



Cryptex[®]

Biomangement





Cryptex[®]

Cutting edge granulovirus technology for the suppression of False Codling Moth (FCM – *Cryptophlebia/Thaumatotibia leucotreta*) on various crops as specified on the label.

Why use *Cryptex*[®]?

Features	Benefits
Locally isolated granulovirus strain, manufactured in Switzerland by world renowned virus specialists, Andermatt Biocontrol	Proven and consistent efficacy against FCM on a variety of crops
Highly effective FCM reduction and damage control when applied as recommended	An effective granulovirus product is one of the best tools available to reduce target pest populations
Very specific target range	<i>Cryptex</i> [®] will not affect any beneficial organisms and is harmless to bees
Unique mode of action	Mode of action of virus products differ from chemical insecticides, making them ideal for use in IPM and resistance management programs
User friendly SC formulation	Advanced formulation allows for: <ul style="list-style-type: none"> • Versatile application options • No feeding stimulant (molasses) needed • Lipophilic characteristics ensure excellent adhesion and rain fastness • Can be tank mixed with most agricultural products provided pH is correctly managed • Excellent shelf life; min. 24 months at 4 °C, unlimited if kept at -18 °C
Non-toxic, no MRL requirements and has no withholding period	<i>Cryptex</i> [®] is suitable for organic and conventional agriculture and can be applied during the harvesting period

How does *Cryptex*[®] work?

Cryptex[®], a *Cryptophlebia/Thaumatotibia leucotreta* Granulovirus is produced by Andermatt Biocontrol. With more than 30 years' experience in virus production Andermatt's process ensures *Cryptex*[®] product quality and consistent performance. *Cryptex*[®] contains encapsulated virus particles, which are applied just after peaks in FCM flights. It has to be ingested by FCM larvae to be effective.

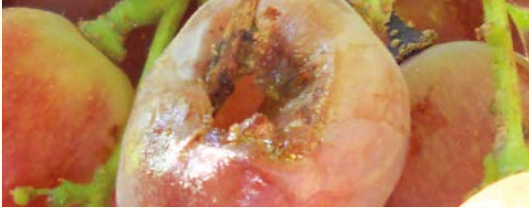
Once ingested the alkaline conditions in the FCM midgut dissolves the protective capsule, activating the virus particle and infects the rest of the larvae resulting in death. Buffering of the spray mix (pH 5 to 8) is extremely important as very alkaline or acidic conditions could dissolve the protective capsule in the spray tank and decrease the virus particle's tolerance to environmental conditions, as well as overall efficacy.



Photo above:
FCM larva infected with virus particles.

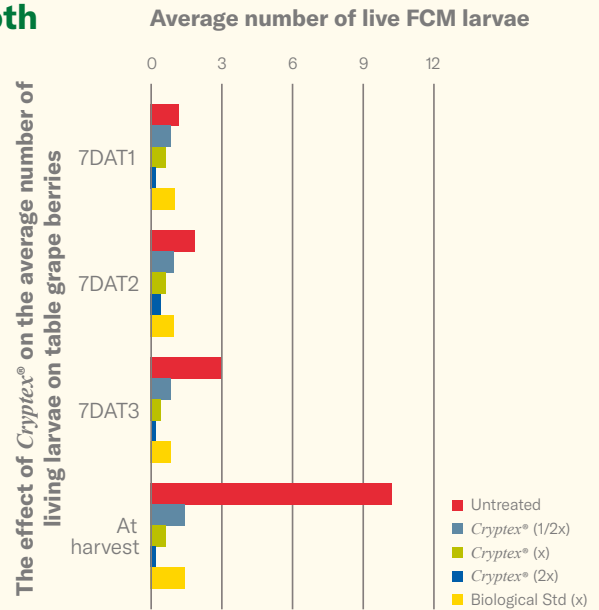
Efficacy of *Cryptex*[®] against False Codling Moth (*Thaumatotibia leucotreta*) on table grape

(Scarlotta cultivar – Paarl, Western Cape)



FCM damage on grapes

Figures right: The graph compares the average number of live FCM larvae in table grape berries after applications of *Cryptex*[®] (½X, X and 2X) compared to a biological standard as well as an untreated control. Applications were made after peaks in FCM moth flights and all treatments were evaluated 7 days after each treatment and at harvest. *Cryptex*[®] at all the rates provided significant reduction of the incidence of live FCM larvae in berries and *Cryptex*[®] at the X and 2X rates were the best treatments overall.



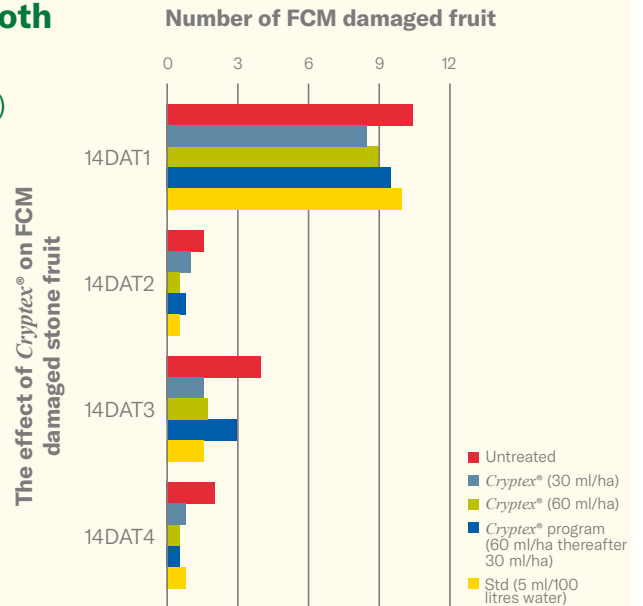
Efficacy of *Cryptex*[®] against False Codling Moth (*Thaumatotibia leucotreta*) on stone fruit

(Peaches, cultivar – Kakamas, Piketberg, Western Cape)



Healthy peaches in orchard

Figures right: The graph compares the number of FCM damaged peaches after bi-weekly applications of *Cryptex*[®] (30 ml, 60 ml and a program application with 1st application at 60 ml thereafter 30 ml per ha) with a standard as well as an untreated control. All treatments were evaluated every 2 weeks and a total of 4 applications were made. *Cryptex*[®] at all the rates evaluated provided significant reduction of FCM damaged fruit.



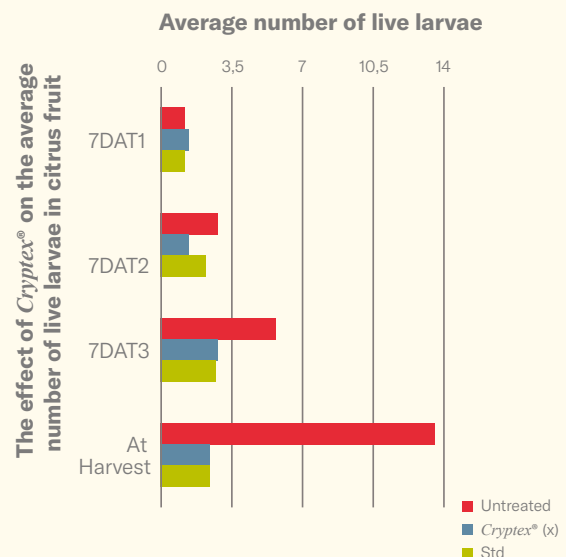
Efficacy of *Cryptex*[®] against False Codling Moth (*Thaumatotibia leucotreta*) on citrus fruit

(Cultivar – Nules, Stellenbosch, Western Cape)



FCM on citrus

Figures right: The graph compares the average number of live FCM larvae found in citrus fruit after applications of *Cryptex*[®] (3.3 ml per 100 litres water – maximum 330 ml/ha) compared to a biological standard as well as an untreated control. Treatments were applied after peaks in FCM moth flights and all treatments were evaluated 7 days after each application as well as at harvest. *Cryptex*[®] at the recommended dose rate (X) provided excellent reduction of FCM larvae resulting in significant population reduction.



Cryptex® – production, formulation and quality control:

Andermatt Biocontrol is the leading producer of virus products and has more than 30 years' experience in the production of these viruses for commercial pest control. Granulovirus particles are covered by a natural occlusion capsule, which protects the virus from environmental factors. Inadequate procedures during production, improper timing of harvest, incorrect formulation and inappropriate co-formulants can lead to incomplete or damaged viruses which results in reduced stability, impacting the virus' efficacy.

Andermatt Biocontrol has optimised the production procedure to ensure that the virus particles are not damaged and maintain their virulence under varying application conditions. Product quality is very important for the Swiss company, and therefore their product efficacy is determined by evaluating the product on the relevant host insect itself. In the case of *Cryptex*®, each batch is tested via bioassay against FCM larvae. The quality control on FCM larvae ensures that only the most effective products are put on the market.

Registered uses:

Pest	Crop	Dose rate
False Codling Moth	Avocados, litchis, citrus, stone fruit (apricots, cherries, nectarines, peaches, plums and prunes), tree nuts (almonds, cashews, chestnuts, hazelnuts, macadamia, pecans, pistachio, walnuts, coconut, Brazil nuts and pine nuts), table grapes and pomegranates.	Refer to the <i>Cryptex</i> ® label for detailed application instructions.

Available in: 500 ml

Registered, Marketed and Distributed by :



Manufactured by:



Healthy Food and Healthy Environment, for all



E: support@anderlatt.co.za
W: www.anderlattafrica.com