WeedSOFT$_{SM}$ Decision Support Workshop

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WeedSOFT is a support tool to analyze information we provide the program. Let's use WeedSOFT to illustrate the decision process. We will simulate a real situation and utilize WeedSOFT for specific economic computations and yield loss.

1. We will assume a postemergence treatment type and will only consider broadcast applications. We will treat when corn is in the 0 to 5-inch stage.
2. Our crop will be corn, with a selling price of $2/bu and a 150 bu/A estimated yield.
3. We will use all the default values in the Environmental Info. Window (for sake of time).
4. Lets assume our weed infestation is 20 velvetleaf plants/100 ft^2.
5. What is our yield loss %?
6. How many velvetleaf would it take to double our yield loss?
7. What happens if we add 5 sunflower plants to the 20 velvetleaf plants?
8. What if we had the same 20 velvetleaf plants/100 ft^2 in soybeans? Would our yield loss be 10%? Why or why not?
9. How do we calculate yield loss? What are these calculations based on?
10. What happens to yield loss as the size of the 20 velvetleaf plants increases? Why? Remember our corn growth stage.
11. How many velvetleaf plants at the maximum growth stage will be required to reduce yield by the same 10%?   WOW!
12. Do you hate weeds yet?
13. Lets look at Roundup as a treatment recommendation. What would be a situation where Roundup may not be the best treatment? How about Atrazine?
14. Now lets switch to preemergence treatment type. We will choose the low moisture values and velvetleaf for our weeds species. What is the control in corn with Bicep Mag TR? Why?
15. Now lets adjust the moisture values to high at planting. Is the control going to improve? Decrease?
16. What treatments might drop out if we choose highly erodible soil with < 30% soil residue?
17. What should WeedSOFT adjust for in making a postemergence recommendation?

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