

Information on the insecticide Fenitrothion (Sumithion ULV) Australian Plague Locust Commission (APLC)

The Australian Plague Locust Commission uses fenitrothion (tradename - Sumithion ULV) applied by aircraft, for control of locust bands and swarms. The formulation used is suitable only for ultra-low volume (ULV) application, and cannot be mixed with water for conventional ground spraying.

Sumithion ULV contains 1.27 kg of fenitrothion (the active ingredient)/L.

The label permits the application of fenitrothion at rates of 200-400 mL (254-508 g a.i.) /ha. However, APLC research has found that a lower rate of 210-300 mL (267-381 g a.i.) /ha is effective and this is used operationally.

Fenitrothion is registered for use against locusts on pasture and a wide range of cereal and other crops eg. grazing sorghum, lucerne, apples, grapes, lettuce, tomatoes and soybean.

The registered label conditions impose a 1.5 km no spray zone between a sprayed block and any sensitive area **downwind**, eg dwellings, dams, rivers, organic production.

Fenitrothion is an organophosphorus insecticide, of moderate mammalian toxicity and acts on the nervous system of the insect. Fenitrothion is degraded rapidly in livestock, within 2-7 days according to Australian and overseas research. On vegetation the level of any residue is halved every day. However, re-entry into treated areas during the 48 hours immediately following application should be restricted. APLC Officers re-entering treated areas during this period to assess efficacy must take precautions and wear suitable protective clothing.

Research has demonstrated that fenitrothion has no major or long-term impacts on invertebrates of grasslands.

Fenitrothion is highly toxic to aquatic invertebrates (eg. shrimps, insects & yabbies) and honey bees. It is of moderate toxicity to fish and birds.

Following the application of fenitrothion to crop or pasture the following **withholding periods** and/or **slaughter interval** must be observed in accordance with the current (2000) registered label:

- for pasture & lucerne, do not graze for 7 days after application;
- do not cut for stockfeed for 14 days after application;
- do not apply later than 14 days before harvest (edible crops);
- locusts may be treated in an area where stock are grazing (oversprayed) as long as the animals are not be sent for slaughter until 14 days after the pasture was sprayed.

Fenitrothion (both ULV and emulsifiable concentrate [EC] formulations) can cause leaf discoloration and burning to some sorghum varieties.

**ALWAYS CHECK AND ADHERE TO THE REQUIREMENTS OF THE
CURRENT REGISTERED LABEL OR OFF-LABEL PERMIT FOR ALL
AGRICULTURAL CHEMICALS.**

APLC – May 2008