

TIPS FOR IMPROVING YOUR BOTTOM LINE FOR YOUR SOYBEAN CROP



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With the low commodity prices and high input costs, it is important to look at strategies that can improve your bottom line for your soybean crop this year. Sometimes minor changes in management such as using disease resistant varieties, a lower planting rate, an earlier planting date or Integrated Pest Management (IPM) can improve your potential for profitability.

Soybean cyst nematode (SCN) is the pest that causes the single largest loss to soybean producers in both Nebraska and the U.S. each year. The University of Nebraska has conducted research to evaluate the impact of the use of SCN resistant soybeans compared to susceptible varieties. The average yield advantage was 6 bushels per acre. At today's prices, that's an additional \$50+ per acre return without investing a dime. SCN-resistant varieties cost no more than susceptible varieties, but yields are significantly higher on infested sites. In short, you can achieve better yields on SCN-infested sites with no increased costs. If you haven't sampled your fields recently, now is the time. The Nebraska Soybean Board is supporting Nebraska soybean producers by covering the costs of samples submitted to the University of Nebraska for SCN analysis. Bags for submitting samples are available from your local County Extension office. If you have fields that are infested with Sudden Death Syndrome (SDS), the seed treatment ILeVo has shown consistently about a 4-5 bu/ac yield response in trials conducted throughout Nebraska and the Midwest. With SDS, the impact on soybean yields is inconsistent from year to year. There are SDS resistant varieties available as well, but this seed treatment adds more protection against this disease. Research at K-State showed a 17 bu/ac yield response from ILeVo on a field with a high infestation of SDS. The recommendation of most of the University Plant Pathologists is to use resistant varieties and ILeVO in combination for fields that are infested with SDS.

There have been a number of soybean plant population trials conducted with on-farm research across Nebraska over the years. The bottom line is, many farmers can reduce their planting rate of soybeans without impacting soybean yields. In 2016 an on-farm research study conducted in Richardson County, in 15 inch rows, soybeans planted at the rate of 116,000 plts/ac yielded 2 bu/ac less than those planted at the rate of 160,000 plts/ac, but were over \$7/ac more profitable. At other locations across eastern Nebraska, planted populations as low as 90,000 plts/ac yielded similar to planted populations of 150,000 plts/ac, but were over \$25/ac more profitable. In earlier research conducted in several counties across eastern and central Nebraska, yields were similar for planted populations of 120,000 plts/ac compared to 150,000 plts/ac. If you have not already done so, cutting your plant population to 120,000 plts/ac could save you \$10 per acre.

Dr. Jim Specht has conducted research at the University of Nebraska and his research suggests having May 1st as your target date for planting soybeans. Use good judgment. Soil temperature is less of a factor when following these guidelines than calendar date and soil moisture. Regardless of calendar date, neither "mudding in" soybeans — that is, planting when soils are too wet — nor planting in dry soils will turn out well. Treat early-planted soybean with insecticide and fungicide seed treatments. These mitigate potential problems from Bean Leaf Beetle (BLB) as well as fungal organisms impacting germination and hypocotyl elongation. If soil temperatures are greater than 50°F and the short-term forecast is for warm conditions, insecticide and fungicide seed treatments may not be necessary. Use short-term weather forecasts to evaluate frost risks at the estimated time of crop emergence. For the article on early planting soybeans improves yield potential go to: <http://cropwatch.unl.edu/why-planting-soybean-early-improves-yield-potential>.

A final management tool to use during the growing season is IPM. By keeping on top of potential pests, including weeds, diseases and insects; you can determine if treatment is feasible for your soybeans. You may be able to head off yield impact from a specific pest. You also may avoid treatment if you have some natural predators present, i.e. ladybugs. Just don't spray for the sake of spraying! These are just possible strategies you may want to consider this year as you plan for the 2018 soybean crop and the upcoming growing season. If you have any questions feel free to contact me at (402) 274-4755 or glesoing2@unl.edu .

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April 2018