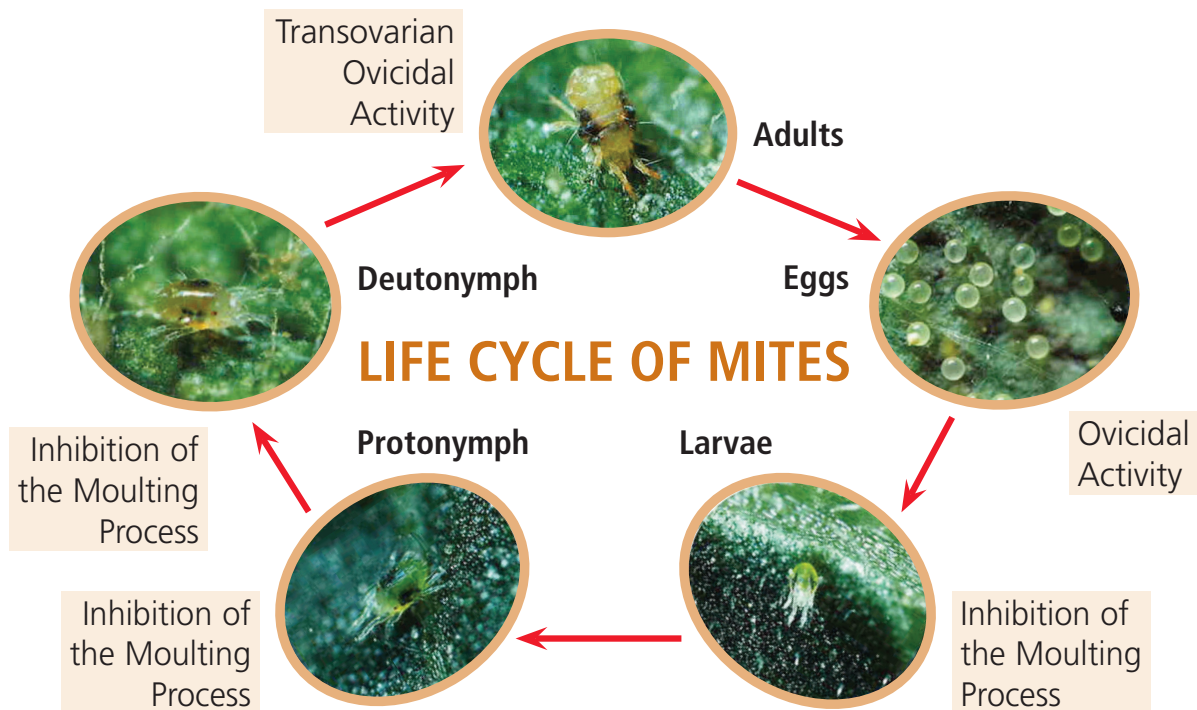


ZEAL[®]

M I T I C I D E

110 g/L Etoxazole

WIN THE FIGHT AGAINST MITES



For use in cotton, maize* and popcorn*
Controls the mite population by:

- Inhibiting the moulting process of nymphs
- Ovicidal activity – sterilises eggs
- Sterilises females

* Permit number PER82075.

Impact of insecticides and miticides on predators, parasitoids and bees in cotton

Insecticides (in increasing rank order of impact on beneficials)	Rate (g ai/ha)	Target pest		Beneficials																Pest resurgence			Toxicity to bees	
		Mites	Persistence	Overall ranking	Predatory beetles				Predatory bugs					Hymenoptera							Mite	Aphid		Helicoverpa
					Total	Red and blue beetle	Minute 2-spotted lady beetle	Other lady beetles	Total	Damsel bugs	Big-eyed bugs	Other predatory bugs	Apple dimpling	Lacewing adults	Spiders	Total (wasps)	Eretmocerus	Trichogramma	Ants	Thrips				
Etoxazole	38.5	✓	short	low	VL	VL	—	L	VL	VL	VL	VL	VL	M	L	—	VL	VL	L	—	—	—	VL	
Dicofol	960	✓	long	low	L	—	—	—	L	—	—	—	L	—	L	—	M	—	—	VL	—	—	—	VL
Diafenthiuron	350	✓	medium	low	M	H	VL	M	L	M	VL	L	H	VL	L	L	H	VL	H	L	—	—	+ve	M
Abamectin	5.4	✓	medium	moderate	L	M	H	VL	M	L	M	M	H	VL	M	M	H	M	H	M	—	—	—	H
Dimethoate (low)	80	✓	short	moderate	M	L	H	H	M	L	—	H	M	M	L	M	—	M	H	M	+ve	+ve	+ve	H
Dimethoate (low + salt)	80	✓	short	moderate	M	L	H	H	M	L	—	H	M	M	L	M	—	M	H	M	+ve	+ve	+ve	H
Propargite	1500	✓	medium	moderate	M	H	H	M	M	H	VL	VL	L	VL	M	M	L	H	H	M	—	+ve	+ve	L
Clothianidin (low)	25		medium	moderate	M	VL	—	H	L	M	VL	VL	H	H	M	M	H	M	VH	VL	—	—	+ve	—
Amitraz	400	✓	medium	moderate	H	M	VH	H	L	—	—	—	H	VL	M	M	H	L	H	M	—	—	—	L
Chlorfenapyr (low)	200	✓	medium	moderate	M	L	VH	VL	M	VL	H	H	VH	L	L	M	—	VH	H	M	—	—	—	H
Dimethoate (high)	200	✓	short	high	M	M	H	H	M	H	—	H	H	VH	M	H	H	H	VH	M	+ve	—	+ve	H
Chlorfenapyr (high)	400	✓	medium	high	H	M	VH	L	H	H	H	H	VH	L	M	M	—	VH	VH	M	—	+ve	—	H
OP's		✓	short-medium	high	H	M	H	H	H	M	H	H	VH	L	M	H	VH	H	VH	H	+ve	—	—	H
Pyrethroids		✓ ⁷	long	very high	VH	—	—	—	VH	—	—	—	VH	VH	VH	VH	VH	VH	VH	VH	+ve	+ve	+ve	H

VL Very low L Low M Moderate H High VH Very high

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Safety to beneficials

Pest attacked by beneficial insect	Beneficial insect	Effect of Zeal on beneficial insect
Aphids, mealybug and TSM	Beetles (stethorus and ladybirds)	None to low toxicity
TSM	Predatory mites	Moderate toxicity (not to adults)
Aphids, scales and mealybug	Lacewings	None to low toxicity
Caterpillars and thrips	Bugs (pirate bugs)	Low toxicity
Pollination	Honey bee	None

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