



Actual name *Bacillus thuringiensis var. kurstaki*

Type of product Bacterial insecticide

How Btk is made Btk is grown from soil bacteria that occur naturally worldwide. It is cultured by fermenting grains and potatoes with fish or corn meal, similar to brewing beer. The final product contains 90% water, the leftover growth medium, carbohydrates, inert ingredients approved as food additives, and the active ingredient.

How Btk works The active ingredient is a toxic protein produced by bacteria when the product is fermented. The protein destroys the caterpillar's gut, causing the insect to stop feeding and also allowing bacteria to infect it. The caterpillar typically dies within a few days.

What Btk affects Different strains of Bt affect different species of insects. The kurstaki strain affects the caterpillars of moths and butterflies that ingest it. Not all species of caterpillar are affected by Btk but gypsy moth, tent caterpillars, and Karner blue butterflies are all susceptible. We do not use Btk where we know there are Karner blue butterflies or other threatened or endangered species of moths and butterflies that could be harmed. Numerous studies have documented no serious harm to humans, pets, wild animals, birds or fish. As a commonsense precaution, people with compromised immune systems or those with chemical sensitivities or allergies should avoid exposure.

Application rate Btk is applied at the rate of 3/4 gallon per acre.

Application timing Most effective if applied when gypsy moth caterpillars have hatched and begun feeding, usually mid-May in southern Wisconsin through early June further north.

Spraying Program In 2008, Btk is proposed for treatment in 16 Wisconsin counties as part of the DNR Suppression Program. Those counties are: Adams, Brown, Columbia, Dane, Door, Green Lake, Juneau, Marathon, Marinette, Marquette, Menominee, Milwaukee, Outagamie, Rock, Sauk, and Waushara.

Why we use Btk

- Breaks down in sunlight within days
- Highly effective; around 90% mortality of gypsy moth caterpillars in treated areas
- Generally harmless to people, animals, and insects other than caterpillars
- Readily available