LECONTVIRUS WP

Nuclear Polyhedrosis Virus BIOLOGICAL INSECTICIDE FOR REDHEADED PINE SAWFLY (NEODIPRION LECONTEI) FOR FOREST, WOODLAND AND ORNAMENTAL USE

WETTABLE POWDER

RESTRICTED

GUARANTEE: Polyhedral inclusion bodies of redheaded pine sawfly nuclear polyhedrosis virus....... 0.050% (Contains at least 20 X 10⁹ polyhedral inclusion bodies per gram)

READ THE LABEL BEFORE USING

CAUTION: SKIN and EYE IRRITANT. Avoid contact with skin, eyes or clothing. Avoid inhalation.

REGISTRATION NUMBER 29936 PEST CONTROL PRODUCTS ACT

NET CONTENTS	GRAMS
USE BEFORE:	

Natural Resources Canada Canadian Forest Service Great Lakes Forestry Centre 1219 Queen St. E. Sault Ste. Marie, Ontario P6A 2E5 (705) 541-5517 NOTICE TO USER: RESTRICTED: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

NATURE OF RESTRICTION: This product is to be used only in the manner authorized; consult local pesticide regulatory authorities about use permits which may be required.

RESTRICTED USE

This product is to be used only under the direct supervision of Federal or Provincial Forestry Service personnel.

DIRECTIONS FOR USE

Lecontvirus WP is a highly selective insecticide for the control of redheaded pine sawfly larvae. Applications should be made when most of the eggs have hatched and larvae are in the first and second instars. It is also effective on third instar larvae, but should not be applied after the majority of larvae reach the fourth instar. A higher dosage is recommended for third and fourth instar larvae. Fourth instar larvae can easily be recognized by black spots which are not present on the earlier instars. Larvae must eat polyhedra to become infected. If one larva in a colony becomes infected, it will transmit the disease to the rest of the larvae in that colony.

Lecontvirus WP contains virus-infected redheaded pine sawfly larvae which have been freeze-dried and ground to a fine powder.

AERIAL APPLICATION

For aerial application, it is recommended that Lecontvirus WP be used with conventional boom and nozzle or Micronair® spinning nozzles on fixed wing aircraft or Beecomist® spinning nozzles with drilled sleeves on helicopters. Aircraft should be calibrated to deliver droplet diameters of 100 - 250 microns. To ensure a good deposit, Lecontvirus WP should be applied only under conditions of highest possible relative humidity and low wind velocity i.e., in the early morning or early evening when good spray conditions prevail. Do not mix Lecontvirus WP with any materials other than water.

RATES FOR AERIAL APPLICATION

Larval	RATE OF LECONTVIRUS WP	Water*	TOTAL EMITTED
instar	per hectare		Volume per hectare

		Grams	PIB	Litres	Litres
	1 st & 2 nd	0.25	$5x10^{9}$	9.4	9.4
			(5 billion polyhedral		
suc			inclusion bodies)		
atic					
Plantations			$10x10^9$		
Pla			(10 billion		
	3 rd & 4 th	0.50	polyhedral	9.4	9.4
			inclusion bodies)		

GROUND APPLICATION

This product may be applied from the ground with a variety of equipment and using a variety of techniques. With backpack mistblowers, every third or fourth row in a plantation can be treated taking advantage of any wind to carry the spray cloud across rows. With pressurized, hand-held hydraulic sprayers, individual colonies can be sprayed. Here, particular care should be taken to treat those at the tops of the trees as virus will spread to those located lower on the trees. Usually redheaded pine sawfly are not evenly distributed throughout plantations and particular attention should be given to obtaining good spray coverage on "hot spots". Do not mix Lecontvirus WP with any materials other than water.

RATES FOR GROUND APPLICATION

	Larval	RATE OF LECONTVIRUS WP		Water*	TOTAL EMITTED
	instar	per hectare			Volume per hectare
		Grams	PIB	Litres	Litres
	1 st & 2 nd	0.25	$5x10^{9}$	20	20
			(5 billion polyhedral		
Su			inclusion bodies)		
			ŕ		
Plantations			$10x10^9$		
Pla			(10 billion polyhedral		
	3 rd & 4 th	0.50	inclusion bodies)	20	20
			,		

MIXING FOR AERIAL AND GROUND SPRAY APPLICATIONS

Weigh the quantity of Lecontvirus WP required for application that day. Suspend the material in water using 100 mL of water for each 5 grams of Lecontvirus WP. Mix thoroughly using a Waring blender or similar equipment and sieve through a 20µm mesh sieve. Measure the required volume of this concentrate and dilute with the appropriate volume of water for aerial or ground application. Agitate thoroughly. With mistblowers and handheld pressure sprayers, mix material directly in their tanks. Mix only the amount of material to be sprayed that day and do not store the final diluted preparations.

KEEP OUT OF REACH OF CHILDREN

PRECAUTIONS:

Skin and Eye irritant: Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Wear a long-sleeved shirt and long pants, socks, shoes, protective gloves, dust/mist filtering respirator (MSH/NIOSH approval number prefix TC-21C) or a NIOSH-approved respirator with any N-95, R-95, P-95 or HE filter for biological products, as well as eye goggles or face shield during all handling, clean-up and repair activities. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Primary eye irritation studies indicate that the pesticide is a severe eye irritant and may cause irreversible eye damage. An emergency eye flushing apparatus must be present where mixing/loading/application take place. Remove contaminated clothing and wash clothing before re-use.

Harmful if inhaled. DO NOT breathe dust.

Avoid inhalation. Wear mask or respirator during preparation and application of this material. Do not spray into lakes, streams or ponds.

FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Product is a severe eye irritant, possibly causing irreversible damage to the cornea. Treat symptomatically.

ENVIRONMENTAL HAZARDS

As this pesticide is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats with this product.

DO NOT clean equipment or dispose of wastes in any water supply.

STORAGE

Store this product at 2°C for a period of up to one year from the date of manufacture.

DISPOSAL

- 1. Triple or pressure rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.
- * Chlorinated or highly alkaline water should not be used in tank mixes. Tank mix pH should be between 5.0 and 8.0. If only chlorinated water is available, it should be allowed to stand for 24 hours before use.

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