

NATURALYTE INSECT CONTROL
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Abstract

Naturalyte insect control is the name for DowElanco's new proprietary biologically based Insect Control Products. They are the result of a long dedicated effort to discover biological based products which have broad application in agriculture. Naturalytes are defined as naturally produced metabolites from living organisms that selectively control pests. To qualify within DowElanco's naturallyte class, the metabolites must possess a high level of efficacy that is equivalent or superior to commercial standards and at the same time possess human and environmental compatibility that is equivalent to that provided by most biological products. The common name of the active ingredient of the first product in the naturallyte class is spinosad. Spinosad received approval for a 1995 Experimental Use Permit (EUP) that resulted in over 100 evaluations of the product. These trials demonstrated that spinosad couples the efficacy of synthetic insecticides with the environmental compatibility of biologicals.

Characteristics of Products in the Naturalyte Class

Efficacy - Products in the naturallyte class offer outstanding efficacy on target pests.

Environmental Compatibility - Products in the naturallyte class have an extremely favorable toxicology profile as it relates to mammals, birds, aquatic organisms, and beneficial insects and mites. Naturalytes are produced by living organisms so they degrade to natural organic building blocks.

Integrated Pest Management (IPM) - Naturalytes have a high level of efficacy allowing you to scout and treat only as needed. Naturalytes are also selective controlling only the pests and leaving beneficial insects to provide additional control.

Resistance Management - Naturalytes have a unique mode of action allowing you to rotate them with any other class of products to delay or avoid resistance treadmills.

Cotton Pest Targets and Tracer* Naturalyte Insect Control

The spinosad based products in cotton will be marketed as Tracer* naturallyte insect control. Tracer* will be recommended for control of tobacco budworm (*Heliothis virescens*), cotton bollworm (*Helicoverpa zea*), beet armyworms (*Spodoptera exigua*), fall armyworms (*S. frugiperda*), soybean loopers (*Pseudoplusia includens*), cabbage loopers (*Trichoplusia ni*), cotton leafperforator (*Bucculatrix thurberiella*), and saltmarsh caterpillar (*Estigmene acrea*).

Registrations and Availability

The Tracer* naturallyte insect control registration was submitted to the EPA during 1994. In 1995 it was placed in the EPA reduced risk pesticide category. The reduced risk classification will result in an expedited review. Registration is currently anticipated during 1996. An expanded testing program is also planned for 1996 with the full commercial launch following in 1997.

Future Naturalytes

Naturalyte insect control is an example of DowElanco's commitment to providing products that are both efficacious and safe. DowElanco is aggressively pursuing additional natural sources, including spinosad analogs. Additional natural sourced products will be brought forward as rapidly as possible if they can meet the standard for combined efficacy, selectivity, and environmental compatibility set by Tracer* naturallyte insect control.

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