

**Western Illinois University  
School of Agriculture  
2012 Soybean Variety Trials-Yield Summary**

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Variety	Group	Company/ Source	Organic Allison Farm Planted 6/7 Yield (Bu/A)	Alpha = 0.05	Rank	Conventional WIU Site Planted 5/25 Yield (Bu/A)	Alpha = 0.05	Rank
GH 349	3.4	Great Harvest Organics	48.3	a	1	59.9	abc	3
34A7	3.4	Blue River Hybrids	47.2	a	2	58.6	abc	5
30C3	3.0	Blue River Hybrids	45.5	ab	3	58.5	abcd	6
348.TCS	3.4	Blue River Hybrids/eMerge	44.5	ab	4	63.9	a	1
34C2	3.4	Blue River Hybrids	43.5	abc	5	56.8	bcd	7
35C2	3.5	Blue River Hybrids	42.4	abc	6	59.4	abc	4
LVF 3507	3.5	Lakeview Farm	41.1	bc	7	54.3	cd	9
389F.YC	3.8	Blue River Hybrids/eMerge	40.6	bc	8	61.8	ab	2
LVF 3209	3.2	Lakeview Farm	39.7	bc	9	52.1	d	10
GH 327	3.2	Great Harvest Organics	37.8	c	10	54.4	cd	8
			LSD = 6.0			LSD = 6.4		

### Research Site Descriptions

#### Organic Site

The Allison Organic Research Farm is located 7 miles north of Sciota, IL in southwestern Warren County. The variety trial was located in the southwest corner of field 4-1, which is mapped as a Sable silty clay loam soil (poorly drained). The trial was arranged as a complete randomized block design with 5 replications. Two row plots were planted on 6/7/12 with a Buffalo 4 row planter at a rate of 175,000 seeds/a. The entire field was cultivated twice and sub-plots were hand weeded. Weed-free sub-plots ranging from 20-30' in length were harvested with an old model KEM plot combine on 10/31/12.

## **Conventional Site**

The WIU research farm is located ~ 2 miles north of Macomb in McDonough Co, IL. The variety trial was located in block 13 which is mapped as a Downs silt loam soil (moderately well drained). The trial was arranged as a complete randomized block design with 5 replications. Two row plots were planted on 5/25/12 with a Kincaid JD71, 2 row plot planter at a rate of 160,000 seeds/a. Weed control included a herbicide application and slight hand weeding to remove a few broad leaf weeds. Sub plots ranging from ~ 12-18' in length were harvested by Tech Services, Inc. with a new model Kincaid plot combine on 10/26/12.

## **Results**

The 4 varieties that ranked in the top significance group at both sites were GH 349-Great Harvest Organics, 34A7-Blue River Hybrids, 30C3-Blue River Hybrids, 348.TCS-Blue River Hybrids/eMerge.

348.TCS-Blue River Hybrids/eMerge, the top yielding variety at the Macomb site, had the 4th highest yield at the Allison Farm (63.9 and 44.5 bu/a respectively).

GH 349-Great Harvest Organics, the top yielding variety at the Allison Farm had the 3<sup>rd</sup> highest yield at the Macomb site (48.3 and 59.9 bu/a respectively).

Yield differences for the top yielding variety and lowest yielding variety at both sites are similar. The difference at the organic site is 10.5 bu/a and the conventional site is 11.8 bu/a.

## **Discussion**

Heavy rain occurred shortly following planting of the plots at the WIU research farm. A strong stand emerged in all plots despite some crusting. In contrast, the Allison Farm plots were planted after ~ 2 weeks of dry weather and no additional rain occurred for over 2 more weeks. Most of the soybean seeds were planted into moisture, but some emerged slowly and others did not emerge for approximately 3 weeks after a rain. The large yield advantage for the Macomb site (~ 15 bu/a) was probably partly related to the earlier planting and better stand establishment, but the timing of small rain events in July and August may also have been more advantageous. Weed control was excellent at both sites so inter-species competition for moisture should not have been issue. All varieties produced good quality soybean seeds based on visual observation and despite a drought produced respectable yields.