Spider Mites

Spider mites continue to increase and be a concern in area corn. The hot, dry climatic conditions are putting corn under stress that increases the mite’s reproductive capacity and shortens their life cycle. At temperatures we are experiencing mites can develop from egg to adult in as little as 5 days. Therefore, mite populations are increasing rapidly, much faster than mite predators can keep under control. Also, mites are rebounding in some corn fields that have previously been treated. Fields will need to be monitor through the dent growth stage, at which time mite feeding will not impact yield. Still excessive feeding damage after dent can weaken stalk strength and lead to lodging.

Spider mites infestations are also becoming an issue in sorghum. The population biology of mites on sorghum is similar to that on corn. Monti Vandiver, Extension IPM agent for Bailey and Parmer counties has written an excellent description of mite biology on sorghum, which can be accessed at http://bailey.agrilife.org/newsletters/integrated-pest-management/. In general, populations establish as small colonies on the underside of the leaves in the lower third of the plant. As densities increase mites spread out from the mid-rib and move from leaf to leaf up the plant. Just like on corn, mite infestations increase more rapidly during the grain filling growth stages and can reduce yield until hard dough. Damage symptoms are similar to symptoms on corn. Initially, small colonies produce yellow stippling areas. This stippling on the leaf becomes more pronounced as spider mite densities spread. Entire leaves can be killed with rapid developing infestations.

Insecticide used to control greenbugs and headworms may flare spider mite populations by eliminating mite predators and causing mites to disperse throughout the plant. Spider mites infesting sorghum are the same species of spider mites infesting corn and these mites have developed resistance to certain miticides and insecticides. Many of these chemicals belong to the organophosphates and pyrethroids.

Control options are limited in sorghum, so fields should be monitored closely. As Monti stated “...it is important to know the density of mites within the field but even more important to know the population dynamics (is the population static, increasing or decreasing). There are no “cut and dry” thresholds for mite management decisions like we have for head worms. A miticide application may be justified if the mite population is well established and increasing in density. For instance a field with most plants having established mite colonies in the lower portion of the plant and, after frequent scouting, are determined to be moving up the plant will likely benefit from a miticide application.”