



Diamondback Moth Control with Dipel DF

- There are many reports this month of unusually high numbers of diamondback moths arriving in the UK from the continent. Diamondback moth causes feeding damage in brassicas, but of particular concern in collards and kale as well as cauliflower, cabbage and broccoli. Adults lay their eggs on the leaves, with the larvae stripping the leaf. With UK temperatures, it is possible to host 2 or 3 life cycles. Eggs will hatch within 3 days of being laid, and a complete generation will take around 5 weeks.
- An IPM approach has to be considered, the Diamondback moth has shown resistance to pyrethroids and diamides (such as chlorantraniliprole). DiPel DF is a biological insecticide based on naturally occurring *Bacillus thuringiensis* (Bt). It is a highly selective insecticide for use against caterpillars (larvae) of lepidopterous insects

KEY BENEFITS

- Powerful and targeted control of Lepidoptera pests.
- Stops feeding immediately.
- Does not harm bees, beneficials, mammals or fish.
- Biological insecticide - Organic classification.
- Nil withholding period.
- No LERAP.
- Once dry, DiPel DF has excellent rainfastness.
- Multiple applications.



MODE OF ACTION

- DiPel DF is targeted to lepidopterous species because of their high gut pH (9.5 – 10.5).
- The Bt toxin crystals dissolve in the midgut.
- The Bt toxins are activated and attach to midgut receptors.
- Pores form in the cell wall and cells rupture.
- Bt spores will invade the insect body, death follows.



APPLICATION ADVICE

DiPel DF contains *Bacillus thuringiensis* var *kurstaki* with a potency of 32,000 IU/mg
Easy to use WDG formulation supplied in a 0.5Kg pack.

Water Volume:	Field crops 400 - 1000L/Ha. Protected Crops 400-2000L/Ha
Rate of Use :	0.75 - 1Kg DiPel DF *
Maximum number of applications:	No restriction
Latest time of application:	No restriction

*Use lower rate for normal infestation of young larvae and higher rate for heavy infestations or larvae at more advanced growth stages. In case of infestation with cabbage moth (*Mamestra brassicae*) use higher rate (DiPel DF provides only some control of this pest).

Apply DiPel DF as soon as first larvae are seen, preferably during an active feeding period. Repeat every 7-10 days until the end of the hatching period. Avoid high sunlight intensity. Ensure good coverage.

	Crops
Label Crops	Amenity vegetation, aubergine (protected), broad bean - fresh (protected), broccoli/calabrese (outdoor), brussels sprout (outdoor), cabbage (outdoor), cauliflower (outdoor), combining pea (outdoor), cucumber (protected), dwarf french bean (protected), edible podded pea (outdoor), globe artichoke (outdoor), leek (outdoor), ornamental plant production, pepper and chilli (protected), raspberry, runner bean (protected), strawberry, tomato (protected), vining pea (outdoor)
EAMU Crops Please check CRD website. This list is not complete	Forestry, outdoor sweetcorn, blackberry, other rubus hybrids, aubergine (protected), cayenne pepper (protected), red beet (outdoor), leek (outdoor), watercress (outdoor and protected), bulb onion (outdoor), garlic (outdoor), shallot (outdoor), broad bean (outdoor), dwarf French bean (outdoor), runner bean (outdoor), Outdoor carrot, Outdoor horseradish, Outdoor parsley root, Outdoor parsnip, Outdoor salsify, Outdoor bilberry, Outdoor blackcurrant and redcurrant, Outdoor blueberry, Outdoor cranberry, Outdoor gooseberry, Outdoor other vaccinium species, Outdoor whitecurrant, Outdoor calabrese, Outdoor celery, Outdoor choy sum, Outdoor collards (including spring greens), Outdoor kale, Outdoor oriental cabbage, Outdoor rhubarb, Protected broccoli, Protected Brussels sprout, Protected cabbage, Protected calabrese, Protected cauliflower, Protected celery, Protected choy sum, Protected collards (including spring greens), Protected kale, Protected oriental cabbage, Protected rhubarb

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DiPel DF is a trademark of Valent BioSciences

Details of application rates and timings are given in Nufarm labels and product literature; both of which can be accessed from our website www.nufarm.com/uk. Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00 - 17.00

Use plant protection products safely. Always read the label and product information before use. For label and safety information, refer to the Nufarm website www2.nufarm.com/uk. Nufarm UK Ltd, Wyke Lane, Wyke, Bradford, BD12 9EJ.