

David G. Hallauer  
District Extension Agent  
Crops & Soils/Horticulture

### ***Cold Weather Crown Stress in Corn***

Under ideal conditions, we'd plant corn when soil temperatures reach 50-55 degrees F and were headed upward. Air temperatures would also be increasing and we'd have plenty of sun with rain each week to replenish soil moisture.

We don't often get perfect spring growing conditions, though, and with what we've seen this spring for temperatures and moisture, our corn crop may deserve some evaluation as the growing season gets going. If my windshield survey is correct, we're somewhere around 90 percent emerged, and while we'd like to think we're off to the races, corn stands could still face some issues, one of those being what we often call cold weather crown stress.

Cold weather crown stress isn't a given under the wet/cool growing conditions we're seeing, but cooler soil temperatures and extended periods of saturated soils increase the potential for issues. According to Iowa State University, *Fusarium* or a fungus that causes anthracnose can sometimes be isolated from affected plants, but not always. Even the presence of a 'rotted' crown area may not always signify damage, though many of these plants will tend to be stunted, with leaf discoloration (much like nutrient deficiencies), wilting, and even death in cases where soils remain wet long enough that decay results in a 'disconnect' between leaves and roots.

Other stresses can make plants more susceptible to crown issues *and* cause problems later. Compaction, fertility deficiencies, or herbicide injury can enhance the potential for crown damage. Stress (drought/heat) conditions later on tend to result in further problems, with late season stresses on these plants potentially leading to stalk rots and lodging.

With any luck, we won't see a thing, but it never hurts to scout. As sun returns and temperatures rise, corn growth will take off. Be on the lookout for patches of uneven plant growth. Some of it may be attributed to our typical 'ugly duckling' stage as plants really start to grow rapidly, but watch for areas of potential crown damage as well.

### ***Slug Damage***

If you've got a garden in, take some time to monitor for slugs. Found on many garden (and landscape) plants, moist soils in spring are perfect conditions for slug feeding damage.

Damage will show up as missing leaf material and chewed on stems, even though you may not find the culprit. Predominantly nocturnal in nature, slugs feed at night then hide, leaving tattered plants in their wake and *maybe* a slimy trail that turns silvery upon drying.

If you find a trail, damage, or happen upon an actual slug, you have three control options. The first is increased light and air movement to reduce the chance for soils to stay moist. Recent weather has made it difficult, but consider reducing mulch until soils dry is an option.

Commercial slug baits are available. Just make sure you get one that is a) safe for use on the intended crop and b) not harmful to other pets/humans. Iron phosphate baits are preferred. They may require multiple applications and take some time to take hold, but they can add some long-term effectiveness to your slug control efforts.

You can also trap slugs. Bury a shallow pan to ground level and fill with beer or a mixture of sugar, yeast, and water. Slugs will fall in to the pan and drown.

For a list of slug baits, contact any District Office or e-mail me at [dhallaue@ksu.edu](mailto:dhallaue@ksu.edu)