

Alfalfa Weevil Update:

KSU Entomologists report that sampling of alfalfa in late March showed very few signs of feeding (a few pinprick sized holes and small signs of feeding were noted in the terminals) as well as the presence of some small, first instar larvae.

Fewer larvae were found this last week with no change in larvae size. Larvae do not appear to have been harmed by the cold conditions, instead hiding under plant residue on the soil surface during this period of inclement weather. No field had more than a 10% infestation. A random sampling of fields across the Meadowlark Extension District yielded similar results.

For more information on alfalfa weevil management, see the KSU Alfalfa Insect Management Guide: <https://www.bookstore.ksre.ksu.edu/pubs/mf809.pdf>

Dear Producer:

The calendar might say it's spring - but temperatures would say otherwise! With any luck, warmer weather is just around the corner.

Don't have your dicamba application training requirements completed? This link: https://webapp.agron.ksu.edu/agr_social/eu_article.throck?article_id=1766 will take you to an article by K-State Research & Extension Weed Specialist Dr. Dallas Peterson, where he outlines the online dicamba application training program options approved by the Kansas Department of Agriculture. Have a great week!

David G. Hallauer
Meadowlark Extension District Agent,
Crops & Soils, Horticulture
E-mail: dhallaue@ksu.edu

Fertilizer applied (lbs)	In-Furrow placement	2x2 Band placement	Surface Band placement
	Yield (bu/acre)		
Check: 159 bu/A	--	--	--
5-15-5	172	194	190
15-15-5	177	197	198
30-15-5	174	216	212
45-15-5	171	215	213
60-15-15	163	214	213
Average:	171	207	205

Effect of starter fertilizer placement on corn yield at North Central Experiment Field (Source: Dr. Dorivar Ruiz-Diaz, KSU Nutrient Management Specialist.

Click here for the full article available in the March 30th KSU eUpdate.

Chilling Injury

Call it superstition. Call it a weather 'tale'. Call it whatever you want, but many have heard the saying: If it rains on Easter Sunday, it will rain the next seven Sundays in a row. Rain is one thing, but Easter Sunday 2018 brought more than rain. Will snow be what we see for the next seven Sundays?!

While it's possible – it's not likely. What could be a possibility, however, is cool temperatures and the possibility of delayed planting IF moisture continues for a seven week post Easter stretch. Short term forecasts seem to be mixed on whether relief is coming, but if not, what can we expect?

Imbibitional chilling injury is the terminology commonly used to describe the injury to germinating seed as it is absorbing moisture when temperatures are cold. It is particularly severe when soil temperatures remain at or below 50 degrees F after planting.

The time frame when four-inch depth temperature is the most critical is during the first 24-72 hours after seeding. During this time frame, kernels are imbibing water and the germination process is beginning. Kernels naturally swell when hydrating. If the cell tissues of the kernel are too cold, they become less elastic and may rupture during the swelling process, resulting in "leaky" cells. Injury symptoms from this damage may include swollen kernels that fail to germinate or aborted growth of the radicle and/or coleoptile after germination has begun.

Potential injury doesn't cease once germination occurs, however. Even after seedlings enter the emergence process, cold temperatures can continue to contribute to reduced plant metabolism and vigor that can result in stunting or death of seminal roots, deformed elongation ("corkscrewing") of the mesocotyl, and either delayed or complete failure of emergence (often manifesting itself as leafing out underground). Chilled seedlings may also be more sensitive to herbicides and seedling blights. The picture below from Southeast Area Agronomist Dr. Doug Shoup shows what this looks like.

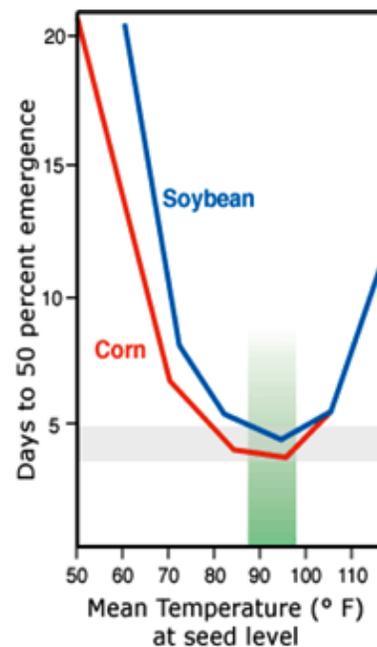


How fast will it emerge?

Data from Iowa State University Extension Climatologist Elwynn Taylor shows that if the soil temperature is averaging 50 to 55 F at the time of planting, corn may take three weeks to emerge.

Temperatures averaging 60 F may have emergence in 10 days to 12 days.

Soybean emergence usually requires that soils be about 10 degrees warmer than for corn although soybean does begin to respond at 50 F.



K-STATE
Research and Extension

**Meadowlark
District**

David Hallauer – Meadowlark District, 785-863-2212, dhallau@ksu.edu

**Seneca Office
Nemaha County**
1500 Community Dr
Seneca, KS 66538-9786
Phone: 785-336-2184

**Holton Office
Jackson County**
114 W. 5th
Holton, KS 66436-1778
Phone: 785-364-4125

**Oskaloosa Office
Jefferson County**
Courthouse Basement
PO Box 326
Oskaloosa, KS 66066-0326
Phone: 785-863-2212

www.meadowlark.ksu.edu

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