Corn and Flooding

It seems that we are either in a feast or famine state when it comes to rain here in Butler County. Over the duration of the past several days, a majority of Butler County residents saw anywhere from 5 inches to well over 10". Looking ahead, the next 5-10 days look to be plenty wet, so drying out doesn’t look to be in our favor. After visiting with several farmers and ranchers, we all agree we wish we could put a plug in the rain and save it for the hot, dry months!

Since we can’t do that, we must embrace it and the challenges that it brings. Standing water in fields and rivers out of their banks don’t create ideal conditions for the corn crop that is up and growing. These saturated conditions can produce impacts both now and potentially later for corn. What does that mean? Once corn has sprouted, saturated soils inhibit root growth, leaf area expansion, and photosynthesis due to lack of oxygen and cooler soil temperatures. If you start noticing yellow leaves on your corn plants, that is due to a slowdown of photosynthesis and plant growth. Purple sheaths mean there is an accumulation of sugars due to photosynthesis continuing but growth being slowed down.

If conditions can return to normal relatively quickly, corn should recover with minimal impact. Young corn plants vary in susceptibility depending on their growth state. Temperatures also influence the extent of damage from flooding and saturated soils. While many are ready for warmer temperatures, we should be thankful for the cool, cloudy weather as growth is slowed and cool water contains more oxygen than warm water. Warm temperatures can increase the chances of long-term damage.

Other concerns that can result from flooding include disease, loss of nitrogen by denitrification or leaching, cold weather crown stress, green snap and root lodging. Once water recedes and you can access your field, you should check your stand, look for new leaves and growth and other conditions that do not appear to be a part of the normal growth.

If you would like additional information on flood damage to corn, soybeans, or planting into wet soil, you can find the latest in the K-State Agronomy eUpdate at https://webapp.agron.ksu.edu/agr_social/eu.throck.

K-State Research and Extension/Butler County is located at 206 N. Griffith St. in El Dorado, KS. We are dedicated to a safe, sustainable, competitive food and fiber system and to strong, healthy communities, families and youth through integrated research, analysis and education. We can be reached by calling: (316) 321-9660, on the web www.butler.ksu.edu, or on Facebook: K-State Research and Extension – Butler County.