



Actual name Foray, containing *Bacillus thuringiensis var. kurstaki (Btk)*

Type of product Bacterial insecticide

How Btk is made Btk is a strain of a common soil bacteria that occurs naturally. 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 interacts with bacteria in the caterpillar's digestive tract to kill the caterpillar within a few days.

What Btk affects Different strains of *Bacillus thuringiensis* 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 apparent toxicity for humans, pets, wild animals, birds, honeybees, or fish. Due to rare cases of mild, short-lasting allergic reactions by humans, you may wish to stay indoors with your windows closed during a spray if you have severe food or chemical sensitivities.

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 The current year's spray program information, including maps of the proposed spray sites, will be available online starting in early February at the website below. Information is also available by phone or by emailing dnrfrgypsymoth@wisconsin.gov.

Why we use Btk

- Breaks down in sunlight within days
- Highly effective; around 90-95% mortality of gypsy moth caterpillars normally seen in treated areas
- No apparent toxicity to people, animals, and insects other than caterpillars
- Readily available

**For more information, call 1-800-642-MOTH
or visit Wisconsin Gypsy Moth on the Web at <http://gypsymoth.wi.gov>**