



# type of product

Foray, containing Bacillus thuringiensis var. kurstaki (Btk), is a strain of a common soil bacteria that occurs naturally. It is a bacterial insecticide 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 spongy 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 and timing

Btk is applied at the rate of 3/4 gallon per acre. It is most effective if applied when spongy moth caterpillars have hatched and begun feeding, usually mid-May in southern WI through early June in northern part of the state.

#### why we use Btk

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

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

1-800-642-MOTH (6684) | spongymoth.wi.gov