

# GRAIN MILLET INSECT CONTROL

(Pearl millet for grain production)

David Buntin, Research/Extension Entomologist

PEST	INSECTICIDE	AMOUNT PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	WHEN TO TREAT, REMARKS AND PRECAUTIONS
Chinch bug, false chinch bug	<u>At-planting treatment</u> Gaucho 600	6.4 fl. oz./100 lb seed	-	Inspect seedlings soon after emerge. Apply after planting when stunting and discoloration are visible and bugs are present. In wide rows, direct spray at base of plants. In narrow rows, broadcast application. Use at least 20 gal. of spray mix per acre. Spray for thorough coverage. Applications to dense foliage and after boot stage may not be effective.
	<u>Post-emergence</u> Mustang MAX 0.8EC	4.0 fl. oz.	0.025	
	Consero (4.0)	3.05 fl. oz.	-	
Lesser cornstalk borer	Mustang MAX 0.8EC	4.0 fl. oz.	0.025	Very difficult to control. Broadcast application may provide some control. Do not plant millet into burnt grain stubble.
Fall armyworm and other worms in the whorl	Mustang MAX 0.8EC	4.0 fl. oz.	0.025	Millet is very tolerant of whorl stage defoliation. Treat when 50% of whorls are infested and larvae are present.
	Consero (4.0)	3.05 fl. oz.	-	
	Tracer 4SC	1.5 to 3 fl. oz.	0.047 - 0.094	
Headworms: Corn earworm, fall armyworm, sorghum webworm	Mustang MAX 0.8EC	3.2 to 4.0 fl. oz.	0.02 - 0.025	Larvae chew and damage or destroy seed. Treat when 2 or more earworms and armyworms or 5 or more sorghum webworms per grain head. Tracer is most effective against smaller larvae.
	Consero (4.0)	2.0 to 3.05 fl. oz.	-	
	Tracer 4SC	1.5 to 2.0 fl. oz.	0.047 - 0.063	
Stink bugs, Leaffooted bugs	Mustang MAX 0.8EC	3.2 to 4.0 fl. oz.	0.02 - 0.025	Infest grain heads, suck seed causing shriveled seed. Threshold: 3 bugs per head at milk stage; 5 bugs per head at dough stage. Do not treat after medium dough stage.
	Consero (4.0)	2.0 to 3.05 fl. oz.	-	
False chinch bugs on seed heads	Mustang MAX 0.8EC	3.2 to 4.0 fl. oz.	0.02 - 0.025	Treat when 100 bugs per head are present in milk to soft dough stage.
<b>PESTICIDE USE PRECAUTIONS:</b>				
<p><b>Gaucho 600 (imidacloprid):</b> Do not graze or feed livestock on treated areas for 45 days after planting. REI = 12 hours.</p> <p><b>Mustang MAX 0.8EC (zeta-cypermethrin):</b> Do not apply more than 21.5 fl. oz. per acre per season. Do not apply less than 10 days apart. Do not use within 14 days of harvest for grain. Can be applied up to 0 days for millet for forage and hay; do not apply less than 7 days apart. REI = 12 hours.</p> <p><b>Conserve 4.0 (mixture of spinosad and gamma cyhalothrin):</b> Do not apply within 30 days of harvest. Use highest rate for heavy infestations. See label for maximum use rate per season. REI = 24 hours.</p> <p><b>Tracer 4SC (spinosad):</b> Do not apply within 7 days for grain or fodder harvest, or within 14 days for grazing livestock. REI = 4 hours.</p> <p><b>NOTE:</b> Mustang is labeled for use on all types of millet for grain production. Tracer also is labeled for use on proso millet. Sevin (carbaryl) is labeled for armyworm control on proso millet, but Sevin is not specifically labeled for use on pearl millet and other millets.</p>				

**Disease Control** - Except for seed treatments, there are no fungicides labeled for use on pearl millet at this time.

# PEARL MILLET FOR GRAIN WEED CONTROL

Eric P. Prostko, Extension Agronomist - Weed Science

USE STAGE AND HERBICIDE	BROADCAST RATE/ACRE		REMARKS AND PRECAUTIONS
	AMOUNT OF FORMULATION	POUNDS ACTIVE INGREDIENT	
<b>PREEMERGENCE</b>			
mesotrione (Callisto 4SC)	6 oz	0.188	Callisto will provide preemergence control of large crabgrass and various pigweed species. Apply after planting but before crop emergence. Callisto may cause temporary crop injury in the form of bleaching or whitening. <b>Applications of Callisto to emerged pearl millet will result in severe crop injury.</b> Callisto rotational crop restrictions: field corn, grain sorghum = 0 months; small grains and sugarcane = 4 months; soybeans, cotton, peanuts, sunflowers, canola, tobacco = 10 months; other crops = 18 months. MOA = 28.
<b>POSTEMERGENCE</b>			
2,4-D amine (Various trade names) 3.8 SL	16 oz	0.475	2,4-D is very effective on common broadleaf weeds such as pigweed and morningglory. Apply when weeds are small and after crop is tillered but before jointing stage of growth. Do not apply before tillering stage or during early boot through milk stage of growth. MOA = 4.

