

Product Name: Sero-X Insecticide  
APVMA Approval No: 81070/120291



Label Name:	Sero-X Insecticide
-------------	--------------------

Signal Headings:	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
------------------	--

Constituent Statements:	400g/L CLITORIA TERNATEA EXTRACT
-------------------------	----------------------------------

Statement of Claims:	For the control or suppression of green mirids, silver leaf white fly (biotype b) and heliothis in cotton, and suppression of diamondback moth in brassicas as specified by the Directions for Use table.
----------------------	---

Net Contents:	1-1000 L
---------------	----------

Restrains:	<p><b>RESTRAINTS</b></p> <p><b>SPRAY DRIFT RESTRAINTS</b></p> <p>DO NOT apply with spray droplets smaller than a FINE spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the British Crop Production Council guideline.</p> <p>DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour, as measured at the application site.</p> <p>DO NOT apply during surface temperature inversion conditions at the application site. Users of this product MUST make an accurate written record of the details of each spray application within 24 hours following application, and must KEEP this record for at least 2 years. The spray application details that must be recorded are:</p> <p>1 date with start and finish times of application 2 location address and paddock(s) sprayed 3 full name of this product 4 amount of product used per hectare and number of hectares applied to 5 crop or situation and weed or pest 6 wind speed and direction during application 7 air temperature and relative humidity during application 8 nozzle brand, type, spray angle, nozzle capacity and spray system pressure measured during application 9 name and address of person applying this product. (Additional record details may be required by the state or territory where this product is used.)</p> <p><b>MANDATORY NO-SPRAY ZONES</b></p> <p>DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 5 metres downwind from the application area.</p>
------------	--

Directions for Use:	This section contains a file attachment.
Withholding Period:	Harvest: Not required when used as directed
General Instructions:	This section contains file attachment.
Precautions:	Re-entry: Do not allow enter treated areas until spray has dried. If prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.
Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT DO NOT contaminate wetlands or watercourses with this product or used containers. Tail drains which flow from treated areas should be prevented from entering river systems.
Storage and Disposal:	KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.  Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.
Safety Directions:	Will irritate eyes. Avoid contact with eyes. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). If product in eyes wash it out immediately with water Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.
First Aid Instructions:	First aid is not generally required. If in doubt, contact a Poisons Information Centre (e.g. phone Australia 13 11 26) or a doctor.
First Aid Warnings:	

---

## DIRECTIONS FOR USE

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Cotton	Cotton bollworm ( <i>Helicoverpa armigera</i> ) Native budworm ( <i>Helicoverpa punctigera</i> ) Silverleaf whitefly (biotype b) ( <i>Bemisia tabaci</i> ) Green mirid ( <i>Creontiades dilutus</i> )	Qld, NSW and WA only	2 L / ha	<p>Apply as indicated by field checks and pest presence thresholds to a maximum of 5 applications per growing season. Ensure good coverage. Note treatment effects may not be seen for 3 or more days. Suppression of pest numbers rather than control may occur if sufficient exposure is not possible. Best results are obtained when Sero-X Insecticide is applied before pest populations build up to damaging levels.</p> <p>Budworm and Bollworm: Applications should be timed to coincide with egg hatch and when small larvae up to 5 mm are present. A second application at 7 days may be required if conditions favour pest development.</p> <p>Silver leaf white fly, Green mirid: Apply at recommended threshold levels as</p>
				indicated by field checks. A repeat application may be required at 14-20 days if conditions favour pest development.
Brassicas	Diamondback moth ( <i>Plutella xylostella</i> )	All states	2 L / ha	Apply as soon as diamondback moth appears and approach threshold levels. Ensure good coverage with a maximum 7 day retreatment interval to ensure that there is a constant exposure of new larvae to Sero-X.

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL  
UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**

---

## GENERAL INSTRUCTIONS

Sero-X Insecticide contains the active constituent *Clitoria ternatea* Extract. *Clitoria ternatea* extract includes many different biologically active compounds which in combination reduce the economic damage caused by target pests through insecticidal and behaviour modification activity such as egg laying disruption and anti feeding. Sero-X Insecticide does not rely solely on direct mortality to provide crop protection.

It can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing pests. This product is suitable for use in Integrated Pest Management (IPM) programs. Effects on insect predators or parasites have been demonstrated as low.

The biological extract in Sero-X is comprised of many bioactive compounds and as a result will have different modes of action. The likelihood of resistance developing to all of the bioactive compounds is considered low. However, as the product requires repeated treatment for good results, it is suggested that this product is incorporated into an Integrated Pest Management plan where insect management products are rotated during the growing season to minimise resistance development to any insecticide product being used.

### MONITORING

Detailed checks of pest numbers as per best practice pest management requirements are recommended to ensure application can be made at the earliest suitable time to achieve the best result.

### MIXING

Shake or agitate the container prior to mixing with water. Add the required quantity of Sero-X Insecticide to clean water in half filled spray tank with agitator or by-pass in operation. Maintain agitation while filling tank with remainder of water. Agitation must also be maintained throughout the spray operation.

### COMPATIBILITY

Sero-X Insecticide is an emulsifiable concentrate and is likely compatible with commonly used organic liquid fertilizers. Always check the physical compatibility with other products using a jar test in the correct proportions. Do not mix Sero-X with paraffinic oils.

### SURFACTANTS

Sero-X Insecticide contains a surfactant. Additional surfactant such as esterified vegetable oils may only be necessary on hard to wet plants. Use as per surfactant label instructions.

### APPLICATION

#### Ground Rig.

Thorough coverage is essential to ensure adequate control. Applications should be made using nozzles, pressures and other spray conditions to produce a fine / medium spray. An application volume of 50-200 L/ha is recommended for cotton and 300-500 L/ha for brassicas. For crops at a later stage of development, e.g. after head formation, apply Sero-X on a per 100 L rate.

#### Aerial Application

Apply in a minimum of 30 L/ha water. Use appropriate water volume to achieve thorough coverage. A strategy to minimise spray drift should be employed at all times when aerially applying sprays near sensitive areas. Such a strategy is illustrated by the cotton industry's Best Management Practice Manual.