

Licking County Soybean Tests

Howard Siegrist, Agriculture and Natural Resources Extension Agent

Objective

Evaluate current Roundup Ready and conventional soybean varieties under high-yield environmental conditions in Licking County.

Background

Cooperator:	Ohio Foundation Seeds	Planting Date:	June 10, 2002
County:	Licking	Planting Rate:	170,000 seeds/A
Nearest Town:	Croton	Row Width:	10-inch
Drainage:	Systematically tiled	Herbicides:	
Soil type:	Clay silt loam	PRE:	2 pt/A Dual
Tillage:	Conventional till	POST:	Roundup Ready plots: 32 oz/A Roundup UltraMax
Previous Crop:	Corn		Conventional plots: 2.2 oz/A First Rate, 1 pt/A Basagran 1 qt/A crop oil
Variety:	See Results		
Soil test:	pH 6.4, P 32 ppm, K 120 ppm	Harvest Date:	November 2, 2002

Methods

All plots were randomized with three replications of each variety. Plots were 30 feet in length and six rows wide. Early Roundup Ready soybeans were of 2.8 to 3.4 relative maturity. Late Roundup Ready Soybeans were of 3.5 to 3.9 relative maturity. The maturity ratings of the conventional soybeans were in a range of 2.7 to 3.9. Harvest estimates were made by weights calculated from combine. Yield averages were adjusted to a standard moisture of 13.0%.

Results

Roundup Ready Early	Yield (bu/A)	Roundup Ready Late	Yield (bu/A)	Conventional	Yield (bu/A)
Pioneer 93B36	55.5	DeKalb DKB35-51	56.7	Sow Right SR390	53.3
Vigoro V332RR	55	Pioneer 93B72	49.7	LG Seeds C3545	46.3
DeKalb DKB31-52	51.9	Seed Consultants SC9391	48.6	LG Seeds C3201	45.2
LG Seeds C3033RR	51.5	Asgrow AG3703	47.8	Shur Grow 398	43.8
LG Seeds C3429RR	51.4	Seed Consultants SC9371	46.4	Sow Right SR350	43.1
LG Seeds C3322WRR	50.2	Ag Venture AV 6371RR	46	Shur Grow 328STS	42.4
Golden Harvest H2940RR	49.4	Seed Consultants SC9362	44.6	Steyer 386	41.8
Asgrow AG3302	49.2	AGI 7361RR	44.4	Vigoro V380	41.3
NK S34-B2	49.1	Sun Prairie SP3602NRR	44.1	General	41.1
Ag Venture AV6329RR	49.1	Pioneer 93B53	43.3	LG Seeds C3883N	40.4
NK S32-G5	48.9	Vigoro V372RR	43.2	Shur Grow 392STS	39.5

Shur Grow 312RR	48.9	Garst 3712RR	43.1	Dilworth	38.7
Vigoro V340RR	48.5	Seed Consultants SC9351	42.6	Ag Venture AV1398	38.4
Golden Harvest H3243RR	47.9	Crow's C3717R	42.6	Ohio FG3	38.2
Ag Venture AV6289RR	47.6	LG Seeds C3655RR	40.6	Shur Grow 311STS	37.2
Shur Grow 332RR	47.4	AGI 7374	40.6	Ohio FG1	36.9
Seed Consultants SC9320	46.5	LG Seeds C3944NRR	40.3	Ag Venture AV1329	36.6
Steyer 3010	46.2	LG Seeds C3767RR	39.2	Kottman	36
AGI 30R01	45.9	Golden Harvest H3603RR	38.6	Sow Right SR360STS	34.4
AGI 7343RR	45.2	LG Seeds C3996RR	38.1	Ag Venture AV227	34.3
DeKalb DKB31-51	44.8	AGI 7377NRR	37.9	Stressland	34.1
Asgrow AG3401	44.1	Pioneer 93B68	37.8	High	53.3
Crow's C3315R	44	Shur Grow 362RR	36.6	Average	40.1
Steyer 3430	43.5	DeKalb DKB38-51	36.5	Low	34.1
Brodbeck SC3000	43.5	HF9667-2-15 (3.8)	36.5	LSD (0.05)	13.8
Brodbeck SC3080	43.5	Pioneer 93B67	36.5		
Asgrow AG3201	42.9	Vigoro V37N3RR	36.1		
Sun Prairie SP3400RR	42.6	Steyer 3540	35.5		
Sun Prairie SP2801RR	42.4	Sun Prairie SP3702RR	35.4		
HF9670-3-10 (3.0)	42.3	Hyttest RT 3600RR	34.9		
HF9667-2-4 (2.6)	41.3	Shur Grow 351RR	34		
Sun Prairie SP2902NRR	40	Shur Grow 370RR	33.6		
Hyttest RT346RR	39.7	Golden Harvest H3994RR	32.4		
High	55.5	Ag Venture AV6361RR	30.8		
Average	46.7	Pioneer 94B13	29.8		
Low	39.7	Ag Venture AV6350RR	28.6		
LSD (0.05)	9.2	Shur Grow 360RR	28.3		
		NK S 35-A6	23.4		
		Crow's C3915R	21.9		
		HF9665-2-15 (3.9)	21.2		
		High	56.7		
		Average	38.2		
		Low	21.2		
		LSD (0.05)	17.5		

Summary

Seventeen varieties of the early Roundup Ready soybeans were not significantly different from each other with yields ranging from 46.5 to 55.5 bushels per acre. Eighteen late Roundup Ready soybean varieties were not significantly different from each other with yields ranging from 39.2 to 56.7 bushels per acre.

For the conventional soybean plots, 11 varieties were not significantly different in yield from each other with a range of 39.5 to 53.3 bushels per acre.

For additional information, contact:

Howard Siegrist
The Ohio State University
siegrist.1@osu.edu