Nemaha County Ag Line

June 2024
Volume 19 Issue 2

By: Ritika Lamichhane, Nemaha County Extension Educator

This will be our last printed newsletter. The next issue will be sent out electronically. If you want to keep receiving our newsletter, please let us know; call 402-274-4755, email nemaha-county@unl.edu, or scan this QR code.

CALENDAR OF EVENTS

IN-PERSON EVENTS

June 26	Weed Management Field Day South Central Ag Lab near Clay Center, NE 8:30 am—1:00 pm
June 28	Part 107 Drone Test Prep Course Gage County Extension Office Beatrice, NE 9:00 am—5:00 pm
July 11	4R's Nutrient Stewardship Field Day ENREEC 1071 County Rd G, Ithaca, NE 8:30 am—3:00 pm
July 15-21	Pawnee County Fair Pawnee City, NE
July 21-27	Richardson County 4-H/FFA Jr Fair Humboldt, NE
July 25-28	Otoe County Fair Syracuse, NE
August 7	Youth Crop Scouting Competition ENREEC 1071 County Rd G, Ithaca NE
August 7-10	Cass County Fair Weeping Water, NE
August 11-14	Nemaha County Fair Auburn, NE
August 13-16	Soybean Management Field Days 4 days/4 locations
August 16	TAPS Soybean Field Day ENREEC 1071 County Rd G, Ithaca NE
August 16-19	Johnson County Fair Tecumseh, NE
August 19	Ag Tour for Small-Scale Producers Auburn, NE
August 23	Southeast Nebraska Pasture & Acreage Expo Lancaster County Extension Office Lincoln, NE
August 23-September 2	Nebraska State Fair Grand Island, NE
September 10-12	Husker Harvest Days, Grand Island, NE
September 11-14	Richardson County Free Fair Humboldt, NE

ONLINE EVENTS

Center for Ag Profitability Webinars
Every Thursday at Noon
Livestream and Recordings at:
cap.unl.edu/webinars

AG TOUR FOR SMALL SCALE PRODUCERS ON AUGUST 19

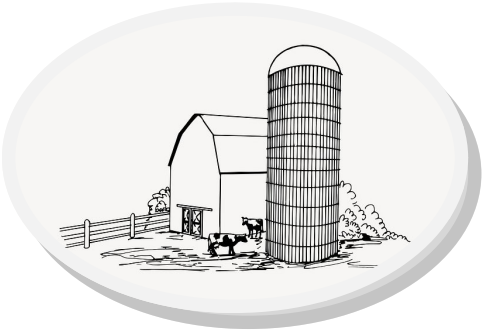
We are planning an Ag tour for small-scale producers on August 19 in Auburn. This program will be a combination of a farm tour with several informative talks on the opportunities and challenges of small-scale farming. The program will feature a farm tour along with

presentations from various speakers. Registration is required, and lunch will be provided.

The event will be hosted at Cailyn Winkelman's flower farm, located two miles west of Auburn. Cailyn's farm spans about an acre and specializes in flowers curated for weddings and events throughout the Midwest. Her main crops include zinnias, celosia, amaranth, strawflower, cosmos, sunflowers, and dahlias. She also grows and forages ornamental grasses and native blooming plants for her designs. In addition to wedding floral design, Cailyn offers floral design workshops, u-picks, and operates a farm stand. She also produces handmade soaps, lotions, and soy wax candles, all featuring natural ingredients and skin-safe essential oils. More information about her operations can be found on her website: theforkandtiller.com.

The program will include presentations by Carol Waters, Commercial Fruit and Vegetable Production Extension Educator in Cass County, and Ben Jewells, Rural Prosperity Extension Educator based out of Otoe County. It will conclude with a panel discussion featuring Leigh Wakulinski from FSA, Luke Johnson from NRCS, and Jeff Allgood from Auburn State Bank. Topics will cover considerations for diversifying your farm, funding opportunities and loans available for small-scale producers, NRCS high tunnel initiative through the EQIP, and challenges for small scale producers.

This event is an excellent opportunity for growers in Southeast Nebraska to learn more about small-scale farming and the opportunities and challenges it holds. More details will be provided soon. Please contact the Extension Office in Auburn for more information and stay updated.



PART 107 REMOTE PILOT EXAM PREP COURSE

Nebraska Extension is providing a one-day, 8-hour Part 107 Remote Pilot Test Preparation Course. This course prepares students to successfully pass the FAA Remote Pilot Aeronautical Knowledge Exam to become certified drone pilots. Pre-registration is required with a $275 registration fee. Registration is available for each location at web.cvent.com/event/9a915ec7-0766-4512-98b4-87a6090eb4fd/summary. Details on upcoming courses are below:

June 28- Gage County Extension Office, 1115 W. Scott St., Beatrice

July 10- Henry J. Stumpf International Wheat Center, 76025 Rd. 329, Grant

Aug. 8- Dodge County Extension Office, 1206 W. 23rd St., Fremont

Aug 16- UNL West Central Research, Extension and Education Center, 402 W. State Farm Rd., North Platte

Dr. Dirk Charlson is an FAA Certified Remote Pilot with 8 years of experience flying drones and teaching drone education courses and he will be teaching this prep course. Study material and lunch will be provided during the class. You can contact Dr. Charlson for more information on this course at dirk.charlson@unl.edu or 402-460-0742 (call or text).

2024 NEBRASKA CUSTOM RATES REPORT PUBLISHED

The 2024 Nebraska Custom Rates Report has been published. You can visit the custom rates page on Center for Agriculture Profitability (CAP) where you can share the link or download the pdf file copy of the report: cap.unl.edu/customrates

A new CAP article is available on the custom rates topic in CropWatch - cap.unl.edu/management/2024-nebraska-custom-rates-what-charge

There will be a webinar available for the public from CAP on the Nebraska Custom Rates which is scheduled for Thursday, July 11 at Noon. Watch cap.unl.edu/webinars for that information.

WHAT IS TAPS?

At the end of April, I had the opportunity to go to Eastern Nebraska Research, Extension, and Education Center (ENREEC) near Mead to plant soybeans for the TAPS competition. Many of you may not know what TAPS is. TAPS stands for Testing Agricultural Performance Solutions. It is a unique farm management competition that was created in 2017 by a team of researchers, extension specialists, and educators at UNL's West Central Research, Extension, and Education Center.

The competitions operate like real-life research projects, with each team given four randomized plots within the same field, totaling approximately one-half of an acre. Teams can make specific management decisions, such as choosing crop insurance, variety type, seeding rate, fertilizer management, grain marketing and more. These choices are made through a secure online portal. University staff then implement these decisions in the field. The yield and cost from each farm are scaled to represent 1,500 acres of production, as this provides opportunity to market an amount of grain that is more representative of a modern farm size. Since everyone is farming in real time in the same field with the same weather conditions and marketing opportunities, the results are strictly the result of individual choices and decisions.

What are the participants competing for? The competition has three awards: 1) most profitable 2) efficiency of nitrogen and water use 3) highest grain yield, emphasizing a focus on profit and efficiency rather than just yield like traditional contests. The most economically profitable team is awarded $1500, highest input use efficiency receives a cash prize of $1500 and the highest grain yield team receives $500, based upon how profitable the team was.

The competition started as a sprinkler corn farm management competition with 15 teams in the first year at the West Central Lab in North Platte, Nebraska. It has grown tremendously since then, expanding to seven competitions: five in Nebraska, one in Oklahoma and one in Colorado with over 200 participants last year. Who are these participants? They vary from mostly farmers to university teams, stakeholders, government agencies, ag instructors, seed sales representatives, as well as high school students. Basically, it can be anyone who is interested in learning more about crop production and marketing.

The 2024 UNL-TAPS consists of four competitions in Nebraska—sprinkler irrigated corn, continuous corn, irrigated sorghum and soybeans. A team can be an individual or a group of people. This is the first year for irrigated soybeans in Eastern Nebraska. The plots are located at ENREEC near Mead with 18 teams. I am part of one of these teams, along with four water and cropping systems educators and one agricultural economics educator.

Each individual/team receives a confidential farm number needed to access the team specific website. Each farm's decision and farm specific information will be kept confidential until the season's end and only be available to authorized team members and TAPS personnel. The TAPS team will be hosting a TAPS Soybean Field Day at ENREEC on August 16, this will be a great opportunity for sharing updates and interacting with multiple stakeholders and industry representatives.

The main goal of TAPS is to promote profitability and efficiency in crop production. It provides the opportunity to test new methods

and products and build a peer-to-peer network. Some of this technology includes using satellite imagery, weather station data, soil and water monitoring, and plant sensing. You can visit taps.unl.edu to learn more about this program or contact your local extension educator.

SOYBEAN GALL MIDGE TRIALS IN TALMAGE

Entomologist Dr. Justin McMechan, plant pathologist Dr. Dylan Mangel, and their team at UNL are evaluating the impact of soybean gall midge and dectes stem borer at ten sites across eastern Nebraska. They are examining different management strategies, including foliar fungicide application and hilling for disease management. One of the fields for this research trial is located in Talmage in Otoe County. Along with investigating the effect of different management practices on gall midge infestation, two other studies are being conducted at the Talmage site. These studies are examining the effect of seeding depth and different soybean hybrids on gall midge infestation. They planted the Talmage site on May 10th and on June 3 an adult gall midge was collected from the research plot. We will be having a small informal meet up this summer on the Talmage site where you can have one on one conversation with the UNL team, stay connected for more details on this.

The information below is from a CropWatch article recently written by Dr. McMechan.

On May 30, soybean gall midge adult emergence was observed in east-central Nebraska in Saunders and Lancaster counties. On June 3, an adult was collected in Otoe County, and on June 5, white larvae were found on early planted soybean near Mead, Nebraska.

Soybean stage is a critical factor for the susceptibility of soybean-to-soybean gall midge. Only soybean with fissures at the base of the plant are susceptible to soybean gall midge infestation. Soybean planted in late April and early May are mostly at the V2 stage; however, those planted in mid to late May are VE-V1. Research being conducted this season shows that soybeans planted on the same day at different depths can impact the soybean stage of development.

Management of soybean gall midge has been difficult. Foliar sprays have shown some response but are inconsistent between locations and years. No specific foliar-applied product tested to date has provided consistent control of SGM. Research to date suggests that growers can consider using a combination product that contains a pyrethroid.

If an application is being considered, it should only be made in soybean fields where a history of issues with soybean gall midge injury has occurred. Since soybean gall midge is a field edge-infesting pest, growers may only need to treat the first 60 to 120 feet of a field edge that is directly adjacent to a field that was injured the previous year. Do not treat any soybean fields prior to V2, as they are not susceptible to infestation due to the lack of fissures or cracks at the base of the stem.

Hilling or covering the base of soybean stems with soil has also been found to be a very effective strategy with almost complete control of soybean gall midge. This is a difficult practice to implement when soybean plants are small, as they can easily be completely covered by soil. Studies are being conducted to evaluate the timing of hilling relative to the plant development stage. More information on hilling is available through soybeangallmidge.org. Little is known about the impact this management strat-

egy could have on soybean gall midge movement in a field. Although no field studies have been conducted, it is possible that adults may continue to move into the field until they find a susceptible plant.

With no detection of soybean gall midge in other parts of the network, it would be advisable to wait for emergence to occur in those areas. You can continue to follow adult emergence at all locations through the soybeangallmidge.org.

TAR SPOT CONFIRMED IN RICHARDSON COUNTY

UNL Plant Pathologist Dr. Tamra Jackson-Ziems and her team recently confirmed tar spot in Richardson County, just north of Falls city. The disease infestation is in very low levels, but it is important to begin scouting your corn field. The Corn ipmPIPE helps track the appearance of tar spot. It is available online at corn.ipmpipe.org/tarspot. When you look at the map, keep in mind that the gray color signifies counties where tar spot was found in previous years and the highlighted yellow ones indicate that a sample from one or more fields in that county tested positive this year. Last year, tar spot was confirmed in 47 counties in eastern Nebraska.

What does Tar Spot look like?

Tar spots produce small, raised black circular spots that look like tar. These spots cannot be scraped off the leaf and often have a tan to brown halo around them, giving them a "fisheye" appearance. These black spots can be mistaken for a few other things:

- Insect frass: This can be rubbed off with some moisture and does not show through both sides of the leaf like tar spot.
- Saprophytic fungi: These fungi grow on dead brown tissue and thrive in moist conditions. These saprophytic fungi are not raised above the surface like tar spot and may not have clearly defined margins as well.
- Rust spores: At the end of season, orange-red spores in common and southern rust turn black and looks similar to tar spot. Rust spores can be rubbed off and often leave an orange to black mark on your finger.

Because of these similarities, it is important to be extra careful while scouting your corn field for tar spot.

What causes Tar Spot and where to scout?

Moderate temperatures and frequent early and mid-season rainfall with average leaf wetness of 7 hours or more create ideal conditions for disease. With all the rain we have been getting this year we need to be especially cautious. The disease could be observed as early as V8 corn stage. The fungus overwinters in crop debris so the disease will reappear in the same areas. Once the fungus is established and the weather conditions become favorable again, it can reproduce and cause infections.

At this time of the season, tar spot is expected to be found in the lower part of the canopy because it is a residue-borne disease. If you have a center pivot, inner spans may be more conducive for disease than the outer irrigation span and that is where you will need to scout first.

What should I do if I find Tar Spot?

Contact your local extension educator if you see anything that fits the description of tar spot. Samples with suspected tar spot can be sent to the UNL Plant and Pest Diagnostic Clinic (plantpathology.unl.edu/plant-pest-diagnostic-clinic) and they will diagnose the samples free of charge. Once tar spot is confirmed, foliar fungicide applications should be considered. You can visit go.unl.edu/2023cornfungicideefficacy for specific product and their ratings for tar spot and other corn diseases.

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