



Prolan® 500 herbicide - a safe and cost effective herbicide for pre-emergent weed control in ALMONDS

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 broad leaf weeds. This infonote is written specifically for the application of Prolan in almonds. For instructions on use of the product in all situations refer to the product label.

Key Features and Benefits in Almonds

- **PROLAN 500 can be applied to new plantings and young orchards.**
- **It requires fewer applications than paraquat or diquat and is more cost efficient compared to paraquat and diquat (see the table on the other side of this Infonote).**
- **It is safer to use than paraquat/diquat and is therefore an excellent option for ensuring safety on farm provided the label directions are followed.**

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. Its 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 of the product label).

Note: Contact herbicides may damage trees when they contact green bark or shoots.

Remove or thoroughly mix trash (weed residue, prunings etc.) into the soil before applying the product. Clods more than 4cm in diameter will reduce the efficacy of PROLAN 500, 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 and incorporation

Moisture in the form of rain or irrigation (12.5mm) is required within 21 days of treatment with PROLAN 500 to activate 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.

Note: 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. When mixing with other products conduct a jar test first to ensure that PROLAN 500 is compatible.

PROLAN 500 APPLICATION COSTS

Weed Control Options for Almonds	Prolan 500	Paraquat/Diquat/ Spray.Seed
Herbicide Costs		
Prolan costs. 10L (ex GST)	\$319.00	
Average rate L / Ha	6.8	
Costs in \$ / L	\$31.90	
Spray Seed costs. 20L (ex GST)		\$200.00
Average rate L / Ha		3.2
Costs in \$ / L		\$10.00
Cost per hectare for one application	\$216.92	\$32.00
Labour / machinery costs		
Labour cost in \$ / hour	\$30.00	\$30.00
Machinery cost in \$ / hour	\$50.00	\$50.00
Labour/machinery cost / Ha	\$23.05	\$115.24
Total costs		
Cost including 5 applications of Spray.Seed ↓		
Total costs of spraying orchard per year / Ha	\$263.02	\$275.24
If required the cost of 1 application of Spray.Seed - Use only if weeds present	\$32	

DIRECTIONS FOR USE

CROP GROUP	DESCRIPTION	WEEDS CONTROLLED	WEEDS CONTROLLED	RATE (L/HA)	CRITICAL COMMENTS
Nuts	Almond, Macadamia, Pecan, Walnut	Grasses: Barnyard grass Guinea grass Love grass Paradoxa grass Pigeon grass Spiny burr grass (Gentle Annie/ Innocent Weed) Summer grass (Crabgrass 1.)	Broadleaf Weeds: Deadnettle Fathen Fumitory Portulaca (Pigweed) Sowthistle Wireweed (Hogweed) Brassica species: (See note 2.) Blackberry nightshade Caltrop Paddymelon Silverleaf nightshade	Short term control (up to 4 months) 4.5L Long term control (6–8 months) 6.8L	See GENERAL INSTRUCTIONS 1. Western Australia only: Apply early in summer for crabgrass (<i>Digitaria sanguinalis</i>) control and incorporate with overhead irrigation. 2. 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.

