



ADVICE SUMMARY

APPLICATION FOR REGISTRATION OF A CHEMICAL PRODUCT

Product name: FARMALINX TRIFLURALINX 580 HERBICIDE
Applicant: FARMALINX PTY LTD
Product number: 68604
Application number: 58671

Purpose of Application and Description of Use: Registration of a 580 g/L trifluralin, emulsifiable concentrate product for the control of annual grasses and certain broadleaf weeds in certain horticultural and agricultural crops.

Active Constituent(s): TRIFLURALIN

Regulatory Decision:

To grant the application subject to the following conditions:

Standard Conditions of Registration/Approval

1. Containers must meet AgVet Code Regulation 18
2. Agricultural products must meet Active Constituents Quality Assurance Requirements
3. Label must contain a Date of Manufacture and Batch Number

For full conditions, refer to Standard Conditions for Applications on the APVMA website.

ADVICE

External Efficacy Reviewer

Trial data was provided from a field and glasshouse trials. A replicated (n=8) glasshouse trial was conducted to compare the efficacy of TRIFLURALINX 580 HERBICIDE (containing 580 g ai/L) with a suitable reference product containing 480 g trifluralin ai/L for the control of annual ryegrass (*Lolium rigidum*). The treatments included application at 25, 50, 100, 200 and 400 g ai/ha. An untreated control was also included in the trial. A crop was not sown with this trial.

Treatments were applied to a sandy loam soil in plastic bags and incorporated by thorough mixing. Thirty annual ryegrass seeds were sown in treated soil and then covered with 1cm of treated soil. Fourteen days after application the number of emerged ryegrass plants was counted. Both formulations provided equivalent levels of ryegrass control at 200 and 400 g ai/ha, with a significant reduction in ryegrass numbers when compared to the untreated control. The untreated control had a mean population of 23 ryegrass plants whilst TRIFLURALINX at 400 g ai/ha reduced this to nil and the reference product at the equivalent rate reduced the population to 0.1 plants.

Data was provided from a field trial conducted at Barooga, NSW. Application of TRIFLURALINX has provided statistically the same levels of annual ryegrass control as measured 33 days after sowing (DAS) as that provided by the reference product at equivalent levels of active ingredient per ha (1440 g ai/ha), which is the maximum label rate for use in min till/no till. Both TRIFLURALINX and the reference product significantly reduced annual rye grass numbers when compared to the untreated control. The untreated control had 67 annual ryegrass plants per m² compared to TRIFLURX which had 6.7 and TRIFLURALINX which had 15 plants.

Additional data was provided from two further field trials conducted in New South Wales and Victoria. The trials were conducted as small plot replicated (n=6) trials with plot size being 2 x 20m. Assessments included crop emergence and weed counts. TRIFLURALINX 580 was compared to the reference product. Both products were applied at 720, 1,440 and 2,880 (x2 maximum label rate) g ai/ha. Weed counts in both trials showed that the weed species present, annual ryegrass and wireweed (*Polygonum aviculare*) in the NSW trial and annual ryegrass and brome grass in the Victorian trial were in high numbers. In both trials the labelled application rates of both TRIFLURALINX 580 and the reference product at 720 and 1,440 g ai/ha significantly reduced the annual ryegrass and wireweed population when compared to the untreated control. The data from these two trials shows that TRIFLURALINX has provided bioequivalent control of labelled weeds at commercial rates when compared to the reference product. In both trials as measured at 33 (NSW) and 30 (Vic) DAS application of TRIFLURALINX and reference product at the rate of 2,880 g ai/ha both significantly reduced the wheat crop emergence when compared to the untreated control. At the rates of 720 and 1,440 g ai/ha crop emergence was statistically equivalent to the untreated control.

The crop safety data from trials measured as crop emergence and yield show that TRIFLURALINX is bioequivalent to the reference product. In the NSW trial there was no significant difference between grain yields from plots treated with either formulation. In the Victorian trial application of both products at 2,880 g ai/ha; significantly reduced crop yields when compared to the lower rates of 720 and 1,440 g ai/ha. Despite the presence of a high population of ryegrass and brome grass (*Bromus diandrus*) which were controlled at the high rate of 2,880 g ai/ha there was a yield reduction when compared to the lower rates. This indicates crop safety with both the proposed product TRIFLURALINX and the reference product.

The APVMA is satisfied that the product TRIFLURALINX 580 HERBICIDE can be used safely and effectively when used in accordance with the proposed product label instructions.

Data relied on to provide the advice

Data No	Data Source*	Author(s)	Title	Date	Data Type	Data Sub-type	Authorising Party	Inherited Application No.
73662	S	Kent Wooding	Observation Report Farmalinx Trifluralin 580 g/L	17 July 2012	Efficacy and safety	Efficacy	Applicant	
73663	S	Philip Pentland	Final Report for Eureka! AgResearch (Vic) Pty Ltd Eureka Trifluralin 580 bioassay (EUR808)	March 2007	Efficacy and safety	Efficacy	Applicant	
82257	S	Leanne Bromeley	Pre-Emergent Annual Ryegrass Control in Wheat	December 2013	Efficacy and safety	Efficacy	Applicant	
73665	S	Toby Williams	Crop Safety & Efficacy of FLNX TRIFLURALINX 580 Herbicide in the Control of Grass and Broadleaf Weeds (including Annual Ryegrass) in Chickpeas.	10 October 2012	Efficacy and safety	Efficacy	Applicant	
73666	S	Toby Williams	Crop Safety & Efficacy of FLNX TRIFLURALINX 580 Herbicide in the Control of Grass and Broadleaf Weeds (including Annual Ryegrass) in Lentils	10 October 2012	Efficacy and safety	Efficacy	Applicant	
73664	S	Anon	Scientific argument for Acceptance of Farmalinx Trifluralin 580 Herbicide as an equivalent to Nufarm Triflur X. Both are Emulsifiable Concentrate (EC) Formulations of Trifluralin	31 July 2012	Efficacy and safety	Other information	Applicant	
86006	S	Anon	Comparison of the efficacy and crop safety of two trifluralin formulations on annual ryegrass and wire weed in wheat.	February 2008	Efficacy and safety	Phytotoxicity and crop safety	Applicant	
86005	S	Anon	Comparison of the efficacy and crop safety of two trifluralin formulations on annual ryegrass and brome grass in wheat.	January 2008	Efficacy and safety	Phytotoxicity and crop safety	Applicant	

* S = Data submitted with the application