Widespread rainfall finally returns to southwest Michigan; might be too little too late for some area corn fields.

Bruce MacKellar -- MSUE Field Crops Educator

Rainfall over the last week has helped to alleviate drought stress across much of the hardest hit areas in southwest Michigan.

While the rainfall is good news, for some area corn fields the damage from continual lack of soil moisture has already had devastating impacts on corn yield potential. Of course, how damaging the drought stress was depends upon several factors, including soil type, rainfall received and even the amount of slope in portions of the field. Other factors that are likely to have had an impact include overall soil compaction, sidewall compaction of the seed slot caused by the planter if planted when soil conditions were too wet, and how quickly the soil dried out following planting. While sandier soil type in these areas tended to have the worst damage, most fields suffered some degree of drought injury in the impacted areas.

The drought stress tended to impact the earliest planted fields (often the sandier locations during this wet spring) the hardest. This was particularly disappointing to growers as these fields had some of the best early growth, and presumably the best yield



Much needed weekend total rainfall was over 3" in some drought stressed locations.

potential early. Some of these fields were struck by the dry conditions either at the time of pollination or shortly thereafter.



NOAA 30 Day Temperature Outlook, August 15-September 15. Heat is needed to help the later planted corn reach maturity.



Corn planted in mid May, severely impacted by drought stress, associated ear development near Lawton.



Corn planted in mid-June on heavier soil. Less leaf tissue loss, but shorter plants, thinner stalks, and larger ears.

Currently the plants are just after pollination. Warm temperatures and a late frost will be critical for this crop..

Corn Development: Same hybrid RM 96 Day, planted May 31 (top: 1567 GDD and June 23 (bottom: 1250 GDD). Bottom ear at full silk (Aug 19, 2019), Lawton Mi.

