All,

This spring has certainly been a trying time for many growers with the weather being as unpredictable and strange as ever. One of the issues this year seems to be when replanting of crops should be considered. Sometimes the decision to replant is easy, but more times than not it is very much a judgment call. With corn and sorghum, the decision is usually easier when poor stand establishment is the issue rather than damage from hail. Hail damage often requires an assessment of stalk damage, which can sometimes be a challenge. Sorghum has the ability to compensate for stand reduction by tillering, increasing the number of seed per head, and increasing seed weight.

A very informative study on sorghum's ability to compensate for stand reduction was conducted by Dr. Erick Larson, who is currently the Mississippi State Corn and Sorghum Specialist, when he was a graduate student at Kansas State University. Dryland studies were conducted over two years at two locations with historically different rainfall amounts. Two hybrids were examined, one with a high tillering ability and one considered to be low-tillering. The control plant populations were 32,000 and 50,000 plants per acre depending on the location, planted on 30-inch rows. Plants were then thinned to create treatments of within row skips of 3 feet and 9 feet with the adjacent rows remaining unharmed, with 36 percent uniform plant reduction in a single row with adjacent rows unaffected and a 36 percent uniform stand reduction of all rows. A final treatment was made of 3 foot skips scattered in adjacent rows. More details of the study design and results can be found in Agronomy Journal Vol. 86, pg 474-477.

Interestingly, there was no difference between the high-tillering and low-tillering hybrids in their ability to compensate for yield. Both tillering and the ability to increase the number of seed per head were important in compensating for yield. As long as the adjacent rows remained intact it took a 9 foot skip within a row to significantly reduce yield (5.1 percent). A 36 percent uniform plant reduction reduced yield only 6.9 percent. The most severe reduction in yield in this study was 10.9 percent when 3 foot skips were present in adjacent rows. In summary, yield reduction in sorghum is likely only where plant stand reduction is severe resulting in long, in-row skips or when many adjacent rows are affected with moderate skips. A 36 percent uniform reduction of plants did not significantly reduce yield.

A recent news release by Josh Lofton at Oklahoma State provides some additional insight on sorghum replant decision making.

For those of you who may be considering double cropping behind wheat, KSU addressed this topic in their most recent K-State Agronomy eUpdates.
Sugarcane Aphid Update

Two weeks ago I visited the Texas Rio Grande Valley and the Coastal Bend area. Some fields have been sprayed this year for SCA, but overall the problem has been minimal and well managed by growers and consultants. I visited a 30-entry hybrid strip trial initiated by Texas AgriLife located on Highway 44 about 3 miles north of Aqua Duce. The trial clearly shows the advantage of planting SCA tolerant hybrids (photo attached). I was pleased to see the hybrids in the trial that are on our SCA hybrid tolerant list were clearly showing fewer SCA and less plant damage than the susceptible hybrids.

Dr. Robert Bowling, with Texas AgriLife, discusses the South Texas SCA situation along with many relevant SCA topics in his most recent Rolling with Bowling newsletter. Check it out here.

On a final note, SCA was reported in Southwest Oklahoma in Kiowa and Jackson counties last week. A sharp-eyed graduate student found a winged aphid and a couple of nymphs in grain sorghum fields in each county. SCA has also shown up in a couple of Georgia counties. Please let me know, or contact your county agent or regional entomologist, if you find SCA in any counties not being reported on the distribution map.

Have a good week!

Brent

--

Brent Bean, PhD
Director of Agronomy
United Sorghum Checkoff Program

Sorghumcheckoff.com
4201 N. Interstate 27 | Lubbock, TX 79403
806.687.8727 (office) | 806.674.0006 (cell)
Tolerant on Left, Susceptible on Right