Mosquito control with Bti damages wetland food webs

By Elisabeth Beaubien, plant ecologist

The toxin BTi, (Bacillus thuringiensis israelensis) is produced by a bacterium that occurs naturally in the soil.

BT is another type of this bacteria, used to genetically modify crops.





DDDDT...FOR CONTROL OF HOUSEHOLD PESTS



Propaged by the

Bureau of Entomology and Plant Quarantine Agricultural Research Administration United States Department of Agriculture, and the United States Public Health Service Federal Security Agency

Washington, D. C.

Issued March 1947





Research by Dr. Brigitte Poulin

- in wet areas treated with BTi, half the dragonflies disappeared
- •One nest of house martins needs 700,000 mosquitoes to feed one nest of chicks. These birds provide excellent mosquito control.



Dr. Bruhl, in Germany, also studies Bti.

He discovered that it kills non biting midges which are important food for birds, dragonflies, fish and frogs.

He found that in wetlands, the areas with active insect-eating birds decreased by almost 90% over 40 years! These birds are in trouble.



A non-biting midge (chironomid) - has no mouth parts!

In Germany, the law now prevents use of BTi in conservation areas.

Do we want to continue to lose birds, frogs, and other insect eaters?

Edmonton city should stop spraying BTi, to preserve wildlife.

There are many other possible ways to control mosquitoes (including traps).

Lets' use the saved money to increase public understanding of the ecological impacts of mosquito control!