

LEPIDOCIDE™

BIOLOGICAL INSECTICIDE

LEPIDOCIDE™ is a biological insecticide meant to protect forest, agricultural crops and parks from caterpillars of lepidopterous insects, including silk moths, black arches, geometrid moths, pea moths, sod webworms, cabbage and turnip white butterflies, fall webworms, thorn butterflies, owl-moths, moths, etc. Lepidocide is approved to be applied in agriculture and forestry, farmland and urban plantations.

PRODUCT FORMULATION

Product active agent is bacterial spores and protein crystals (delta-endotoxin) of *Bacillus thuringiensis* var. *kurstaki*. Inert fillers provide product integrity, flowability, adhesiveness and stability. During first 4 hours after ingestion, contained in the product protein toxin causes general paralysis of insect alimentary tract. Later, during 12-24 hours, general bacterial hematosepsis develops in insect. By sufficient dose, caterpillars stop feeding, moving, change their colour, shrivel, turn black and die within 3-7 days. Sublethal doses provoke metamorphosis disturbance, lowering of reproductive performance and viability of next generations.



Product main characteristics

Item	Standard	
Commodity form	Suspended concentrate (SC and SC-M)	Powder
Appearance and colour	Grayish-brown thick suspension	Pale-gray to beige-brown powder
Biological activity, UA/mg, n.l.t.	2 000	3 000

Commodity forms:
Suspended concentrate Lepidocide SC and SC-M, Powder Lepidocide P

Shelf life:
Lepidocide™ SC and SC-M – 12 months at (+5)-(+30)°C
Lepidocide™ P -18 months at (-30)-(+30)°C

Packaging:
Lepidocide™ SC and SC-M is packed by 20-50 L into polyethylene drums. Lepidocide™ P is packed by 15 kg, 20 kg into hermetically sealed polyethylene bags.



Lepidocide™ SC, SC-M consumption rates to control forest pests

Crop	Pests	Consumption rate
Coniferous species	Siberian and pine moth, black arches, geometrid moths, pine noctuide	3 l/ha
Oak and other broadleaved trees	Gypsy moth, geometrid moths, brown-tail moth, Aleimma loeflingiana	3 l/ha

Lepidocide™ consumption rates to control most abundant leaf-eating pests

Crop	Pests	Product consumption rate	
		Suspended concentrate	Powder
Vegetable crops	Cabbage white and turnip butterflies, cabbage moth, grass moth, meadow moth	0,5-1,0 l/ha	0,5-1,0 kg/ha
Fruit crops	Apple, codling and ermine moths, fall webworm, moth	1-3 l/ha	1-3 kg/ha
Berries	Leaf-roller, gooseberry fruit and geometrid moths, gooseberry sawfly	1-1,5 l/ha	1-1,5 kg/ha
Grapes	Grape moth	2-3 l/ha	2-3 kg/ha

Lepidocide™ in forestry

Lepidocide™ in form of suspended concentrate (SC and SC-M) has been applied in forestry since 1997. Annually Lepidocide™ effectively protects over 50-300 thousands ha of forest. In forestry, Lepidocide™ is allpied by means of plant spraying with groud equipment or aircrafts. Suspended concentrate may be used as a finished product or diluted by water. Maximum protective effect of Lepidocide application is achieved when treating trees and bushes at early (I-III) larvae instar at (18-30)°C air temperature. Experience of applying Lepidocide™ to protect forest has demonstrated produt high efficiency (85-90%) to control phytophages and its harmlessness for beneficial entomofauna of biocenosis.

Lepidocide™ in agriculture

In agriculture, Lepidocide™ is applied by means of plant spraying with ground equipment. Suspended concentrate is applied as finished product or diluted by water. Prior to application, a aqueous suspension is prepared by dissolving powder in water. The product is recommended to be applied in dry weather in the morning or evening. Maximum protective effect of Lepidocide application is achieved when treating trees and bushes at early (I-III) larvae instar at (18-30)°C air temperature.

PRODUCT MAIN ADVANTAGES

- Selectively destroys wide variety of lepidopterous pests.
- Is not phytotoxic
- Is not accumulated in plants and fruits
- Ensures eco-friendly and safe products
- Is applied at any stage of plant growth
- Safety interval is 5 days, thus, crops may be treated shortly before harvesting
- Is compatible with chemical pesticides and biological products when applied in tank mixtures and within integrated plant protection system
- May be applied to solve the problem of pest resistance to chemical pesticides.