

**Trade Advice Note
on**

Glufosinate-ammonium

in the product

Liberty 150 Herbicide

(APVMA Product Number 60249)

**Australian Pesticides and Veterinary
Medicines Authority**

For further information contact:

**Jay Kottege
Manager Herbicides
Pesticides Program**

Ph: 02 6272 5208

Fax: 02 6272 3218

jay.kottege@apvma.gov.au

July 2006

DRAFT

Trade Advice Note on the Product

Liberty 150 Herbicide

(150 g/L glufosinate-ammonium)

Introduction

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Bayer CropScience for the registration of a new product, Liberty 150 Herbicide, containing glufosinate-ammonium, for the control of weeds in Liberty Link Cotton.

The APVMA invites any person to submit a relevant written submission with respect to whether the proposed new use is likely to unduly prejudice trade or commerce between Australia and Australia's trading partners. **Please provide your submission by 31 July 2006.** Any submissions provided after this date may be unable to be considered before the regulatory decision is made. All submissions should be addressed to the contact given on the title page.

Trade Consideration

1. Commodities exported

Cottonseed, and its derived oils and meals are considered to be major export commodities¹.

2. Destination and Value of Exports

Over the 2004-2005 period, Australia exported \$A 771 million of cotton products. The major markets were Indonesia, Thailand, the Republic of Korea, Japan and China.²

The largest export markets for Australian cottonseed by volume are shown below.

Country	Cottonseed exports by destination ³ (kt)							
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Chinese Taipei	0.58	3.50	3.35	2.45	1.47	0.57	0.42	0.61
Japan	177.08	175.34	175.98	152.57	164.48	133.41	134.12	144.67
Korea, Rep of	45.63	55.39	83.14	94.60	88.47	22.72	28.42	56.04
Saudi Arabia	0.00	0.30	2.27	17.00	8.50	0.00	0.00	10.58
United States	58.14	122.65	221.20	386.54	327.68	98.81	1.34	1.00
Other	14.63	2.77	44.82	4.64	3.05	3.05	2.26	1.47
Total	296.06	359.94	530.75	657.79	593.64	258.57	166.57	214.35

The largest export markets for Australian cottonseed and sunflower seed meal by value are shown below

Destination	Volume (kt)
Republic of Korea	4.28
New Zealand	0.43
Other	1.72
TOTAL	6.42

¹ Ag Requirements series Part 5B: Overseas trade aspects of residues in food commodities

² <http://www.dfat.gov.au/facts/affaoverview.html>

³ Australian Commodity Statistics 2005. Australian Bureau of Agricultural and Resource Economics.

DRAFT

Australia is an importer of cottonseed oil, importing 3.16 kt over the 2004-2005 fiscal year. Only 2.19 kt were exported in 2004-05.

DRAFT

3. Proposed use pattern for Liberty 150 Herbicide

The proposed use pattern for glufosinate-ammonium in Liberty 150 Herbicide is presented below:

DIRECTIONS FOR USE

Restrains

DO NOT apply to cotton varieties other than Liberty Link.

DO NOT apply by aircraft.

DO NOT apply by mister.

DO NOT apply when rain is expected within 6 hours (Liberty 150 is a water-soluble herbicide).

DO NOT apply onto weeds when dew, fog or mist is present.

DO NOT apply to weeds under stress due to, for example, very dry, very wet, frosty, wind blasted, insect damaged, nutrient deficient or diseased conditions.

CROP	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Liberty Link cotton	Control of: Annual polymeric Awnless barnyard grass Barnyard grass Bell vine Bladder ketmia Caltrop Dwarf amaranth Field bindweed (European bindweed) Paddy melon Peach vine Red pigweed Rhyncho (Rhyncosia) Sesbania pea Sowthistle (Milk thistle) Volunteer cotton (other than Liberty Link) Yellow vine Suppression of: Chinese lantern (Wild gooseberry) Noogoora burr complex	2-6 leaf	5 L/ ha in a minimum of 100 L water	Apply to actively growing weeds. Good coverage is essential. Refer to Climatic Conditions section of the label. Do not apply more than 3 applications per season, i.e. 2.25 kg a.i./ha per season maximum.

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

APPLICATION OF LIBERTY 150 TO COTTON VARIETIES OTHER THAN LIBERTY LINK WILL RESULT IN SEVERE CROP INJURY OR DEATH OF THE CROP.

WITHHOLDING PERIODS

Harvest

DO NOT APPLY LATER THAN 10 WEEKS BEFORE HARVEST.

Grazing

DO NOT GRAZE OR CUT TREATED AREAS FOR STOCK FEED.

DO NOT FEED COTTON TRASH TO LIVESTOCK

DRAFT

Export of Treated Produce

Maximum Residue Limits (MRLs) may be lower or not be established in export markets for cottonseed. Glufosinate-ammonium residues are not found in cottonseed oil when Liberty 150 Herbicide is used according to label directions. Check with Bayer CropScience Pty Ltd prior to using this product if the cottonseed is destined for export.

4. Results from trials presented to the APVMA

Overseas and Australian residues data were provided by the applicant that demonstrated residues of glufosinate-ammonium in cottonseed and commodities derived from cottonseed would not exceed 3 and 5 mg/kg respectively, when the product is used in accordance with the proposed label directions.

It has been determined from the data submitted in support of the application that the feeding of cottonseed and commodities derived from cottonseed to livestock will not produce residues in animal commodities in excess of previously established MRLs.

5. Overseas Registration & Use Pattern

The applicant has indicated that glufosinate-ammonium products are registered for use on cotton in the countries detailed below.

Table 6. approved overseas use pattern for glufosinate-ammonium in cotton

Country	Active Conc; (formulation type)	PHI (days)	Application Timing	No. apps/season	Rate a.i/ha
Belize	150 (AC)	15	Post-emerge broad cast	1-2	0.27-0.45
Brazil	200 (AC)	28	Post-emerge, directed	1	0.4
		28	Pre-harvest, aerial	1	0.1
Columbia	150-200 (AC)	-	Post-emerge, directed	1	0.225-0.3
Dominican Republic	150 (AC)	-	Post-emerge broad cast	1-2	0.27-0.45
El Salvador	150 (AC)	15	Post-emerge Broad cast	1-2	0.27-0.45
Greece	150-200 (AC)	3	Pre-emerge, Post-emerge, directed	1-3	0.8-3.0
Guatemala	150 (AC)	15	Post-emerge broad cast	1-2	0.27-0.45
Honduras	150 (AC)	15	Post-emerge broad cast	1-2	0.27-0.45
Nicaragua	150 (AC)	15	Post-emerge broad cast	1-2	0.27-0.45
Panama	150 (AC)	15	Post-emerge broad cast	1-2	0.27-0.45
Spain	150 (AC)	21	Pre-plant, Pre-emerge Post-emerge, directed	1	0.36-1.5
United Sates	200 (AC)	70	Post-emerge ground and aerial	1-2	0.46-0.59
Venezuela	200 (AC)	14	Post-emerge, directed	1	0.012-0.12

DRAFT

6. Relevant overseas MRLs

Country/status	Commodity	Tolerance, mg/kg	Reference
USA	Cotton, gin trash	15	http://ecfr.gpoaccess.gov
	Cotton, undelinted seed	4	
Japan	Cottonseed	4	http://www.mhlw.go.jp/english/topics/foodsafety/positivelist060228/index.html
Korea	Cottonseed	0.3	MRLs for Pesticides in Foods, Korea Food and Drug Administration.

Codex has not established MRLs for glufosinate-ammonium in cottonseed.

7. Current and Proposed Australian MRLs for glufosinate-ammonium

The following new MRLs have been recommended in relation to this application

Table 1

Compound	Food	MRL (mg/kg)
Glufosinate-ammonium	SO 0691 Cotton Seed	3

Table 4

Compound	Animal feed commodity	MRL (mg/kg)
Glufosinate-ammonium	Cotton meal and hulls	5

For full details of glufosinate-ammonium MRLs, please refer to the APVMA website <http://www.apvma.gov.au> and follow the Residues link.

The dietary burden of livestock to glufosinate-ammonium will not increase significantly as a result of the proposed use of glufosinate-ammonium in Liberty Link Cotton. It is considered that existing animal commodity MRLs are adequate.

8. Conclusions

Export of treated produce containing finite residues of glufosinate-ammonium may pose a risk to Australian trade in situations where (i) no residue tolerance (import tolerance) is established in the importing country or (ii) where residues in Australian produce are likely to exceed a residue tolerance (import tolerance) established in the importing country.

The feeding of cottonseed and its processed commodities to poultry is not expected to produce quantifiable residues in tissues or eggs of poultry. Residues in mammalian tissues and milk resulting from the feeding of cottonseed or meal is expected to comply with existing Australian MRLs; hence the proposed use is not expected to increase the risk to trade of these commodities above that which is already accepted.

Over the last 8 years Japan, Korea and the US have been the most significant export markets for cottonseed.

The US has established an MRL of 4 mg/kg for glufosinate-ammonium in cottonseed and 15 mg/kg in gin trash. The current Japanese Table of provisional MRLs in agricultural commodities includes an entry of 4 mg/kg for glufosinate-ammonium in cottonseed.

DRAFT

Korea has established a tolerance of 0.3 mg/kg for glufosinate-ammonium in cottonseed. Export of treated cottonseed containing residues of glufosinate-ammonium at 3 mg/kg may have the potential to prejudice trade of this commodity.

Although residues of glufosinate-ammonium are expected to occur in treated cottonseed, the residues do not accumulate in the oil. Residues in cottonseed oil are expected to be <LOQ (<0.01 mg/kg)

The APVMA is seeking comments on the potential for Liberty 150 Herbicide to unduly prejudice Australian export trade when the product is used as directed.