

News Column

Anastasia L. Johnson

County Extension Agent



## 2016 MARSHALL COUNTY SOYBEAN PLOT YIELD RESULTS

I am pleased to announce the yield results of the 2016 Marshall County No-Till Soybean Plot. All of the soybeans planted were glyphosate resistant soybean varieties and were around the same maturity. Our cooperators for the soybean demonstration plots were Madison and Sheldon Voet and was located north of Home.

The soybean plot was planted on June 5, 2016, and was harvested the plot on October 28. The plot had a seeding rate of 160,000 seeds per acre with Kinze planter in 15" rows after soybeans. The starter fertilizer consisted of 11-52-0, potash, granular ammonia sulfate, boron, and zinc. Prior to planting, there was a "burndown" application of Sonic, Dual, Roundup, 2,4-D, and Weatherguard and one post-emergence herbicide treatment of Levery, Roundup, and Weatherguard. We had 12 different soybean varieties this year; all of which were relatively disease and pest free.

The inserted tables has the yield results from the 2016 Marshall County Soybean Variety and Population Plots. The soybean variety plot averaged 47.9 bushels per acre, which is about 10 bushels per acre higher than last year's soybean plot. The plot had a range in yields from bushels per acre 43.98 to 54.42 bushels per acre. These average yields are adjusted for field variation. The soybean population plot showed that 120,000 seeds/acre yielded the best compared to the other populations.

Some people may be wondering how to read the yields in the table. The next to the last column is the yield adjusted to the standard moisture for soybeans, which is 13%. The last column takes the yields adjusted for moisture, and adjusts it for field variation. Field variation is measured by using a check variety at different locations in the field because the soil may change within a field. By adjusting for field variation, this allows a person to compare one variety at one location in the field to another variety in the same field.

There are many people to thank for helping make the soybean demonstration plot a success. They are: Madison and Sheldon Voet for sponsoring the land, labor, crop inputs, and equipment; the seed companies for sponsoring the seed; George Bauer of Mycogen Seeds for using his generator, weigh wagon, and equipment to test the soybeans moisture and test weight.

It's important to note that the Marshall County Soybean Demonstration Plot results are not replicated like the Kansas State University Experiment Fields and Stations. Yield data is more accurate the more times varieties are planted. So, use the yield information to get ideas of varieties you like that performed well in Marshall County, and then look at the 2016 KSU Kansas Crop Performance Books.

We will be having a fall crops plot again next year. If there is a seed company that would like to participate in our fall crop plots, please contact me at (785) 562-3531, or email [anastasia@ksu.edu](mailto:anastasia@ksu.edu).

<b>Marshall County Soybean Variety Test Plot</b>						
Harvested on 10/28/2016						
By: Madison & Sheldon Voet, and Anastasia Johnson, County Extension Agent						
	Maturity	Gross Weight	Test Weight	Moisture %	Actual Yield (13%)	Adjusted for Field Variation
<b>Check: Mycogen 5N385R2</b>	<b>3.8</b>	<b>520</b>	<b>56.6</b>	<b>13.3</b>	<b>52.66</b>	Check Avg: 47.79
Hoegemier 3939NR	3.9	530	57.9	13.6	53.49	53.60
Mycogen 5N431R2	4.3	540	56.5	13.9	54.31	54.42
Stine 41RH22 *NT	4.1	478	57.4	13.0	48.45	48.55
<b>Check: Mycogen 5N385R2</b>	<b>3.8</b>	<b>420</b>	<b>58.0</b>	<b>12.7</b>	<b>42.72</b>	Check Avg: 47.79
Producers 4104NSR2	4.1	434	57.3	12.1	44.33	47.65
LG C4322R2	4.3	430	57.8	11.9	44.02	47.31
Asgrow AG3432	3.4	460	57.6	12.9	46.32	49.78
NK S38W4	3.8	460	56.5	13.8	45.84	49.27
<b>Check: Mycogen 5N385R2</b>	<b>3.8</b>	<b>464</b>	<b>56.6</b>	<b>13.4</b>	<b>46.21</b>	Check Avg: 47.79
Mycogen 5N387R2	3.8	438	56.8	12.5	44.07	43.98
LG C3989R2	3.9	508	56.9	12.4	51.04	50.94
Ohlde 0404RS2	4.0	488	56.1	13.4	48.48	48.37
Producers 3801NR2	3.8	474	57.5	12.9	47.23	47.14
<b>Check: Mycogen 5N385R2</b>	<b>3.8</b>	<b>498</b>	<b>56.4</b>	<b>13.0</b>	<b>49.57</b>	Check Avg: 47.79
<b>Average:</b>			57.06	12.99	47.92	
*NT- non treated seed						

<b>Marshall County Soybean Population Test Plot</b>				
Harvested on 10/28/2016				
By: Madison & Sheldon Voet, and Anastasia Johnson, County Extension Agent				
	Gross Weight	Test Weight	Moisture %	Actual Yield (13%)
<b>Population: 120,000 /acre</b>	840	56.6	11.8	42.06
<b>Population: 160,000 /acre</b>	734	56.9	11.4	36.92
<b>Population: 190,000 /acre</b>	720	56.2	11.6	36.13
<b>Population: 90,000 /acre</b>	574	56.4	11.6	28.80