

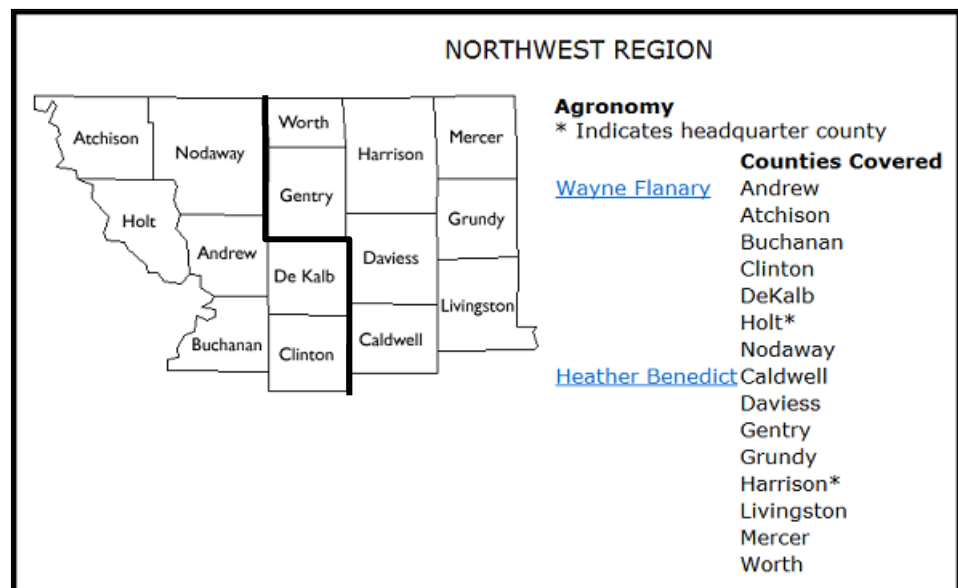


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## Agronomy Information and Tips

Wayne Flanary, Agronomist



**New Agronomist Hired—Heather Benedict.** Heather is a University of Missouri graduate with a background in forages. Her territory will be the eight counties to the east and I will handle the west side of the region. Her phone number is 660-425-6434.

**Soybean Aphid Damage Slows with Early Planted Soybeans Nearing Maturity.** Early May planted soybeans have yellowed from maturity and stress of dry weather. Be sure to consider the maturity of soybeans when deciding when to treat or not.

**Checking Soybean Maturity.** Check the plant about 1/3 of way up from the soil surface and look at the pods. Check to see if the green seed is filling the pod cavity, that is, the width of the green seed is equal to its pod cavity. Next, look at the uppermost nodes on the main stem with a fully developed trifoliolate leaf node. Again check to determine if the green seed is filling the pod cavity at **one** of these upper most nodes. Soybeans are Indeterminate plants so you will see the lower part of the plant move towards maturity faster than the top. Also, some of the top pods that are not well filled will abort. **Once one pod of soybeans at one of the top 4 nodes reach 1/8 inch in diameter, which would be about a R5.5 stage, spraying for soybean aphids would not be beneficial.** Soybean growth staging is at the top of the plant but I always like to look at the plant to get my eyes focused. Often I see growers concerned about the small pods on top which can be deceiving about maturity.

**Late Planted Soybeans Should be Checked For Aphids.** Late planted soybeans should be checked for aphids. One should consider the yield potential and look at the plants carefully.

### Estimating Soybean Yields May be Helpful with Late Planted Soybeans—Dr. Bill Wiebold, Department of Agronomy

1. Find the number of feet of row need to make 1/1000th of an acre. Use 74'8" for 7 inch rows; 24'10" for 15 inch rows; 17'5" for 30 inch rows.
2. Find the plant population by counting the number of plants in several different randomly selected sample areas and calculate an average. Multiply the average by 1000. This equals the number of plants per acre. (Use at least 10 sample areas to increase accuracy. More samples may be needed if the field is highly variable.)
3. Find the number of pods per plant by counting the pods on 10 randomly selected plants from each sample area. Calculate an average over all plants in all sample areas. (Pod number is highly variable and errors in this estimate can greatly affect the answer.)
4. Find the number of pods per acre by multiplying the answer in step 2 with your answer in step 3.
5. Find the number of seeds per acre by multiplying you answer in step 4 by 2.5. (This assumes that the average number of seeds per pod equals 2.5. Your field may be quite different.)
6. Find the number of pounds per acre by dividing 2,500 into your answer in step 5. (Seed size in soybean varies greatly among varieties and environments. If stand is sparse seed number per pound is reduced—larger seeds. If frost or drought speeds maturity seed number per pound is increased—smaller seed.)
7. Estimate yield by dividing 60 into your answer in step 6. Be cautious, there are many places to make errors.

Comments using this with late planted soybeans. Carefully measure the average number of seeds per pod as many have been affected by drought-Flanary.

**Flanary back at writing newsletter again.** This spring with the weather, I started behind and seems like I could never get ahead. Will try to send out information timely since we have another agronomist picking up other counties. Thanks for you patience.

**If you would like to be added to our electronic mailing list, please contact Rosa Matthews, Holt County Secretary at 660-446-3724.**

Information contained in this newsletter is intended for use in Northwest Missouri and may need to be adapted to other locations. We ask that you credit University of Missouri Extension if you use this information.

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