

How to use Bt (Bacillus thuringiensis) sprays



Bt stands for *Bacillus thuringiensis*, a species of bacteria that is formulated as an insecticide to control caterpillar pests. There are two sub-species, *B.t. kurstaki* (e.g. Dipel and Delfin) and *B.t. aizawai* (e.g. XenTari) which contain different toxins. Bt acts as a stomach poison and must be eaten by the caterpillars. Alternate between spraying each of the sub-species.

The following are factors that IPM Technologies P/L considers important when using Bt's:

1. Check the "USE-BY" date or "Date of Manufacture". It should be no more than 2 years after the batch date.
2. Use a high water volume to ensure good coverage, especially on larger, leafy plants. In most vegetable crops at least 500 L/ha.
3. Spray after 3:00pm to avoid peak UV radiation.
4. Use a sticker such as Nu-Film-P, FilmStar, FlexStic or Bond.
5. Avoid overhead watering or rain for 24 hours after spraying.

Other factors that will influence the effectiveness of the sprays:

1. Use a feeding attractant such as milk powder or molasses.
2. Target small caterpillars.
3. Make sure the tank and lines are clean of other pesticides (especially Synthetic Pyrethroids).
4. Use a wetting agent.
5. Use the right rate.
6. Ensure that the water is a neutral pH.
7. Use as part of an IPM programme.

The Kangaroo Island Landscape Board gratefully acknowledges [IPM Technologies](https://ipmtechnologies.com.au/) (<https://ipmtechnologies.com.au/>) for this information.

