34 |
| Farmer Check ³ | 83.7 | 8.5 | 55.7 | 37 |
| Dyna-Gro 31D20 | 77.4 | 8.3 | 56.4 | 34 |
| NK Brand S28-G1 | 75.6 | 8.8 | 55.7 | 34 |
| Dyna-Gro 37T26 | 75.2 | 9.0 | 55.1 | 37 |
| Dyna-Gro 35F25 | 73.8 | 8.7 | 55.0 | 34 |
| Dyna-Gro 36F22 | 70.2 | 8.4 | 55.8 | 26 |
| Dyna-Gro 36C28 | 69.7 | 8.8 | 55.3 | 35 |
| Dyna-Gro 33D27 | 66.9 | 9.2 | 55.9 | 39 |
| Average | 78.0 | 8.7 | 55.7 | 34 |
| ⁴ LSD _(0.30) | 7.5 | 0.2 | 1.0 | 2 |
| ⁴ LSD _(0.05) | 8.4 | 0.4 | 1.9 | 5 |

¹Trial conducted on the Bob Taylor farm; seeded 05/25 and harvested 10/02/07.

Site Information

Plot Size: 7.5' x 31' with 30" row spacing

Experimental Design: randomized complete block; 3 replications

Seeding Rate: approximately 165,000 seeds/acre

Previous Crop: Corn Irrigation: Sprinkler Soil Type: Rago Silt Loam Herbicide: Round-up

²Yields corrected to 13% seed moisture.

³Farmer Check is Asgrow SN79553.

 $^{^4}$ LSD_(0.30) is more useful for producers using these results to select a variety but some seed company collaborators wish to use LSD_(0.05).

2-Yr Average Irrigated Soybean Variety Performance Trial at Yuma in 2006-07

| | | | rest | |
|-----------------|--------------|----------|--------------|--|
| Hybrid | Yield | Moisture | Weight | |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | |
| NK Brand S28-G1 | 87.7 | 7.9 | 56.4 | |
| Dyna-Gro 37T26 | 86.6 | 7.9 | 56.4 | |
| Average | 87.2 | 7.9 | 56.4 | |

3-Yr Average Irrigated Soybean Variety Performance Trial at Yuma in 2005-07

| | | | Test | |
|-----------------|--------------|----------|--------------|--|
| Hybrid | Yield | Moisture | Weight | |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | |
| NK Brand S28-G1 | 75.3 | 7.8 | 56.4 | |

2007 Dryland Soybean Variety Performance Trial at Akron

| | | | Test |
|------------------------------------|--------------------|----------|--------------|
| Hybrid | Yield ² | Moisture | Weight |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> |
| NK Brand S12-V7 | 18.2 | 6.8 | 54.9 |
| Dyna-Gro 39D11 | 16.3 | 6.7 | 50.3 |
| Dyna-Gro 36P10 | 16.1 | 6.4 | 50.6 |
| Dyna-Gro 33X19 | 15.9 | 6.7 | 42.5 |
| NK Brand S08-C3 | 13.8 | 6.5 | 45.2 |
| Roughrider Genetics RG607RR | 12.8 | 6.9 | 41.8 |
| NK Brand S02-M9 | 11.8 | 6.6 | 36.8 |
| Dyna-Gro 32K16 | 11.7 | 6.6 | 38.4 |
| NK Brand S14-A7 | 11.5 | 6.9 | 37.7 |
| Roughrider Genetics RG604RR | 10.0 | 6.9 | 32.4 |
| Roughrider Genetics RG405RR | 9.9 | 6.9 | 32.4 |
| Dyna-Gro 33T06 | 9.6 | 6.8 | 31.3 |
| Roughrider Genetics RG603RR | 8.3 | 7.1 | 29.4 |
| Roughrider Genetics RG200RR | 7.8 | 7.0 | 25.6 |
| Roughrider Genetics RG600RR | 7.5 | 7.2 | 24.4 |
| Roughrider Genetics RG601NRR | 7.2 | 7.2 | 23.8 |
| Roughrider Genetics RG6008RR | 5.9 | 7.2 | 19.4 |
| Average | 11.4 | 6.8 | 36.3 |
| ³ LSD _(0.30) | 3.6 | 0.2 | 9.6 |
| ³ LSD _(0.05) | 7.0 | 0.5 | 18.5 |

^{*}Total Precipitation: 7.58 inches.

Site Information

Previous Crop: barley Fertilizer: None

Herbicide: Round-up Ready

Insecticide: None

Plot Size: $5' \times 15'$ with 30'' row spacing

Seeding Rate: 130,000 seeds/ac

¹Trial conducted at the Central Great Plains Field Station; seeded 5/14 and harvested 9/5.

²Yields corrected to 13% seed moisture.

 $^{^{3}}LSD_{(0.30)}$ is more useful for producers using these results to select a variety but some seed company collaborators wish to use $LSD_{(0.05)}$.

2007 Limited Irrigation Early Maturity Soybean Variety Performance Trial at Fort Collins

| | | | Test |
|------------------------------------|--------------------|----------|--------|
| Hybrid | Yield ² | Moisture | Weight |
| | bu/ac | <u>%</u> | lb/bu |
| NK Brand S12-V7 | 30.3 | 7.7 | 57.2 |
| NK Brand S14-A7 | 28.0 | 7.6 | 56.2 |
| Roughrider Genetics RG405RR | 27.0 | 7.6 | 51.5 |
| Dyna-Gro 33X19 | 26.2 | 8.0 | 48.1 |
| Check One | 24.7 | 7.4 | 56.1 |
| Roughrider Genetics RG603RR | 22.7 | 7.4 | 56.0 |
| Dyna-Gro 36P10 | 22.5 | 7.3 | 53.9 |
| Dyna-Gro 39D11 | 22.4 | 7.8 | 56.7 |
| NK Brand S02-M9 | 22.2 | 7.5 | 54.6 |
| Roughrider Genetics RG607RR | 21.3 | 7.9 | 56.1 |
| NK Brand S08-C3 | 20.8 | 7.7 | 43.0 |
| Roughrider Genetics RG604RR | 16.6 | 7.6 | 47.6 |
| Dyna-Gro 32K16 | 15.8 | 7.4 | 39.7 |
| Roughrider Genetics RG200RR | 15.6 | 7.3 | 46.2 |
| Roughrider Genetics RG601NRR | 15.6 | 7.7 | 49.9 |
| Dyna-Gro 33T06 | 15.6 | 7.9 | 45.6 |
| Roughrider Genetics RG200RR | 13.7 | 7.5 | 45.2 |
| Roughrider Genetics RG6008RR | 10.9 | 7.5 | 35.8 |
| Average | 20.7 | 7.6 | 49.9 |
| ³ LSD _(0.30) | 6.6 | 0.3 | 8.8 |
| ³ LSD _(0.05) | 12.7 | 0.6 | 16.9 |

^{*}Total water received (precipitation plus irrigation) = 13.7 inches

Site Information

Previous Crop: corn Herbicide: Round-up

Plot Size: 5' x 15' with 30" row spacing Seeding Rate: 130,000 seeds/ac

¹Trial conducted at the Nutri-Turf Farm; seeded 5/14 and harvested 9/5.

²Yields corrected to 13% seed moisture.

 $^{^{3}}LSD_{(0.30)}$ is more useful for producers using these results to select a variety but some seed company collaborators wish to use $LSD_{(0.05)}$.

2007 Limited Irrigation Medium Maturity Soybean Variety Performance Trial at Fort Collins

| | | | Test |
|------------------------------------|--------------------|----------|--------------|
| Hybrid | Yield ² | Moisture | Weight |
| | bu/ac | <u>%</u> | <u>lb/bu</u> |
| Dyna-Gro 37T26 | 31.9 | 7.3 | 57.1 |
| Dyna-Gro 36C28 | 29.8 | 7.5 | 56.8 |
| NK Brand S28-G1 | 29.7 | 7.8 | 57.4 |
| Dyna-Gro 37Y21 | 28.6 | 7.5 | 56.9 |
| NK Brand S28-B4 | 24.8 | 7.6 | 57.0 |
| Dyna-Gro 36F22 | 24.1 | 7.4 | 54.4 |
| Dyna-Gro 33D27 | 21.9 | 7.6 | 56.8 |
| Dyna-Gro 35F25 | 18.8 | 7.5 | 54.8 |
| Dyna-Gro 31D20 | 16.0 | 7.3 | 51.4 |
| Average | 25.2 | 7.5 | 55.8 |
| ³ LSD _(0.30) | 3.9 | 1.9 | 1.9 |
| ³ LSD _(0.05) | 7.7 | 0.2 | 3.8 |

^{*}Total water received (precipitation plus irrigation) = 13.7 inches

Site Information

Previous Crop: corn Herbicide: Round-up

Plot Size: 5' x 15' with 30" row spacing

Seeding Rate: 130,000 seeds/ac

¹Trial conducted at the Nutri-Turf Farm; seeded 5/14 and harvested 9/28.

²Yields corrected to 13% seed moisture.

 $^{^{3}}LSD_{(0.30)}$ is more useful for producers using these results to select a variety but some seed company collaborators wish to use $LSD_{(0.05)}$.

2007 Limited Irrigation Early Maturity Soybean Variety Performance Trial at Rocky Ford

| - | - | - | Test | |
|------------------------------------|--------------------|----------|--------------|-------------------------|
| _Hybrid | Yield ² | Moisture | Weight | Shattering ³ |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>(1-10)</u> |
| NK Brand S08-C3 | 48.9 | 10.7 | 59.1 | 0.8 |
| Dyna-Gro 33X19 | 48.1 | 11.7 | 56.8 | 2.0 |
| Dyna-Gro 39D11 | 43.2 | 12.5 | 57.2 | 0.7 |
| Roughrider Genetics RG604RR | 42.3 | 11.8 | 58.2 | 2.3 |
| NK Brand S14-A7 | 39.9 | 12.3 | 57.2 | 1.2 |
| NK Brand S02-M9 | 39.5 | 12.4 | 57.5 | 2.0 |
| Dyna-Gro 36P10 | 38.9 | 12.9 | 58.1 | 4.0 |
| Dyna-Gro 32K16 | 38.1 | 12.1 | 54.9 | 2.7 |
| NK Brand S12-V7 | 35.0 | 10.3 | 60.8 | 3.0 |
| Roughrider Genetics RG607RR | 32.0 | 10.5 | 57.9 | 4.0 |
| Roughrider Genetics RG200RR | 29.4 | 11.9 | 58.9 | 4.0 |
| Roughrider Genetics RG405RR | 27.8 | 11.7 | 58.3 | 4.7 |
| Roughrider Genetics RG600RR | 27.4 | 12.1 | 56.5 | 3.3 |
| Roughrider Genetics RG601NRR | 26.5 | 11.2 | 58.8 | 3.7 |
| Dyna-Gro 33T06 | 24.6 | 14.0 | 55.8 | 5.0 |
| Roughrider Genetics RG603RR | 24.1 | 12.7 | 57.5 | 8.0 |
| Roughrider Genetics RG6008RR | 20.6 | 11.9 | 57.3 | 5.0 |
| Average | 34.5 | 11.9 | 57.7 | 3.3 |
| ⁴ LSD _(0.30) | 3.8 | 0.5 | 1.1 | |
| ⁴ LSD _(0.05) | 7.3 | 1.0 | 2.1 | |

^{*}Total water received (precipitation plus irrigation) = 11 inches

Site Information

Plot Size: 7.5' x 32' with 30" row spacing

Seeding Rate: 130,000 seeds/ac
Herbicide: Dual Magnum/Round-up

Comments: There was good moisture in the seedbed (and probably the top foot of soil) at planting. The soybean plants emerged before the first irrigation, i.e., in less than one week.

There was a severe woolly bear caterpillar infestation, which started in early August and resulted in complete defoliation five to six weeks later.

¹Trial conducted at the Arkansas Valley Research Center; seeded 5/14 and harvested 9/24.

²Yields corrected to 13% seed moisture.

 $^{^{3}}$ Rating scale 1-10, with 1 = no shatter and 10 = completely shattered.

 $^{^{4}}$ LSD_(0.30) is more useful for producers using these results to select a variety but some seed company collaborators wish to use LSD_(0.05).

2007 Limited Irrigation Medium Maturity Soybean Variety Performance Trial at Rocky Ford

| | | | Test | |
|------------------------------------|--------------------|----------|--------------|-------------------------|
| Hybrid | Yield ² | Moisture | Weight | Shattering ³ |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | (1-10) |
| Dyna-Gro 36F22 | 44.9 | 9.1 | 57.4 | 0.7 |
| Dyna-Gro 37Y21 | 43.5 | 10.0 | 57.8 | 0.8 |
| Dyna-Gro 35F25 | 41.4 | 8.9 | 58.8 | 2.8 |
| Dyna-Gro 31D20 | 40.9 | 9.5 | 57.7 | 0.7 |
| Dyna-Gro 36C28 | 38.2 | 9.7 | 58.4 | 0.7 |
| Dyna-Gro 37T26 | 37.3 | 9.6 | 58.5 | 1.5 |
| Dyna-Gro 33D27 | 36.5 | 9.0 | 58.3 | 0.8 |
| Average | 40.4 | 9.4 | 58.1 | 1.1 |
| ⁴ LSD _(0.30) | 4.2 | 0.6 | 0.6 | |
| ⁴ LSD _(0.05) | 8.4 | 1.2 | 1.2 | |

^{*}Total water received (precipitation plus irrigation) = 11 inches

Site Information

Plot Size: 7.5' x 32' with 30" row spacing

Seeding Rate: 130,000 seeds/ac Herbicide: Dual Magnum/Round-up

Comments: There was good moisture in the seedbed (and probably the top foot of soil) at planting. The soybean plants emerged before the first irrigation, i.e., in less than one week.

There was a severe woolly bear caterpillar infestation, which started in early August and resulted in complete defoliation five to six weeks later.

¹Trial conducted at the Arkansas Valley Research Center; seeded 5/14 and harvested 9/24.

²Yields corrected to 13% seed moisture.

³Rating scale 1-10, with 1 = no shatter and 10 = completely shattered.

 $^{^{4}}$ LSD_(0.30) is more useful for producers using these results to select a variety but some seed company collaborators wish to use LSD_(0.05).

2007 Irrigated Soybean Variety Performance Trial at Stratton

| | | | Test | Plant |
|--------------------|--------------|----------|--------------|--------|
| Hybrid | Yield | Moisture | Weight | Height |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | inches |
| Asgrow DKB22-52 | 73.4 | 8.7 | 58.4 | 26 |
| Asgrow AG2802 | 71.9 | 9.0 | 57.3 | 37 |
| Asgrow AG2703 | 71.5 | 8.4 | 57.5 | 35 |
| Asgrow DKB26-53 | 71.0 | 9.0 | 59.3 | 31 |
| Check ² | 70.6 | 8.7 | 57.5 | 36 |
| Asgrow AG3102 | 69.8 | 8.8 | 58.9 | 39 |
| Asgrow DKB24-52 | 67.5 | 8.4 | 57.8 | 34 |
| Average | 70.8 | 8.7 | 58.0 | 34 |

 $^{^{1}\}mathrm{Trial}$ conducted on the Jerry and Lester Hasart farm, Tim Stahlecker - Stratton

Equity Coop; seeded 05/22 and harvested 09/28/07.

Site Information

Plot Size: 25' wide, lengths ranging from 1244' to 1283'

Seeding Rate: 245,000 Previous Crop: corn Irrigation: sprinkler Soil Type: Silt loam Fertilization: 26-0-0

Herbicide: Roundup Weathermax/Select

Insecticide: none

²The Check is Asgrow AG3006.

2006 Irrigated Soybean Variety Performance Trial at Yuma- row planting

| Hybrid | Yield | Moisture | Test Weight | Plant Height | Lodge ² |
|-----------------------|--------------|----------|--------------|---------------|--------------------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> | <u>10-Jan</u> |
| NK Brand S28-G1 | 99.7 | 7.0 | 57.0 | 33.5 | 1.5 |
| Dyna-Gro 37T26 | 98.1 | 6.7 | 57.6 | 40.0 | 1.5 |
| NK Brand S27-L4 | 96.5 | 6.5 | 56.7 | 36.0 | 1.0 |
| Dyna-Gro 36D24 | 94.9 | 6.4 | 57.6 | 36.5 | 1.3 |
| Dyna-Gro 39J25 | 93.7 | 7.4 | 56.4 | 31.0 | 1.8 |
| Dyna-Gro 32C25 | 92.8 | 6.2 | 56.3 | 35.5 | 1.0 |
| NK Brand S27-T7 | 89.6 | 6.6 | 57.4 | 33.5 | 1.0 |
| Dyna-Gro 33X19 | 85.7 | 6.3 | 56.9 | 32.0 | 1.0 |
| Dyna-Gro 35C23 | 85.0 | 6.2 | 57.7 | 36.8 | 1.5 |
| Average | 92.9 | 6.6 | 57.1 | 35.0 | 1.3 |
| LSD _(0.30) | 5.7 | | | | |

¹Trial conducted on the Bob Taylor farm; seeded 5/15 and harvested 10/2.

Site Information

Plot Size: 7.5' x 31' with 30" inch rows

Experimental Design: randomized complete block

Seeding Rate: approximately 165,000 seeds/acre for row trial and 198,000 seeds/acre for solid trial.

Previous Crop: corn Irrigation: sprinkler

Soil Type: Richfield silt loam Fertilization: 35 lbs N acre-1

Herbicide: Round-up

2-yr Average Soybean Variety Performance in row planting at Yuma in 2005-06

| Hybrid | Yield | Grain Moisture | Test Weight |
|-----------------|--------------|----------------|--------------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> |
| NK Brand S27-T7 | 79.7 | 7.1 | 57 |
| NK Brand S28-G1 | 79.4 | 7.4 | 56.8 |
| Average | 79.5 | 7.3 | 56.9 |

²Rating scale 1-10, with 1 = no lodging and 10 = completely lodged.

^{*}Good growing conditions and excellent weed control.

2006 Irrigated Soybean Variety Performance Trial at Yuma-solid planting

| Hybrid | Yield | Moisture | Test Weight | Plant Height | Lodge ² |
|-----------------------|--------------|----------|--------------|--------------|--------------------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>in</u> | <u> 10-Jan</u> |
| NK Brand S27-L4 | 80.3 | 8.6 | 57.3 | 34 | 1.0 |
| NK Brand S27-T7 | 79.8 | 8.8 | 57.8 | 32 | 2.0 |
| NK Brand S28-G1 | 78.0 | 9.4 | 57.3 | 37 | 2.3 |
| Dyna-Gro 39J25 | 68.1 | 9.3 | 57.1 | 34 | 2.8 |
| Average | 76.6 | 9.0 | 57.4 | 34 | 2.0 |
| LSD _(0.30) | 6.1 | | | | |

¹Trial conducted on the Bob Taylor farm; seeded 5/15 and harvested 10/2.

Site Information

Plot Size: 5' x 31' with 7.5" row spacing

Experimental Design: randomized complete block

Seeding Rate: approximately 165,000 seeds/acre for row trial and 198,000 seeds/acre for solid trial.

Previous Crop: corn Irrigation: sprinkler

Soil Type: Richfield silt loam Fertilization: 35 lbs N acre-1

Herbicide: Round-up

2-yr Average Soybean Variety Performance in solid planting at Yuma in 2005-06

| Hybrid | Yield | Grain Moisture | Test Weight |
|-----------------|--------------|----------------|--------------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> |
| NK Brand S27-T7 | 74.8 | 8.2 | 57.3 |
| NK Brand S28-G1 | 68.5 | 8.6 | 56.9 |
| Average | 71.7 | 8.4 | 57.1 |

²Rating scale 1-10, with 1 = no lodging and 10 = completely lodged.

^{*}Good growing conditions and excellent weed control.

Differential soybean variety response to solid planting or row planting

A combined analysis of planting system and variety response revealed a significant interaction between these two factors. This means that some varieties were ranked higher in one planting system than in the other system, and that variety performance is affected by the planting system. See the results below by planting system. However, the variety NK Brand S27-T7 was the highest yielding variety in both planting systems, albeit not significantly higher yielding than DEKALB DKB26-53 in the solid planting system, and not significantly higher yielding than NK Brand S29-C9 in the row planting system. The two planting systems were not significantly different from one another in terms of yield.

2005 Irrigated Soybean Variety Performance Trial at Yuma-solid planting

| Hybrid | Yield | Moisture | Test Weight | Plant Height |
|-----------------------|--------------|----------|--------------|---------------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> |
| NK Brand S27-T7 | 69.7 | 7.7 | 56.7 | 27 |
| DEKALB DKB26-53 | 62.2 | 7.8 | 56.4 | 31 |
| NK Brand S28-G1 | 59.1 | 7.9 | 56.5 | 29 |
| ASGROW AG3005 | 51.2 | 8.2 | 56.9 | 32 |
| DEKALB DKB29-51 | 50.3 | 7.7 | 56.2 | 32 |
| Garst 2018 (RR) | 50.2 | 7.8 | 56.9 | 29 |
| Garst 2677 (RR) | 48.7 | 7.6 | 56.0 | 28 |
| ASGROW AG2403 | 46.0 | 7.6 | 55.7 | 26 |
| NK Brand S28-W2 | 45.6 | 8.0 | 56.8 | 28 |
| NK Brand S29-C9 | 32.8 | 7.8 | 56.2 | 33 |
| Average | 51.6 | 7.8 | 56.4 | 29 |
| LSD _(0.30) | 9.5 | | | |

¹Trial conducted on the Bob Taylor farm; seeded 5/23 and harvested 10/03/05.

2005 Irrigated Soybean Variety Performance Trial at Yuma-row planting

| <u>Hybrid</u> | Yield | Moisture | Test Weight | Plant Height | Shatter |
|------------------------|--------------|----------|--------------|---------------|----------|
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> | <u>%</u> |
| NK Brand S27-T7 | 58.2 | 7.7 | 55.9 | 31 | 0.0 |
| NK Brand S29-C9 | 57.7 | 7.8 | 56.0 | 38 | 0.7 |
| NK Brand S28-W2 | 51.1 | 7.7 | 56.6 | 32 | 0.3 |
| NK Brand S28-G1 | 50.6 | 7.8 | 56.5 | 32 | 0.0 |
| Myconate - Non-treated | 50.4 | 7.6 | 53.7 | 29 | 0.3 |
| Garst 2018 (RR) | 49.9 | 7.8 | 56.6 | 29 | 0.0 |
| Myconate - Treated | 47.8 | 7.7 | 55.6 | 31 | 0.0 |
| Garst 2677 (RR) | 40.6 | 7.9 | 54.7 | 31 | 0.0 |
| Average | 50.8 | 7.8 | 55.7 | 32 | 0.2 |
| LSD _(0.30) | 4.1 | | | | |

¹Trial conducted on the Bob Taylor farm; seeded 5/23 and harvested 10/03/05.

^{*}No shatter.

^{**}Good growing conditions, no problems.

^{*}Good growing conditions

2003 was our third year of testing soybean varieties at Yuma. This sprinkler-irrigated trial included only Roundup Ready varieties. Yuma has a relatively long growing season (average 2615 corn growing degree days) and appropriate for Group 2 maturity varieties. A corn growing degree day = daily average temperature -50; with base temperature of 50 degrees F and daily maximum temperature of 86 degrees F.

Rocky Ford, site of soybean variety trials for several years, has a longer growing season (2837 corn growing degree days) and can produce late Group 3 or early Group 4 maturity soybeans. We are extremely pleased with high yields in 2003 at Yuma and the Arkansas Valley Research Center at Rocky Ford. The Rocky Ford trial was furrow irrigated and both conventional and Roundup Ready varieties were included where conventional herbicides were used. Plots in both trials consisted of four rows (30" spacing), each 36 ft long. Yields are expressed at 13% grain moisture as bu/ac (60 lbs per bushel).

2003 Irrigated Soybean Variety Performance Trial at Rocky Ford

| | | | Test | Plant | Leaf |
|-----------------------|--------------|----------|--------------|---------------|-------------------|
| Variety | Yield | Moisture | Weight | Height | Drop ² |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> | <u>date</u> |
| DG 37R39 | 66 | 7.1 | 55.7 | 33 | 259 |
| DG 34P38 | 63 | 7.0 | 56.1 | 31 | 258 |
| Triumph TR3752 (RR) | 62 | 7.0 | 56.0 | 36 | 257 |
| Garst 3824 RR/N | 61 | 7.0 | 55.6 | 35 | 258 |
| DG 3399 + RR | 61 | 6.9 | 55.2 | 34 | 260 |
| Garst 3135 (RR) | 57 | 7.0 | 55.8 | 30 | 252 |
| Average | 62 | 7.0 | 55.7 | 33 | 257 |
| LSD _(0.30) | 4 | | | | |

¹Trial conducted at the Arkansas Valley Research Center; seeded 5/13 and harvested 9/29.

Rocky Ford Site Information

Soil Type: silty, clay loam Previous Crop: corn

Fertilization: 11 lbs N acre⁻¹; 52 lbs P₂O₅ acre⁻¹

Herbicide: Dual II Magnum, Gramoxone Extra, Basagran, Blazer, Poast Crop Oil

Irrigation: furrow

²Julian Date - 50% leaf drop.

2003 Irrigated Soybean Variety Performance Trial at Yuma

| | | | Test | Plant | |
|-----------------------|-------|----------|--------|--------|----------------------|
| Variety | Yield | Moisture | Weight | Height | Lodging ² |
| | bu/ac | <u>%</u> | lb/bu | inches | rating |
| ASGROW AG2403 | 69 | 9.0 | 55.0 | 31 | 1 |
| DEKALB DKB25-51 | 66 | 10.1 | 55.0 | 38 | 1 |
| DG 31G30 | 64 | 11.1 | 55.4 | 32 | 1 |
| Garst 2018 (RR) | 61 | 9.9 | 55.8 | 35 | 1 |
| Triumph TRX2J28 (RR) | 61 | 9.7 | 55.5 | 39 | 1 |
| DEKALB DKB28-52 | 61 | 10.8 | 55.1 | 36 | 1 |
| ASGROW AG2703 | 60 | 11.1 | 55.6 | 38 | 1 |
| Garst 2677 (RR) | 60 | 9.6 | 56.6 | 33 | 1 |
| DG 38K28 | 59 | 10.2 | 55.8 | 38 | 2 |
| Farmer Check* | 55 | 9.7 | 56.6 | 37 | 1 |
| DG 35R27 | 52 | 11.7 | 56.0 | 34 | 1 |
| ASGROW AG3005 | 50 | 12.4 | 54.6 | 39 | 1 |
| Average | 60 | 10.4 | 55.6 | 36 | 1 |
| LSD _(0.30) | 7 | | | | |

¹Trial conducted on the Max Olsen farm; seeded 5/21 and harvested 10/02.

Yuma Site Information

Soil Type: ascalon fine sandy loam

Previous Crop: sunflowers

Herbicide: Roundup Irrigation: sprinkler

2002 Colorado Soybean Performance Trials

2002 was the second year of testing soybean varieties at Yuma. The 2001 trial was severely compromised by hail. Our second attempt at soybean variety testing at Yuma was more successful, without hail and with vigorous vegetative growth, but yields were depressed by high temperatures and mediocre seed set. This sprinkler irrigated trial included only Roundup Ready varieties. Yuma has a relatively long growing season (average 2615 corn growing degree days) and is appropriate for Group 2 maturity varieties. A corn growing degree day = daily average temperature -50; with base temperature of 50 degrees F and daily maximum temperature of 86 degrees F.

Rocky Ford, site of soybean variety trials for several years, has a longer growing season (2837 corn growing degree days) and can produce late Group 3 or early Group 4 maturity soybeans. We are extremely pleased with the high yields in this trial at the Arkansas Valley Research Center at Rocky Ford. This might have been a record high yield for soybeans in Colorado (up to 2002) and gives a rare glance at variety performance under high yield conditions. The trial was furrow irrigated and both conventional and Roundup Ready varieties were included where conventional herbicides were used. Plots in both trials consisted of four rows (30" row spacing), each 36 ft long. Yields are expressed at 13% grain moisture as bu/ac (60 lbs per bushel).

²Lodging rating scale 1-5, 1 = Best.

^{*}Farmer check was NK 528-W2.

2002 Irrigated Soybean Variety Performance Trial at Rocky Ford

| | | | Test | Plant | Leaf | |
|-----------------------|--------------|----------|--------------|---------------|-------------------|----------|
| Variety ² | Yield | Moisture | Weight | Height | Drop ³ | Maturity |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> | <u>date</u> | rating |
| DG 3399+RR | 89 | 8.5 | 54.4 | 39 | 272 | 3.3 |
| Syngenta S39-Q4 | 88 | 10.8 | 53.5 | 39 | 276 | 3.9 |
| Garst 3135(RR) | 84 | 8.4 | 55.6 | 32 | 262 | 3.1 |
| Triumph TR3752RR | 81 | 8.8 | 55.6 | 41 | 271 | 3.7 |
| Pioneer brand 93B85 | 80 | 8.6 | 55.1 | 36 | 267 | 3.8 |
| DG 3390 N RR | 78 | 8.7 | 54.9 | 38 | 272 | 3.3 |
| US Seeds US S4002(RR) | 77 | 8.7 | 55.2 | 36 | 273 | 4.0 |
| Pioneer brand 93B68 | 76 | 8.5 | 56.6 | 33 | 264 | 3.6 |
| Pioneer brand 93B72 | 75 | 9.1 | 55.0 | 37 | 266 | 3.7 |
| US Seeds US S3902(RR) | 74 | 9.9 | 55.1 | 39 | 273 | 3.9 |
| AG3701 + Myconate + | 72 | 8.6 | 56.3 | 34 | 268 | 3.7 |
| DG 3388RR | 69 | 8.6 | 55.3 | 41 | 271 | 3.3 |
| Garst 355(RR) | 69 | 8.4 | 56.6 | 35 | 263 | 3.5 |
| AG3701 + Myconate - | 66 | 8.7 | 56.3 | 38 | 269 | 3.7 |
| Garst 3083(RR) | 63 | 8.7 | 55.4 | 30 | 260 | 3.0 |
| Average | 76 | 8.9 | 55.4 | 37 | 269 | |
| LSD _(0.30) | 5 | | | | | |

¹Trial conducted on the Arkansas Valley Research Center; seeded 5/16 and harvested 10/7.

Rocky Ford Site Information

Soil Type: silty, clay loam Previous Crop: corn

Fertilization: 16 lbs P₂O₅ acre⁻¹; 75 lbs K₂O acre⁻¹

Herbicide: Basagran, Blazer, Poast

Irrigation: furrow

²Myconate® is a new agricultural product developed by researchers at Michigan State University. Myconate® is a signal compound put out by plant roots in times of stress that encourages beneficial fungus (mycorrhizae) to colonize them. The fungus extends the plants root system and helps it take up nutrients and water, and fight off disease. Previous research has shown significant yield increases on a number of crops in a variety of locations. This simple compound is non-toxic, is quickly broken down in the soil, and is effective in very small quantities. It is water soluble and easy to apply to seeds or soil. Myconate® is a trademark product of VAMTech, L.L.C., commercially available for enhancing mycorrhizal colonization.

³Julian date.

2002 Irrigated Soybean Variety Performance Trial at Yuma

| | | | Test | Plant | | |
|--------------------------|--------------|----------|--------------|---------------|---------------------|----------|
| Variety | Yield | Moisture | Weight | Height | Shatter | Maturity |
| | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>inches</u> | rating ² | rating |
| ASGROW AG3003 | 47 | 8.0 | 55.6 | 33 | 1 | 3.0 |
| DGX 432 RR | 43 | 7.7 | 53.4 | 34 | 1 | 4.3 |
| ASGROW AG2703 | 42 | 8.2 | 53.8 | 34 | 1 | 2.7 |
| DEKALB DKB26-51 | 42 | 8.2 | 56.4 | 32 | 1 | 2.6 |
| DG 3270 RR | 42 | 8.6 | 56.1 | 39 | 1 | 3.2 |
| DG 3287 RR | 41 | 7.7 | 56.2 | 31 | 1 | 3.2 |
| Syngenta S29-C9 | 41 | 7.8 | 54.1 | 36 | 1 | 2.9 |
| DEKALB DKB24-51 | 41 | 7.8 | 56.6 | 28 | 1 | 2.4 |
| US Seeds US S2503(RR) | 40 | 7.6 | 55.4 | 32 | 1.7 | 2.5 |
| Garst 2677 (RR) | 39 | 7.5 | 56.6 | 31 | 1 | 2.6 |
| US Seeds US S2703(RR) | 37 | 8.3 | 53.8 | 35 | 1 | 2.7 |
| Pioneer 91B91+Myconate + | 37 | 7.8 | 51.3 | 30 | 1 | 1.7 |
| Garst 2332 (RR) | 33 | 7.7 | 56.9 | 29 | 1 | 2.3 |
| DEKALB DKB23-51 | 33 | 7.6 | 57.6 | 30 | 1 | 2.3 |
| Pioneer 91B91+Myconate - | 30 | 8.0 | 55.4 | 28 | 1 | 1.7 |
| Garst 2603(RR) | 30 | 7.9 | 51.5 | 33 | 1 | 2.6 |
| Average | 39 | 7.9 | 55.0 | 32 | 1 | |
| LSD _(0.30) | 5 | | | | | |

¹Trial conducted on the Rod Hahn farm; seeded 5/14 and harvested 10/1.

Yuma Site Information

Soil Type: manter, loamy sand

Previous Crop: corn

Fertilization: 9 lbs N acre $^{-1}$; 23 lbs P_2O_5 acre $^{-1}$; 6 lbs K_2O acre $^{-1}$; 6 lbs S; .5 lbs Zn

Herbicide: Touchdown Irrigation: sprinkler

² Rating scale 0-10.

^{*}Myconate® is a trademark product of VAMTech, L.L.C., commercially available for enhancing mycorrhizal colonization

2001 was the first year of testing soybean varieties at Yuma. This sprinkler irrigated trial on soils with pH in the range of 7.0 – 7.4 included only Roundup Ready varieties. Yuma has a relatively long growing season (average 2615 corn growing degree days) and is appropriate for Group 2 maturity varieties. A corn growing degree day = daily average temperature -50; with base temperature of 50 degrees F and daily maximum temperature of 86 degrees F. Our first attempt at soybean variety testing in Yuma was marred by a severe hail storm during the first week of September. Our collaborating grower thinks yields were reduced by 40% due to the storm.

Rocky Ford, site of soybean variety trials for several years, has a longer growing season (2837 corn growing degree days) and can produce late Group 3 or early Group 4 maturity soybeans. The trial was furrow irrigated with a soil pH of 7.8. Both conventional and Roundup Ready varieties were included, and conventional herbicides were used. Plots in both trials consisted of four rows, each 36 ft long. Yields are expressed at 13% grain moisture as bu/ac with 60 lbs of soybeans in one bushel.

2001 Irrigated Soybean Variety Performance Trial at Rocky Ford

| | | | Plant | |
|-----------------------|--------------|----------|---------------|-------------------------|
| Variety ² | Yield | Moisture | Height | Leaf Drop |
| | <u>bu/ac</u> | <u>%</u> | <u>inches</u> | <u>date³</u> |
| DG 3399(RR) | 72.9 | 7.2 | 35 | 275 |
| Pioneer brand 93B85 | 72.1 | 7.0 | 33 | 275 |
| Garst 355(RR) | 70.8 | 6.8 | 36 | 273 |
| Pioneer brand 93B72 | 69.9 | 6.9 | 32 | 274 |
| Pioneer brand 93B53 | 69.1 | 6.9 | 34 | 273 |
| Garst 437(RR/N) | 68.8 | 7.7 | 38 | 277 |
| DG 3388(RR) | 68.5 | 7.2 | 37 | 0* |
| Asgrow AG3903 | 67.9 | 7.4 | 35 | 275 |
| Asgrow AG3902 | 67.8 | 7.5 | 36 | 0* |
| Garst 381(RR/STS) | 67.6 | 6.9 | 35 | 273 |
| DEKALB DKB40-51 | 61.8 | 7.6 | 37 | 277 |
| Average | 68.8 | 7.2 | 35 | 225 |
| LSD _(0.30) | 4.4 | | | |

¹Trial conducted on the Arkansas Valley Research Center; seeded 6/4 and harvested 10/10. No shatter.

Site Information

²Abbreviations used with soybean variety traits: RR = Roundup Ready, RR/N = Not Roundup Ready, STS = Sulfonylurea Tolerance

³Julian date.

^{*}Frosted before leaf drop.

^{**}Plot size: 7.5' x 31' with 30" row spacing

2001 Irrigated Soybean Variety Performance Trial at Yuma

Plant Variety² Yield Moisture Height Shatter rating³ bu/ac inches <u>%</u> DG 3270(RR) 47.6 34 2.3 13.4 Syngenta S29-C9 45.7 31 2.0 11.2 Prairie Brand PB-2717(RR) 42.8 11.8 34 2.0 Asgrow AG2703 41.2 13.5 33 2.0 36.6 3.0 Asgrow AG2402 12.7 36 2.7 Syngenta S24-K2 35.0 14.5 36 Garst 198(RR) 32.6 12.7 30 3.0 Prairie Brand PB-2131(RR) 32.5 12.6 34 3.0 DG 3263(RR) 31.6 12.9 37 2.3 2.3 DEKALB DKB26-51 30.8 11.5 31 Garst 2547(RR) 29.9 12.4 32 3.3 DEKALB DKB23-51 28.5 13.0 33 3.0 28.0 33 3.0 Asgrow AG2302 11.0 Garst 2603(RR) 25.0 34 3.0 13.5 Garst 2112(RR/N) 24.9 12.3 29 3.0 **Average** 34.2 **12.6** 33 2.7 4.4 LSD_(0.30)

Site Information

¹Trial conducted on the Joe Harper farm; seeded 6/6 and harvested 9/25.

²Abbreviations used with soybean variety traits: RR = Roundup Ready, RR/N = Not Roundup Ready, STS = Sulfonylurea Tolerance

 $^{^{3}}$ Rating scale 0-10, with 0 = no shattering and 10 = 100% shattering. Shatter was due to hail damage on 9/15/01.

^{**}Plot size: 7.5' x 31' with 30" row spacing

2000 Irrigated Soybean Variety Performance Trial at Rocky Ford

| | | | Test | Test |
|-----------------------|--------------|----------|----------|--------------|
| Variety | Yield | Moisture | Average | Weight |
| | <u>bu/ac</u> | <u>%</u> | <u>%</u> | <u>lb/bu</u> |
| DKB 38-51 | 74.2 | 8.3 | 112 | 56.0 |
| 346 RR | 72.4 | 8.5 | 110 | 56.2 |
| 5404 | 71.3 | 8.4 | 108 | 55.8 |
| 93B51 | 71.2 | 8.4 | 108 | 56.1 |
| 5383 | 70.8 | 8.3 | 107 | 56.0 |
| 5370 RR | 67.8 | 8.3 | 103 | 56.2 |
| TR3750 RR | 67.6 | 8.4 | 102 | 56.4 |
| 93B34 | 66.7 | 8.4 | 101 | 56.8 |
| TR3939 RR | 65.7 | 8.7 | 99 | 56.6 |
| CX 391 RR | 65.7 | 9.0 | 99 | 56.4 |
| AG 3701 | 65.4 | 8.3 | 99 | 57.0 |
| 5316 RR | 63.6 | 8.5 | 96 | 55.7 |
| AG4101 | 63.4 | 11.8 | 96 | 55.7 |
| TR4319 RR | 61.3 | 14.4 | 93 | 55.6 |
| 429 RR | 60.9 | 8.9 | 92 | 56.9 |
| 94B01 | 58.8 | 8.9 | 89 | 56.5 |
| 9396 | 57.5 | 8.3 | 87 | 56.6 |
| Average | 66.0 | | | |
| LSD _(0.10) | 5.7 | | | |

¹Trial conducted on the Arkansas Valley Research Center; seeded 5/31 and harvested 10/13.

Site Information

Fertilizer - 50 lbs. P₂O₅/Acre

Soybean inoculants - 15 oz./300 lbs. of seed

Herbicide - Pursuit .0626 lbs. Al/Acre - 6/6, Poast .28 lbs. Al/Acre + Dash - 6/20,

Basagran 1 lb. + Blazer .25 lbs. Al/Acre - 6/23

Fungicide - None Insecticide - None

^{*}Yield adjusted to 13% moisture and 60 lbs. bushel.

^{**}Plot size: 7.5' x 31' with 30" row spacing

1999 Irrigated Soybean Variety Performance Trial at Rocky Ford

| _ | - | - | | | |
|-----------------------|-------------|--------------|----------|--------------|----------|
| | | | Test | Test | |
| Variety | Brand | Yield | Average | Weight | Moisture |
| | | <u>bu/ac</u> | <u>%</u> | <u>lb/bu</u> | <u>%</u> |
| TR4319RR | Triumph | 63.7 | 119 | 53.5 | 7.7 |
| CX419RR | DeKalb | 59.7 | 111 | 55.5 | 7.7 |
| S39-D9 | NK Novartis | 59.7 | 111 | 55.5 | 7.5 |
| TR 3939RR | Triumph | 59.4 | 111 | 54.1 | 7.6 |
| 9396 | Pioneer | 59.0 | 110 | 55.7 | 7.6 |
| 377RR | Producers | 57.7 | 107 | 55.1 | 7.6 |
| S42-K2 | NK Novartis | 57.3 | 107 | 55.7 | 7.7 |
| 93B34 | Pioneer | 56.9 | 106 | 55.2 | 7.6 |
| 94B01 | Pioneer | 55.9 | 104 | 55.3 | 7.8 |
| 93B51 | Pioneer | 55.1 | 103 | 54.9 | 7.8 |
| 5366NRR | Mycogen | 53.5 | 100 | 54.7 | 7.6 |
| S36-U2 | NK Novartis | 52.6 | 98 | 53.4 | 7.7 |
| 5370RR | Mycogen | 52.2 | 97 | 54.4 | 7.6 |
| TR4339RR | Triumph | 50.7 | 94 | 55.9 | 7.7 |
| J-399 | Mycogen | 49.7 | 93 | 55.4 | 7.5 |
| CX390RR | DeKalb | 42.0 | 78 | 55.6 | 7.7 |
| X8135RR | Producers | 27.5 | 51 | 55.7 | 8.0 |
| Average | | 53.7 | | | |
| LSD _(0.10) | | 8.9 | | | |
| | | | | | |

¹Trial conducted on the Arkansas Valley Research Center; seeded 5/24 and harvested 10/13.

Site Information

Fertilizer - 50 lbs. P₂O₅/Acre

Soybean inoculants - 15 oz./300 lbs. of seed

Herbicide - Roundup 1 lb. + Dual II .98 lbs. AI/Acre - preplant

**Plot size: 7.5' x 31' with 30" row spacing

^{*}Yield adjusted to 13% moisture and 60 lbs. bushel.

Seed Company Entrants in the Colorado Soybean Performance Trials from 1999-2009

| Entrant | Brand/Hybrid | Address | Telephone |
|-------------------------|-------------------|---|--------------|
| Garst Seed Co. | Garst | 1101 Mansfield Drive, Fort Collins, CO 80525 | 970-222-4719 |
| Dyna-Gro Seeds | Dyna-Gro | 240 22 nd Street, Greeley, CO 80631 | 800-332-4045 |
| Monsanto | DEKALB/Asgrow | 4312 Carol Ave., Cortland, IL 60112 | 815-754-4809 |
| NK Brand Seeds, Inc. | NK Brand/Syngenta | 86852 572 nd Avenue, Box 277, Laurel, NE 68745 | 402-256-9109 |
| Pioneer Hi-Bred Int'l | Pioneer brand | 1616 S. Kentucky, Suite C-150, Amarillo, TX 79102 | 806-356-0160 |
| Plant Health Care, Inc. | Myconate | 440 William Pitt Way, Pittsburgh, PA 15238 | 412-826-5488 |
| Prairie Brand Seed Co. | Prairie Brand | 15 X Avenue, Story City, IA 50248 | 515-733-2101 |
| UAP-Pueblo | DG | Box 1279, Garden City, KS 67846 | 620-275-6127 |
| United Suppliers, Inc. | US Seeds | PO Box 538, Eldora, IA 50627 | 877-714-4503 |
| VAMTech, L.L.C. | Myconate | 3186 Pine Tree Rd., Unit D, Lansing, MT 48911 | 517-819-9739 |



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