TEXAS A&M AGRILIFE EXTENSION

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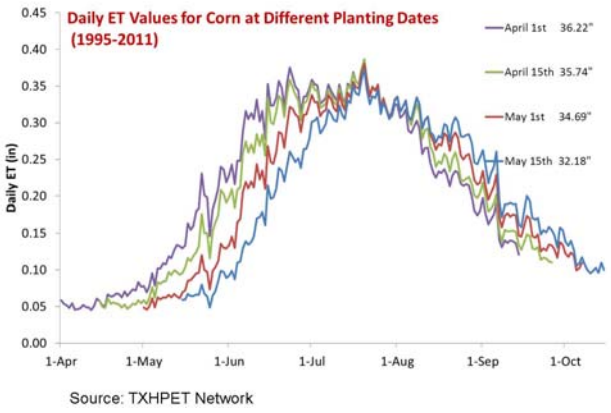
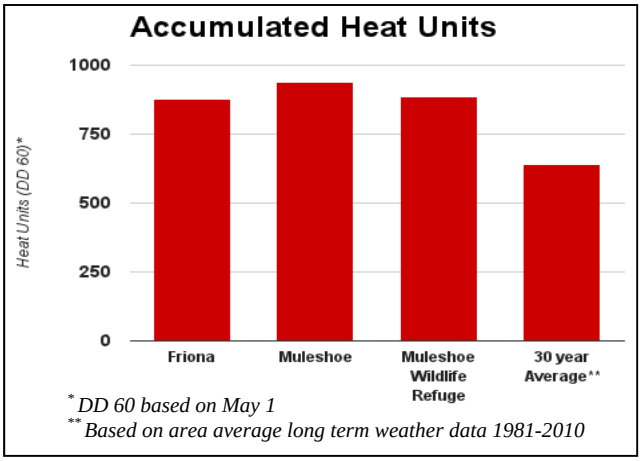
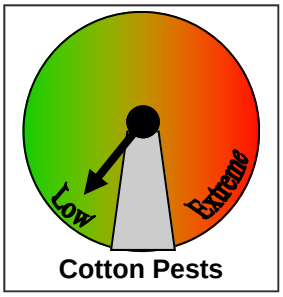
Crops have responded very well to precipitation and cooler temperatures over the last couple weeks. The area **corn** crop has about as wide a range of maturity as I've ever seen this time of year, from just planted to tassel/ silking. More mature corn fields are nearing or at peak moisture demand which could exceed .45 inch/day under hot windy conditions. The following chart graphs daily ET values based on average conditions from various planting dates.



Most **cotton** has "turned the corner" and is squaring but I have not seen a bloom yet. Square sets have been outstanding ranging from the low 90s to near 100% with most fields around 96%. While we are not behind in heat unit accumulation the cotton crop is behind due to delayed planting and harsh environmental conditions which will likely result in a shorter than normal effective bloom period. Considering this, managing cotton for earliness at this point looks to be even more important. The bulk of nitrogen fertilizer should be applied by early bloom. Pest pressure at this point is very low.





Sorghum is progressing very well, the crop ranges from emerging to growing point differentiation (GPD). It seems some sorghum has taken a bit longer to recover from a phenoxy herbicide application than expected. A wide range of crop response was observed between hybrids in a local trial treated with dicamba + atrazine.

Potential Dailey Water Use*	
Crop	Inches/Day
Corn	.35-.40
Cotton	.17-.30
Sorghum	.17-.24

*Daily estimated crop water demands (inches of water per day) based on PET data from Halfway.

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IPM radio show on Fox Talk 950 AM Wednesdays from 1:00-2:30

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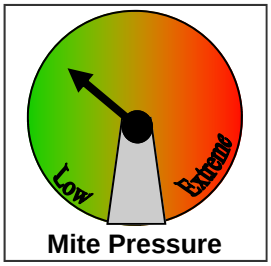
Try to avoid yield robbing moisture and nutrient deficiencies during GPD to maximize yield potential.

Spider mites have been building in some corn fields but remain hard to find in others. Most colonies remain relatively small but have moved up the plant to the upper part of the lower third of the plant. Occasionally we have observed colonies in the middle section of the plant. Remember if spider mites are established in a field which will be likely treated for another pest with an insecticide which is harsh on beneficials then a preventative miticide application about two weeks prior should be considered. Currently labeled miticides are designed to work in concert with natural enemies of spider mites, when these beneficials are removed from the equation miticide performance may not meet expectations. Sixspotted thrips, a key predator of spider mites, have been observed in area corn and will help stabilize mite populations if conserved. Adult sixspotted thrips can be distinguished from other thrips species by the 6 spots on their back (3 on each wing cover). Both adults and larvae are predacious feeding primarily on mites and can be very effective in suppressing mite populations.



Adult sixspotted thrips feeding on mite. Photo by J.K. Clark, UC.

Fall armyworm pressure has picked up in area sorghum and non-Bt corn. Area surveys in sorghum have ranged from 2-11% infested plants. Damaged leaves unfolding from the whorl are ragged with "shot holes." Although this may look dramatic, leaf damage usually does not reduce yields greatly, and control of larvae during the whorl stage is seldom economically justified. Also, larvae within the whorl are somewhat protected from insecticide. Insecticide application may be justified if larval feeding reduces leaf area by more than 30 percent or is damaging the developing grain head or growing point within the whorl.

Plant growth regulators (PGR) in cotton in and of themselves do not "make more cotton" but do allow producers to push a crop with irrigation and fertility while maintaining acceptable plant structure and enhancing earliness. In other words a PGR applied to cotton without adequate moisture and plant nutrients will not enhance yield. A heavy boll load will limit vegetative growth and enhance earliness but in a high input environment where moisture and fertility are not limiting factors a heavy boll load alone may not be enough to adequately control vegetative growth in stripper harvested cotton. Mepiquat chloride (MC) is a foliar applied PGR that is absorbed into leaves and translocated throughout the plant. Since its introduction, MC has been used extensively to manage cotton growth in an attempt to reduce risk associated with a delayed harvest. Mepiquat chloride regulates cell elongation by inhibiting the synthesis of gibberellin. This reduction in cell length in turn reduces overall plant height and internode length. There are numerous PGR options most of which are based on mepiquat chloride but may contain other active ingredients to further enhance effectiveness. Early low rate multiple (LRM) applications during squaring and early bloom have shown to be more effective than later single high rate applications. For example in a local research trial early LRM applications of Stance (4 to 1 ratio of mepiquat chloride and cyclanilide) reduced the number of days to physiological cutout which in turn translated into an earlier harvest while the single high rate application did not differ from the untreated plots.

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