MONOCROTOPHOS (054)

EXPLANATION

Monocrotophos was evaluated by the JMPR for residues in 1972, 1975 and 1991. At the 1991 Meeting comprehensive information on residues, use patterns and the fate of residues was reviewed under the CCPR periodic review programme.

The 1991 JMPR requested information on GAP for rice in the countries where residue trials had been carried out.

At the 1993 CCPR, several countries indicated that the information considered by the 1991 JMPR did not reflect their current agricultural practices. It was decided not to advance any MRL currently at Step 3 or to propose the deletion of the existing CXLs, but to await a full re-evaluation by the JMPR in 1994 based on updated GAP and residue data to be provided by national governments. It was also agreed to request Governments to inform the JMPR on registered uses in their countries and to request submission of any relevant monitoring data. The manufacturer was requested to develop analytical methods with a lower limit of determination than current methods.

The Meeting has received information on current use patterns from Australia, India, Japan, Spain and Thailand.

USE PATTERN

Germany, The Netherlands, Norway, Poland and the UK informed the Meeting that they had no GAP or registrations for monocrotophos. Newly submitted approved use patterns are given in Tables 1-3. All applications are by spraying.

Table 1. Approved uses of monocrotophos on fruits.

Commodity	Country	Form	Application			PHI, days
			Rate, kg ai/ha	Spray concn., kg ai/hl	No.	
Banana	Australia	EC	0.4-0.8			10
Citrus fruit	India	SL	0.37-0.8	0.025-0.04		
Litchi	Thailand	SL	0.25-0.42	0.03-0.06		
Mango	India Thailand	SL SL	0.6-0.8	0.04 0.06-0.12		
Papaya	Thailand	SL		0.03-0.06		
Pome fruit	Australia	EC		0.038-0.04		28

Table 2. Approved uses of monocrotophos on vegetables.

Commodity	Country	Form	Application			PHI, days
			Rate, kg ai/ha	Spray concn., kg ai/hl	No.	
Beans	Australia	EC	0.26-0.27	0.034		21
Cabbage	India Japan Thailand	SL GR SL	0.3 1.5-3	0.03-0.06 0.03-0.06	3	30
Cassava	Thailand	SL		0.03-0.06		
Cucumber	Japan Thailand	GR SL	1.5-3	 0.06-0.12	3	EGS[1]
Egg plant	Japan Thailand	GR SL	1.5-3	 0.03-0.06	3	EGS[1]
Gram, Bengal	India	SL	0.5	0.05-0.1		
Gram, Black	India	SL	0.25	0.025-0.5		
Gram, Green	India	SL	0.18	0.018-0.035		
Gram, Red	India	SL	0.25-0.5	0.025-0.1		
Lotus root	Japan	GR	2-3		3	14
Mung bean	Thailand	SL		0.12-0.15		
Onion	India	SL	0.25	0.025-0.05		
Onion, Welsh	Japan	GR	1.5-3		4	45
Peas	India	SL	0.4	0.04-0.08		
Peanut	Thailand	SL		0.06-0.12		
Peppers, Chili	India	SL	0.3-0.5	0.03-0.1		
Potatoes	Australia	EC	0.14-0.4			3
Radish, Japanese	Japan	GR	1.5-3		2	45
Soya beans	Australia Thailand	EC SL	0.14-0.36	 0.06-0.15		5
Sugar beet	Spain	EC		0.04-0.08		30
Tomato	Australia Thailand	EC SL	0.6-0.8	0.06-0.1 0.03-0.06		4-7
Yard-long beans	Thailand	SL		0.06-0.12		

[1] EGS: growth stage.

Table 3. Approved uses of monocrotophos on grasses, nuts and seeds, and herbs and spices.

Commodity	Country	Form	Application			PHI, days
			Rate, kg ai/ha	Spray concn., kg ai/hl	No.	
Grasses						
Cereals	Australia	EC	0.14-0.72			5-42
Maize	Australia India Spain Thailand	EC SL EC SL	0.14-0.28 0.25	 0.025-0.05 0.04-0.08 0.06-0.12		5-42 30
Maize, Sweet corn	Australia	EC	0.4	0.5		5
Rice	India Japan Thailand	SL GR SL	0.25-0.5 1.5-2	0.025-0.1 0.06-0.12	 3	21 21
Sorghum	Australia	EC	0.14-0.28			5-42
Sugar cane	India Thailand	SL SL	0.2-0.8	0.02-0.16 0.06-0.12		
Wheat	Australia	EC	0.14-0.72			5-42
Nuts and seeds						
Castor	India Thailand	SL SL	0.18	0.018-0.035 0.06-0.12		
Coconut	Thailand	SL		0.06-0.12		
Coffee beans	India Thailand	SL SL	0.63	0.063-0.13 0.03-0.06		
Cotton	Australia India Spain Thailand	EC SL EC SL SL	0.1-1.6 0.18-0.8	 0.018-0.16 0.04-0.08 0.04 0.06-0.12		21-30 30 30
Mustard	India	SL	0.15	0.015-0.03		
Oil palm	Thailand	SL		0.03-0.06		
Sesame	Thailand	SL		0.06-0.12		
Sunflower	Australia	EC	0.72			5
Herbs and spices						
Cardamon	India	SL	0.38	0.038-0.075		

APPRAISAL

Monocrotophos was re-evaluated by the JMPR under the CCPR periodic review programme for residues in 1991 and toxicologically in 1993.

The 1991 JMPR requested information on GAP for rice in the countries in which residue trials have been carried out.

At the 1993 CCPR, several countries indicated that the information considered by the JMPR did not reflect their current agricultural practices. It was decided not to advance any MRL then at Step 3 or to propose the deletion of the existing CXLs at that Session, but to await a full re-evaluation by the JMPR in 1994 based on updated GAP and residue data to be provided by national governments.

The 1993 CCPR also requested the manufacturer to provide an analytical method with a lower limit of determination than current methods.

The Meeting received only limited information on national GAP for monocrotophos. It noted some differences between this new information and that submitted to the 1991 JMPR, but they were not so serious as to require changes in existing CXLs, except in the case of soya beans.

Egg plant, chilli peppers, tea. Comments were made at the 25th Session of the CCPR (ALINORM 95/24, paras 136-138) on the proposed MRLs for egg plant, chilli peppers and tea. No new information was provided, and the Meeting made no new recommendations.

Soya beans. The 1991 Meeting was aware that some residues in trials from Australia exceeded the existing MRL for soya beans, but concluded that the application rates in these trials, 0.4 and 0.45 kg ai/ha, were considerably higher than the recommended rate of 0.28 kg ai/ha. The highest application rate in current Australian GAP is 0.36 kg ai/hl however, and therefore close to the rates used in the trials.

The Meeting reconsidered the data on residues in soya beans as given in the 1991 Evaluations, taking note that there was now appropriate GAP in Australia, but concluded that the information was not sufficiently clearly expressed for a revised recommendation to be made.

Rice. The manufacturer submitted information on GAP in India and Thailand in response to a request of the 1991 JMPR, but this did not accord with the GAP with which the residue data submitted to the 1991 JMPR were linked.

The Meeting was informed by the manufacturer that new supervised trials have been planned for rice. The trials would be designed to analyze rice in husk, husked rice, polished rice and bran.

Analytical methods. The manufacturer did not provide an analytical method with a limit of determination lower than the existing limit of 0.02 mg/kg, arguing that since the 1993 JMPR had increased the ADI to its former value of 0.0006 mg/kg bw the development of a residue method with a lower limit of determination was not necessary.