Ohio Soybean Performance Trials now Available

Hardin County – The 2018 Ohio Soybean Performance Trial data is now available. It is only available in a pdf format and now contains yield and soybean quality data. The purpose of the Ohio Soybean Performance Trial is to evaluate soybean varieties for yield and other agronomic characteristics. The website address to find this report is as follows:


Tables are laid out by region and maturity. There are three regions, North, Central, and South and there are two locations for each region. The maturities are separated by early (2.5 to 3.3) and late (3.4 to 4.1) in the Central region. The two closest Performance Trials to Hardin County are Mercer and Marion Counties, both in the Central region. The varieties are listed from the highest average yield of the two sites to the lowest of both sites. The highest yielding variety for a particular location is designated by two asterisks (**). Varieties marked with a single asterisk (*) are statistically similar to the highest yielding variety within that location, so they are not different. There is also data presented for an average yield over a two-year period if submitted each year.

The trial contained Roundup Ready (1 and 2), LibertyLink, Non-GMO (conventional), and Xtend soybean varieties. There are three Xtend varieties that also contain the STS trait. The trial was designed to have each of these types of varieties in a single trial so they could be compared equally. Therefore, conventional herbicides were used to control weeds at each site so the four types of varieties could be compared.

There were 175 varieties compared to 227 in 2017 from 20 (3 less than 2017) companies submitted to the Performance Trial. In total there were 107 Xtend varieties, only 25 Roundup Ready varieties (58 in 2017), 26 (38 in 2017) LibertyLink varieties and 17 conventional varieties submitted to the trial.
For the Central region in the early maturity group, Growmark, Inc HS 28X70 (Xtend variety) at Mercer County and AgriGold Hybrids G2900RX (Xtend variety) at Marion County had the highest yield. The variety with the highest average yield for both sites was Seed Consultants, Inc. SC 9339R (Roundup Ready variety). Only seven varieties were statistically similar at both locations of the early maturity group. Twenty early season maturity varieties were statistically similar at Mercer County with five being LibertyLink, one conventional, two Roundup Ready, and 12 Xtend. Eighteen early season maturity varieties were statistically similar at Marion County with two being Roundup Ready, one conventional, two LibertyLink, and 13 Xtend varieties. The two highest yielding soybeans for a two-year period in the Central region of early maturity soybean were Dyna-Gro S3305N, a conventional variety and Dyna-Gro S28XT58, a Xtend variety.

The highest yielding varieties in the Central region in the late maturity group were Ebberts Field Seeds 368R2X, a Xtend variety at Mercer County and Advanced Genetics, Inc. 3801RX, a Xtend variety at Marion County. The variety with the highest average yield for both sites was LG Seeds LGS3777RX. Only six varieties were statistically similar at both locations of the late maturity group. Seventeen late season maturity varieties were statistically similar at Mercer County location with 13 being Xtend, three Roundup Ready, and one Xtend plus STS. Nineteen late season maturity varieties were statistically similar at the Marion County location with ten being Xtend, seven LibertyLink, and two Xtend plus STS. The top two highest yielding soybean varieties for a two-year period in the Central region of late maturity soybean were Growmark, Inc. HS 38X70 (Xtend variety) and NuTech Seed, LLC 3386L (LibertyLink variety).

None of the top five early maturity varieties in the North region showed up in the Central region list. Three of the top five late maturity varieties from the North region were also present in the Central region list. None of the top five early maturity varieties in the South region was also on the early maturity list for the Central region. One of the top five late maturity varieties in the South region were also on the late maturity list for the Central region. LG Seeds LGS3777RX (Xtend plus STS variety) was the most consistent high yielding soybean variety in the trials. It was first in the Central region and South region and fifth in the North region.

Choosing varieties based upon the greatest yield is the first step to choosing varieties. After that you need to look at disease resistance traits and other agronomic traits that will match the soils and environmental conditions for your fields. Varieties that do well at multiple locations and for multiple years should be adaptable to many different conditions and be strongly considered.

*Article written by Jeff Stachler, OSU Extension-Auglaize County and edited by Mark Badertscher, OSU Extension-Hardin County.*