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Droughty Soybeans Still Have a Chance

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Soybeans are entering an important growth phase. Plants are now filling pods with seeds. Unfortunately, more than two-thirds of the soybean fields aren't getting the moisture necessary to progress normally. It depends on where you're located in the state as to the condition of the crop. The soybean crop in east central Indiana is very dry and under tremendous stress. The plants are still very, very short, the plant canopy has not closed, and, due to the drought stress, there is quite a bit of floral -- and some pod -- abortion in those fields. On the other hand, west central Indiana has received good rainfall during July and the soybeans look very good at this time.

We are in desperate need of 2 to 3 inches of rain within the next week for the soybeans to resume normal growth. Soybeans, like corn, need an inch of rain per week during critical growing phases. It's not too late to turn this crop around. There is still time for the beans to flower and set pods, but we need the rains rather quickly for that to occur. If we do have adequate rain for normal growth to resume, we're going to need the rain to carry through to at least the second week of September. We normally say August, but with the late planting of this year's crop we need rain through the first two weeks of September to give us a reasonable yield.

Yield is determined by the number of pods for a given area, the number of seeds in those pods and the weight of the seed within the pod. Stresses at reproductive stages 3 and 4 can reduce the number of pods. Stresses at reproductive stages 5 and 6 can reduce the number of seeds within the pod and also the size of the seed. If any of these yield components are reduced, it'll have a negative impact on the final yield.

Dry conditions are hurting soybeans in another way. Spider mites are thriving on hot, parched crops. Farmers should monitor their fields for outbreaks. Nutrient deficiency also is a problem; some have reported a lot of fields that tend to be yellowing. Under those conditions look for two things. First of all, look for the possibility of soybean cyst nematode that may be restricting the root system, particularly if the deficiency symptoms appear to be a potassium deficiency. The other element that's causing the yellowing is manganese deficiency. It tends to be more severe on our sandier, well-drained soils. If deficiency symptoms appear, about the only solution is an application of one pound of elemental manganese per acre, as a foliar application