

Comparison of the Yellow Sugarcane Aphid and the Sugarcane Aphid

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Yellow Sugarcane Aphid	Sugarcane Aphid
Identifying Characteristics	Identifying Characteristics
Usually lemon yellow, but may be pale green	Pale yellow, gray or tan
Body covered with small spines (hairs), cornicles are very small are not easily seen, and tips of feet and antennae are not black	Cornicles ("tailpipes") and tips of feet, antennae are black
Hosts - grain sorghum, forage sorghums and sorghum related plants like johnsongrass and dallisgrass and many different grasses.	Hosts - grain sorghum, forage sorghums and sorghum related plants like johnsongrass and dallisgrass.
Damage	Damage
Primarily a pest of seedling plants, but feeding damage can still be significant on older plants. Feed on the underside of leaves of seedling and older leaves. Populations do not develop to high numbers per leaf.	Feed on the underside of all leaves. Populations develop to extremely high numbers per leaf from seedling, boot, and heading growth stages.
Injects a potent toxin when feeding that can kill leaves. Very few aphids per leaf cause seedling leaves to turn purple and older leaves yellow.	Does not inject toxin when feeding, but feeding cause leaves to turn yellow, purple, and finally brown as leaf tissue dies. Large pre-boot infestations can stunt growth and uneven head emergence from boot causing significant yield loss.
Does not produce honeydew.	Produce heavy amounts of "honeydew". Sticky leaves, stalks, and head clog combines along with reducing grain separation from heads at harvest. Honeydew contaminated leaves and stems can gum up cutter bars when harvesting for silage, forage, etc.
Sampling	Sampling
Colonies infest the lower portion of the canopy. Look for discolored lowered leaves when scouting.	Inspect underside of leaves from both the upper and lower canopy. If honeydew is present, look for sugarcane aphids on the underside of the leaf above the honeydew. If no sugarcane aphids are present, or only a few individual wingless or winged aphids are present on upper leaves, then continue once a week scouting. If sugarcane aphids are found on lower or mid-canopy leaves, begin twice a week scouting to determine if aphid densities exceed the economic threshold.

Yellow Sugarcane Aphid	Sugarcane Aphid
<p style="text-align: center;">Management Decisions</p> <p>Grain Sorghum Seedling plants - Economic injury levels have been established for seedling plants up to the three true-leaf stage (http://aglifesciences.tamu.edu/entomology/wp-content/uploads/sites/12/2014/07/B-1220.pdf).</p> <p>Larger plants - No economic injury levels have been established for vegetative plants after the three true-leaf stage and during head development, but damaging infestations may develop and cause yield losses. Using the following action threshold that was developed for greenbugs can prevent excessive yield losses when YSCA are infesting older grain sorghum.</p> <p>6 inches to boot - Treat when colonies are causing red spotting or yellowing of leaves and before any entire normal-sized leaves on 20% of plants are killed.</p> <p>Boot to heading - Treat if there is death of one functional normal-sized leaf on 20% of plants.</p> <p>Head to hard dough - Treat when colonies are sufficient to cause death of two normal-sized leaves on 20% of plants.</p>	<p style="text-align: center;">Management Decisions</p> <p>Grain Sorghum If the field average is 50-125 sugarcane aphids/leaf or greater, apply an insecticide within 4 days and evaluate control after 3-4 days (refer to insecticide labels for re-entry intervals). Consider treatment at 50 aphids/leaf if limited to only once a week scouting.</p> <p>If the field average is less than the threshold level, continue scouting twice a week.</p> <p>Forage Sorghum Treatment thresholds for SCA infesting forage sorghums and Johnsongrass meadows have not been determined. Until those thresholds are available, the thresholds used for grain sorghum can provide a guide to making treatment decisions.</p>
<p style="text-align: center;">Suggested Insecticides</p> <p>All commercially treated seed insecticides will control seedling infestations for about 4-5 weeks.</p> <p>Foliar insecticides - Field experience has shown that chlorpyrifos 4E at 12 floz/A mixed with dimethoate 4E at 12 floz/A provides good control. But do not apply dimethoate after sorghum heading.</p>	<p style="text-align: center;">Suggested Insecticides</p> <p>All commercially treated seed insecticides will control seedling infestations for about 4-5 weeks.</p> <p>Foliar insecticides Transform WG - 0.75 - 1.5 floz/A, 1.0 floz/A suggested, no more than 3 floz/A per season and only 2 applications per season. Minimum application volume - full plant coverage by ground or 5 gpa by air. Pre-harvest interval - 14 days for grain or straw, 7 days for grazing or forage, fodder or hay harvesting. Sivanto 200SL - 4 - 7 floz/A, 4 floz/A suggested, no more than 28 floz/A per season. Minimum application volume - 10 gpa by ground, 2 gpa by air. Pre-harvest interval - 21 days for grain or straw or stover, 7 days for grazing, forage, fodder, or hay harvest.</p> <p>Both Transform and Sivanto will control greenbugs and yellow sugarcane aphids when there are mixed infestations with sugarcane aphids.</p>