E-1582 Bulletin Exercise

Situation 1: Crop: Soybean, R2 stage, 5th of August

Field conditions: Heavy rain in June, but no rain since July 10th. Temps in August in the ’90s.

Damage: Stippling damage on about 20% of the foliage (you think it is spider mites)

List three ways you could confirm presence of mites:

1) _________________________________________________________
2) __________________________________________________________
3) __________________________________________________________

What conditions contributed to this infestation? __________________________________

Should you treat this field?    NO    YES
Why/Why not

Which product (s) would you use, given each of the following situations:

1) you are not a certified applicator: ________________________________
   OR
2) the local elevator is hosting a field-day in the field the next evening:
   ______________________
   OR
3) soybean aphid is also numerous in the field:
   ________________________________
   OR
4) a neighbor has honeybee hives near the field: ________________________________

Situation 2: Corn rootworm larvae

What is the best method to control rootworm damage? __________________________

You find rootworm damage in first-year (rotated) corn…what are two possible explanations?

1) ________________________________
2) ________________________________

When (time of year) would you scout for rootworm to make a decision about soil insecticide use? __________________________

What soil insecticide would you use if you are NOT certified: ______________
ROOTWORMS CONTINUED:

Which of the following would you use with Beacon herbicide?

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<thead>
<tr>
<th></th>
<th>NO</th>
<th>YES</th>
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<tbody>
<tr>
<td>Counter 20 CR in-furrow</td>
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<tr>
<td>Counter 20 CR T-band</td>
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<tr>
<td>Aztec in-furrow</td>
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<td>Lorsban 15G T-band</td>
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<td>Lorsban foliar applied 5 days after the herbicide</td>
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You are thinking about using a seed treatment to control rootworms….would you use Kernel Guard?   NO   YES   Why/why not __________________

There are actually two formulations of Kernel Guard. Which is ‘safer’?

____________________

Seed treatments that contain the insecticide lindane (such as Enhance and Seedmate) do not work well against rootworms. Could you use a higher rate? __________________

Why/Why not? ____________________________

Situation 3 Soybean aphids in soybean

When are the most likely times to spray for soybean aphid to get the best economic return?

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<tr>
<td>tank-mix insecticide with Roundup in early summer</td>
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<td>at first report of detection by MSU</td>
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<td>early pod-fill</td>
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<td>mid- to late August</td>
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You sprayed for aphids using Lorsban 4E. Now aphid numbers are increasing again. You want to spray a second time, but you are worried about resistance. Choose a product for the second spray:

____________________    Why? _______________________________

Besides resistance, what could be another explanation for the increase in aphids?

__________________________________________________

You plan to harvest these beans in one month (30 days). How does this effect your insecticide options? ____________________________

Your spouse is worried about exposure to insecticides. You promise to use the least toxic product for spraying aphids. How would you determine the least toxic product, and where do you find this info in the guide?

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