## TECH BULLETIN

# PROLAN 500

## Vineyards, Non Bearing Tree Crops, Fruit and Nut Orchards

### **Pre-emergent Weed Control**

#### Introduction

PROLAN 500 is a unique pre-emergent herbicide, which is applied to the soil surface to selectively control a range of annual grasses and broadleaf weeds. This infonote is written specifically for the application of PROLAN 500 in vineyards non-bearing tree crops, fruit & nut orchards. For instructions on use of the product in all situations refer to the product label.

#### **Mode of Action**

PROLAN 500 is based on the active constituent Oryzalin and is a member of the dinitroaniline family. For weed resistance management purposes, it is a GROUP D Herbicide. It's main activity on plant tissue is to inhibit the development of cells in the meristematic or new cell producing areas of the roots of susceptible plants.

#### **Soil Preparation**

Areas to be treated should be free of established weeds. PROLAN 500 has virtually no activity on weeds once they have germinated and established a root system. If weeds are very small and only recently germinated, a number of contact herbicides are registered for use as a tank mix partner with PROLAN 500.(see compatibility section).

NB: Contact herbicides may damage vines and trees when they contact green bark or shoots.

Remove or thoroughly mix trash (weed residue, prunings etc.) into the soil before applying product. Clods more than 4cm in diameter will reduce the efficacy of PROLAN, due to weed roots becoming established before contact with the herbicide. If clods over 4cm cannot be broken down, an alternate weed management program should be used.

#### **Soil Activation / Incorporation**

Moisture in the form of rain or irrigation (12.5mm) is required within 21 days of treatment with PROLAN 500 to incorporate the product, otherwise efficacy may be reduced. If moisture is not received within the 21 day period, the product may be mechanically incorporated in to the top 2.5cm of soil. Operators should be careful not to throw untreated soil back around the new plants.

Flood or furrow irrigation is not ideal as there is usually no downward movement of the product into the weed seed bed when moisture rises towards the surface rather than falls from above. Incorporation of PROLAN 500 by applying the product with very high water rates is not possible.

NB: To effectively apply 12.5mm of rain, your boom spray would need to apply 125,000 litres of water per hectare.





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#### Mixing

The required amount of PROLAN 500 should be added to the half-full spray tank and agitated well during the completion of filling. DO NOT leave spray solutions to stand overnight.

#### **Application**

Apply PROLAN 500 in 200 to 450 litres of water per hectare. Apply uniformly, especially within the drip line of trees and vines, so that application above label rates does not occur. Use a properly calibrated low pressure (170 to 340 kPa) herbicide sprayer. Provide good by-pass or other agitation of the spray suspension in the tank before and during application. Soil treated with this product may be shallow cultivated without loss of herbicidal activity.

#### Compatibility

PROLAN 500 is compatible with Paraquat, Glyphosate, Oxyfluorfen and Simazine.

#### **Directions for Use Summary:**

#### Amenity Plantings, Garden Beds and Roadside Areas

CROP GROUP		WEEDS CONTROLLED	RATE (L/HA)	CRITICAL COMMENTS
Banana <sup>1</sup>		<b>Grasses:</b> Barnyard Guinea grass	Short term control (up to 4 months)	See GENERAL INSTRUCTIONS DO NOT apply by aircraft or through any type of irrigation equipment. <sup>1</sup> <b>DO NOT</b> use as a pre-emergent at the time of
Grape <sup>2</sup>		Love grass Paradoxa grass Pigeon grass Spiny burr grass (Gentle Annie/ Innocent Weed) Summer grass (Crabgrass <sup>3</sup> ) <b>Broadleaf Weeds:</b> Deadnettle Fathen Fumitory Portulaca (Pigweed) Sowthistle Wireweed (Hogweed) <b>Brassica species:</b> <sup>4</sup> Blackberry nightshade Caltrop Paddy melon Silverleaf nightshade	4.5L Long term control (6-8 months) 6.8L	<ul> <li><sup>2</sup> Western Australia only: Vineyards on medium loam or heavier soil types, heavily infested with crabgrass may be sprayed with up to 9.9L/ha of Prolan 500 and together with pome fruit and all Prunus species on these soils spraying can be immediately after transplanting from nurseries providing buds are still dormant and no functional leaves are present.</li> <li><sup>3</sup> Western Australia only: Apply early in summer for crabgrass (<i>Digitaria sanguinalis</i>) control and incorporation with overhead irrigation.</li> <li><sup>4</sup> Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.</li> </ul>
Pome Fruit	Apple, Pear (see also non- bearing fruits)			
Stonefruit	Apricot, Peach, Nectarine, Cherry, Plum & prune			
Citrus	Grapefruit, Orange (see also non- bearing fruits)			
Nuts	Almonds, Pecan, Walnut, Macadamia			
Non- bearing berryfruits	Blackberry, Blueberry, Boysenberry, Currant, Raspberry, Gooseberry, Loganberry			
Non- bearing – fruits including nursery stock of the following:	Avocado, Custard apple, Feijoa, Guava,Kiwifruit, Lemon, Litchi, Mandarin, Mango, Nashi, Olive, Passionfruit, Pawpaw, Persimmon, Rambutan			

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

Always read the entire label prior to use. ® Prolan is a registered trademark of Sipcam Pacific Australia Pty Ltd For further information please call Sipcam or visit our website: sipcam.com.au/agricrip products Phone: +61 3 5223 3746

