

**Western Illinois University
School of Agriculture
2010 Soybean Variety Trials-Yield Summary**

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Variety	Group	Company/ Source	Conventional WIU Site Planted 6/11 Yield (Bu/A)	Alpha = 0.05	Rank	Stature Score	Rank
38C9	3.8	Blue River Hybrids	51.5	a	1	6.7	11
289.TC	2.8	eMerge/ Schillinger Seed	51.2	ab	2	6.7	12
29AR9	2.9	Blue River Hybrids	50.0	abc	3	7.0	8
389F.YC	3.8	eMerge/ Schillinger Seed	47.8	abcd	4	5.3	17
348.TCS	3.4	eMerge/ Schillinger Seed	46.8	abcd	5	6.7	13
34A7	3.4	Blue River Hybrids	46.2	abcde	6	7.0	7
32FO	3.2	Blue River Hybrids	45.8	abcde	7	8.3	3
30A7	3.0	Blue River Hybrids	45.6	abcde	8	8.7	2
35AO cnv	3.5	Blue River Hybrids	45.4	abcde	9	5.7	16
298F.Y	2.9	eMerge/ Schillinger Seed	44.9	abcde	10	7.3	5
DFE 306	3.0	American Organics	44.4	bcde	11	8.7	1
XP 3520	3.5	eMerge/ Schillinger Seed	43.7	cdef	12	7.7	4
MOFC 5148	3.7	MOFC	43.4	cdefg	13	7.0	10
XC 3810	3.8	eMerge/ Schillinger Seed	41.6	defg	14	6.3	15
20736	3.6	US Soy	39.5	efg	15	6.7	14
20737	3.7	US Soy	37.2	fg	16	7.0	9
MOFC 5160	2.6	MOFC	37.1	fg	17	7.3	6
Iowa 3027	3.0	Clarkson Grain	36.6	g	18	5.3	18
			LSD = 7.0			LSD = 1.3	

Note: All seed planted for this trial was either certified organic or non-gmo.

Stature Score is based on a scale of 1-10 with 1 being lodged/touching ground and 10 fully erect.

See next page for site description and discussion.

Research Site Description

Conventional Site

The WIU research farm is located ~ 2 miles north of Macomb in McDonough Co, IL. The variety trial was located in block 1, which is mapped as Tama silt loam (3% sand, 75% silt, 22% clay). Soil test results from 2010 suggest that fertility levels (310 lbs K/ac, 54 lbs P/ac, pH = 6.4, % OM = 2.2% and CEC. = 16.5 centimols/kg) were adequate for good crop yields.

The trial was arranged as a completely randomized block design with 4 replications. Two row plots on 30" row spacing were planted on 6/11/10 with a Kincaid JD71, 2 row plot planter at a 160,000 seeds/acre rate. Weed control included an application of FirstRate herbicide at 0.6 oz/ac + Dual II Magnum at 1.67 pt/ac and moderate hand weeding to remove broad leaf weeds. Sub plots (~ 15' in length x 2 rows) were harvested with a KEM plot combine on 10/29/10.

The variety trial was not replicated at the WIU/Allison Organic Farm due to excessive rainfall (300% of normal precipitation in May, June and July). The intended site at the organic farm had standing water during much of the appropriate window for soybean planting. The conventional site also received unusually high rainfall but was less affected because of better drainage.

Results/Discussion

Blue River Hybrids 38C9 (group 3.8) was the top yielding soybean variety with an average of yield of 51.5 bu/ac. eMerge 289.TC (group 2.8) was a close 2nd with an average yield of 51.2 bu/ac. These varieties, interestingly, vary by a full maturity point, but had comparable yields. Iowa 3027 (group 3.0) has been a competitive yielding food-grade variety in the past, but in this 2010 test plot it had both the lowest yield and stature score. American Organics DFF 306 and Blue River Hybrids 30A7 were the top ranking varieties for stature. The top 5 yielding varieties had below average stature scores possibly indicating a correlation between higher yields and less erect plants.