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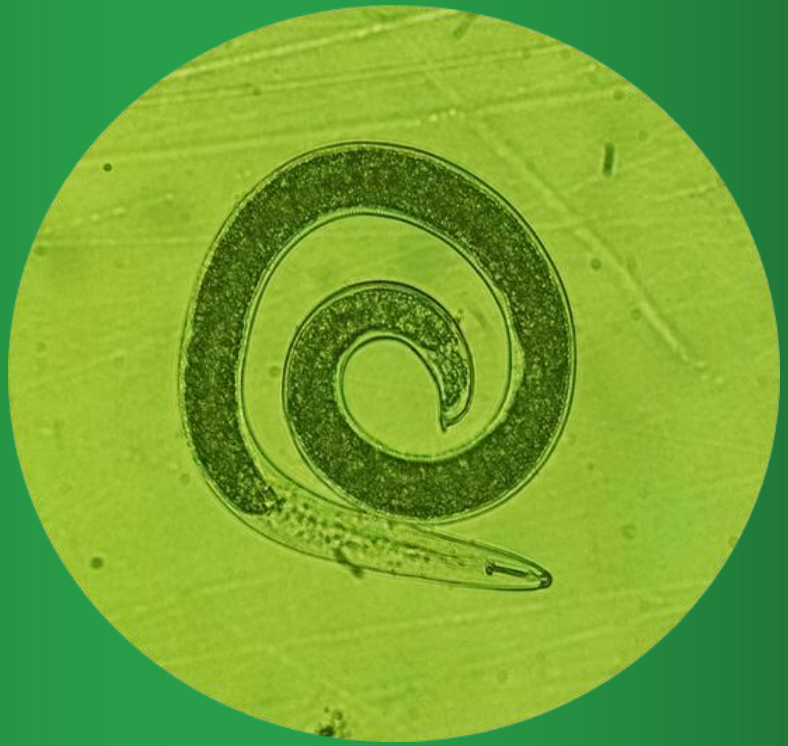
PESTPROS CROP CONSULTANTS

On The Radar



August 29th, 2025

Status by Crop

Corn: R5 (Dent)

Soybeans: R4 (Full Pod)

Potatoes: 90% vine killed or will be vine killed within the next week

Cabbage: halfway through harvest

Carrots: 2-4 weeks to harvest

Pheromone Traps

No data this week! Big shout out to our intern Cade Larsen for checking the traps every week as part of his internship project

Estimating Corn Yield

For 30” rows:

1. Measure 17.4 feet

Within that span:

2. Count the # of harvestable ears.
3. Pick 10 ears and count the number of complete kernel rows and the number of kernels per row.
4. Multiply the number of rows by the number of kernels per row. This will give you the number of kernels per ear.
5. Calculate the average number of kernels per ear by adding the values of each ear and dividing by the number of ears that you performed steps 3 and 4 on.
6. Multiply the number of ears in the 17.4 feet by the average number of kernels per ear.
7. Divide this number by 75-85 depending on growing conditions. Divide by 75 for excellent conditions and 85 for poor conditions.
8. You will end up with a bu/a yield estimate.

Source: The University of Purdue Extension. (2015) The Corn and Soybean Field Guide . Purdue crop diagnostic training and research center.

Estimating Soybean Yield

1. To calculate plants per acre, count the number of pod-bearing plants in 1/1,000thof an acre. In 15-inch row spacing, count the number of plants in 34 feet, 10 inches of row. In 30-inch row spacing, count the number of plants in 17 feet, 5 inches of row.
2. To estimate pods per plant, count the number of pods (containing one or more seeds) from 10 plants selected at random. Divide the total number of pods by 10 to get the average number of pods per plant.
3. To estimate the number of seeds per pod, count the number of seeds from 10 pods selected at random. Generally, the number of seeds per pod is 2.5, but this number can be less in stressful environmental conditions. Divide the total number of seeds by 10 to get the average number of seeds per pod.
4. To estimate the number of seeds per pound (seed size), assume that there are 3,000 seeds per pound. If the soybean plants experienced stress, seed size will be reduced, and it will take more seeds to make one pound. Use a seed size estimate of 3,500 seeds per pound if smaller seeds are expected because of late season stress.
5. Using the above estimates, the following formula is used to estimate soybean yield in bushels per acre: bushels per acre = [(plants/1,000th acre) x (pods/plant) x (seeds/pod)] ÷ [(seeds/pound) x 0.06]

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DIFFERENT SOYBEAN SEED SIZES

Potatoes

Many fields only have a couple of days remaining until vine-kill.

As fields are vine-killed, doing digs throughout the field to assess tuber skin set can help develop a harvest strategy.

Potato
Handling During Harvest

- The mantra is “handle potatoes like eggs; not rocks.”
  - Rough handling can cause skinning and bruising. These defects can result in unmarketable potatoes and/or storage issues.

The amount of mechanical, biological, and environmental variables that influence the management of potato harvesting is mind-boggling.

Before harvest:

Finding and flagging areas that often had standing water or still has standing water to avoid these poor-quality tuber spots.

Carrot Harvest

It starts slow, only harvesting a few truck loads worth a day, then will really pick up the 1st week of October.

Carrot harvest will continue essentially until the ground is too frozen to pull them up. Because carrots are harvested by pulling, the tops need to remain as healthy as possible.

Fungicides will continue into September and if needed, a late nitrogen application will be applied if the canopy begins to weaken.

Soil Fertility Sampling

Soil sampling at Pest Pros is picking up as more fields are getting harvested!

Soil Sampling: Options

- Composite Sampling
  - X acres/sample; zig-zag path across a field section
- Point Sampling
  - Grid
    - 5 acre, 2.5 acre, custom grid size
  - Zone
    - Sample points chosen based on EC, yield, and/or remote sensing maps.

Composite v. Point Sampling: Recommended Scenarios for Use

Composite

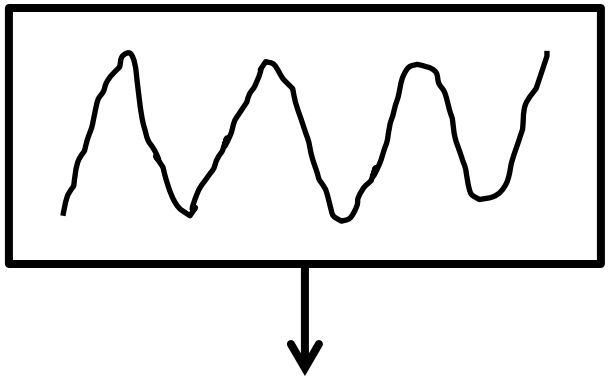
- On fields that are less than 10 acres:
  - Take one or two composite samples (E&W or N&S)
- On fields that are 10 to 30 acres, completely flat, not under a nutrient management plan, and where no VRT will be used in the rotation.

Point (Grid)

- Required for fields under nutrient management plans that are greater than 10 acres.
- On fields over 15 acres and where some degree of variability is apparent.
- Any field over 30 acres
- Any field where VRT is going to be used in the rotation.

Composite v. Point Sampling

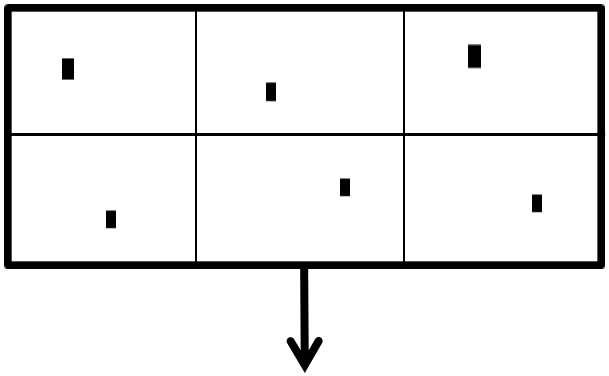
Composite



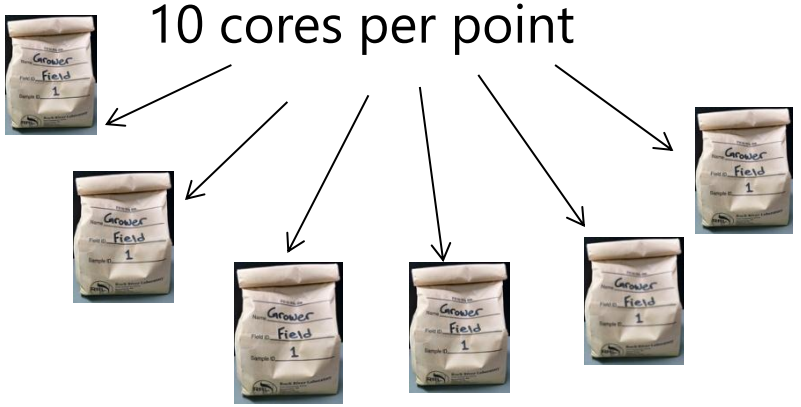
30 cores

Subsample of well-mixed composite

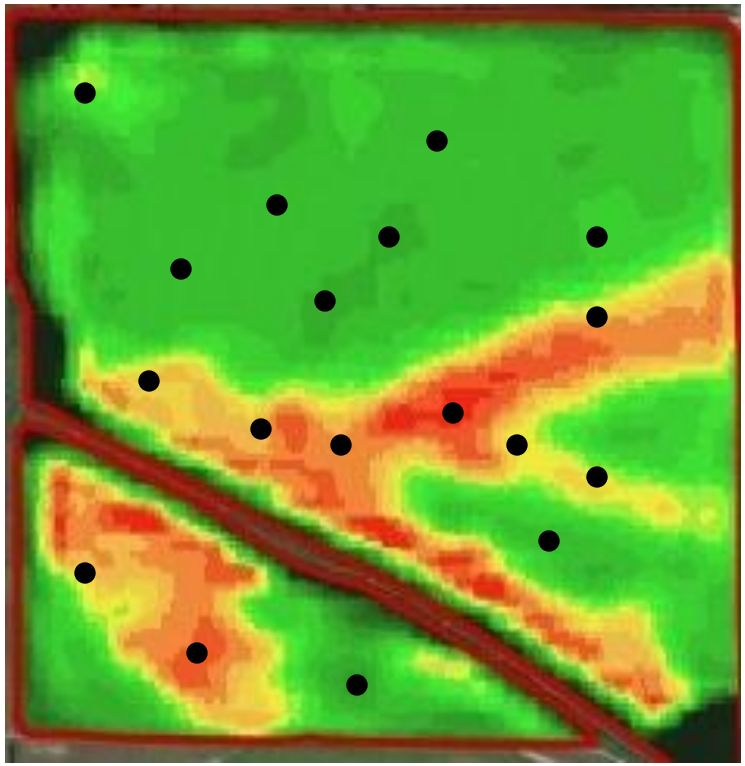
Point (Grid)



10 cores per point



Zone Sampling



Recommended Scenarios:

-High management situation

-Available yield, EC, and/or remote sensing maps from which the points can be chosen.

-Fields over 100 acres with dramatic variation

-A specific question about a soil characteristic's impact

Happy Harvest!

That is a wrap for the 2025 season! We would like to thank our intern Samantha Salmi for helping put together the report every week as part of her internship project