This has been a relatively quiet year for insects (keep your fingers crossed). The lack of insect pressure is likely due to the winter, and/or the fact some drowned in our wet soils this spring. Nonetheless, this is the time of year to continue to scout for insects and to also evaluate damage to make changes in management decisions for next year.

**Soybean Aphid**

There have been multiple reports of finding soybean aphids, but to date, none that have reached economic threshold. The cooler, drier weather we have been experiencing can be ideal for soybean aphids, allowing populations to increase so you should continue to scout.

Check for aphids on the youngest two or three trifoliate leaves and stems in the plant terminal. Scout 5 locations for each 20 acres. Look for ants or lady beetles on soybean plants as they can be a good indicator that aphids are present.

The economic threshold for aphids is 250 aphids per plant. This threshold allows a few days lead time before aphid populations would be expected to reach the economic injury level. An insecticide should be applied when there are 250 aphids per plant and the population is increasing. Research shows that yield losses are rarely recognized below the economic threshold.
threshold of 250 aphids per plant. If you experience soybean aphid populations at threshold or above please let me know. Additional resources regarding soybean aphids can be found at: http://www.ent.iastate.edu/soybeanaphid/

Corn Rootworm

I have not seen any rootworm beetles yet this summer and several retail dealers have also shared they have not seen rootworm beetles. Mid-July through early August is the prime time to evaluate rootworm injury. It is important to evaluate all hybrids to determine if management strategies need to change for the next growing season. This includes the evaluation of hybrids with Bt rootworm resistance as well. These nice, cooler temperatures offer a great opportunity to get out and dig roots and evaluate for rootworm feeding. My colleague, Terry Basol, summarized the following 7 steps in his latest Crop Chat newsletter dated July 27, 2014.

Follow these steps to check for corn rootworm feeding:

1. Determine the priority fields to check first. A good place to start is to look for lodging, as this can be an indication of corn rootworm feeding on corn roots. However, there are other factors that cause lodging as well, like dis-ease, planting issues, weakened roots, wet saturated soils and very strong winds, etc. Other high priority fields to look at first are those that are continuous corn fields and those with areas with Bt performance issues.

2. Randomly select 1 plant in at least 10 different areas of the field (10 plants/field). Walk into the field at least 50 feet before digging any plants. If there is an apparent area of the field to be investigated, start there first.

3. With a spade or shovel, dig about 6 or 7 inches
around the corn plant in a circle. Be sure to push the shovel vertically into the ground so the corn roots aren't cut off. Carefully pull the soil and plants out, making sure the roots are as intact as possible. The corn stalk can then be cut off above the roots to make it easier to work with.

4. One of two methods can be used to remove the soil. One option is to carefully place the roots on a small piece of dark plastic or canvas and very cautiously break the soil away from the roots. If there are any larvae present, their white color will contrast against the dark background as they fall from the soil. Another way to clean off the roots is to place them in a bucket of water and carefully break the soil from the roots. If there are any larvae present, they will float to the top of the water. Adding salt to the water will help float the larvae to the top.

5. Carefully evaluate or rate the roots for rootworm injury. Use the 0-3 corn root node-injury scale developed by Iowa State University.

- **0** = No feeding damage
- **1** = One node (circle of roots) or the equivalent of an entire node, eaten back to within approximately 1.5 inches of the stalk (soil line on the 7th node)
- **2** = Two complete nodes eaten (approximately 20 roots) are pruned to within 1.5 inches of the stalk
- **3** = Three complete nodes eaten (highest rating). Approximately 30 roots are pruned to within 1.5 inches of the stalk.

6. According to Erin Hodgson, ISU entomologist, a severe corn rootworm larval infestation can destroy nodes 4-6; each node has approximately 10 nodal roots. A recent research finding shows that there is a 15% yield loss for every node that is pruned.

7. Adjusting management strategies are suggested if
the average injury is above 0.5 on a 0-3 rating scale.

**Events**

[**Soybean Aphid Field Day**](#) | August 14, 2014 | Field Extension Education Lab (FEEL) near Ames.

[**Iowa Drainage School**](#) | August 19-21, 2014 | Borlaug Learning Center, Nashua.

[**Late-Season Crop Management Clinic**](#) | August 19, 2014 | Field Extension Education Lab (FEEL) near Ames.

[**Late-Season Crop Disease Clinic**](#) | August 20, 2014 | Field Extension Education Lab (FEEL) near Ames.


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