

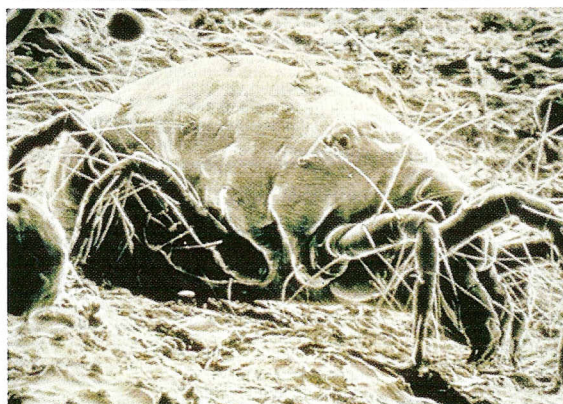
INTRODUCTION

BAROQUE 10 SC belongs to a new and technically advanced chemical family, the Diphenyloxazoline derivatives, with a unique mode of action and excellent efficacy against Tetranychid mites.

BAROQUE 10 SC, with its superior and long lasting performance on all juvenile stages (eggs, larvae and nymphs) of mites contains the active ingredient etoxazole, which is the only commercial compound from the Diphenyloxazoline class of miticides. The uniqueness of etoxazole makes BAROQUE 10 SC a powerful tool for spray programmes and resistance management strategies.

BAROQUE 10 SC, can be used as part of Integrated Pest Management (IPM) programmes since it has little to no hazardous effects on many parasitic and predatory insects and predatory mites.

BAROQUE 10 SC, is a safe product when used according to label instructions and can be used at any time during crop development. Treatment should begin at the first sign of mite infestation in order to ensure highest level of control.

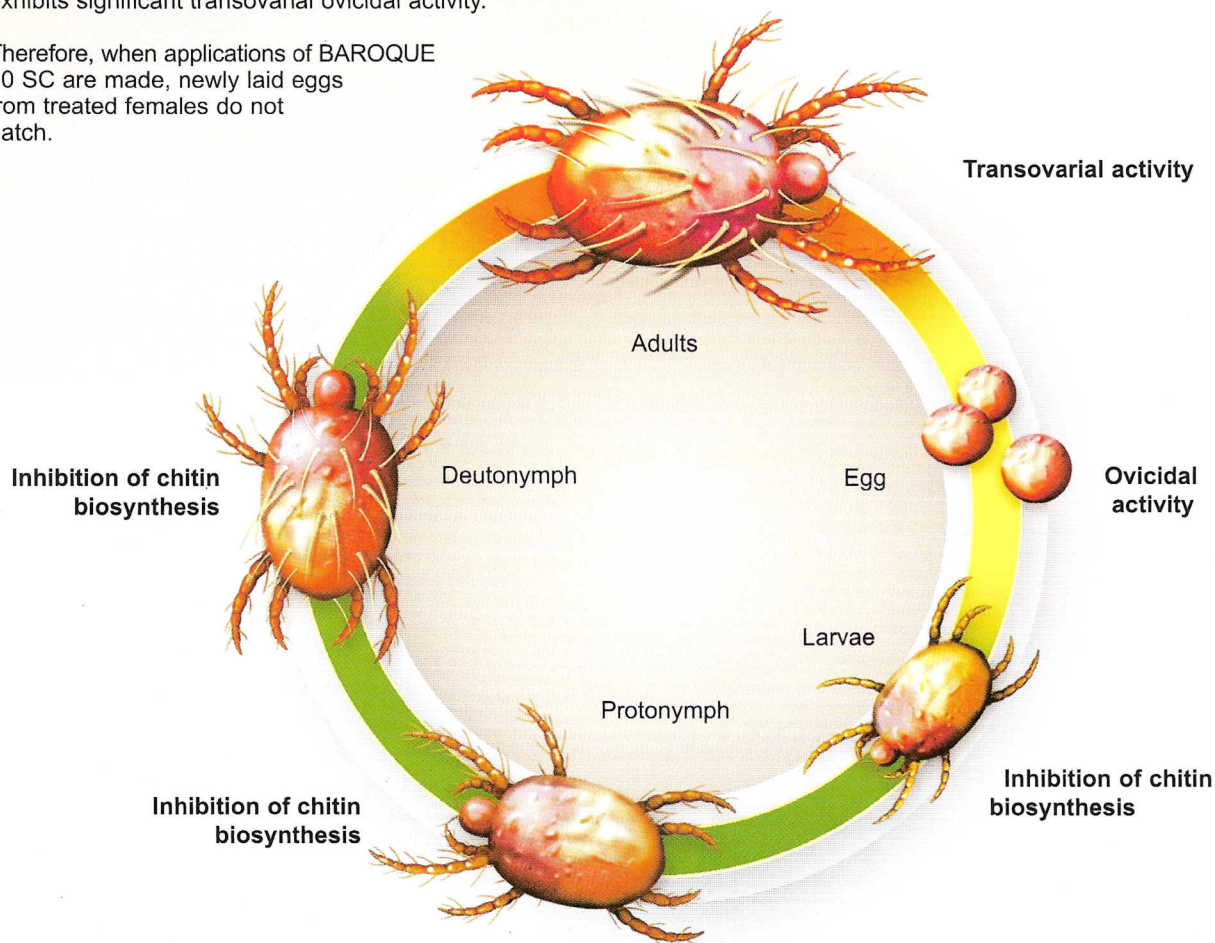
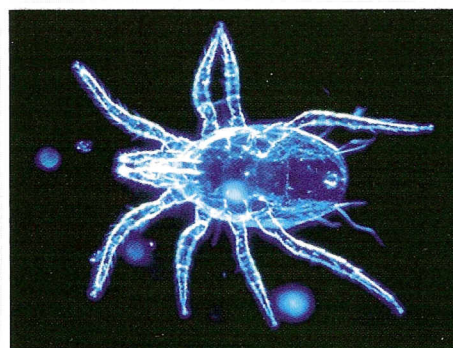


MODE OF ACTION

Etoxazole's unique mode of action is by inhibiting chitin biosynthesis in mites. Chitin is important for the formation of the mite exoskeleton. Disturbance of chitin formation results in inability to shed the old exoskeleton and incomplete ecdysis occurs.

BAROQUE 10 SC is effective against eggs, larvae and nymphs of mites but lacks any efficacy against male and female adults. However, thanks to its sterilizing effect on adult females, etoxazole exhibits significant transovarial ovicidal activity.

Therefore, when applications of BAROQUE 10 SC are made, newly laid eggs from treated females do not hatch.



PRODUCT FEATURES & BENEFITS

NEW CHEMISTRY

When repeatedly subjected to acaricides of the same mode of action, spider mite populations tend to develop resistance. Therefore growers are advised to adopt resistance management programs to ensure effective long-term control of mites.

Resistance management strategies through alternation of acaricide with different modes of action and limiting the total number of applications per season are recommended.

Etoxazole is the only commercialised compound belonging to the Diphenyloxazoline chemical class. The uniqueness of the mode of action without any reported cross resistance cases with any of the commercially available miticides makes BAROQUE 10 SC an excellent tool for resistance management.



COMPATIBILITY IN AN IPM PROGRAM

Because of its minimal adverse effects on predatory insects, mites and bees, BAROQUE 10 SC meets user needs in IPM environment:

- In laboratory studies, etoxazole has very little adverse effects on honey bees (Oral & contact $LD_{50} > 100 \mu\text{g a.i. / bee}$ in 48 hours at 25 °C.)
- At a dosage as high as 112.1 g.a.i./ha, etoxazole, does not reduce the population of the predatory mite *Typhlodromus occidentalis*, which is one the most important beneficial mites.
- Etoxazole has very little adverse effect against adults of *Neoseiulus californicus* from 1.5 hour to 4 days after treatment in a Burgerjon Potter test (The Burgerjon Potter test is one of the representative studies in Europe to determine the sensitivity of beneficial mites. Eighty adults (males and females) of *Neoseiulus californicus* were sprayed with etoxazole in a Burgerjon Potter tower)
- Excellent Environmental and Workers Safety Characteristics



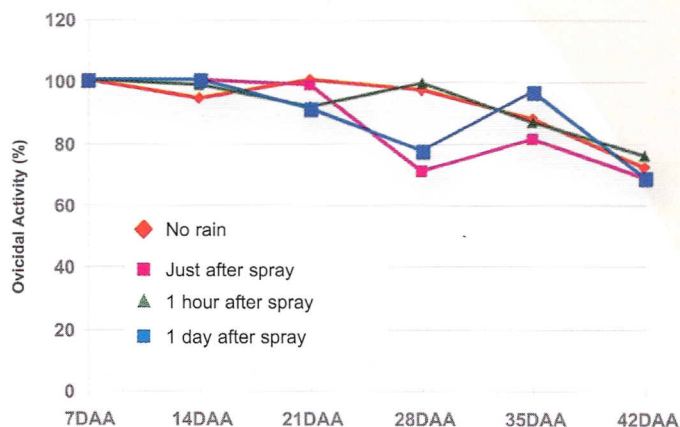
EXCELLENT ENVIRONMENTAL AND WORKERS SAFETY CHARACTERISTICS

BAROQUE 10 SC offers outstanding environmental and workers safety features:

- 12 hours re-entry interval
- CAUTION signal word used on the label
- WHO Class IIb with an acute oral LD_{50} in rat of greater than 5,000 mg/kg body weight.
- Minimal personal protective equipment required (Please consult product label for details).

RAINFASTNESS

BAROQUE 10 SC is rapidly absorbed by leaf tissues. Rainfastness studies have shown that, even when simulated rain follows within one hour after treatment, excellent acaricidal activity remains. Therefore, for outdoor ornamentals where rainfall can seriously affect performance, BAROQUE 10 SC is the preferred choice. However, it is a prerequisite that the spray solution is dry before rainfall occurs.



Conducted by Yashima Chemical Industry Co. LTD.

Baroque® 10SC

A new selective acaricide for the control of mites in Roses and Carnations

USE AND RATE RECOMMENDATIONS ROSES AND CARNATIONS

It is very important for etoxazole to be applied in a timely manner to show its excellent initial and residual efficacy against target mites. The optimal application timing for etoxazole is the early infestation period (a few eggs and larvae per leaf), because etoxazole acts by suppressing embryogenesis within the mite eggs and by inhibition of the moulting process of the larvae and nymphs.

Applications of BAROQUE 10 SC should be repeated depending on the mite pressure in the crop.

Crop	Target Pests	Rate
Roses and Carnations	<i>Tetranychus urticae</i>	0.5 ml/L
	<i>Tetranychus cinnabarinus</i>	or 500 ml/ha
	<i>Panonychus ulmi</i>	
	<i>Panonychus citri</i>	

BAROQUE 10 SC does not cause crop phytotoxic effects when used according to label directions.

BAROQUE 10 SC is compatible with most other commonly used acaricides, insecticides and foliar nutrients. However, local conditions can influence the compatibility of tank mixtures and it is recommended that small scale mixtures are tested before use on an entire field. When other products are mixed with BAROQUE 10 SC, they should be used only in accordance with their specific label directions.

This Product Use Guide explains on how growers will manage mites using BAROQUE 10 SC. The information is for general reference only. Before using BAROQUE 10 SC, or any pest control product, read the product label and follow all recommendations for safe and effective use.

