



# Pest e-alerts



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## Transform Receives Emergency Use Permits for Cotton and Sorghum, 2018

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The EPA has granted Oklahoma a Section 18 Emergency Use Permit (EUP) for **Transform WG** to control plant bugs in cotton, and in sorghum, to control sugarcane aphid during the 2018 growing season.

In cotton, Transform can be applied at 1.5-2.25 fl. oz. per acre to control “plant bugs”, which includes several *Lygus* species (pale legume bug, tarnished plant bug, and western tarnished plant bug) as well as the rapid plant bug. EPA granted this EUP in part due to the expected increase in planted acres of cotton in Oklahoma, especially in areas where alfalfa is also grown. **This Emergency Use Permit expires October 30, 2018.**

Plant bugs cause deformed bolls, square and boll shedding, stunted plant growth and small black spots on the bolls. Oklahoma does not have a treatment threshold set for plant bugs. Texas A&M suggests sampling with a sweep net or drop cloth. Sweep net is best before bloom, and drop cloth works better after peak bloom. The following table summarizes suggested thresholds:

Cotton Growth Stage	Sampling method	
	Drop Cloth	Sweep Net
1 <sup>st</sup> two weeks of squaring	1-2 bugs per 6 ft-row + unacceptable square set	8 per 100 sweeps with unacceptable square set
3 <sup>rd</sup> week of squaring to first bloom	2 bugs per 6 ft-row + unacceptable square set	15 per 100 sweeps with unacceptable square set
After peak bloom	2 bugs per 6 ft-row + unacceptable fruit set in the first 4-5 weeks	15-20 per 100 sweeps with unacceptable fruit set in the first 4-5 weeks

Rapid plant bug (1/4 inches)



Paul Langlois, Museum Collections, USDA APHIS, bugwood.org

Tarnished plant bug (1/4 inches)



Russ Ottens, University of Georgia, bugwood.org

Pale legume bug, (1/4 inches)



Whitney Cranshaw, Colorado State University, bugwood.org

Western tarnished plant bug (1/4 inches)

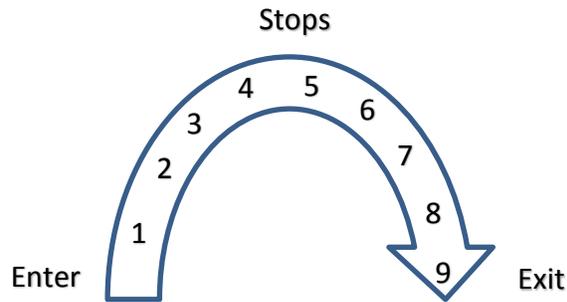


Whitney Cranshaw, Colorado State University, bugwood.org

In sorghum, Transform to be applied at 0.75-1.5 fl. oz. per acre to control sugarcane aphid. Current thresholds for sugarcane aphid are It has a restricted entry interval (REI) of 24 hours. It should not be applied within 14 days of grain harvest, or 7 days if grazed or harvested for grain. **This Emergency Use Permit expires November 30, 2018.**

We encourage growers to inspect their sorghum fields once a week. When aphids are detected, increase sampling to two times per week. Look at three consecutive plants and examine one upper and one lower leaf on each plant. Estimate the average number of aphids found per plant. Then move 5 feet and sample three more consecutive plants. This is considered one "stop". Next, move 50 feet from the first spot using an inverted "U" shaped pattern in the field and sample six more plants for the next stop. Collect counts for nine stops (for 54 plants) and estimate the percentage of plants that averaged at least 50-125 aphids per plant.

plants with 50-125 aphids/54 \* 100.....



The current recommendation for control of sugarcane aphid is **to treat if 20% of plants are infested with 50-125 aphids per leaf before panicle emergence, and if 30% of plants are infested with 50-125 aphids per leaf after panicle emergence.** Do not spray until suggested thresholds are reached, but if needed; apply the spray with the highest amount of water carrier as possible (5 or more gallons/acre by air, or 10 or more gallons/acre by ground). Spraying too early and with inadequate coverage may require a second application from aphid recolonization.

In order to minimize pollinator protection, this product should be applied before 7:00 am or after 7:00 pm, or in the unlikely situation that temperatures drop below 55 degrees F at the site of the application (an extremely rare event until later in the fall). In addition, **for cotton**, the applicator should attempt to notify any beekeepers with hives within 1 mile of the treatment area at least 48 hours before the product is applied. **In sorghum**, Transform should not be applied during flowering (less than 3 days pre-bloom until after seed set).

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