BEST MANAGEMENT PRACTICES TO COMBAT THE SUGARCANE APHID

Management of the sugarcane aphid starts with proper identification. The aphid can be gray, tan, light green or pale yellow in color. It is often called the white aphid because it is much lighter in color than many of the other aphids encountered in the field. Its most distinguishing characteristics are black cornicles or tailpipes on its back end, and its black feet and antennae (Fig 1). A magnifying glass is required to see these characteristics. In the field, early infestations can generally be found on the underside of the leaf clustered around the midrib. The sugarcane aphid produces a sticky, shiny substance called honeydew that drips on to the leaf below (Fig 2). Often, these sticky leaves are the first sign to identifying sugarcane aphids in a field.



Figure 1. Sugarcane Aphid and Colony

- 1 Sugarcane aphids can only survive on sorghumrelated species. To help reduce local populations, control Johnsongrass, volunteer sorghum and other sorghum species in and around your fields during the winter and spring prior to planting.
- 2 Consider planting a hybrid that has shown tolerance to the aphid. Tolerance does not mean immunity to the aphid. These hybrids still require monitoring and treating with an insecticide if action thresholds are reached. Be careful in giving up hybrid adaptability, yield potential and other favorable agronomic characteristics. In most cases, these characteristics should not be given up in order to plant a sugarcane aphid tolerant hybrid. Visit SorghumCheckoff.com for a current list of hybrids showing some tolerance.
- **3 Plant seeds treated with an insecticide seed treatment.** These seed treatments will protect sorghum from potential early season infestations. Acceptable seed treatments include Cruiser (thiamethoxam), Poncho and Nipsit (clothianidin) and Gaucho (imidaclorprid).
- 4 **Plant early.** In many areas of the country, sugarcane aphids tend to infest fields later in the growing season. Early planting may avoid infestation.



Figure 2. Honeydew produced by SCA

- 5 Scout fields early and often using proper procedures to determine the level of aphid infestation. Once sugarcane aphid infestation occurs in the field, the number of aphids can increase quickly.
- 6 Apply insecticide as soon as the action threshold is reached. Threshold levels change and vary with individual states. Check with your local experts for current information. In general, the threshold is reached when 25 percent of the plants are infested with 50 aphids per leaf.
- 7 Use only recommended insecticides and follow label rates and application instructions. Coverage is critical. Best results are achieved when high volumes of water are used.
- 8 **Preharvest.** If aphids are present in the upper canopy or grain panicle in sufficient numbers to produce honeydew, consider applying an insecticide in order to prevent potential issues with harvest. If a harvest-aid product is used, tank mixing with the insecticide has worked well when the sugarcane aphid is present.
- **9 Avoid use of insecticides,** especially pyrethroids, that are harmful to beneficial insects because it may result in sugarcane aphid numbers increasing faster than they otherwise would.

