



Current Report

Cooperative Extension Service • Division of Agriculture • Oklahoma State University

1981 COTTON INSECT CONTROL IN OKLAHOMA

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During the growing season, cotton scouting on a regular and continuous basis is of utmost importance to determine the actual need for some type of control. You may want to consult your local County Extension Director or the OSU Area Entomologist relative to the use of a scouting program.

MAJOR PESTS

CONTROLS

Insects	Insecticide	Pounds Active Ingredient/Acre	Comments
Cotton flea-hopper	Dimethoate (Cygon or Defend)	0.1	Treat when 40 or more fleahoppers are found per 100 terminals. As plants increase in size and fruit load, higher populations can be tolerated. Applications for flea-hopper control should be minimized in order to protect bollworm-budworm predators and parasites. Delay in chemical application for fleahoppers often delays the onset of application for bollworm-budworm control.
	Toxaphene	0.5	
	Dylox	0.25	
	Sevin	0.5	
	Bidrin	0.1	
	Orthene	0.1-0.2	
Boll weevil	Sevin	1.0-2.0	Treat when 25% of squares are punctured. Repeat at 3-5 day intervals until infestation drops.
	Guthion ^r , dilute spray	0.25	
	Toxaphene + Methyl Parathion ^r	1.0-2.0	
	Encapsulated Methyl Parathion (Penncap-M) ^r	0.25-0.5	
	Parathion ^r	0.375	
	Guthion ULV ^r	0.5-0.75 0.125-0.25	

MAJOR PESTS (CONT'D)

Insects	Insecticide	CONTROLS		Comments
		Pounds Active Ingredient/Acre		
Bollworm or Tobacco Budworm	Toxaphene + Methyl Parathion ^r	1.0-2.0		NOTE: The combination of Toxaphene and Methyl Parathion has not provided adequate control of worms in some areas of the state. Treat when 5 small bollworms and eggs are found per 100 plants or 10% infested squares in July or 5% infested squares in August. When necessary, repeat at five day intervals. Bollworms and/or budworms cannot be controlled effectively after reaching the third instar (½ inch or longer). Methomyl may be phytotoxic to cotton under stress and use may redden cotton. The synthetic pyrethroids Fenvalarate (Pydrin) and the Permethrins (Ambush and Pounce), are occasionally used in combination with other insecticides or an ovicide. There are tight restrictions on use of chlordimeform. Chlordimeform can only be applied by applicators using a "closed system".
	¹ Endrin ^r + Methyl Parathion ^r	0.4 + 0.4		
	EPN ^r + Methyl Parathion ^r	0.5-1.0		
	Encapsulated Methyl Parathion (Penncap-M) ^r	1.0		
	Parathion ^r or Methyl Parathion ^r	1.0		
	Azodrin ^r	0.75-1.0		
	Sevimol	1.0		
	Methomyl ^r (Lannate or Nudrin)	0.45		
	Orthene	1.0		
	Bolstar ^r	1.0		
	Synthetic Pyrethroids (e.g. Ambush ^r , Pounce ^r or Pydrin ^r)	0.1-0.2		
	Ovicides			
Chlordimeform ^r (Galecron or Fundal)	0.125			
Methomyl ^r (Lannate or Nudrin)	0.125			

MINOR PESTS

Insects	Insecticide	CONTROLS		Comments
		Pounds Active Ingredient/Acre		
Thrips	Sevin	0.5		Three or more thrips/plant in seedling stage may be considered of economic importance. If thrips are a problem in fields most every year, one can use Disyton treated seed; however, research indicates that thrips control in Oklahoma is not generally profitable.
	Toxaphene	0.5-1.0		
	Bidrin	0.1		
	Dimethoate (Cygon or Defend)	0.1-0.2		
	Orthene	0.1-0.2		

MINOR PESTS (CONT'D)

CONTROLS

Insects	Insecticide	Pounds Active Ingredient/Acre	Comments
Pink bollworm	Sevin	2.0	Apply insecticides at 5 day intervals when 10 to 15% of bolls are infested during early and midseason. When late infestations occur, 40 to 50% of the top bolls may be infested without economic loss.
	Guthion ^r	0.75	
Whiteflies	Azodrin ^r	0.25	Apply at 5 day intervals until infestation is cleaned up. Begin applications when 50% of terminals contain several adult whiteflies each. As many as 3 or 4 treatments may be necessary. Cotton should be actively grown to be sure of good control since systemic action is necessary to kill immature stages. Azodrin may be mixed with other insecticides if other pests are present.
	Azodrin ^r	1.0	Single application for heavy infestation.
Cabbage looper	Orthene	1.0	Cabbage looper infestations are often reduced or eliminated by naturally occurring disease agents before excessive leaf damage occurs.
	<u>Bacillus thuringiensis</u> (e.g. Dipel or Bactur)	see label for rate	The bacteria is a selective microbial insecticide.
Beet army-worm	Methomyl ^r (Lannate/Nudrin)	0.45	Treatment will be most effective if applied when worms are small.
	Dylox	1.0	
	Orthene	1.0	

^rRestricted use pesticides.

¹As of July 19, 1979, EPA has restricted the use of Endrin on cotton as follows:
 1. Use on cotton west of Interstate Highway #35 only. 2. Refer to the label for further restrictions on protective clothing requirements, specifics on application pressures, nozzles, restrictions regarding use around human habitation, lakes, and streams.

Worker Reentry Intervals:

Guthion - workers should not enter fields within 24 hours after application.

Bidrin - workers should not enter fields within 48 hours after application.

Methyl and Ethyl parathion - workers should not enter fields within 48 hours after application.

Azodrin - workers should not enter fields within 48 hours after application.

Chlordimeform - workers should not enter fields within 24 hours after application.

Any pesticide information presented is current with EPA regulations at the time of printing. The user is responsible for determining that the intended use is not inconsistent with the pesticide label.

Bee Caution: Many of the suggested insecticides are highly toxic to bees exposed to direct treatment or as residues on plants. Applications after sunset will generally reduce hazard to bees.

NOTE: Be sure to read and follow directions provided on the label of pesticide containers since certain restrictions on post-treatment harvest, feeding of gin trash, and grazing limitations exist. Also, it is important to note if the label includes minimum gallonage requirements for ground and/or air application.

Growers should not use excessively alkaline water to make spray mixtures. In areas where water pH exceeds 9.0 deterioration of insecticides may be expected. Insecticide mixture should be used within three to six hours after preparation.

*The information given herein is for educational purposes only. References made to commercial products or trade names is with the understanding that no discrimination is intended and no endorsement is implied.