Grain Sorghum in Texas
Crop Brief on Production, Pests, & Pesticides

Grain Sorghum Production

- Texas is the 2nd largest producer in the U.S., harvesting 3.15 million acres annually.
- The cash value to farmers is $315 million, which generates $1.065 billion for Texas.
- Sorghum is commonly rotated with other crops to reduce insects, weeds and diseases.
- The grain is important for beef cattle, the feed lot industries, and poultry.

Insect Pests

- 80% of the acres are scouted and insecticide use is based on economic thresholds.
- Greenbug and sorghum midge are the most damaging insects. If left untreated, these pests can reduce crop yields 15% or more.
- Other pests include spider mites, headworms, stink bugs, chinch bugs, and aphids.
- Chlorpyrifos (Lorsban) is used for greenbug. Terbufos (Counter), dimethoate (Cygon), carbofuran (Furadan), ethyl parathion, and carbaryl (Sevin) are also important. All of these pesticides are targeted for review under FQPA.
- Three pyrethroids are important - esfenvalerate (Asana), lambda-cyhalothrin (Karate) and cyano (Baythroid).

Diseases and Nematodes

- Sorghum hybrids are bred for genetic resistance to most diseases. But seed rot, head smut, pythium, downy mildew, charcoal rot, and nematodes are still a problem.
- Seed treatments and crop residue management help alleviate most disease problems. Metalaxyl (Apron) and Captan (a potential carcinogen) are common seed fungicides. No fungicides are foliar-applied in the field.
Weeds

- Weeds cause major crop losses in an already water-sensitive crop. Weeds reduce yields up to 24% if not controlled and are a primary concern for producers.

- 100% of the irrigated sorghum is treated with a herbicide but little of the dryland sorghum is treated at planting time.

- Cultivation and crop rotations are commonly practiced in all fields.

- Pigweed, morning glory, johnsongrass, and sunflower are major problems. Cocklebur and foxtail are on the rise. Weeds are a greater problem in irrigated fields.

- Atrazine is of major importance but is being reviewed by EPA.

- Other common herbicides (usually in combination with a triazine) are metolachlor (Dual), prosulfuron (Peak), bromoxynil (Buctril), and dimethenamid (Frontier).

- Postemergence herbicides, especially 2,4-D and dicamba (Banvel) help control escapes or late season weeds.

- Roundup Ready sorghum is not being developed since sorghum out-crosses with johnsongrass and could result in a herbicide-resistant weed.

Outlook

- Breeding for greenbug resistance and head smut tolerance continues.

- Non-chemicals are advocated in Extension programs, but pesticides are essential to sustain production.

- For latest information regarding these issues and status of risk assessments visit ipmwww.ncsu.edu/opmppiap and www.epa.gov/pesticides.