

## Product profile

Biscaya is a neonicotinoid insecticide for use as a foliar spray against:

- ▶ Aphids in broccoli/calabrese, cabbage, cauliflower, pea and potato (seed and ware) crops .
- ▶ Orange wheat blossom midge in wheat.
- ▶ Pollen beetles in oilseed rape and mustard.

Active ingredients	thiacloprid 240 g/L
Formulation	Oil Dispersion (O-TEQ)
Pack Size	1 Litre
Water volume	200 – 400 L/ha
Local Environmental Risk Assessment for Pesticides (LERAP)	None
MAPP	12471

## Key features

- ▶ Fast knockdown and persistent systemic action.
- ▶ Advanced O-TEQ® formulation technology.
- ▶ No varietal restrictions.
- ▶ No restriction on use in flowering crops.
- ▶ No LERAP.
- ▶ Rainfast in two hours.



## Crop specific information

	Maximum individual dose	Maximum number of treatments	Latest time of application (days before harvest)
Broccoli/calabrese, cabbage, cauliflower	0.4 L/ha	2	7 days
Oilseed rape and mustard	0.3 L/ha	1	30 days
Peas	0.4 L/ha	2	7 days
Potatoes: seed crops	0.4 L/ha	2	14 days
Potatoes: ware crops	0.4 L/ha	1	14 days
Wheat	0.4 L/ha	1	Up to and including flowering, anthesis just complete (GS69)

## Resistance management

Total reliance on one pesticide will hasten the development of resistance; pesticides of different chemical types or alternative control methods should be included in a planned programme.

Alternating insecticides with different modes of action is a recognised anti-resistance strategy and Biscaya should always be used in conjunction with other insecticides of a different mode of action. This includes consideration of sequences involving seed or soil treatments followed by foliar sprays. Use no more than two foliar applications of any neonicotinoid insecticide in any crop.

The crop specific guidelines on pesticide resistance management strategy in the following crop sections should also be followed.

## Broccoli/calabrese, cabbage and cauliflower

Biscaya controls cabbage aphids (*Brevicoryne brassicae*) and peach-potato aphids (*Myzus persicae*) and has activity against whitefly.

- ▶ Apply at a rate of 0.4 L/ha as aphids start to build up in the crop.
- ▶ Levels of control may be reduced where high, established populations are present. In such circumstances a second application may be required.
- ▶ On autumn/winter crops with longer growing periods destined for later harvesting, one or both of the neonicotinoid foliar applications should be targeted at *Brevicoryne brassicae* and should be applied late in the season when numbers of *Myzus persicae* are low.
- ▶ Biscaya may be used up to 2 times in a programme in alternation with non neonicotinoid insecticides of a different mode of action. Do not use Biscaya in consecutive sprays.

## Resistance management - Brassicas

Two foliar applications are permitted regardless of whether a neonicotinoid insecticide has previously been used on the crop as a seed or module treatment. Where a neonicotinoid seed or soil treatment has been used, the first subsequent foliar spray should be with a non-neonicotinoid containing product with a different mode of action.



**BISCAYA**



## Summary of recommendations

**2009  
UPDATE**

## Oilseed rape and Mustard

Biscaya controls pollen beetle including those resistant to pyrethroids.

- ▶ Apply at a rate of 0.3 L/ha at green bud stage if pollen beetle numbers are at threshold levels.
- ▶ Biscaya may be tank mixed with Proline or Prosaro in oilseed rape.

### Resistance management - Oilseed rape and Mustard

Use no more than one foliar application of any neonicotinoid insecticide on oilseed rape. Growers should consult the IRAG website for further information on the current resistance management strategy for pollen beetle, in particular the use of thiacloprid in areas of high resistance risk, or where a pyrethroid has been used but pollen beetle populations remain above the treatment threshold.

## Combining peas and vining peas

Biscaya controls pea aphids (*Acyrtosiphon pisum*) and has activity against pea midge (*Contarinia pisi*).

- ▶ Apply at a rate of 0.4 L/ha as pea aphids start to build up in the crop.
- ▶ A second application may be applied if aphid pressure remains high.

## Potatoes

Biscaya controls aphids and will reduce the transmission of potato viruses when used as part of an insecticide programme for virus prevention.

### Seed Crops

- ▶ Apply at a rate of 0.4 L/ha from crop emergence.
- ▶ Biscaya may be used up to 2 times in a programme in alternation with non-neonicotinoid insecticides of a different mode of action. Do not use Biscaya in consecutive sprays.

### Ware Crops

- ▶ Apply at a rate of 0.4 L/ha when aphids reach threshold levels.
- ▶ Should further applications be required, use a non-neonicotinoid insecticide of a different mode of action.

### Resistance management - Potatoes

Use no more than a single application of any neonicotinoid insecticide on ware potatoes, and no more than two applications of any neonicotinoid insecticide on seed potatoes.

## Wheat

Biscaya reduces damage caused by orange wheat blossom midge. Aphids present on the crop at application will also be controlled.

- ▶ Apply at a rate of 0.4 L/ha during ear emergence as soon as the threshold of adult orange wheat blossom midges has been reached.
- ▶ Use pheromone traps or yellow sticky traps to monitor adult activity in crops at risk.
- ▶ Crops at GS55-59 are most susceptible to damage. Do not apply to wheat before first spikelet visible stage (GS51).
- ▶ Consult HGCA literature or a qualified agronomist for additional information on the pest and spray thresholds.

## SOLAs

Specific Off-Label Approvals (SOLAs) have been granted for Biscaya on:

- ▶ Brussels sprouts, swede and turnip.
- ▶ Outdoor crops of Chinese cabbage, choi sum, collard, kale, Pak Choi, spring greens and tat soi.
- ▶ Outdoor crops (edible and non-edible) grown for seed.
- ▶ Outdoor ornamental plant production.

These may be used at the grower's commercial risk and it is important that users obtain a copy of the relevant SOLA before use. They may be obtained from the CRD website at [www.pesticides.gov.uk/psd\\_databases.asp](http://www.pesticides.gov.uk/psd_databases.asp)

## Mixing

- ▶ Shake the container well before use.



- ▶ Half fill the spray tank with clean water, add the required amount of Biscaya with the agitation system in operation, and fill to the required level.
- ▶ For induction bowls, half fill the bowl with water before adding Biscaya.
- ▶ Wash out the container, add the washings to the spray tank and top up with clean water.

- ▶ Continue agitation at all times during spraying and stoppages until the tank is completely empty. Spray immediately after mixing.
- ▶ Wash equipment thoroughly, immediately after use, and drain.

## Application

- ▶ Use a water volume of 200 – 400 L /ha with conventional flat fan nozzles as a medium quality spray.
- ▶ Higher water volumes should be used to ensure good coverage and penetration when crops are dense.

### Always:

- ▶ Apply Biscaya at the full recommended rate of use and in sufficient water volume to achieve the required spray penetration into the crop and uniform coverage necessary for optimal pest control.

### Avoid:

- ▶ Drift to areas outside those being sprayed having due regard to the prevailing weather conditions and the spray quality being used.

### DO NOT:

- ▶ Use in consecutive sprays.
- ▶ Apply to wet foliage or if rainfall or irrigation is imminent.

## Compatibility

Biscaya is physically compatible with a wide range of fungicides, insecticides and micro nutrients. For the current list please visit [www.bayercropscience.co.uk](http://www.bayercropscience.co.uk) click on the documents section and select tank mixes from the menu.

For more information visit the insecticides section at [www.bayercropscience.co.uk](http://www.bayercropscience.co.uk)

Biscaya contains thiacloprid. Proline contains prothioconazole. Prosaro contains prothioconazole and tebuconazole. All products and O-TEQ are registered trademarks of Bayer.

Always read the label: use pesticides safely.



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