

# Tyranex® VeripHy® Insecticide

## Superior protection against Monolepta Beetle & Flower Caterpillar in fruit crops

Imtrade Tyranex® 500 VeripHy® SL is the product of choice for Monolepta Beetle & Flower Caterpillar control in Fruit Crops. Tyranex® 500 VeripHy® SL is an upgrade to Tyranex® 500 SL and trichlorfon equivalents. The stable formulation is based on 500g/L of trichlorfon, free from volatile organic compounds, with spray solution pH indicator.



- ▶ High-level protection against Monolepta Beetle & Flower Caterpillar.
- ▶ Includes new VeripHy® technology with spray solution pH indicator.
- ▶ Reliable and robust formulation.
- ▶ Early application provides a strong return on investment by protecting the lower canopy, and minimising disease pressure, reducing the need for follow-up sprays.
- ▶ Group 1B mode of action suitable for rotating through multiple modes of action when routinely spraying crops for

### Application methods

Dilute and concentrate ground spraying equipment.

GROUP	1B	INSECTICIDE
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### Harvest WHPs

Edible Crops: 2 days after application

### Grazing WHPs

Pastures, Forage Crops: 2 days after application

\*Refer to label for full list of application methods

### Crops and pests controlled\*

#### Avocados

Monolepta Beetle

#### Avocados, Macadamia and Pawpaw

Fruit Spotting Bug

#### Macadamia, Strawberries and Sorghum

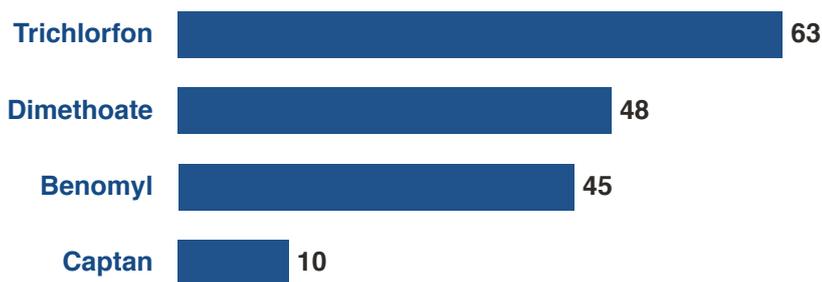
Macadamia Flower Caterpillar, Cluster Caterpillar and Sorghum Head Caterpillar

\*Refer to label for full list of crops, pests and rates

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## Degradation Via Alkaline Hydrolysis

Chemical degradation via alkaline hydrolysis is a relevant issue for many insecticides. It reduces efficacy of agrichemical products and varies with the chemistry of the active ingredient. Having the correct pH of the tank-mix prior to application is crucial. Alkaline hydrolysis is measured in time (minutes), to degrade to 50 percent concentrate, otherwise known as half-life. The chart below shows how quickly some active ingredients such as Trichlorfon breakdown at a water pH 8.0.



Time (in minutes) to degrade to 50% concentrate in water at pH 8.0

Source: Deer, H.M and R Beard. 2001. Effect of water pH on the Chemical Stability of Pesticides, Utah State University Extension.

## VeripHy® Colour Indication

Trichlorfon is subject to alkaline hydrolysis once diluted as a spray solution, being the degradation of active ingredient content on reaction with water, at pH > 7, is intensified. The magnitude of degradation of trichlorfon varies with temperature, time held in the spray tank, the presence of other chemicals and contaminants and the extent to which the pH level is greater than 7.

VeripHy® forewarns Tyranex users when there may be a problem with alkaline spray water and equally provides confirmation when there is not. If a yellow colouring is exhibited, this signals that the spray solution is acidic (pH < 7) and alkaline hydrolysis is not a threat with no further action needed. If a purple colouring is exhibited, this signals that the spray solution is alkaline (pH > 7) and alkaline hydrolysis will be occurring. The spray tank water requires treatment with an acidifying agent such as Imtrade Pro 700 as per the below chart in order to reduce pH and preserve trichlorfon. When this occurs, the water solution will turn from purple to yellow indicating the water pH is now acidic (pH < 7) and not subject to alkaline hydrolysis.

below pH 7.0

above pH 7.0

OK

Acidify – add Imtrade Pro 700 Surfactant



Scan this code  
with your phone to  
view product label

For more information on Tyranex® VeripHy®, visit [imtrade.com.au](http://imtrade.com.au)  
or contact your local Imtrade representative on **1800 171 799**

**ALWAYS READ AND FOLLOW LABEL DIRECTIONS BEFORE USING ANY PRODUCT IN THIS FACT SHEET.**

This fact sheet is intended as general advice. The information submitted in this publication is based on current Imtrade knowledge and experience. In view of the many factors that may affect its application, this data does not relieve the user from carrying out their own tests. The data does not imply assurance of certain properties or of suitability for a specific purpose. It is the responsibility of the user to ensure that any proprietary rights and existing laws and legislation are observed.

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