Evaluating the Potential of my Soybean Crop that hasn’t been cut for Hay

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For some producers the time has come to determine if their soybean crop will be cut for hay or left for grain. Some of the soybean crop has already been cut for hay but in some areas the plants are still hanging on despite the heat and lack of moisture. The next 10 to 14 days will be critical as pods that are set during this timeframe still have a chance of making it to maturity given we have a normal fall. A general rule of thumb is that it takes approximately 60 days from bloom until maturity. This can easily vary +/-10 days depending on the environmental conditions. This time to maturity may be reduced if temperatures are warmer than normal.

With more favorable conditions for pod set starting this weekend, I would expect most of the soybean fields that were planted in late June and early July to initiate blooming and if we receive moisture things could look quite a bit different in another 10 days compared to right now. However, the value of soybean hay is extremely high and may be more valuable than harvesting 10-15 bu. of soybean per acre. The following points should be considered when deciding to cut this year’s soybean crop for hay or grain:

- How many pods do I currently have set and are they filling? The following is a link for instructions on how to estimate soybean yields
  http://plantsci.missouri.edu/soyx/soyfacts/estimate.PDF
- Are the lower leaves starting to fall off of the plants? If so, you are starting to reduce the potential quality of the hay and tonnage.
- Was the variety of soybean planted indeterminate or determinate?
  Indeterminate or semi-determinate varieties will have a greater chance to set more pods if favorable weather conditions return. Also, indeterminate or semi-determinate varieties may produce a little more biomass if weather conditions improve. Although this is not a certainty based on the extreme weather that we have had.
- What is the objective for this fall? If you want to plant wheat or canola this fall it would be best to remove the soybean crop and start hoping things improve for this fall.
Nutrition value and yield for soybean hay will vary. Typically, quality of soybean will be the same as alfalfa or slightly lower. The crude protein (CP) should be in the range of 14% to 21%. The energy value based total digestible nutrients (TDN) could be as high as 60%. If the leaves have dropped, CP could fall to as low as 10% and the TDN will drop accordingly. Forage yield will be highly dependent on past growing conditions, but should be no less than 1 ton per acre if the plants are least 12 inches tall.

The decision to harvest the hay or grain should be based on economics. If you have decent biomass (1 t/ac or greater) and your yield potential is less than 20 bu/ac then hay appears to be the best option. If you still are not committed either way, re-evaluate yield potential by the middle of September. At that point you may have a better idea of yield potential because pods set will be determined by then.