

# Control of Helicoverpa with HELICOVEX<sup>®</sup> – a specific viral insecticide

**Iris Kraaz**

Andermatt Biocontrol, Switzerland

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# Andermatt Biocontrol

- **Leading company in baculovirus production worldwide**
- **25 years of key expertise**
- **Worldwide distribution network**
- **Own R & D department**
- **Capacity to scale up Baculovirus production**
- **High quality standard**
  - Comply with EU specifications for microbiological contaminants in baculovirus products



# *Helicoverpa*

## Host plants and damage



# Geographical distribution of the four most damaging *Helicoverpa* species



*Helicoverpa zea*  
+ *virescens*

*Helicoverpa armigera*,  
*zea*, *virescens*

*Helicoverpa*  
*armigera*

*Helicoverpa armigera*  
+ *H. punctigera*

# HELICOVEX product features

Tomato  
Maize  
Soybean  
Cotton  
Beans  
Lettuce  
Pepper  
...



- **Active ingredient: *Helicoverpa armigera* Nucleopolyhedrovirus (HearNPV)**
- **Specific control of *Helicoverpa* spp. such as: *Helicoverpa armigera/virescens/punctigera/zea***
- **Acts by ingestion.**
- **$> 7.5 \times 10^{12}$  PIB/liter**
- **Low hectare volume 200 ml/ha. SC formulation.**

# Standard application strategy

## Application timing

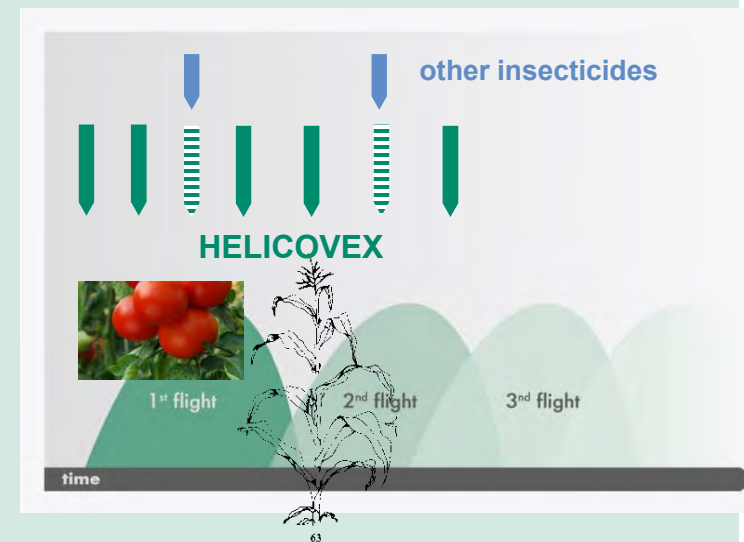
- Target on eggs and against first instar larvae = **First sign of moth activity and when flowering plants are present.**

## Application rate

- 100 to 200 ml/ha  
Depending on pest pressure, strategy and integration in pest control programs.
- Repetition after 8 sunny days.

## Remarks

- Cover the whole larval hatching period of the treated generation until harvest.



# Benefits



**Compatible with foliar fertilizers, fungicides and other insecticides (pH in tank mix 5 – 8.5)**

**Non-toxic, no MRL requirements and no (minimum) withholding period.**

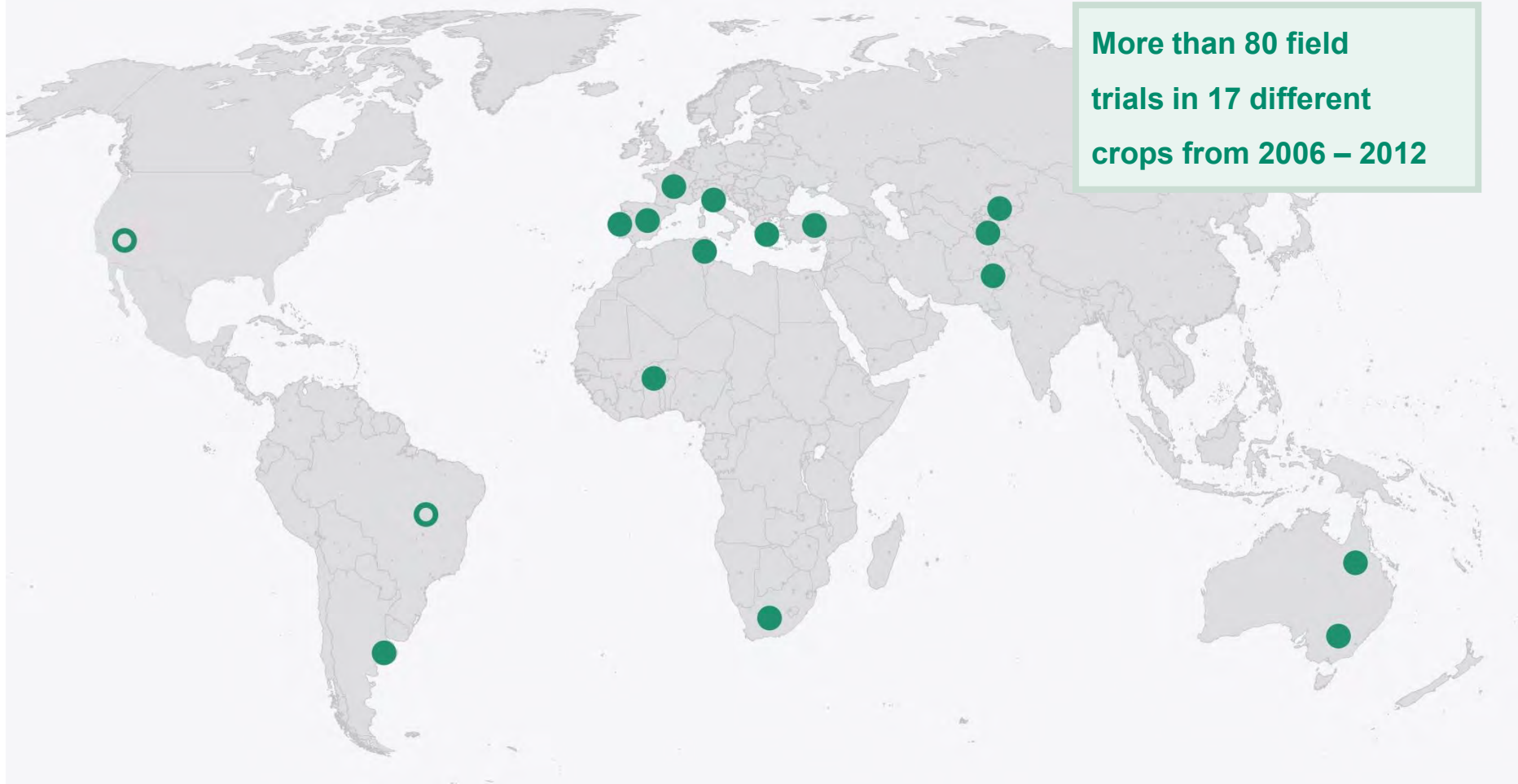
**Good shelf life (>2 years at –18 °C; 2 years at 5 °C, 1 month at 25°C, few days at 30°C)**

**Contributes to resistance management of traditional insecticides**

**Highly suited for integrated and organic pest management**

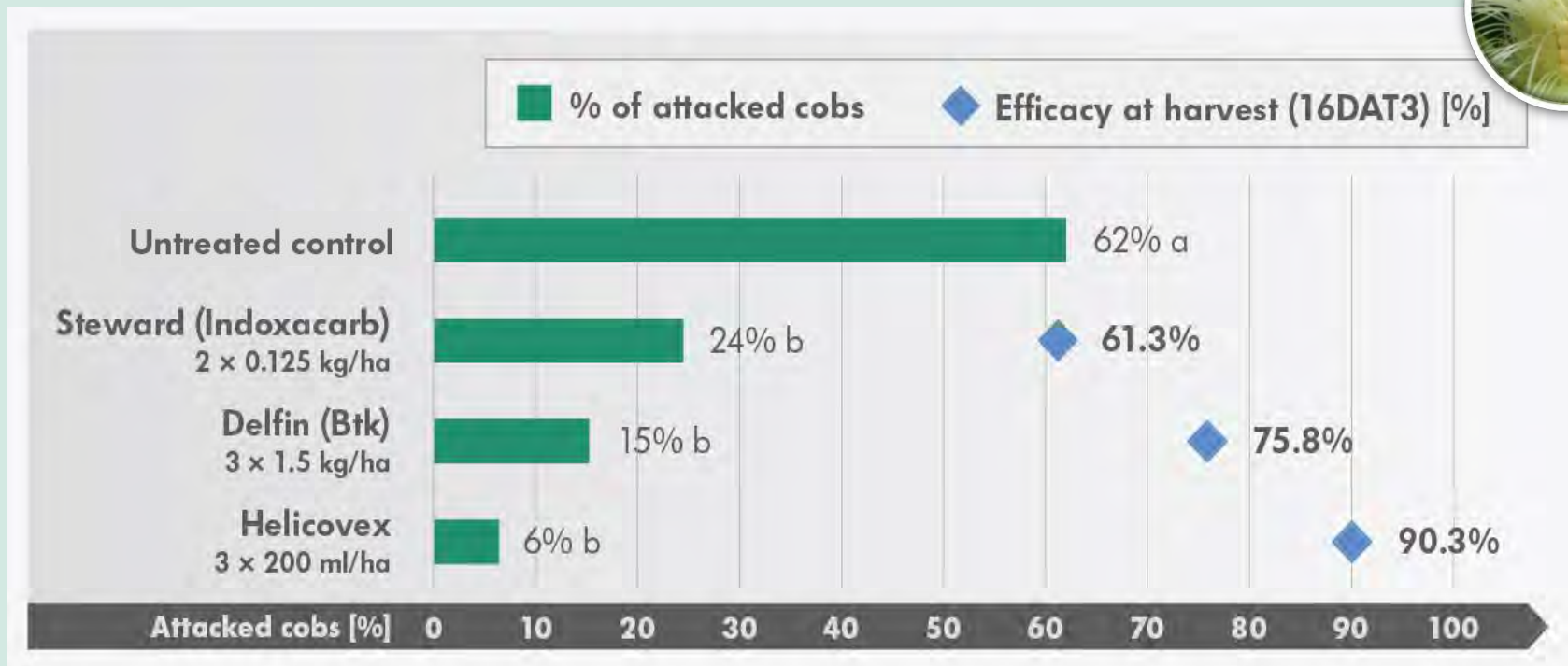
# Helicovex

## Field trial overview





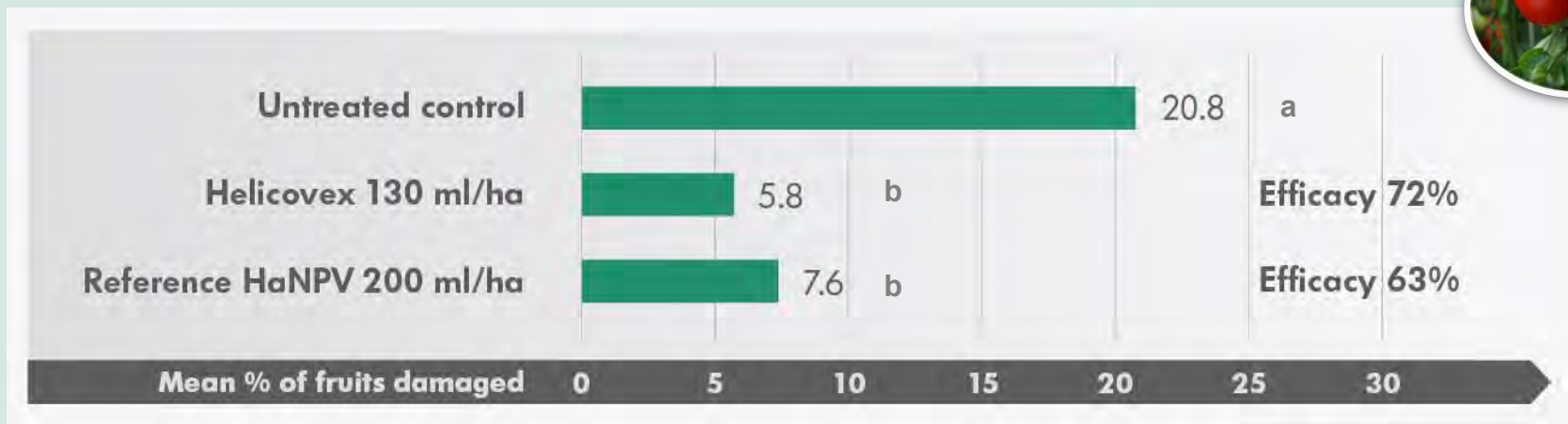
# Control of *Helicoverpa armigera* in sweet corn, Aquitaine, France 2011



Contractor: DRAAF-SRAL Provence Alpes Côte d'Azur.

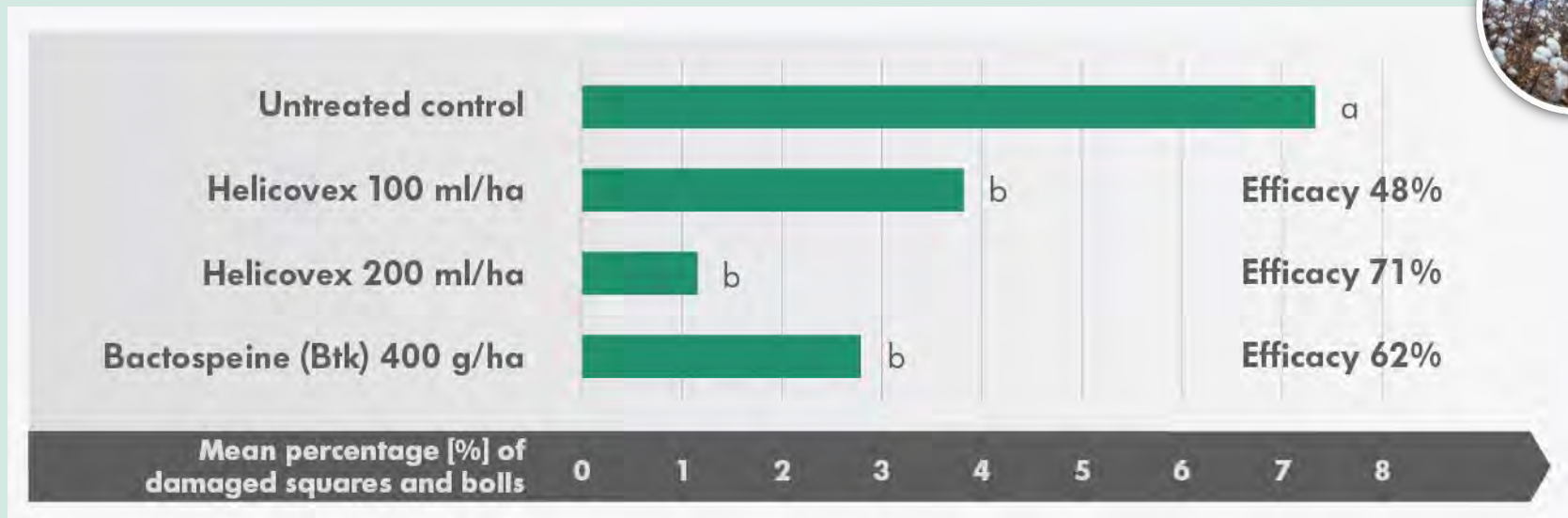
# Control of *Helicoverpa* in open field tomato Australia 2012

- Helicovex, at 5 – 8 days interval, 3 treatments
- Reference HaNPV, at 3 – 6 days interval, 5 treatments
- Assessment at 6DAT3 of Helicovex (fruits turning red)
- Mainly *H. armigera*, some *H. punctigera*



# Control of *Helicoverpa armigera* in cotton, Greece 2012

- 4 applications, at intervals of 7 to 9 days
- First application at hatching of third generation larvae (BBCH 65 – 71)



# Transfer into practice...

- First year of use in South Africa  
Bolldex (registration on all crops)
- Mainly used in high-value crops
- Substitution of old insecticides in  
e.g. citrus or apple production
- Integration in existing plant  
protection programs in lettuce  
production
- Used at reduced dosage in  
tobacco and pea production
- Future: Expansion to broad acre  
crops



**Bolldex = Brand-name of  
Helicovex in South Africa**



***Thank you for  
your attention!***



Andermatt  
**Biocontrol**



***where Nature  
leads Innovation***