

Auglaize County ANR

News from OSU Extension

It's Getting Hot in Here!

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Authors: Taylor Dill and Jamie Hampton



The 2022 crop has already seen its fair share of stress. But with the forecast of a flash drought and much higher than normal June temperatures, we will be seeing some extra stress that we may normally anticipate for later in the growing season. Nevertheless, our crops are very resilient. The original corn plant was a tropical grass that can tolerate temperatures up to 112°F for a short amount of time, but optimal daytime growth ranges from 77°F to 91°F. 86°F is what is used for growing degree days because that is the average temperature where a corn plant will start to experience water stress. Corn growth starts a rapid decline when temperatures exceed 95 degrees.

Temperatures exceeding 86°F can be calculated as stress degree days, this is a way of tracking how much stress a type of plant has been subjected to. According to agronomists with Iowa State, in years when corn exceeds 140 stress degree days, achieving above-average yield is difficult.

However, according to agronomists at the University of Illinois afternoon temperatures in the mid-90s are not usually a problem for corn when there is enough soil water available. Temperatures above 100°F can begin to damage leaves. Though it is important to remember adequate water

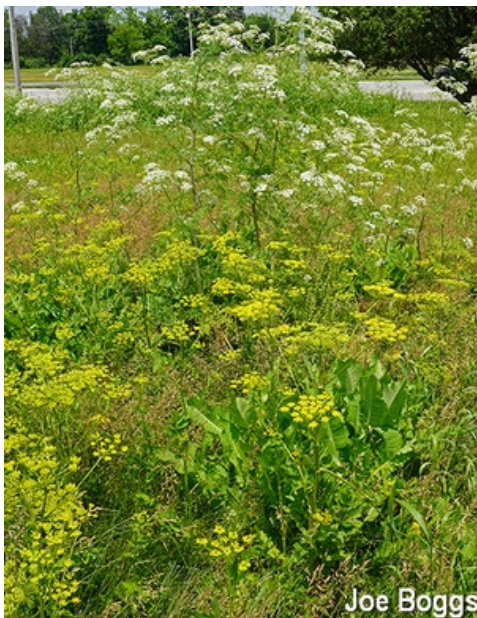
can increase the ability of the plant to handle heat stress. The combination of dry and hot is more damaging. Leaf rolling is a common symptom of high-temperature stress. Yield diminishes by 1% for every 12 hours of leaf rolling during vegetative growth but increases to 1% every four (4) hours during silking. When water is deficient during a heat wave the loss of yield increases after four consecutive days of 93°F or above, not including the stress from leaf rolling. So, the impact of heat stress can be two-fold.

Soybeans have a similar range in temperature to corn, for temperatures above 85°F for several consecutive days can cause heat stress. This heat can accelerate maturity because soybeans are photoperiod and temperature-controlled when it comes to flowering. During vegetative stages, these high temperatures can slow or stop photosynthesis because the plant is making an effort to conserve water. Thus, inhibiting new vegetative growth, which is vital for late-planted soybeans. Temperatures above 86°F can also reduce nodulation and therefore nitrogen-fixation in the soybean which could have an effect until the reproductive stages.

Wild Parsnip, Foe not Friend!

Author Joe Boggs, Edited by Jamie Hampton

It is too late to control wild parsnip, but not too late to identify it according to OSU Extension Educator, Joe Boggs. Wild parsnip is in full bloom in Ohio. With recent hot temperatures accelerating seed development, particularly in the southern part of the state. This means it's too late to reduce the seed bank of this highly dangerous, non-native invasive weed by mechanical removal (e.g., mowing) or using herbicides. Masses of 3 – 4 ft. tall plants capped by clusters of bright yellow “flat-topped” flowers is a common sight along the interstate. It's also common to see another dangerous non-native invasive, Poison hemlock (*Conium maculatum*), growing near or among the wild parsnip. The two growing together creates a high-risk scenario for the uninformed. Most consider poison hemlock to be one of the most dangerous plants in North America owing to the highly toxic piperidine alkaloid compounds it produces for chemical defense.



“Too Late to Control, Not Too Late To Identify”

The toxins in poison hemlock must be ingested or enter through the eyes, nasal passages, and cuts in the skin to induce poisoning. There's also anecdotal evidence that mechanical removal may cause the sap containing the toxins to become aerosolized and inhaled.

However, poison hemlock toxins do not cause skin rashes or blistering. The defense chemicals produced by wild parsnip are very different and have a vastly different mode of action. Skin contact with wild parsnip sap can produce painful severe blistering requiring medical attention. Various online reports describe the skin damage as being comparable to a 2nd-degree chemical burn and hospital treatment commonly involves burn units. It's important to note that it is not unusual to find poison hemlock and wild parsnip growing together which can create misinterpretations of exposure symptomology. This may account for some online resources incorrectly attributing skin blistering to contact with poison hemlock. Wild parsnip sap contains psoralen which is a

naturally occurring phytochemical grouped in a family of organic compounds, known as linear furanocoumarins. Psoralen acts as a photosensitizing compound because of its ability to crosslink DNA to interfere with transcription in epidermal cells. This kills these light-shielding cells responsible for protecting us from long-wave ultraviolet radiation (LWUVR) bombarding us in sunlight. Severe blistering occurs when the affected skin is exposed to LWUVR. The synergistic effect is called phytophotodermatitis (a.k.a. PPD or Berloque dermatitis) and the burn-like symptoms, as well as skin discoloration, may last for several months. When you say the effect out loud, it sounds like “fido,” although dogs have nothing to do with it. Skin blistering takes around 24 hours for symptoms to first appear after exposure to LWURV and severe blistering typically doesn't peak until 48 -72 hours. The time required for symptoms to appear after exposure to the sap means the effect may be disconnected from the cause. You can read more [HERE](#)

Honeysuckle, Invasive!

Author Christine Gelley, Edited by Jamie Hampton



Honeysuckle is a commonly found plant that often draws the attention of passersby with its pleasantly fragrant blossoms from April to July. Says Christine Gelly, Noble County ANR Extension Educator. Despite the sweetness it adds to the air, the impacts it has on our environment are certainly not sweet. Unfortunately, four of these introduced species are extremely aggressive in our landscapes and have created an imbalance in natural systems due to their ability to outcompete native plants for resources. The types of honeysuckles which are damaging to these spaces are Japanese honeysuckle, which is a vining type, and three bush type honeysuckles- amur, morrows, and tartarian. Some species form dense thickets of shrubs, and some

spread with vast creeping vines that can strangle neighboring plants. These honeysuckle species are commonly found in pastures, woodlands, reclaimed sites, and waste spaces. Because of their invasive status in Ohio, it is every landowner's legal responsibility to control their spread. With honeysuckle blooming now across the state, I encourage admirers to pick all the flowers they want to use in arrangements for their tables and loved ones, because every flower removed stops seed development. After enjoying the flowers, remember to return to execute the remainder of the plant in order to help preserve the environment for our beneficial natives! You can read the full article [HERE](#)

Rural Wisdom "Separating the Wheat from the Chaff"



Separating the wheat from the chaff is a saying that I have heard all my life. This phrase can be applied to people and things. For instance, when I tried out for softball we were put through a variety of exercises, to help separate the wheat from the chaff, meaning that we were separating the good from the bad.

To separate the wheat from the chaff comes from the practice of thrashing wheat to remove the undesirable chaff from the valuable grain. This was done in several different styles over the centuries and is now all contained in our combines. If you enjoy a good antique tractor show you may be lucky enough to see an old-fashioned thrasher in operation.

According to Merriam-Webster, the phrase "separate the wheat from the chaff" is British in origin, but there are clear biblical roots to this phrase. Most notably in Matthew 3:12 and Luke 3:17, when reference is made to the separation of the chaff and the wheat, the desirable and the undesirable.

Going Home to Farm

Author Jamie Hampton

When Katherine Lee Bates wrote the second line of “America the Beautiful” she was talking about the amber waves of grain in the Midwest.



The fields in Ohio at this time of year can take your breath away. The waves of awns blowing in the light breeze and the wheat at full

maturity is a beautiful sight! This is my favorite time of year! The wheat is ready, and it is time to go to work! I will be going home next week to start straw season. I am a farm hand, AKA the number one tractor driver during straw season. I am blessed to be able to work alongside my dad and uncle to harvest the straw for some pretty amazing farmers! Being a farm hand is like a country girl vacation. I get to do all the fun things I love to do and spend amazing quality time working side by side with my dad. I will be back on July 12th, and I will be sure to bring plenty of fun stories of my farming adventures! You will be able to leave voicemails and emails for me and I will check in on them periodically.



June Events



29th , Mercer County Lawn and Garden Talks at the central service building in Celina, use the sugar street entrance. The topic will be succulent plants

30th , Hoppin' Around Darke County 5:30 pm at Endless Pint, 39 E. Main Street Versailles Ohio Topic is Advocacy.



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