

The 2016 University of Delaware Variety Trial Notes

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The University of Delaware conducted a total of 24 soybean variety trials for the 2016 year. This consisted of four full season and one double cropped glyphosate resistant trials separated into maturity groups III, Early IV, and Late IV-V's. The full season glyphosate trials were conducted at four locations throughout the state to obtain a good representation of climate and soils found for this region. We also did a full season and double crop Liberty Link resistant trial separated into three maturity groups as stated above. In addition, we conducted a direct comparison "conventional" trial of Liberty and Glyphosate resistant varieties head to head. Weed control was considered good in all trials.

The Full Season Liberty Link trial was planted relatively early (5/20/16) and was impacted by significant rainfall and cool weather prior to emergence. This resulted in surface compaction, less than ideal emergence, although stands were acceptable. Similarly, the Conventional trial was planted on the same date and had similar problems resulting in variation.

Yields were excellent at the Dagsboro and Kent locations. The Middletown location (dryland) was impacted by a relatively hot month of August.

A summary page has been provided in which all the entries are pooled together and ranked by yield without regard to maturity group. This illustrates the effect of planting date and weather, rather than a true statistical comparison of the varieties. Though the group III, Early IV and Late IV-V trials were planted at the same time, in the same location, and treated similarly, they were separated statistically into their own individual trials for proper statistical analysis.

Methodology

The full season seeding rate was 5 seeds/ft row (174,200 seeds/A) on 15" row spacing. Each entry consisted of four replications planted in a randomized complete block.

Reported moisture column is moisture at harvest. All yields were converted and reported at 13.8% moisture. Reported test weight, lodging, plant height and maturity date is the average of four reps.

Lodging was scored on a scale of 1-5:

- 1.0= almost all plants erect
- 2.0= either all plants leaning slightly, or a few plants down
- 3.0= either all plants leaning moderately (45 degree angle), or 25-50% down.
- 4.0= either all plants leaning considerably, or 50-80% down
- 5.0= all plants down

Rainfall and Average monthly temperature for trial locations

	Georgetown		Dagsboro*		Middletown**		Kent ***	
	Avg. temp	Rainfall	Avg. temp	Rainfall	Avg. temp	Rainfall	Avg. temp	Rainfall
May	61.3	7.04	-	-	-	-	-	-
June	72.1	4.05	71.1	4.97	72.1	2.51	71.9	2.6
July	78.8	5.72	78.3	3.87	77.8	7.01	71.7	2.16
August	77.5	2.93	77	3.82	76.9	3.69	77.7	3.13
Sept.	71.2	13.79	71	13.4	69.7	5.68	74.7	1.54

*Data is from DEOS site, nearest station Selbyville

** Data is from nearest station, Townsend.

***Data taken from nearest station, Sandtown.

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