

## Sorghum XV-6

### Spider Mites

*John B. Campbell*



*Two-spotted spider mite.*

Spider mites may become a problem if hot, dry weather persists for any length of time. However, the problem is more common in Oklahoma and Texas than in Colorado, Nebraska or Wyoming. The mites start on the bottoms of the lower leaves and if not curtailed, may move rapidly up the plant, killing the leaves as the colonies increase in number.

#### **Identification (and life cycle/seasonal history)**

Mites that are of economic importance consist of two species; the Banks grass mite and the two-spotted spider mite. It is important to identify the species causing the damage in order to make an insecticide selection. The two-spotted mite is much more resistant to pesticides than is the Banks grass mite. The two-spotted mite has pigmentation spots on the back caused by food particles that accumulate in the gut along the side of the body in two distinct spots and they do not extend over halfway along the body. The pigment spots on Banks grass mite are found on each side of the body along the edges and extend from the front to the back.

#### **Management Approaches**

##### **Cultural Control**

Grassy weeds harbor mites overwinter and **should be eliminated** two or three weeks prior to planting the sorghum. If the sorghum is following wheat, volunteer wheat should be destroyed in the fall. Good production practices, in general, should be followed to assure a good, healthy sorghum stand.

##### **Chemical Control**

##### **Sampling/Surveying/Timing of Sampling**

During hot, dry weather, field scouting for mites should be done weekly. Monitor predicted weather conditions if mites are present and hot, dry weather continues; in all probability, mite numbers will increase. Determine which mite species is present. If both species are present, assume the two-spotted mite will be the dominant species in time. Field scouts should survey not only the mites, but the major predators such as the

predatory mite, mite destroyer beetle, sixspotted thrips and the minute pirate bug. If enough of these are present, they may keep the mites in check. Scouts may wish to flag some plants and return to them the following week to determine if mites are increasing in number.

### Economic Thresholds

If mites have reached numbers where large colonies on the bottom leaves and weather forecasts indicate continued hot, dry weather, it is probably advisable to treat.

#### Product List for Banks Grass Mite and Two-spotted Spider Mite

Insecticide	Product Per Acre (Fl oz. or oz. product)	Preharvest interval, remarks
Dimethoate (cygon)	1/2 lb A.I.	Do not apply after heading.  Note: grazing restrictions.
Propargite (Comite 11)	1.64 lb A.I.	Product may be phytotoxic to some hybrids. Use on small test strip or contact seed dealer.
Methidathion <sup>R</sup> (Supracide)	1/2 lb A.I.	A.I. in 10 gal. water/ground equip or 2 gal water/air.

<sup>R</sup> Restricted Use Pesticide.

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Categories: Sorghum, Insects, Spider mites

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