

Otsuka Chemical Co., Ltd.

**Oncol®**

**Product Introduction**

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**Oncol**

**A systemic insecticide- nematicide**



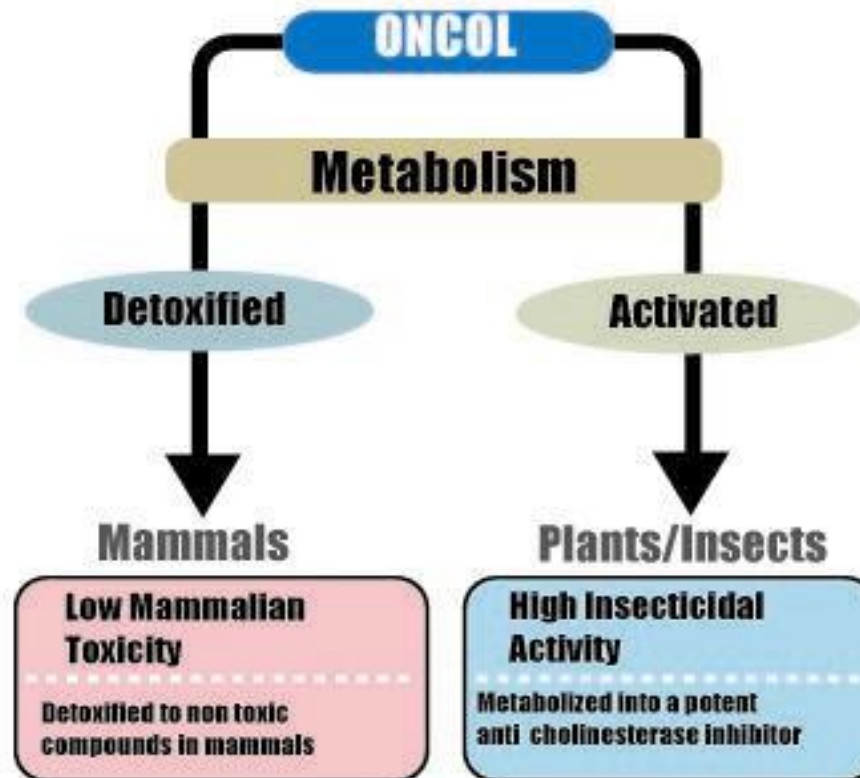
**Oncol<sup>®</sup>**

***Oncol Development Concept***

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- Otsuka's group guiding principle:  
*“Otsuka people creating new products for better health worldwide”*
- Oncol was developed based on the Pro-insecticide design concept :  
*“insecticide chemicals which are intrinsically inactive compounds, but are altered either chemically or biologically to intrinsically active toxic substances”*

- **Oncol was designed to show selective toxicity to insects and humans**



# Oncol®

## Identity

**Common name:** Benfuracarb

**Trade name:** Oncol, Fulgor, Laser, Nakar

**Structure:**



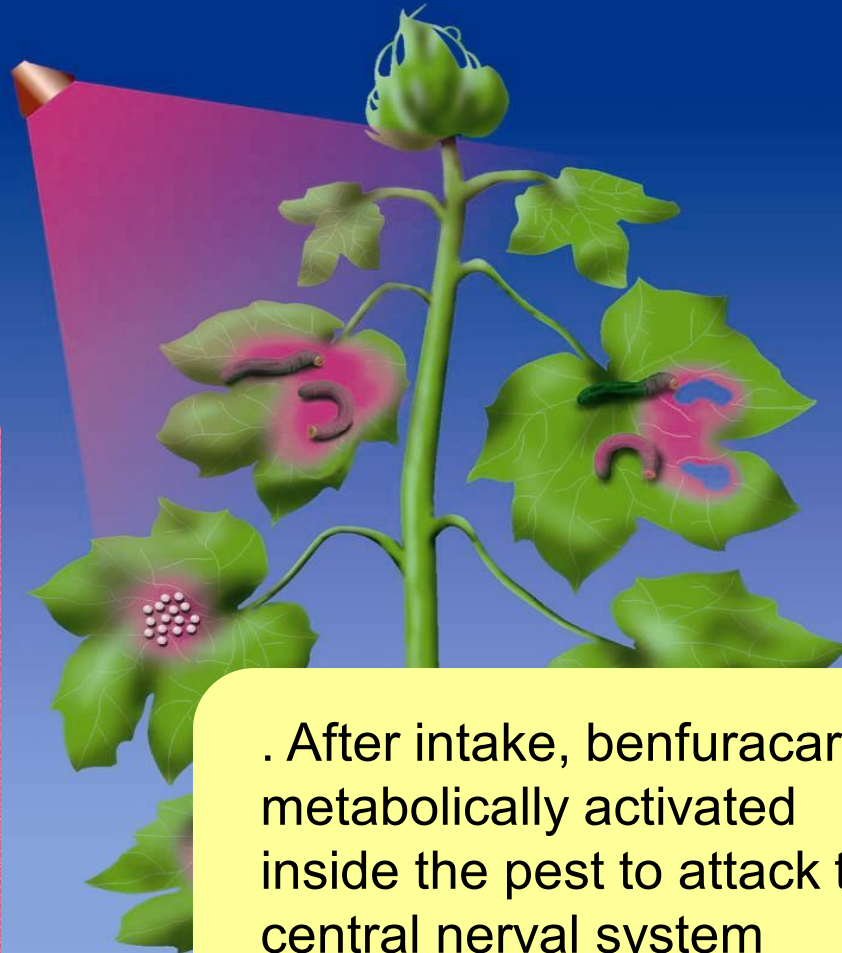
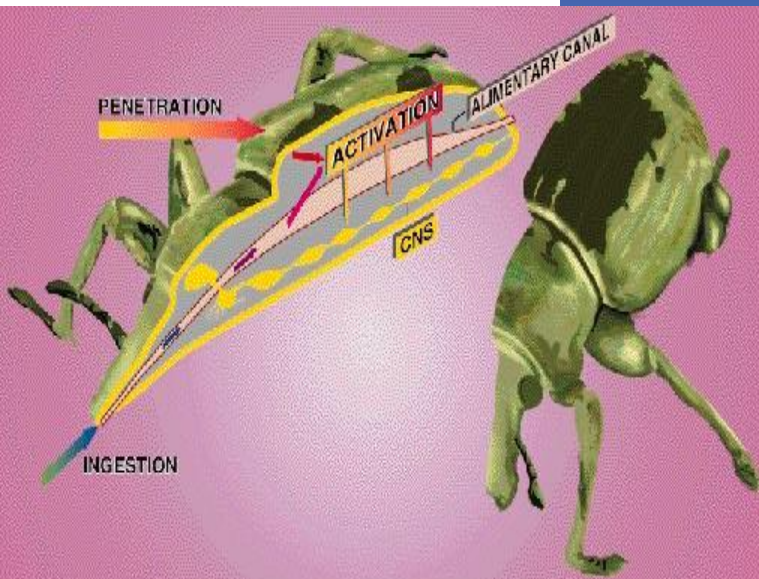
**Chemical class:** Carbamate

- **Systemic action**
- **Broad spectrum**
- **Safe to use**
- **Suitable to different uses**

# Oncol®

## Mode of action

. Benfuracarb works through stomach and contact action.



. After intake, benfuracarb is metabolically activated inside the pest to attack the central nervous system leading to death.

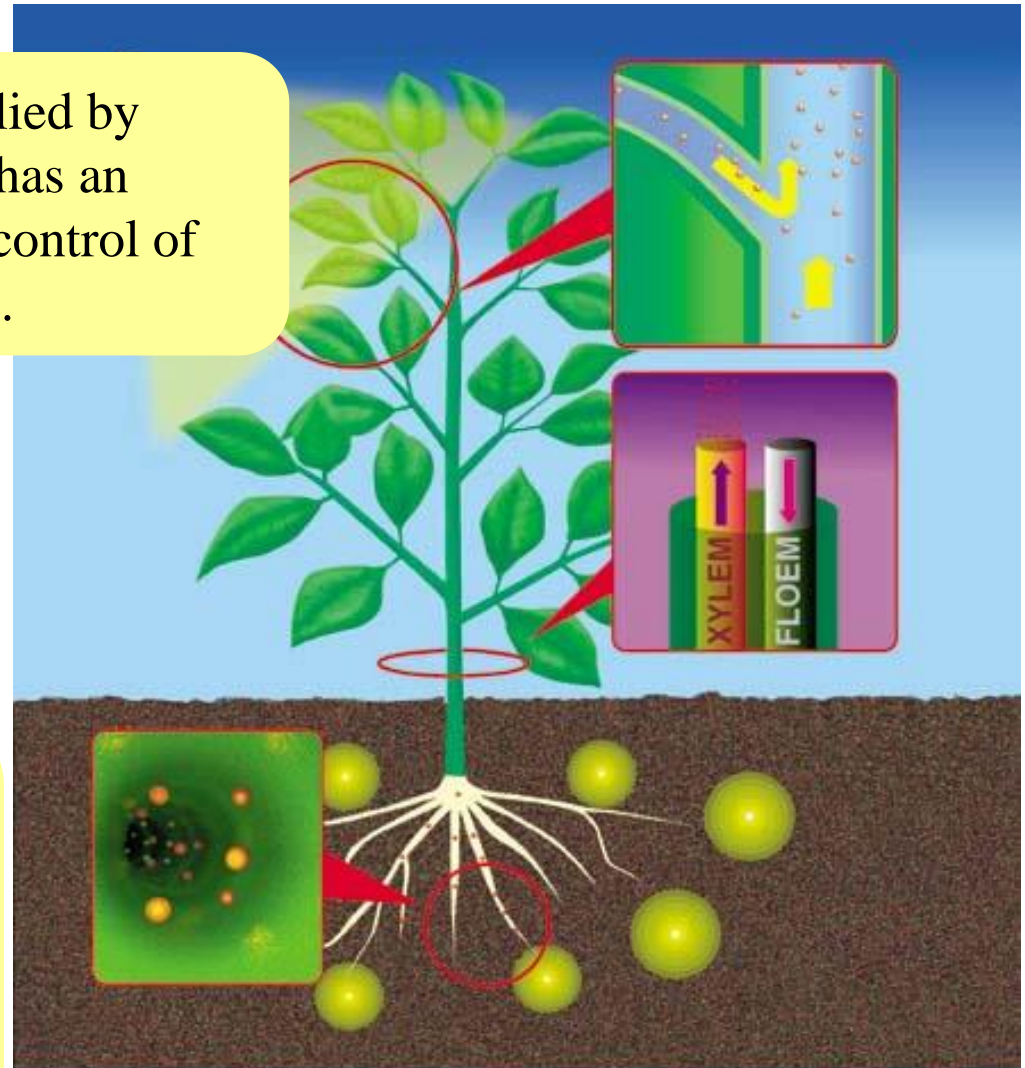
## **Systemic action**

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. **Being highly systemic, benfuracarb is suitable for a variety of uses.**

. When applied by foliar spray, has an outstanding control of foliar insects.

. When applied in soil, benfuracarb is absorbed at root level and moves to the aerial parts of plants to control both soil and foliar pests.



**Oncol<sup>®</sup>**

***Broad spectrum***

**Coleoptera**



**Lepidoptera**



- Worldwide testing shows that Oncol has a broad spectrum

**Thysanoptera**



**Hemiptera**



**Diptera**





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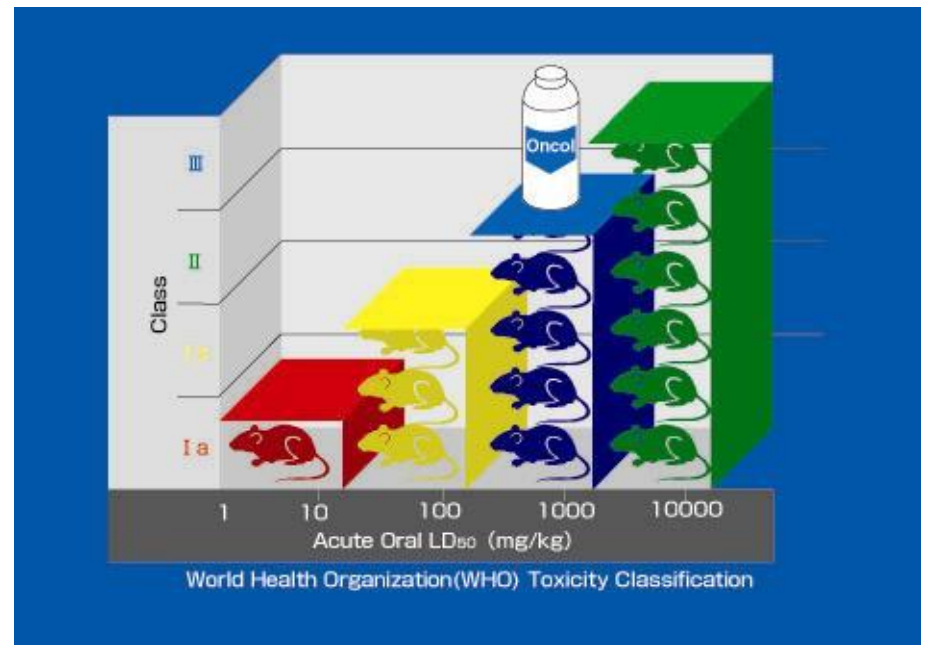
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**Safe to use : crops**

Benfuracarb formulations are not phytotoxic to crops either through foliar, drench or soil granule applications at practical dosages.



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. Benfuracarb Technical is  
Classified in the class II,  
Moderately hazardous by  
WHO



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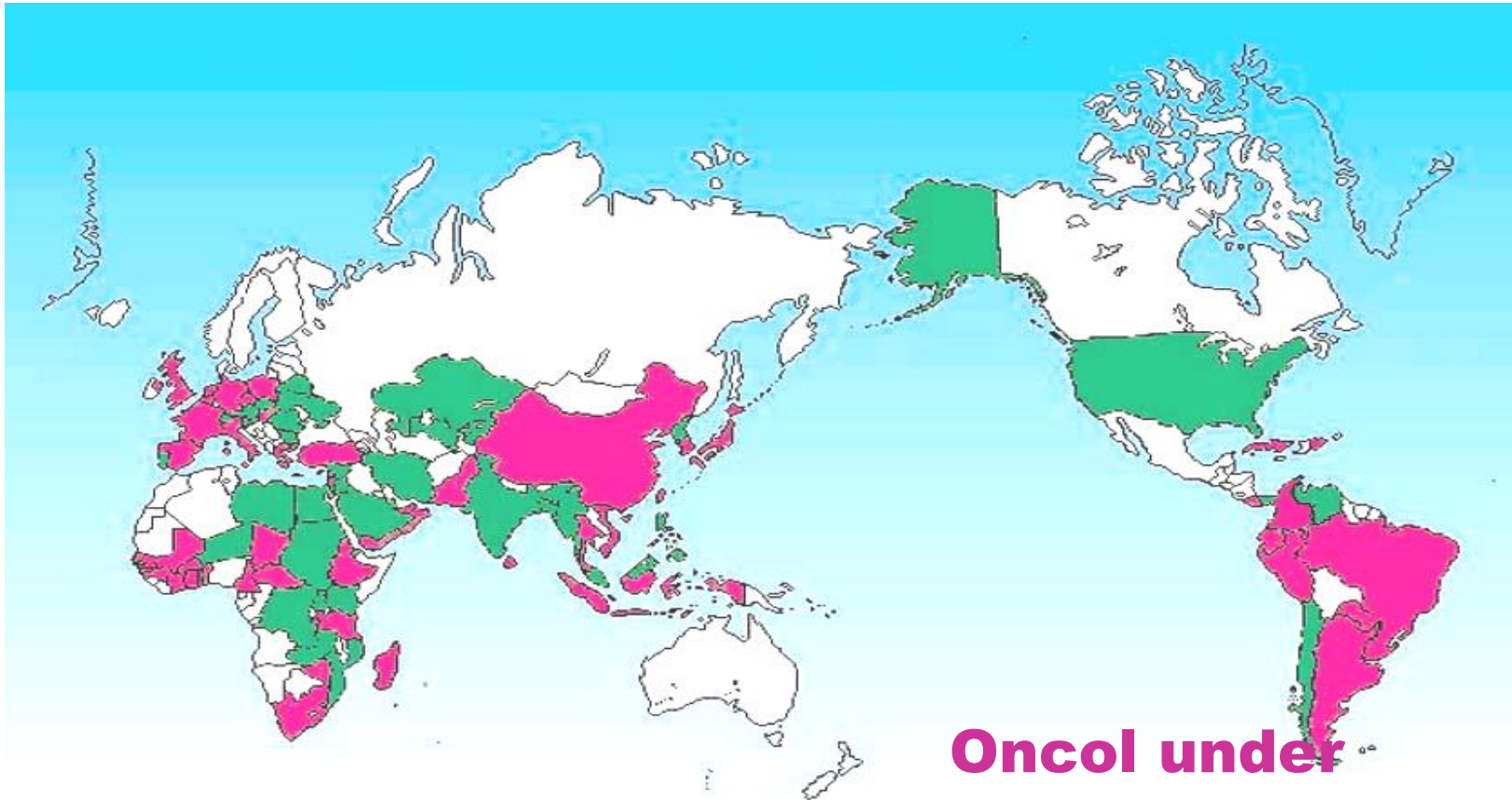
**Oncol®**

**Main Usages Worldwide**



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# **Oncol<sup>®</sup> Worldwide development and marketing**



**Oncol under  
marketing (55)**

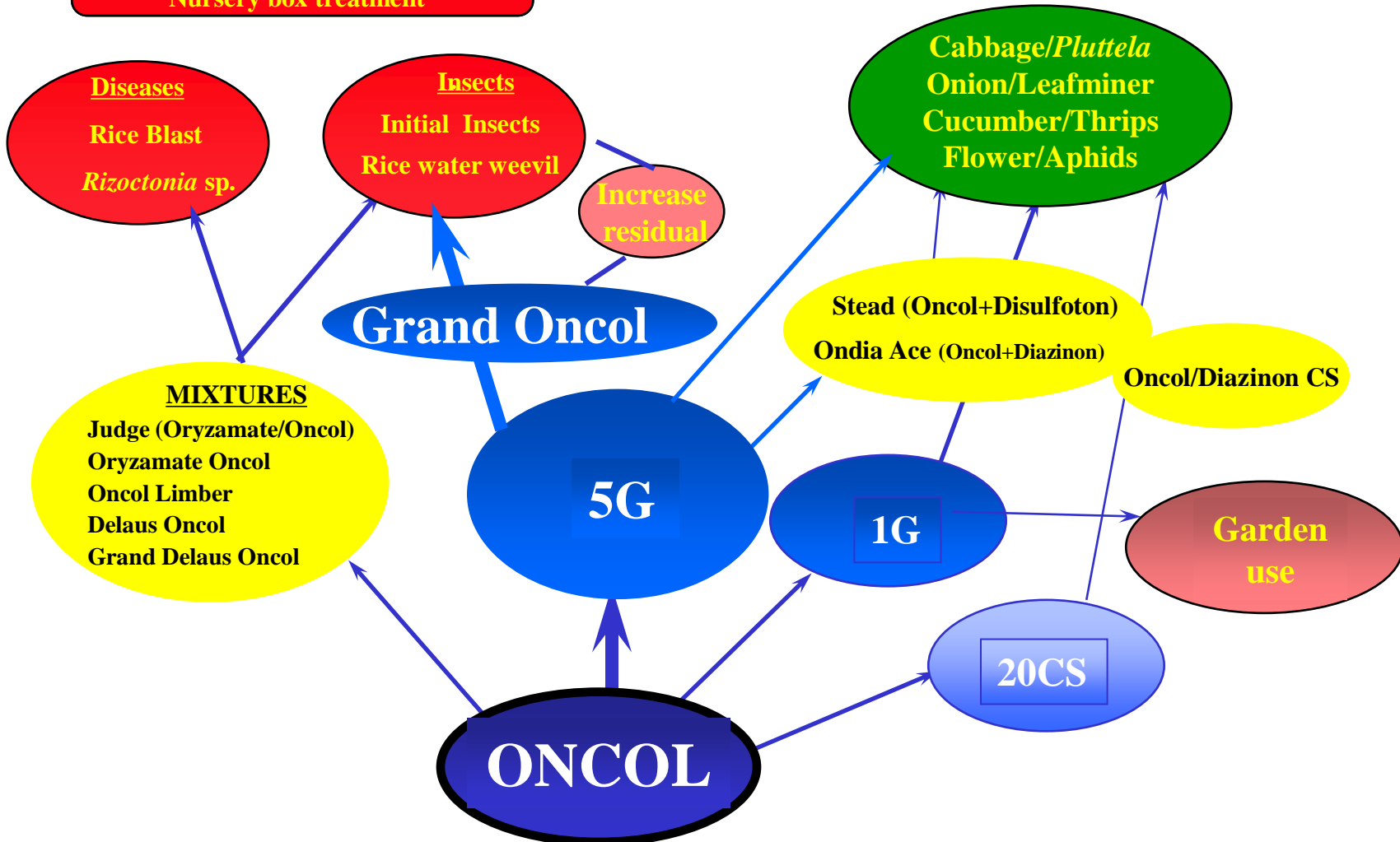
**Oncol under  
development (40)**

# Oncol usage in Japan

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**Paddy Rice**  
Nursery box treatment

**Vegetables**



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## Japanese Top Rankings

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AVAILABLE  
ON SCREEN  
DAILY

# AGROW

WORLD CROP PROTECTION NEWS

Published twice a month – August 14th 1998, No 310

### Japanese pesticide rankings 1997

Rank	Trade name	Active ingredient	Formulation
<i>Insecticides</i>			
1	Oncol	benfuracarb	GA
2	Ortran	acephate	WP
3	Ortran	acephate	GA
4	Lannate	methomyl	WP
5	Admire	imidacloprid	GA
6	D-D	1,3-dichloropropene	Oil
7	Kotetsu	chlorfenapyr	FL
8	Sumithion	fenitrothion	EC

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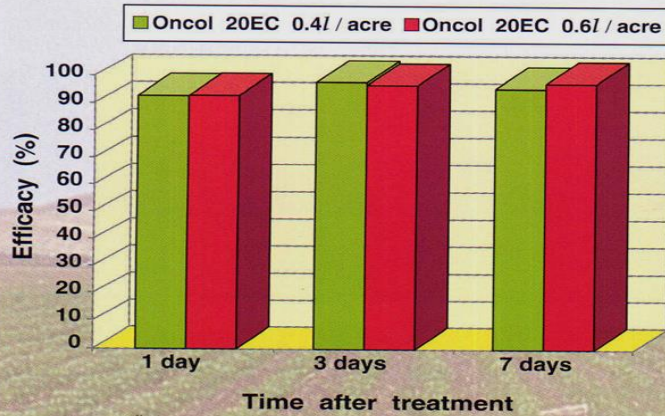
***Efficacy Worldwide***

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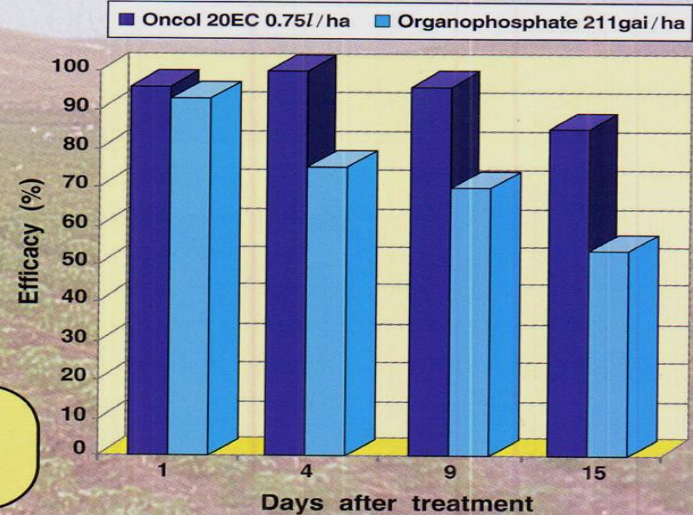


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## Cotton / aphids and thrips



Crop: Cotton  
Target pest: *Aphis gossypii*  
Place: Pakistan, 1996  
Foliar Spray

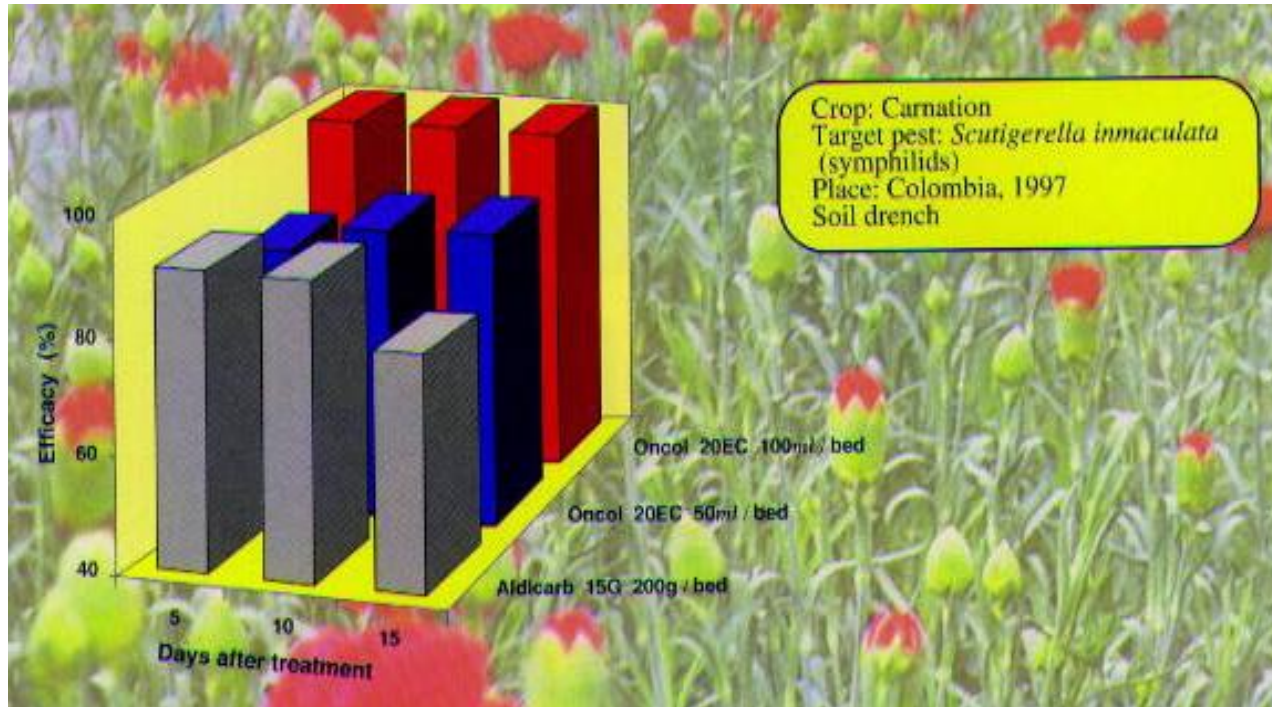


Crop: Cotton  
Target pest: *Frankliniella sp.*  
Place: Brazil, 1996  
Foliar Spray



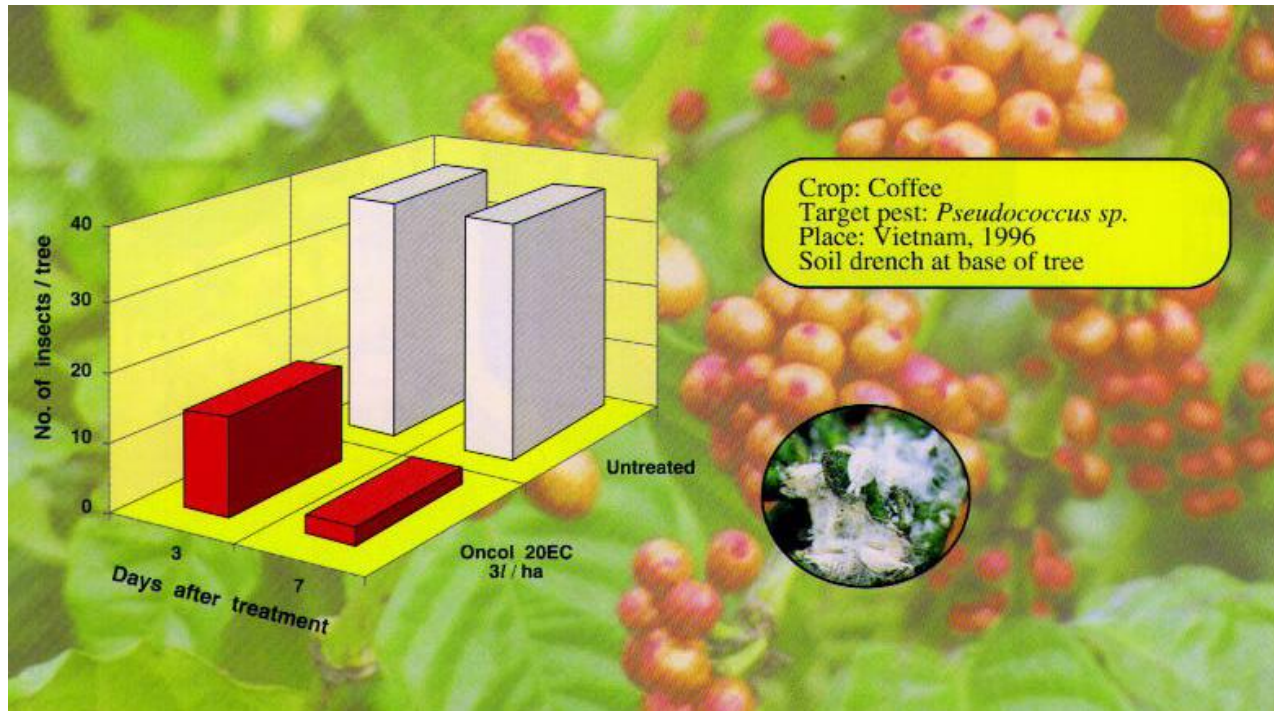
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## Carnation/Symphilids



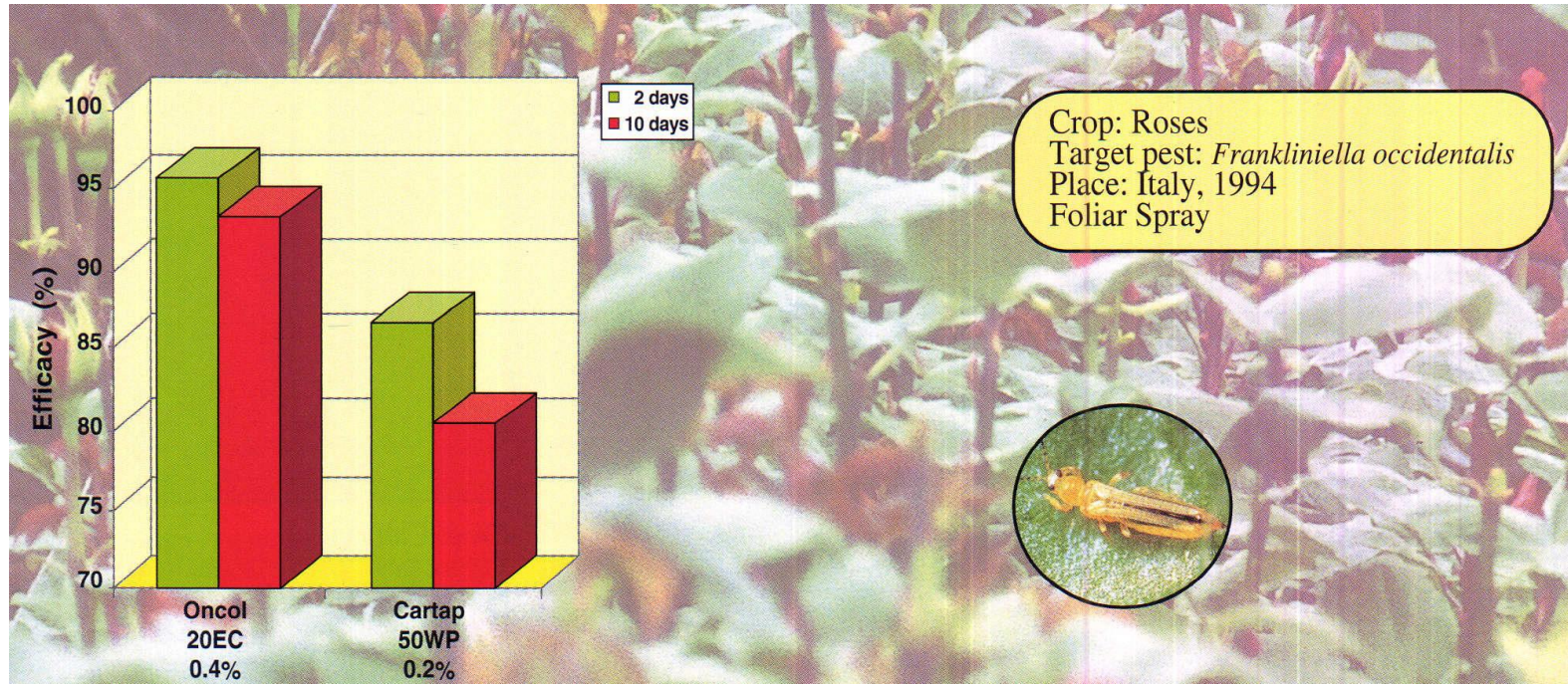
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## Coffee/mealy bug



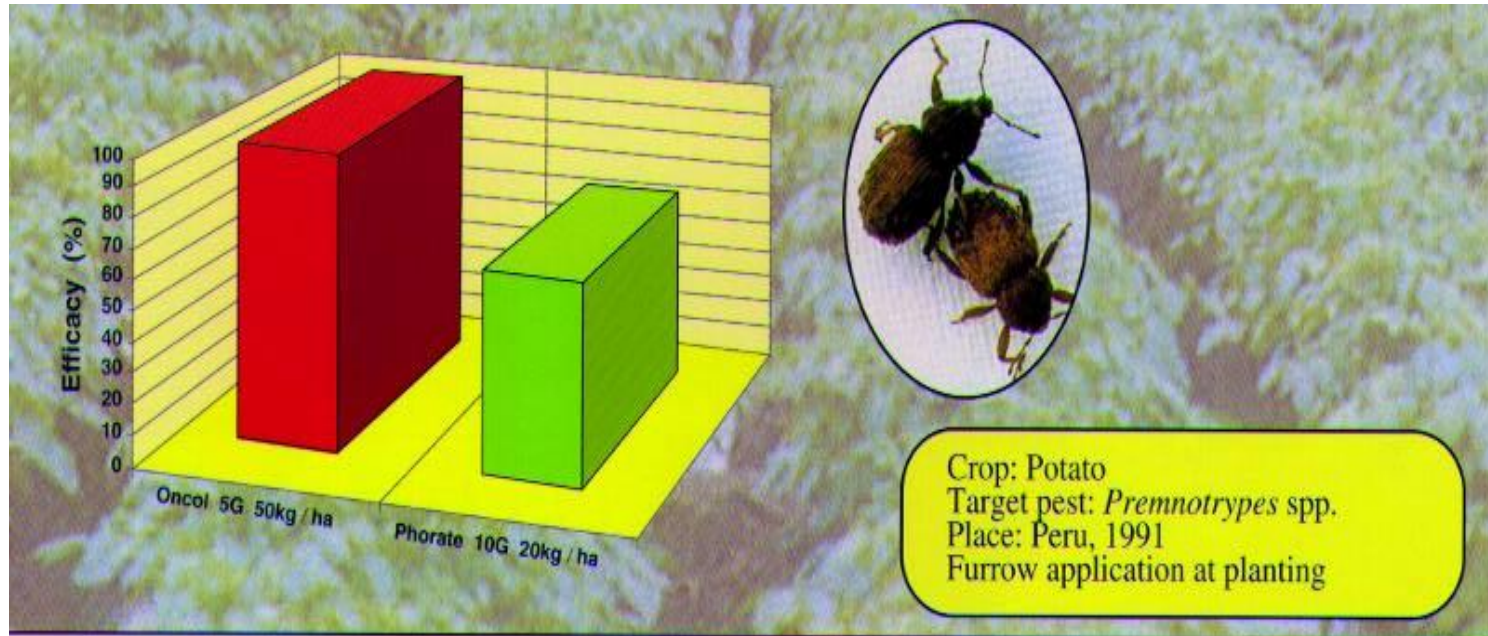
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## Roses/thrips



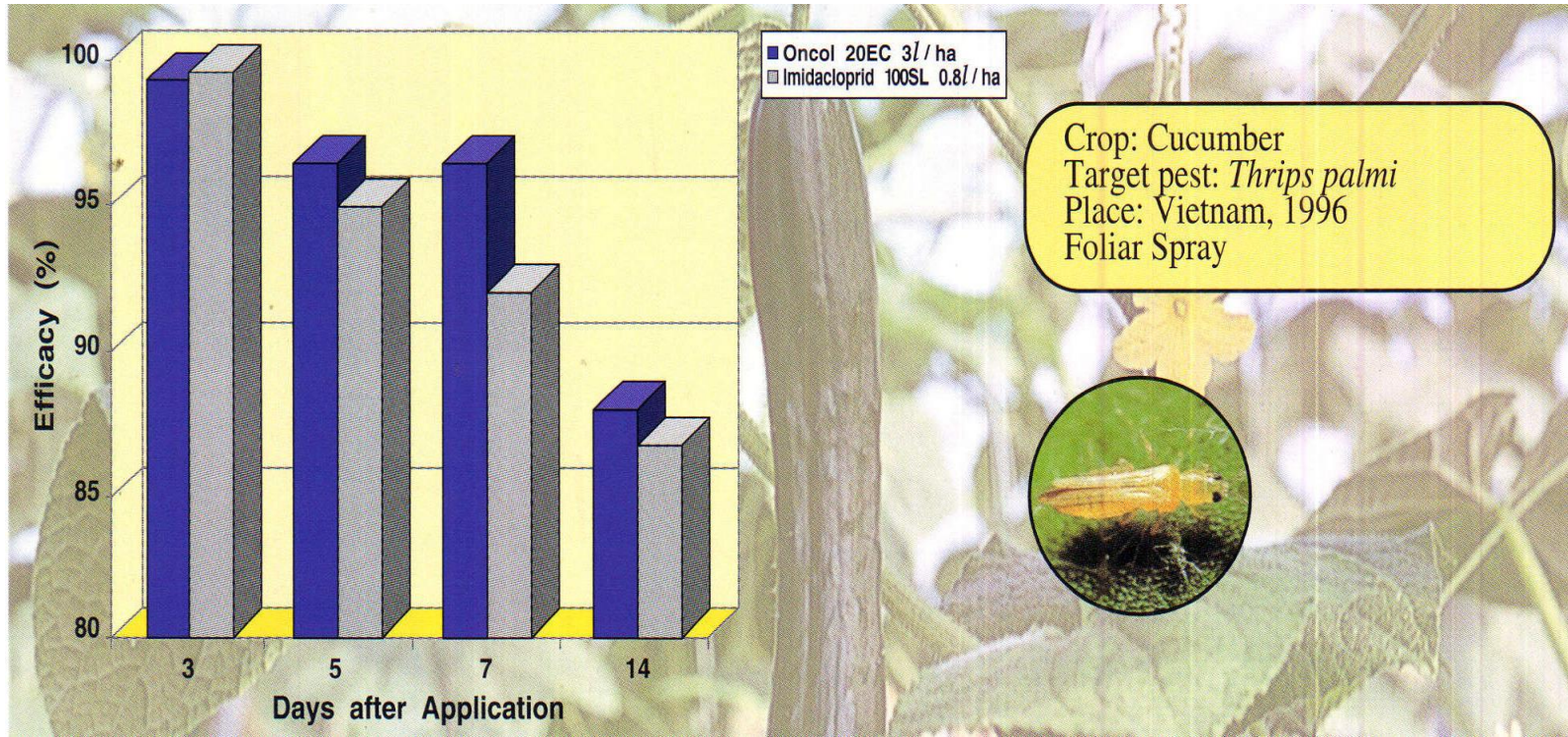
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## Potato / andes weevil



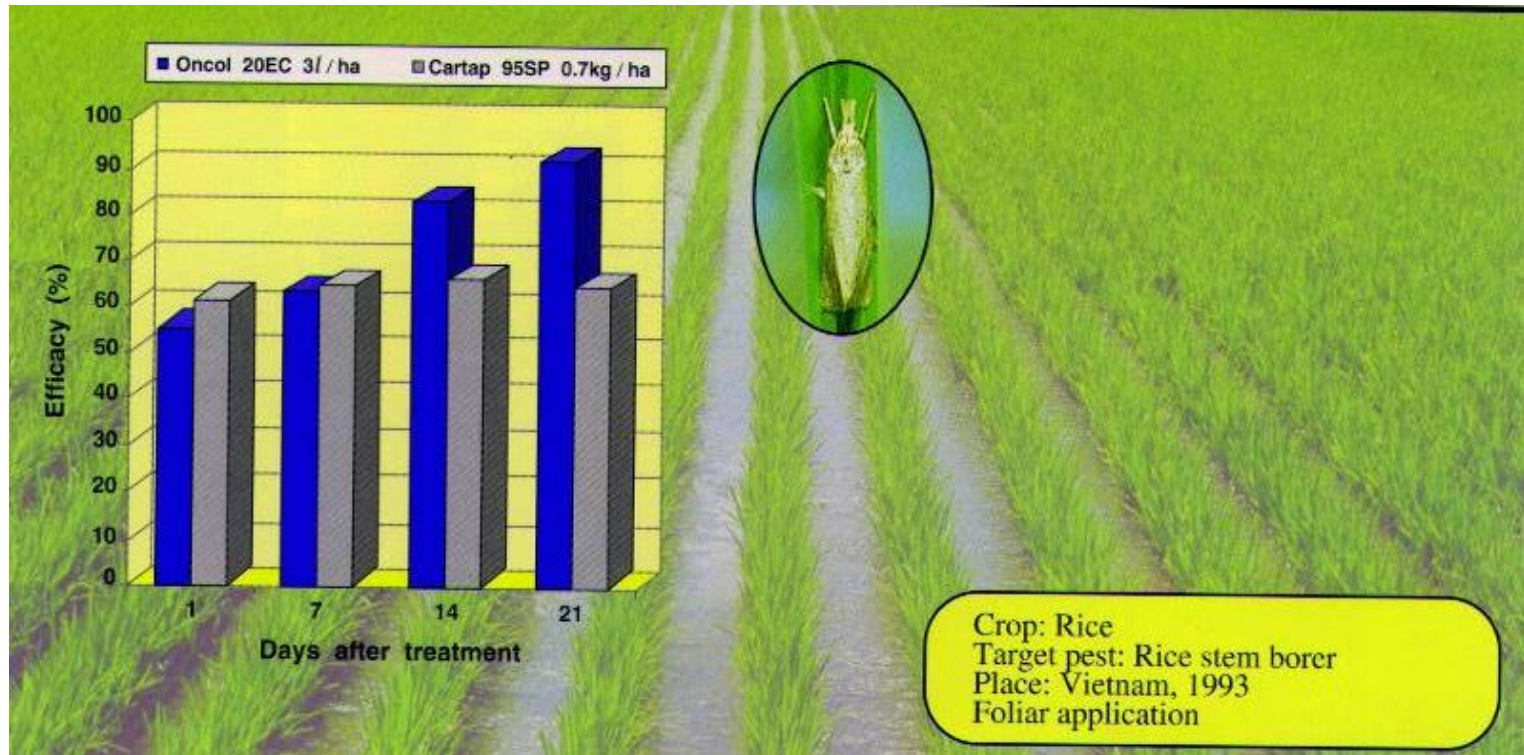
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## Cucumber/thrips



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## Rice/stem borer



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## Cabbage/Plutella and aphids

