

Soybean Varietal Trials — Pennington and Roseau County

	Thief River Falls	Roseau
Cooperator	Lyle Olson	Richard Magnuson
Nearest Town	Thief River Falls	Roseau
Soil type	Roliss loam	Zippel very fine sandy loam
Previous crop	Barley	Wheat
Seed Bed prep	cultivation 2x	cultivated 2x
Soil test	20 - 18 - 332 - 62	NA
Fertilizer	25 - 65 - 20 - 1	14 - 67 - 39 - 0
Planting date	5-31-05	5-19-05
Row width	6 inches	6 inches
Seeding depth	3/4 inch	3/4 inch
Seeding rate	190,000 seeds/ a	190,000 seeds/ a
Herbicides	Trust 1.5 pt/a PPI	Prowl 3 pt/a PPI
		Assure II 10 oz/a Applied on 7-14-05
First Frost date	10-5-05	10-5-05

Purpose of Study:

To evaluate visual maturity, maturity, crop height, yield, protein and oil percent of soybean varieties grown in the far northern zone.

Results:

Within the company maturity rating group of 00.6, 00.7, 00.8, 00.9 and 0.1 significant differences in visual maturity score were observed. It is important to use the actual maturity date in variety selection. There are significant differences in crop height, yield, protein and oil percent.

Experimental Design: Randomized complete block with 3 replications

Variety	Company Maturity rating	Visual ¹ Maturity score Roseau+TRF (1-9)	Maturity ² date	Crop Height Roseau+TRF (inches)	Yield ² percent of mean (%)	Protein ² percent of mean (%)	Oil ² percent of mean (%)
Colibri	00.3	4.9	9-24-05	22.7	93	101	91
06004RR	00.4	5.9	9-27-05	22.0	106	95	103
PB00425RR	00.4	6.0	9-27-05	21.0	100	96	104
RR50-04	00.4	5.9	9-25-05	22.5	101	101	102
S00-J4	00.4	6.1	9-27-05	19.5	87	98	103
RR Ramsey	00.5	6.3	9-28-05	21.5	94	98	103
RR20-05	00.5	6.1	9-27-05	21.0	97	100	102
W20051RR	00.5	5.7	9-27-05	22.5	102	96	102
X5005R	00.5	6.0	9-25-05	22.0	101	104	98

¹Visual score is a combined number of three observations: Roseau 9-12-05 and 9-21-05 and Thief River Falls 9-16-05 (representing an observation around the average first killing frost date).

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Partnership/Funding:

Minnesota Soybean Research Council

For additional information:

Jim Orf, Hans Kandel, Dave LeGare

Soybean Varietal Trials — Pennington and Roseau County (*continued*)

Variety	Company Maturity rating	Visual ¹ Maturity score Roseau+TRF (1-9)	Maturity ² date	Crop Height Roseau+TRF (inches)	Yield ² percent of mean (%)	Protein ² percent of mean (%)	Oil ² percent of mean (%)
06006RR	00.6	3.8	9-21-05	19.4	80	99	99
PB00645RR	00.6	7.5	9-27-05	20.2	95	96	102
RR50-06	00.6	4.6	9-21-05	21.2	90	101	99
RR50-07	00.7	8.3	9-30-05	23.8	103	98	103
MN0071	00.7	4.9	9-21-05	21.0	97	99	104
W20077RR	00.7	6.0	9-27-05	22.2	89	100	101
Jim	00.8	5.0	9-24-05	21.2	99	99	89
Atwood	00.8	8.1	9-27-05	22.0	109	105	97
NS0049RR	00.8	7.8	9-26-05	22.3	102	100	104
DSR-C800/RR	00.9	8.1	9-30-05	23.0	110	98	103
DSTC9-000/RR	00.9	6.3	9-28-05	19.8	97	101	102
RR ROYAL	00.9	7.8	9-29-05	21.2	99	99	99
K-009+RR	00.9	8.5	10-1-05	23.2	109	100	102
M-0096	00.9	8.7	9-30-05	21.8	108	100	101
NT-0090RR	00.9	8.5	10-1-05	22.3	104	102	103
04009RR	00.9	7.4	9-29-05	20.8	92	96	103
PB00965RR	00.9	8.3	10-1-05	21.8	102	101	102
Bravado	00.9	5.2	9-25-05	22.2	108	96	103
W20092RR	00.9	8.5	10-2-05	22.7	109	102	102
W20091RR	00.9	7.9	9-30-05	23.2	102	101	100
NS0110RR	00.9	5.3	9-27-05	20.7	102	101	103
NS0099RR	00.9	6.6	9-29-05	20.2	97	99	102
NS0056RR	00.9	6.8	9-29-05	23.5	102	98	102
RG200	0.0	7.0	9-28-05	21.7	91	105	86
Traill	0.0	6.3	9-27-05	22.0	101	106	87
NT-0111RR	0.1	5.8	9-28-05	20.3	102	98	105
NT-0102RR	0.1	7.0	9-30-05	22.7	97	96	100
NT-0121+RR	0.1	7.5	9-28-05	20.9	98	95	102
90M01	0.1	6.8	9-28-05	21.2	94	100	104
PB00943RR	0.1	8.3	9-30-05	22.5	110	99	102
S01-T5	0.1	8.6	9-29-05	23.2	96	108	95
MK0205	0.1	6.8	9-30-05	19.5	92	104	96
T-0222+RR	0.2	8.9	10-3-05	23.5	106	101	101
S02-M9	0.2	8.4	9-30-05	26.1	108	102	101
Mean		6.8	9-28-05	21.8	35.3 bu/a	35.4%	18.3%
LSD 0.05		1.1		3.0			
LSD 0.20					6%		

¹Visual score is a combined number of three observations: Roseau 9-12-05 and 9-21-05 and Thief River Falls 9-16-05 (representing an observation around the average first killing frost date).

9= Plants green

8= mostly green some yellowing

7= yellowing more than half still green

6 = half yellow half green

5 = mostly yellow limited green

4 = yellow

3 = yellow and browning of pods

2 = plant nearly mature

² Data average for far northern zone Roseau, Thief River Falls and Crookston

Source and more information can be found at <http://www.soybeans.umn.edu/crop/variety/>