

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula and Trumbull Counties

August 15, 2023



We are in Des Moines, Iowa this week for NACAA Annual Conference

In This Issue:

- Ø Sudden Death Syndrome of Soybean in Ohio
- Ø What the...Maggots in Corn?
- Ø Federal Legislation Introduced to Address Farm Estate Taxes
- Ø Know the ins and outs of feeding baleage
- Ø Extension Talk – Where there is smoke...

Hello Northeast Ohio Counties!

Another successful Ashtabula County Fair wrapped up Sunday. It was great to see everyone and celebrate agriculture together. The sale showed great support for our 4-H youth and quite a few records were broke. Thank you to all who came and participated, and congratulations to all the youth on the success of their projects!

Your Ashtabula and Trumbull Ag Extension staff is in Des Moines, Iowa for our nation conference this week. We hope to bring back some great programs and opportunities to NE Ohio.

Have a good week and stay safe!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

Sudden Death Syndrome of Soybean in Ohio

By Horacio Lopez-Nicora, Jenna Moore

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-27/sudden-death-syndrome-soybean-ohio>

We are finding fields in Ohio affected by [sudden death syndrome \(SDS\)](#). These symptoms are showing up earlier than normal. SDS is caused by the fungal pathogen *Fusarium virguliforme*. This species is the most prevalent in the region, however, other *Fusarium* species can cause SDS.



With support and funding from [Ohio Soybean Council](#), we will process soybean plants with SDS symptoms from fields in Ohio to: **1)** Determine the species and genetic diversity of *Fusarium* associated with SDS in Ohio, and **2)** Determine the fungicide sensitivity of isolates in the culture collection. *To successfully achieve these goals, we need your help.*

If you are seeing SDS symptoms, we encourage you to submit a sample to the Soybean Pathology and Nematology Laboratory in the Department of Plant Pathology at The Ohio State University in Columbus (read more [HERE](#)). If it is SDS, we want to determine what *Fusarium* species is the causal agent. **To submit samples, dig out three to five symptomatic plants ([including roots](#)), placed them in a plastic bag, complete the [SDS submission form](#), and submit them to our lab.** Do not hesitate to contact your extension educator or us if you have any questions. Read more about SDS and other mid-season diseases of soybean [HERE](#).

Mail your samples to:

OSU Soybean Pathology and Nematology Lab

Attn: Horacio Lopez-Nicora, Ph.D.

110 Kottman Hall

2021 Coffey Rd.

Columbus, Ohio 43210

lopez-nicora.1@osu.edu

What the...Maggots in Corn?

By: Kelley Tilmon, Andy Michel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-27/what-%E2%80%A6maggots-corn>

We have received a few calls asking about small, slender, almost translucent maggots recently found in abundance on corn leaves and anthers. These are a curiosity, but they are harmless to plants or people. These maggots are the larvae of hover flies (also called syrphids), a type of fly often found in agricultural and horticultural habitats. The hover fly adult is often mistaken for a bee, because of yellow and black stripes on the abdomen. But it is a true fly. If you look at the head, you will see the family resemblance. Adults can sometimes be a nuisance because they are attracted to sweat, both for the moisture and for the salt found in it. However, they neither sting nor bite, and pose no threat. They are called hover flies because of their ability to hold their position steady in flight, rather like a hummingbird.



Syrphid (hover fly) adult. Photo by David Cappaert, bugwood.net



Two syrphid larvae on corn anthers, which they resemble. (Photo by: John Obermeyer, Purdue University)

The larvae of syrphids are small, free-living maggots often found in crop vegetation. Some species are quite beneficial, preying on small-bodied pest insects such as aphids. Some species are pollen-feeders rather than predators. Neither feeds on plant vegetation. The syrphid larvae we're observing in crops at this time of year are most likely in the genus *Toxomerus*, which feed on pollen. The reports we've received have come from late-pollinating corn, where pollen is abundant. Larvae will aggregate on leaves, leaf axils, and tassels – wherever pollen builds up.

Interestingly, field crop entomologists in several neighboring states have also observed unusual numbers of syrphid flies recently. For reasons we don't understand, it seems to be a regional trend this year.

Federal Legislation Introduced to Address Farm Estate Taxes

By: Robert Moore

Source: <https://farmoffice.osu.edu/blog/fri-08112023-903am/federal-legislation-introduced-address-farm-estate-taxes>

On July 26, 2023, Representatives Jimmy Panetta of California and Mike Kelly of Pennsylvania introduced legislation related to farm estate taxes. The proposed bill seeks to increase the limit on the deduction that can be taken by farmers under Section 2032A of the Internal Revenue Code (IRC). The 2032A provision in the IRC allows farmers to value their land at agricultural value, rather than fair market value. However, the current law limits the deduction to \$1.16 million. This relatively small deduction can limit the usefulness of 2032A for some farm estates.

Consider the following example:

Farmer's estate includes 500 acres with a fair market value of \$5,000,000. The agricultural value, allowed by 2032A, is \$4,500/acre or \$2,250,000. The difference between the fair market value and the agricultural value is \$2,725,000. So, by using 2032A valuation, the land value can be reduced by \$2,725,000. However, 2032A limits the deduction to \$1,160,000. Therefore, Farmer's estate can actually use less than ½ the reduction in land value.

The newly introduced legislation would increase the 2032A deduction limit to the federal estate tax exemption, currently \$12,900,000. Applying the proposed legislation to the above scenario, Farmer's estate would be able to deduct the entire \$2,725,000.

The farm value of farmland is determined by a formula included in the IRC. The value is the net cash rent of comparable land less real estate taxes divided by the Farm Credit System Bank interest rate, which is 4.57% for a 2022 Ohio estate. Let's assume the fair market cash rent for a farm is \$220/acre less \$50/acre for taxes. Dividing by the

interest rate, we get a value of \$3,720/acre. The 2032A rate (farm value) is usually 1/3 to 1/2 of the fair market value.

If we use the \$3,720 as the farm value and \$10,000/acre for fair market value, 2032A reduces the value of the farmland by \$6,280/acre. Dividing the per acre savings into the 2032A limit of \$1,160,000 results in 185 acres. So, a reasonable estimate is that the 2032A limit only allows farmers to apply the 2032A special valuation to about 185 acres (assuming \$220 rent and \$10,000 FMV). Conversely, if the 2032A limit is increased to \$12,900,000, the farm value could be used on over 2,000 acres. Increasing the 2032A exemption limit to \$12,900,000 could save as much as \$4,696,000 in estate taxes for some farm estate.

It is important to note that 2032A is only needed by farmers whose estate value will exceed the federal estate tax limit. For example, a farmer that died today with a net worth of \$12,900,000 or less would owe no estate tax and thus would not need to take the 2032A deduction. According to the USDA, of the approximately 31,000 principal farm operators who died in 2020, only 50 (0.16%) owed estate taxes. With the current high estate tax exemption, less than 1% of farmers owe federal estate taxes and thus the 2032A limit is not an issue for the vast majority of farmers.

Unfortunately, this could change soon. In 2026, the federal estate tax exemption is scheduled to be reduced to around \$7,500,000. We will not know the exact number until 2026 because of adjustment for inflation, but it will be somewhere around 1/2 of what it is now. Congress can extend the current, higher exemption or make it permanent, but no one seems to know the likelihood of that happening at this point. If the federal estate tax exemption does come back down in 2026, and with the increases in land prices the last few years, 2032A may become needed by many more farm estates.

Let's take a look at how 2032A would play out in 2026. Consider the following scenario:

Farmer dies in 2026 and the federal estate tax exemption is \$7,500,000. His net worth is \$10,000,000 with \$7,000,000 in farmland. The estate is \$2,500,000 over the estate tax exemption limit which would result in \$1,000,000 in estate taxes. If the 2032A exemption remains at \$1,160,000, we can further reduce the estate by that amount, leaving \$1,340,000 over and \$536,000 of tax liability. If the newly proposed 2032A legislation is passed, the Farmer's estate will be able to deduct at least \$2,500,000 using 2032A, leaving Farmer's estate with \$0 tax liability.

As the scenarios and discussion shows, increasing the 2032A exemption limit will help farm estates, especially if the estate tax exemption is reduced in 2026. The proposed legislation has been introduced in the prior two Congresses and both times did not

make it out of the House Ways and Means Committee. We will keep you updated on the status of this legislation and if it begins to make its way through Congress.

Know The ins And Outs of Feeding Baleage

By: Jason Hartschuh, OSU Extension Field Specialist Dairy Management and Precision Livestock

Source: <https://u.osu.edu/beef/2023/08/09/know-the-ins-and-outs-of-feeding-baleage/>

Maintaining forage quality with small dry-weather windows can be done by using baleage instead of dry hay.

The ideal conditions for baleage is to bale the hay between 40 to 65% moisture and wrap within two hours of baling. This process uses anaerobic conditions and the acids produced in fermentations to preserve hay.

Baleage fermentation is slower than in haylage, often taking six weeks. When forage is baled between 25 to 40% moisture, it will not ferment properly and baleage at these moisture levels should be considered as temporary storage.

During such situations, preservation is primarily a function of maintaining anaerobic, oxygen-limiting conditions. Mold is more likely at this moisture; higher bale densities and more wraps of plastic is required to better seal out oxygen. Baleage at this moisture will not maintain quality for long term in storage, and thus, it needs to be fed as soon as possible.

Have a plan

Baleage can be utilized as a plan or as a backup, but the best baleage is a plan and not a rescue.

A recent study conducted at the U.S. Dairy Forage Research center investigated the benefits of wrapping 25% moisture hay. This moisture has often been considered no man's land, as it is too wet to safely bale with preservatives as dry hay and to dry to bale as baleage.

This study investigated heating of the wrapped hay versus unwrapped with preservatives. Wrapping hay significantly reduced heating with no protein degradation compared to unwrapped hay.

When propionic acid was added at baling to the wrapped bales, not only was heating reduced, but after 84 days in wrapped storage the bales exhibited improved aerobic stability for the following 33 days it was monitored. This means that the hay would have improved bunk life.

While keeping oxygen out is the most important part of making high-quality baleage, it starts with mowing. When baleage is the planned storage method, your harvest capacity-limiting factor will be how many bales you can wrap an hour with the ideal goal of wrapping the bales within four hours.

Based on research done at the University of Wisconsin-Madison, we recommend laying swaths as wide as your mower will allow, helping preserve forage quality and speeds up drying to 65% moisture by 10.8 hours.

When baling, your goal needs to be for the highest-density bales that you can make. Increasing density from 6 pounds/foot 3 to 8 pounds/foot 3, you gain an extra 12 hours of bunk life in the haylage due mostly to better bale fermentation.

Wrapping

It is important to wrap bales as soon as possible after baling to avoid spoilage. Most bale wrap is one mil low-density polyethylene and bales need a minimum of 5 mils of plastic to seal out oxygen, requiring a minimum of six wraps

Types of plastic vary greatly in their stretchiness, which can reduce thickness by up to 25%. Some stretch is necessary so that the plastic stays sticky and seals well between the layers of plastic.

Be cautious when wrapping in the rain, as this will reduce the stickiness and allow more oxygen to penetrate, causing spoilage. Also, be cautious when wrapping forages that poke through the plastic which will require more layers.

When oxygen enters the bale, they start to heat and quality declines when temperatures are over 120°F. The amount of time until bales are wrapped and the number of mils of wrap significantly affects internal bale temperature.

After bales are wrapped, handle them carefully using a squeeze so that plastic is not torn. If plastic is torn in storage, the tears should be taped as soon as you notice them. For this reason, bales should be inspected weekly in storage.

Never use bale spears to move wrapped haylage until the day you are going to feed it. It is recommended that bales be fed within a year of wrapping.

Baleage that is too wet, over 60% moisture, should be feed within three months, and baleage that is below 40% will not ferment well and should be fed within six months. Most of the time when we make baleage as a rescue, it falls in the range of needing to be fed within six months. When done right, baleage can last a year and make excellent feed.

When done wrong, Baleage can spoil, mold and grow organisms that will make your animals sick; use your eyes and nose to be sure that the forage you are going to feed is of high quality. Don't force animals to eat forage they don't want.

EDITOR's NOTE: For more on The Do's and Don't of Making High Quality Baleage, see Hartschuh's presentation from the 2021 Ohio Beef Cattle Management School embedded below:

<https://youtu.be/tljFOgbrdac>

Extension Talk – Where there is smoke...

By: Andrew Holden, ANR Educator – Ashtabula County

Hello Ashtabula County! At the time I am writing this the 177th Ashtabula County Fair is in full swing. So far it has been filled with great exhibits, livestock, food and people. The weather has also been quite pleasant so far, but I do not want to speak too soon! I hope you were able to enjoy this year's fair and support the 4-H youth. I also want to thank the Master Gardener Volunteers, that I have the pleasure of advising, for all of their hard work in the floral building and competition. We had a great showing this year with so many fantastic entries.

One topic of conversation that continued to arise at the fair was the wildfire smoke from Canada and how the haze has been present all summer. Some people, including myself, have speculated on the effects the smoke is having on our local crops. Is the wildfire smoke capable of effecting crop growth and even yield? I decided to do some more research into this topic and share my findings in today's article.

The smoke from the Canadian wildfires continues to impact the northern United States. Over 33 million acres have been burned since the 1st of the year, with little signs of slowing down. The fires are uncontrollable, and many are impossible to put out. Damage from fires and the health risk from the smoke on the people closest to the areas in high. Even here in Ashtabula there have been days of air quality warnings and thick haze in the sky. The smoke has even traveled as far as Europe.

With these widespread impacts of smoke from the fires, it is reasonable to consider there may be an impact to crops here in the U.S. While not much research has been done to study every effect smoke has on crop production, there is information available as well as explanations on what is affecting the crops this year.

The main concern is that smoke reduces light availability, that could negatively impact photosynthesis. The good news is that in research, 15% light reduction did not decrease corn yields. Only 30% to 50% light reduction saw a decrease in yields. Agronomic experts at Ohio State University have shared, "it is highly unlikely that these fires are going to have any kind of impact on Ohio agriculture".

There can be negative effects from the smoke including the reduction in sunlight and the increase of ozone level. This could lead to reductions in photosynthesis that encourage the plant to remobilizes carbohydrates from stalks to grain production making stalks susceptible to lodging.

There are also positive aspects that crops could possibly benefit from due to the smoke. The smoke scattering the light means the light can penetrate deeper into the crop canopy, increasing whole canopy photosynthesis.

So why are crops lagging behind, or not growing like they normally do? The reason is much more likely to do with temperature and precipitation. We are behind average for Growing Degree Days here in Ashtabula County. Essentially this means it has been cooler on average this growing season. We also experienced a minor drought this spring, followed by higher than average amount of rainfall. The combination of lower temperatures and erratic precipitation have given us an irregular crop season. Despite the weather challenges, crops in the area do look fairly decent, albeit lagging behind average years. Hopefully, August will provide us with warmer and drier weather to assist in grain fill for our field crops and harvest for our local vegetable crops.

Andrew Holden is an Agriculture & Natural Resources Extension Educator for Ohio State University Extension. Andrew can be reached at 440-576-9008 or Holden.155@osu.edu

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2023 FARM PESTICIDE DISPOSAL COLLECTION

Do you have unwanted, unused, or unknown FARM chemicals? Bring them to a collection and disposal event coordinated by ODA and EPA - at no cost to farmers.

All events are 9:00 am to 3:00 pm.

To pre-register, or for more information, contact the Ohio Department of Agriculture at 614-728-6987.

Wednesday, August 9

Morgan County Fairgrounds
2760 South Riverside Drive | McConnelsville

Thursday, August 10

Putnam County Fairgrounds, Gate 5
1206 East Second Street | Ottawa

Tuesday, August 22

Miami County Fairgrounds, North Gate
650 North County Road 25A | Troy

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**CFAES****DATE:**

Sunday, August 27th
2:00 p.m.—4:00 p.m.

LOCATION:

Pierpont, OH

**RSVP for address,
details, & directions**

wayman.31@osu.edu
440-576-9008

WOMEN IN AG- ASHTABULA COUNTY

Farm Tour: Lois Wright Morton Outwash Terrace Farm

Lois Wright Morton, a 7th generation farmer in Pierpont, Ohio owns and manages a small diversified farm of specialty crops, primarily blueberries and raspberries, commodity crops corn-bean, and hardwood forest on the East Branch of the Ashtabula River headwaters. She uses a variety of technologies including an on-farm weather station, soil moisture sensors, an augmentation box for composting berries; wetland water filtration; and $\frac{3}{4}$ ac blueberries grown under 85gm exclusion net, allowing her to minimize insecticide use.

Dr. Morton is also Professor Emeritus of Rural Sociology, Iowa State University, with publications on human-natural agroecosystems, climate smart agriculture, farmer decision making, and rural livelihoods.

Dr. Morton serves on Solutions from the Land (SfL) Board of Directors, has written extensively on the future of agriculture and food systems, and has prepared and presented recommendations to United Nations, FAO policies on how farmers concurrently produce food and nutrition security, agricultural products, protect soil and water resources and contribute to household livelihoods and community economies.

RAIN OR SHINE! Wear sturdy shoes, dress for the weather, & bring a camp chair if needed.

For questions, accommodations, or to RSVP, contact Julie Wayman 440-576-9008 or wayman.31@osu.edu