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Soybean Variety Selection for the 2010 Crop: More Important than Ever

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Variety selection is the most important factor in maximizing grain yield and profitability in both corn and soybean. The difficult year we experienced in 2009 coupled with the launch of Roundup Ready 2 Yield® (RR2Y) soybean and increased interest in LibertyLink® (LL) and conventional soybean varieties makes the selection decision even more important.

When selecting a soybean variety remember you can never have too much information. When we were students we were taught to compare grain yields over years and locations before a seed purchasing decision was made. In today's competitive environment however the life span of a soybean variety is often limited to 2-3 years. To make the best variety decision today, collect yield data from several sources including the 2009 University of Wisconsin Soybean Variety Performance Test results found at (<http://www.coolbean.info>) as well as from several seed company representatives. Compare yields from a wide range of locations and environments. A common mistake that we often make is only looking at local data (your farm, neighbor, county, etc.). Though interesting, local data will only tell you how well that soybean variety performed in a narrow area last year. Comparing variety performance over many different environments will offer growers that best "predictive ability" for next year's environment.

Once you have selected a group of high yielding soybean varieties, choose those that have the disease resistance/tolerance characteristics that meet your specific field needs. In Wisconsin, soybean cyst nematode (SCN), brown stem rot, and white mold are considered the largest annual concerns. The Wisconsin Soybean Variety Test Program conducts variety trials targeted specifically at SCN and white mold. We also take extensive field notes at all of our locations to quantify the incidence (percentage of plants infected) of white mold and brown stem rot among the varieties entered. In 2009, our White Mold Variety Test showed a wide range of differences in susceptibility of entered varieties. Incidence levels in our trials ranged from <5% to 100% infection (Please see images 1 and 2 below).

Lastly, seed price will be a large driver of seed sales in 2010. Preliminary quotes on base seed price (quoted prices before discounts and programs) have ranged from the high \$30's (conventional) to the mid-\$70's (RR2Y®) on a per bag basis. Such a huge discrepancy in price has growers struggling over their 2010 variety selection decision. Since 2003, we have seen a divergence in yield potential between conventional and Roundup Ready (RR)® soybean varieties in our trials. To further characterize these yield differences and test the yield potential of LL® soybean, we added several high yielding RR® and LL® soybean varieties as checks into our conventional trials in 2009. This information will provide

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growers with an accurate yield comparison among LL®, RR®, and conventional soybean varieties to aid in their decision process. Our RR® trials also had several RR2Y® varieties entered in 2009 to allow for this new trait comparison.

To aid in the decision making process, we would also recommend using Dr. Joe Lauer's Crop Seed Price Calculator (<http://corn.agronomy.wisc.edu/Season/DSS.aspx>). This tool allows growers to directly compare varieties based on yield potential and seed price.

Image 1. White mold incidence at <5%



Image 2. White mold incidence at >70%

