

Decis<sup>®</sup> EC 025 is a broad spectrum contact insecticide used in the control of a wide range of insect pests in cereals, coffee, cotton, maize, vegetable crops, fruit trees and ornamentals.

The active ingredient of Decis<sup>®</sup> EC 025 Deltamethrin, belongs to a chemical class of the synthetic pyrethroids.

### Mode of Action

Decis<sup>®</sup> EC 025 acts on the insect by contact and ingestion. Decis<sup>®</sup> EC 025 has a strong lipophilic property which promotes its action on the insect in two ways:

- The insect cuticle consists mostly of lipids (fatty matters) which enhances rapid penetration of Decis<sup>®</sup> EC 025 into the insect body resulting into a good contact action and quick knockdown effect.
- Decis<sup>®</sup> EC 025 binds on the lipid layer of the plant improving its residual activity and rainfastness. In addition, Decis<sup>®</sup> EC 025 displays anti-feeding and repellent effects.

### Safety to User, Crop and Environment:

**Decis<sup>®</sup> EC 025:** Favourable toxicological and good ecotoxicity profiles.

- High safety to man and warm blooded animals.
- High safety to crop and environment when used as recommended, hence suitable for use in Integrated Crop Management (ICM) programs.
- ONE DAY Pre-harvest interval (PHI).

### Resistance Management:

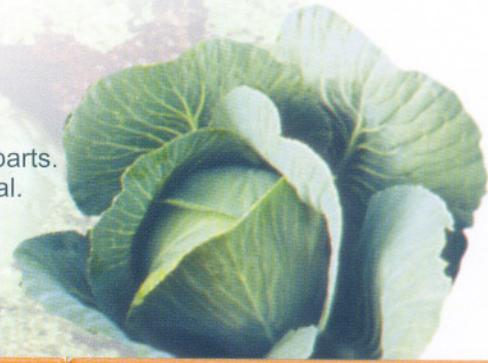
To delay the development of resistant insect pests:

- Practice Integrated Resistance Management (IRM) by avoiding the repeated use of insecticides with the same mode of action. Apply Decis<sup>®</sup> EC 025 within a spray programme that incorporates other approved products of different modes of action.
- Practice Integrated Pest Management (IPM) by supporting the populations of beneficial arthropods and Micro-fauna.
- Integrate the use of cultivar tolerance and agronomic practices.



## Application

Decis® EC 025 should be applied as a full cover spray on all foliage parts. Thorough even coverage of upper and lower leaf surfaces is essential.



## Directions for use

Crops	Pests	Rates	Timing of Application/Remarks
<b>Beans with pods</b> Fine beans French beans Runner beans	Bollworms ( <i>Helicoverpa spp.</i> ) Leafminers ( <i>Liriomyza spp.</i> ) Aphids ( <i>Myzus persicae, Aphis spp.</i> ) Thrips ( <i>Frankliniella occidentalis, Thrips tabaci</i> ) Whiteflies ( <i>Bemisia tabaci</i> )	0.3-0.5l / ha in 400-600lts of water / ha or 10-20 ml per 15-20lts knapsack	Scout your crop for pests every 2 days from germination.  Spray only when the pests are observed and early in their life stages (e.g. 1st to 3rd instar).  Continue spraying every 7-10 days based on re-infestation and pest pressure.
<b>Peas with pods</b> Mangetout Snowpeas Sugarsnaps			
<b>Bulbs</b> Onions, Shallots Leeks			
<b>Cucurbits</b> Cucumber Squash, Zucchini			
<b>Salads</b> Lettuce			
<b>Solanum</b> Tomatoes Eggplants Green peppers Potatoes			
<b>Brassicas</b> Broccoli Brussel sprouts Cabbage Cauliflower Chinese cabbage Kale Kohlrabi	Diamondback Moth ( <i>Plutella xylostella</i> ) Leafminers Cabbage Aphids ( <i>Brevicoryne brassicae</i> )	0.5l/ha in 300-500lts of water/ha or 10-15ml per 15-20lts knapsack	Scout your crop for pests every 4 days from germination or transplanting.  Spray only when pest is observed.  Continue spraying every 7-10 days based on re-infestation and pest pressure.
<b>Corn</b> Sweet Corn Baby Corn Maize	Stalkborers ( <i>Busseola fusca, Chilo spp., Sesamia spp.</i> )	0.25l/ha in 150-200lts of water/ha or 25ml per 15-20lts knapsack (10 knapsacks per hectare)	Scout your crop for pests every 7 days from germination.  Pay special attention to pest infestation when crop is at knee high stage.  Spray only when the pests are observed.  Apply a second spray if re-infestation occurs.



## Directions for use



Crops	Pests	Rates	Timing of Application/Remarks
<b>Flowers</b> Carnations Roses Statice	Caterpillars ( <i>Helicoverpa spp.</i> ) Leafminers ( <i>Liriomyza spp.</i> ) Aphids ( <i>Myzus persicae, Aphis spp.</i> ) Thrips ( <i>Frankliniella occidentalis, Thrips tabaci</i> ) Whiteflies ( <i>Bemisia tabaci</i> )	0.3l/ha-0.5l/ha	Scout your crop for pests every 2 days. Start spraying when presence of insects is first noticed. Repeat at 7-10 day intervals if re-infestation occurs.  Decis® EC 025 should be applied as a full cover spray on all foliage parts. Thorough even coverage of upper and lower leaf surfaces is essential.  <b>Note:</b> As the different species and varieties of ornamentals may differ in their sensitivity to chemical spray, users are advised always to check for crop compatibility by first treating a few plants before large scale application is undertaken
<b>Cereals</b> Barley Wheat	Bollworms ( <i>Helicoverpa spp.</i> ) Ear Aphids ( <i>Metopolophium dirhodum, Rhopalosipum spp., Schizaphis graminium, Sitobion avenae</i> )	<b>Ground application:</b> 0.4l/ha in 150-200lts of water/ha  <b>Aerial application:</b> 0.4l/ha in 30lts of water/ha	Scout your crop for pests every 7 days from germination.  Pay special attention to pest management during critical periods from booting to grain filling.  Spray only when Economic Threshold Levels (ETLs) are reached for any one pest (e.g. an average of 2 aphids per leaf and/or 1 caterpillar/metre of row).  <b>Aerial application:</b> - Apply the rate per hectare in a minimum volume of 30 / water/ha.  - The following flying heights must be maintained above the target area: • At wind speeds of 0-8 km/h-3 m; at 8-15 km/h- 2 m, at more than 15 km/h. DO NOT spray  - Do not spray during the heat of the day.  - Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray.
<b>Cotton</b>	Aphids ( <i>Aphis gossypii</i> ) Bollworms ( <i>Helicoverpa spp.</i> ) Cotton Stainer ( <i>Dysdercus spp.</i> ) Plant Bug ( <i>Lygus spp.</i> ) Thrips ( <i>Thrips tabaci</i> ) Whiteflies ( <i>Bemisia tabaci</i> )	0.4l/ha in 200-600lts of water/ha	Scout your crop for pests every 2 days from 4 weeks after germination or square formation.  Start spraying at early infestation stages.  Repeat application as necessary.



## Directions for use

Crops	Pests	Rates	Timing of Application/Remarks
<b>Coffee</b> 	Antestia Bug ( <i>Antestopsis lineaticollis</i> ) Berry Moth ( <i>Thliptoceras smaragdina</i> ) Coffee Berry Borer ( <i>Stephanoderes hampei</i> ) Lace Bug ( <i>Habrochila ghesquierei</i> ) Leafminers ( <i>Leucoptera spp.</i> ) Thrips ( <i>Diarthrotrips coffeae</i> )	0.25 l/ha in 1000lts of water /ha or 25 ml in 100lts of water.	Scout your crop for pests every 7 days.  Pay special attention to pest management during critical periods of flowering and berry development.  Spray only when the pests are observed.  Continue spraying every 7-14 days based on re-infestation pressure. (The adult is the main target to prevent egg laying).
	Brown Scale ( <i>Saissetia coffeae</i> ) Green Scale ( <i>Coccus spp.</i> ) Mealybug ( <i>Planococcus spp.</i> ) White Waxy Scale ( <i>Ceroplastes brevicauda</i> )	0.7 l/ha in 20lts of water for banding of 500 trees.	<b>For banding:</b> Paint or spray the mixture on the bottom 30 cm base of the stem. This method stops the attendant ants from climbing the plants. Feeding habits of ants encourage development of pests mentioned. Stoppage of ants climbing trees indirectly controls infestation and development of these pests.
<b>Fruit Trees</b> Citrus Pomefruit Stonefruit	Aphids ( <i>Aphis spp., Toxoptera citrii</i> ) False Codling Moth ( <i>Cryptophlebia leucotreta</i> ) Fruitfly ( <i>Ceratitidis capitata</i> ) Whiteflies ( <i>Bemisia spp.</i> )	0.5 l/ha in 1000lts of water/ha or 50 ml in 100lts of water.	Scout your crop for pests every 7 days.  Spray when the pests are first observed, continue spraying every 7-14 days based on pest pressure. The adult forms of false codling moth and fruit fly should be the main target to prevent egg laying.
Pastures, Rangelands and Field Crops	Armyworms ( <i>Spodoptera spp.</i> )	0.4 l/ha in 150-200lts of water/ha or 40 ml per 15-20 lts / knapsack (10 knapsacks per hectare).	Scout crops and surrounding rangelands weekly (daily during favourable conditions) for any signs of pest infestation.
	Desert Locust ( <i>Schistocerca gregaria</i> ) Tree Locusts ( <i>Anacridium melanorhodon</i> )	<b>Ground application:</b> 0.5 l/ha in 150-200 lts of water/ha or 50 ml per 15-20 lts of water/knapsack (10 knapsacks/ha)  <b>Aerial application:</b> 0.5l/ha in 30lts of water/ha.	Spray when the pests are observed.  Apply preferably to young life-stages (1st-2 <sup>nd</sup> instar).  Continue spraying every 2-3 weeks based on re-infestation.

