

Auglaize County ANR

News from OSU Extension

May 5th, 2023



On Our Watchlist: Seedcorn Maggot and Alfalfa Weevil

Author Kelley Tilmon and Andy Michel, Edited by Jamie Hampton

There are two insect pests in particular that we're wary of at the moment: Seedcorn maggot (in corn and soybean) and alfalfa weevil.

Seedcorn maggot is most likely to be a problem in fields where cover crops or other green vegetation has been disked in, or manure applied, a handful of days previous to planting. The nice roty smell attracts the adult flies to lay eggs in the soil, which hatch into the maggots that can feed on seeds and seedlings of corn and soybean. Insecticidal seed treatments typically provide good protection against the maggots. However, if these crops were planted early into cold soils the seeds will be slow to germinate and there is a greater likelihood that the seed coating

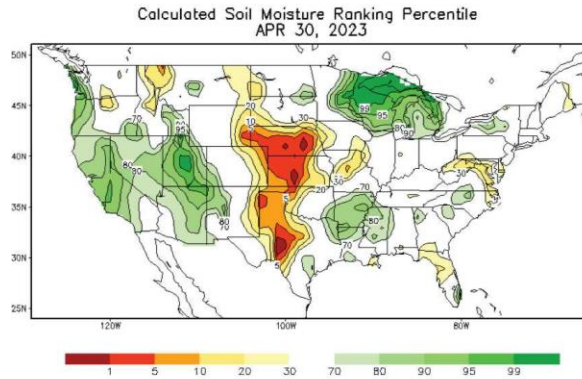
will wash off before germination. These products are very water-soluble which is how they work – they are taken up by the germinating seed and transported through the fluid transport system of the plant to be incorporated into the new growth. But if the seed sits in the soil too long before germinating, much of the product may be lost into the surrounding soil instead of being incorporated into the plant for its protection from maggots and other early season pests. Stubbornly cold soil temperatures in April may have delayed germination for early plantings, which is why we have Seedcorn maggot is on our watchlist. There is no rescue treatment once damage begins, but replanting is always an option

if stand loss is severe enough. Alfalfa weevil is on our watchlist too. Cold temperatures last week may have slowed feeding but the temperatures haven't been cold enough to kill the weevil larvae. We are concerned that as soon as it warms they will speed up their feeding again with a vengeance. Scout your fields now, not when excessive feeding grabs your attention. Keep in mind that at a certain point, early harvest is preferable to treatment. General scouting and management information was provided in last week's CORN newsletter: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-11/alfalfa-weevil-update-%E2%80%93-believe-it-or-not-heat-units-are>

Spring Weather Update

Author Aaron Wilson, Edited by Jamie Hampton

Cooler weather remained in place this past week with temperatures running 2-6°F below average. Overall, daily average soil temperatures are slightly warmer than they were last week: northern locations are hovering in the low 50s, with southern stations reporting mid- to upper 50s. Precipitation was heaviest across portions western and southeastern Ohio, where 1-2" fell. Isolated heavier amounts greater than 2" were observed across central and west central Ohio (see [CoCoRaHS](#)). Soils moisture remain adequate to damp across the state, with this week's rain helping to curb drying trends experienced over the last 30 days. Much of the state is reporting soil moisture between the 30th and 70th percentile compared to historical conditions. For more complete weather records for CFAES research stations, including temperature, precipitation, growing degree days, and other useful weather observations, please visit <https://www.oardc.ohio-state.edu/weather1/>.



Weather Forecast

This week is starting out with a rather raw weather pattern, with low pressure located to the north of the state providing stiff westerly winds, periods of rain/snow showers, and highs only in the 40s. These conditions will persist through Tuesday in the west and into Wednesday morning in the east until high pressure starts to wield its influence later in the week. After a cold and possibly frosty start to the day on Thursday, sunshine and southerly flow will help elevate highs back into the 60s, with some 70s showing up over the weekend. Except for a slight chance of a passing shower in the southwest on Friday, the period Thursday through Sunday should remain dry

before precipitation could move in next Monday. Overall, precipitation will be light this week with the [Weather Prediction Center](#) currently forecasting 0.25-0.75" for much of Ohio and slightly higher amounts possible across the northeast. The 6-10 day outlook from the [Climate Prediction Center](#) and the [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) show temperatures leaning toward warmer than average with near normal precipitation. Climate averages include a high-temperature range of 68-73°F, a low-temperature range of 47-52°F, and weekly total precipitation of about 0.85-1.15".

The International Influences of Cinco de Mayo Favorites

Author Charles Parrott, USDA.gov, Edited by Jamie Hampton

Cinco de Mayo is more than a celebration of Mexican culture and heritage. With its American roots planted during the Civil War, the fifth of May is also a celebration of freedom and victory over odds. Over the years the holiday has become more mainstream, with celebrations that bring together music, art and cuisine shaped by the rich culture and international influences of Mexico and Latin America.

Avocados, cilantro, and chili peppers are a few key ingredients for traditional Cinco de Mayo dishes. Each of these sees significant retail and sale activity during the holiday week. I know that I will be enjoying Tacos and salsa that I have made from local produce. I love that we have holidays that help support Agriculture all over the world. For the full article click [HERE](#)



Sticky, Dripping Maples

Author Joe Boggs, Edited by Jamie Hampton



Calico scale has a wide host range with few landscape trees in Ohio other than conifers remaining beyond the reach of this Asian native. Females (there are no males) are frequently found clustered on woundwood presumably because phloem vessels are more easily accessible through the thin bark. Calico scale has one generation per year. Females spend the winter as small, crusty, flattened late instar nymphs (crawlers) stuck onto plant stems. They look nothing like their mature form and may be overlooked or misidentified. These flattened females inflate ("puff up") in the spring. They eventually show their characteristic helmet-shaped shells and starkly contrasting calico pattern of black-and-white markings that gives this scale its common name. The calico scale females begin to produce eggs shortly after they are fully inflated. Egg hatch occurs at 748 accumulated Growing Degree Days (GDD). The first instar nymphs (crawlers) move to the underside of leaves where they position themselves on leaf veins to tap into phloem vessels. The crawlers move back to the stems at the end of the season where

they spend the winter. These soft scales can rapidly build high populations on trees that have had their health compromised by stress. This includes such things as exposure to high heat, inconsistent soil moisture due to the lack of irrigation, or high soil moisture due to poor drainage related to compaction and/or high clay content. Soil nutrient deficiencies, which can be disclosed through soil tests, can also lead to chronic tree stress. Conversely, too much nitrogen provides support for soft scales and other phloem-feeding plant suckers. Remember that they seek amino acids dissolved in phloem sap and nitrogen is a key element in amino acids. While neither of these soft scales is considered a direct tree killer, the accumulated chronic stress caused by substantial sap loss coupled with other stress-inducing conditions may kill trees. It's death by a thousand sucks. Compromised tree health is the underlying issue with most soft scale outbreaks. Thus, tree health management is the best first step in scale management. For the full article click [HERE](#)

Battle for the Belt: Episode 8

Taylor Dill, Laura Lindsey, Osler Ortez, Lynn Ault, Matt Davis, CCA, Joe Davlin, Colin Barclay, edited by Jamie Hampton



Episode 8 of Battle for the Belt is now available: <https://youtu.be/7e12wC huUrg>

In Episode 8, we talk with Dr. Shawn Conley, the soybean specialist at the University of Wisconsin- Madison and receive a planting date update from all three of our Battle for the Belt trial locations in Ohio. The second planting date of Battle for the Belt occurred last week (April 26-27) at all three of our trial locations. At both Western and Wooster, the soil temperatures were at or above 50°F. However, at the Northwest location, soil temperatures were at 48°F the day of planting. Each planting date thus far has had close to the minimum soil temperature needed for planting. When observing average soil temperatures over the last three weeks, the average is steady between 50°F and 55°F. With these consistent lower temperatures, the crops have been able to germinate **below** the soil surface but have not yet emerged. Emergence takes roughly 115 GGDs to complete. According to the GDD calculations, Western and Wooster would likely emerge first. The first planting date does not yet seem to have an advantage over the second planting date due to slow emergence and growth. For the full article click [HERE](#)

May is here, planting considerations for corn and soybean

Authors, Osler Ortez, Stephanie Karhoff, and Laura Lindsey, Edited By Jamie Hampton

Example: target stand at harvest – 30,000 plants per acre
Seed tag indicates 95% seed germination
Assume 97% survival (3% plant mortality)
Planting rate = $30,000 / (0.95 \times 0.97) = 32,556$ seeds per acre

May is here, and the planting season will speed up with better weather in the coming days/weeks. According to the USDA-NASS report for the week ending 04/23/23, 6% of Ohio's soybean and 6% of Ohio's corn acres were planted. Relative to the 5-year average (2% planted, both crops), that suggests a quicker start for the same period before. Early planting dates can bring advantages and disadvantages for both crops. Following the [OSU Agronomy Guide](#) recommendations, below is a list of key reminders/considerations for planting season this year:

1. Soil Temperatures:

- Planting corn and soybeans after soil temperatures reach the 50°F mark is recommended.
- We recommend measuring ½ - 2 inches below the soil surface in the early morning.
- Generally, early planting comes with the risk of late spring frost, insect/disease losses, and slug damage. However, timely planting is important to maximize yield. In Ohio, we have measured a 0.5 bu/acre reduction in yield for each day soybeans were planted after the end of April. Similarly, grain yield can decrease to 1.75 bu/acre per day for corn if planted after the end of April.

2. Planting Depth – Soybean:

- Plant soybeans 1 – 1.5 inches deep where tillage practices are being used.
- If in no-till fields, ¾ - 1 inch deep is recommended.
- Shallow planting may emerge more quickly, but early planting may have a higher risk of herbicide exposure.
- Higher risk of losses from soil crusting at greater planting depths if soil crusting is a concern.
- Check planting depth consistency.

3. Planting Depth – Corn:

- Plant corn 1.5 – 2 inches deep.
- Adjust depth for field and weather conditions as needed.
- Greater planting depths may delay emergence.
- Shallower depths may cause poor root development, with nodal roots not developing properly and

potentially leading to “floppy” or “rootless” corn.

- Check planting depth consistency.

4. Seeding Rate – Soybean:

- For May planting dates, 100,000 – 120,000 plants per acre is recommended as the target plant population in soybean.
- The seeding rate in soybean is recommended to be ~25% higher than the target plant population.
- It is recommended to factor in crop value and seed cost to determine the optimal economic seeding rate.

5. Seeding Rate – Corn:

- Depending on the hybrid and production environment, recommended plant populations (or final stand) have ranged from 24,000 to 34,000+ plants per acre.
- Adjusting the seeding rate to factor in germination and emergence losses is necessary.
- To calculate the planting rate (seeding rate) in corn, consider the following formula:

Planting

Rate = Desired Population per Acre /
(Germination x Expected Survival)

As planting season picks up, we wish the best for everyone. If you have any questions about planting or outside of planting, do not hesitate to contact us. Follow planting and other Agronomic Crop Updates here (C.O.R.N. Newsletter) or visit the [Ohio State Agronomy YouTube](#) channel.

May Events



Auglaize County Events:

- May 12th, Cover Crop Roundtable, Happy Daz Restaurant in Wapakoneta, 8:30 am
- Insect and Field monitoring

I will be out weekly, if you need me to check a specific field or crop send me a message or give me a call.

- **Have a safe and successful planting season.**

Nearby Happenings:



THE OHIO STATE UNIVERSITY
EXTENSION

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