

Soybean Crop Off to Slow Start

We all know the wet and cool spring planting season has delayed getting corn, milo and soybeans planted. In addition several factors have affected soybeans. Here is the sample of situations I have looked at and been getting calls about. These kinds of problems are out there, but do not represent the majority of fields.

STAND LOSS – The stands are thin in some places. However we must keep in mind the stand effect on yields. Across the corn/soybean belt university research shows that final stand of 50,000 plants per acre to 200,000 plants per acre have the same yield potential. I like to see stands of 75,000 or higher which help to fend off added weed pressures we can have with thin stands. If you mark off 17 feet 5 inches in one 30 inch row and count the plants, you have just counted 1-1000th of an acre. So if you counted 96 plants then your stand is 96,000 plants/acre. If you have 15 inch rows count 2 rows. If you have 7.5 inch drilled beans count four rows. If you have some other spacing and can't figure out how to do this call me and I will do the math and tell you the length of row to count.

The major causes of stand loss this year are crusting and seedling blight. I believe most of the seedling blight I have seen is pythium blight. Most farmers are using treated seed which helps to prevent seedling blights. Under extreme conditions the seed treatments may limit, but not eliminate seedling diseases. One thing is sure. If the stand is bad enough to warrant replant, use treated seed, regardless of the cause of the stand loss. Crusting cases are more severe on tilled soil or in cases where soil is moved in the planting process. The thin crop residues from last year's crops have left fields more exposed than we would like.

WIND/HAIL – Even when it doesn't hail too much, mechanical damage from wind movement of soil particles and plant debris can tatter leaves. I have seen more fields with mechanical damage than fields with hail damage. The major yield damage done by hail is cutting plants off below the cotyledon node or the first node on the stem where the two halves of the seed are attached. Plants cut this low are done and will not regrow. Damage done above this first node will re-bud and grow. The second concern and the more likely damage is stem damage. While the plant may regrow, its performance will be lackluster and the plant may break-off before harvest. The major way crop insurance companies settle these claims is after harvest. It is difficult to evaluate hail effect and agronomists like me are not right all of the time in suggesting courses of action on these fields.

FLOODING AND FIELD BURIAL - I was in a field the other day and evaluating stand loss where over 2 inches of top soil were washed away and the plants were clinging to the soil by roots below seed planting depth. These events do happen. I think the farmer has to be very careful calling that an act of god, without careful examination of what stewardship practices they were using to lessen the catastrophic loss of precious soil resources. Thankfully most farmers are planning ahead to minimize the impact of flash flood events on low lying fields. Most no-till fields with accompanying conservation measures will have an area of thin stand buried in floating residue and some stands thinned by standing water. These events are minor and most quality land stewards would not double disk the site so there will be plenty of loose soil to wash away another 2 inches if we have another event this year. In the long run, it is better to protect the soil and have a thin crop, than work the muck, replant late, wash again and still get a thin crop. It's kind of like this baseball fans suggestion, "*Don't make the second error on the same play in baseball.*"

For more information e-mail Paul C Hay at phay1@unl.edu or call 402-223-1384

Paul C Hay, Extension Educator

University of Nebraska-Lincoln Extension in Gage County • 1115 West Scott Street, Beatrice NE 68310

(402) 223-1384 • FAX: (402) 223-1370 • email: phay1@unl.edu

