

DERISOM[®]
Pongamia glabra
BioInsecticide

Introducing DERISOM[®]

DERISOM[®] is a BioAcaricide / BioInsecticide based on botanical extract of *Pongamia glabra*/*Pongamia pinnata* (Karanja tree). DERISOM[®] contains karanjin as Karanjin (Capital K) active ingredient and is formulated as 2% Emulsifiable Concentrate (20,000 ppm). Being a botanical extract of DERISOM[®] is non phytotoxic.

Data Package for DERISOM[®] is submitted to the Indian Pesticides Regulatory Authority - Central Insecticides Board, Govt of India and the same is under process for registration.

A Historical Brief

Karanja plant and its uses have been described in old Ayurvedic scriptures.

Karanjin -the bitter principle of Karanja was first extracted by Limaye in 1925 by shaking the oil with alcohol. Rajagopalan et al in 1946 obtained kanugin II from the karanja roots. The structures of karanjin and kanugin were established through degradation and synthesis by Seshadri and Venkateshwarulu in 1941 and by Rao and Seshadri in 1946.

Mode of Action

Alkaloids present in DERISOM[®] work as Insect Growth Regulator and act as an anti feedant on adult and nymphs of mites and other sucking pests like thrips, jassids and white flies.

It is recommended that BioPesticides are sprayed in early hours of morning or late afternoon for better results. UV radiation in peak sunny hours of the day may reduce the bio efficacy of BioPesticides.

Method .of Application

Foliar application: Mix DERISOM[®] @ 2ml/ L of water and spray on crop canopy.

The spray volume depends upon the crop canopy.

Target Pests

DERISOM® effectively controls mites and scales of Pigeon pea. It controls mites like red spider mites, scarlet mites, yellow mites, purple mites and other types of mites. Sucking insects like Thrips, Jassids, Aphids and Whiteflies, Flea beetles, Armoured Scales and other sucking insects.

Crops

DERISOM® is suitable for application on Cereals , Millets , Pulses, Oilseeds, Fibre Crops , Sugar Crops , Forage Crops , Plantation crops ,Vegetables, Fruits, Spices , Flowers , Medicinal crops , Aromatic Crops , Orchards and Ornamentals.

Compatibility

DERISOM® is compatible with BioPesticides and with conventional chemical pesticides.

Shelf Life

DERISOM® is stable for a period of 24 months from the date of manufacturing.

Mass Composition

CONSTITUENT	W/W %	FUNCTION
Karanjin	2.0%	Active
Debitterized Karanjin oil	30%	Active
n-Butanol (Solvent)	31%	Inactive
Butyl acetate(Solvent)	22%	Inactive
Emulsifier (Polyoxyethylene (20) Sorbitan monooleate)	15%	Inactive

BIOLOGICAL COMPOSITION

CONSTITUENT	POTENCY
Karanjin	20,000 ppm

Free from Salmonella, Shigella , E.Coli

Cautions for handling and use of product

1. Direct incidence of DERISOM® on eyes may be dangerous. It is mandated that the operator wears eye goggles, face mask and protective clothing while handling the product.

2. Do not spray against the wind. The product must be diluted in sufficient water once the sealed container is opened.
3. Avoid inhalation and skin contact while diluting as there could be spillage / splashes of the product
4. Mixing and spraying equipment is to be thoroughly rinsed with water and detergent before using the same equipment for spraying other pesticides.
5. Surplus spray solution should not be disposed in crop lands / stagnant water / flowing water where there is a possibility of causing pollution to natural resources.
6. Do not eat / drink / smoke during application.

Symptoms and Antidotes

Symptoms: Occasional symptoms include head ache and nausea.

Antidote: In the case of ingestion: symptomatic treatment is advised. In the case of contact with Eyes: Flush with water liberally for 20 minutes. In case of Skin contact, wash the affected area with plenty of water and soap.

Citations

Agrow Projects - a reputed Pesticides Industry publication (PJB Publications, UK) monitoring future promising research products has cited DERISOM® in their recent publication and it is the only product of its kind in the world.

There are many citations in public domain on effectiveness of *karanjin* as a BioInsecticide.

Commitment to Nature

- DERISOM® can be used along with conventional chemical pesticides thus optimizing pesticide usage.
- DERISOM® is safe to natural parasites, pollinators and predators.
- DERISOM® can be used as an effective component in IPM programmes, thereby leading to a reduction in use of chemical pesticides and creating a safer environment.
- DERISOM® does not lead to residue problems and doesn't cause resistance or resurgence problems.

Benefits from DERISOM®

- DERISOM® effectively controls most of the economically important pests such as mites and scales of pigeon pea, red spider mites, scarlet mites, yellow mites, purple mites and other types of mites. Sucking insects like Thrips, Jassids, Aphids and Whiteflies, Flea beetles, Armoured Scales and other sucking insects.
- Pest reduction leads to improved plant health and thereby increased crop productivity.