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'Ugly' Corn Stage

Much of our corn right now has entered in to what I've heard deemed the 'ugly corn' stage. Plants might be a little yellow. Stands might be streaked. There might even be uneven growth. In some cases, those symptoms could signify problems, but as nodal roots continue to expand the area they occupy below the soil's surface (by V4, they have overtaken the seminal roots as the primary root source), plants typically 'straighten out' and all is well. It also means some critical growth stages are just around the corner.

At V6, we lose that first true leaf and the growing point emerges above the soil surface. At this point, all plant parts are initiated, with the potential number of rows around (ear girth) determined between here and V10. It's a critical growth stage and recent moisture should help maximize potential ear size. Ugly corn goes away quickly as we reach this growth stage.

Rapid nutrient uptake also begins at V6. If you don't have adequate nutrients (especially mobile nutrients like nitrogen) available to the plant by this point, the potential for deficiencies increases. Want to see how rapidly nutrient uptake increases? Check out this University of Illinois reference: http://cropphysiology.cropsci.illinois.edu/research/nutrient_uptake.html . For more growth staging notes, request a copy of our KSU Corn Growth and Development poster available upon request from any Meadowlark Extension District Office.

Trees Slow to Leaf Out

Trees slow to leaf out this spring are likely seeing the effects of dryer than normal weather that started last fall and extended through the winter and even in to early spring in many locations. Trees went in to fall under stress and they're showing the effects now.

Recent moisture has helped alleviate some concerns, but continued soil moisture monitoring will be necessary as soils dry out. In most cases, trees handle a single stress well. Add a second, maybe a third, and suddenly it's ability to handle stresses can be compromised. We can't control all stressors, but we *can* plan ahead to help alleviate future moisture stress.

How do we know if supplemental moisture is needed? As soils start to dry out, monitor at least the top 12 inches of the soil profile. Eighty percent of a tree's roots are located in this top foot of soil, so moisture will need to reach this depth. To monitor how quickly soils might be drying, use a metal rod, wooden dowel, electric fence post, etc... to check depth. Dry soil is much harder to push through than wet and your probe will stop when it hits dry soil, providing you with an idea about how much of that main rooting depth has adequate moisture.

If (maybe when is a better assumption...) supplemental water is needed, consider using a soaker hose with Y-adaptor (instructions on page three of the KSU Horticulture Newsletter at: https://hnr.k-state.edu/extension/info-center/newsletters/2022/May24_2022_21.pdf) for best water distribution. On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least half the distance to the dripline (the outermost reach of the branches. On smaller trees, circle the tree several times so only soil which has tree roots will be watered. Watering every two to three weeks during dry weather *should* be sufficient.