

OXAMYL (126)

Explanation

Oxamyl was evaluated by the Joint Meeting in 1980, 1983, 1984 and 1985 (see Annex II). An ADI was determined in 1984 and reaffirmed in 1985. The 1985 Meeting required further information on nationally approved uses of oxamyl on kidney beans, and confirmed the desirability of the following items listed by the 1983 Meeting.

- Additional residue data from supervised trials reflecting good agricultural practice in additional countries, in particular residue data for peas;
- Information on residues in foods in commerce and at consumption;
- Information on the effects of cooking, processing, and storage on oxamyl residues in raw agricultural commodities;
- Crop rotation studies on additional commodities and under field conditions with applications of commercial formulations (both granular and liquid) according to maximum recommended application rates.

RESIDUES IN FOOD AND THEIR EVALUATIONUSE PATTERN

The manufacturer notified FAO that there were no plans to obtain approval for any use of oxamyl on kidney beans which would result in residues in the dry beans. In the circumstances it was proposed that this use should not be recognised and that no further action should be taken to establish an MRL for this commodity (Du Pont, 1985).

The Netherlands government (Netherlands, 1986) informed the meeting that oxamyl had been approved for application to fruiting vegetables and runner beans in glasshouses at the rate of 50-75 g/100 l with a pre-harvest interval of 14 days. In addition oxamyl was approved for application to strawberries for the control of free-living nematodes at the rate of 5 kg/ha, treatment being applied shortly before planting.

Information received from other countries indicated that oxamyl was not yet registered in Finland (1985), and not used in Portugal, France or Chile. It was applied in Sweden with a pre-harvest interval of 100 days.

RESIDUES RESULTING FROM SUPERVISED TRIALS

The responses from The Netherlands, Sweden, Chile, France, Portugal, Finland and Poland indicated that no further residues data were available. The manufacturer advised that no additional data from supervised trials on peas were available and that there were currently no plans to conduct further trials.

FATE OF RESIDUESIn soil

Smelt *et al.* (1983), working in The Netherlands, studied the conversion of four carbamoyl oximes, including oxamyl, in soil samples from above and below the soil water table. Less than 5% of the oxamyl remained after 1 day in four water-saturated anaerobic

sub-soils. Conversion rates in the aerobic soil layers above the water table were much slower, with half-lives ranging from 21 to 415 days in different soils. When soil from below the water table was incubated aerobically, the conversion rates of oxamyl were reduced drastically. The opposite was found when originally aerobic soil was incubated anaerobically. Autoclaving the incubation systems retarded the conversions.

No information was available on crop rotation studies on additional commodities under field conditions but the meeting felt that the above study, when considered in conjunction with the 10 reviewed in 1980, provided reassurance that there would be no significant uptake of oxamyl residues in rotational crops.

In processing

No information was available on the effects of cooking, processing or storage on oxamyl residues and the manufacturer indicated that it had no plans to obtain such data.

RESIDUES IN COMMERCE OR AT CONSUMPTION

No information was received and the manufacturer advised that there were no plans to acquire such data.

NATIONAL MAXIMUM RESIDUE LIMITS

The meeting was informed that the following national maximum residue limits had been established in addition to those noted in 1983.

Country	Commodity	MRL
Australia	Tomatoes	0.05*
The Netherlands	Bananas	0.05
	Beans (in pod)	0.2
	Broccoli	0.02*
	Brussels sprouts	0.02*
	Cabbages	0.02*
	Cauliflower	0.02*
	Endive	0.5
	Fruiting vegetables	2.0
	Lettuce	0.5
	Onions	0.02*
	Potatoes	0.02*
	Strawberries	0.02*
	Other food commodities	0.02*
Sweden	Fruit	2.0 (P)
	Vegetables	2.0 (P)
	Potatoes	0.1 (P)
	Citrus fruits	3.0 (P)

Note: * At or about the limit of determination
(P) Provisional

APPRAISAL

Information on some of the outstanding questions concerning oxamyl residues was available.

Previous meetings had considered the possible use of oxamyl on kidney beans (dry) for which a temporary MRL was recommended and had called for information on national use patterns. It was recognized that the term kidney bean was unspecific and had been abandoned in the latest edition of the Codex Classification of Foods and Animal Feedstuffs. The meeting was informed by the manufacturer that there were no plans to seek approval for the use of oxamyl on beans other than in The Netherlands where the use on beans in glasshouses is important but where the beans are not produced in the dry form. It was therefore agreed that the temporary MRL previously proposed for kidney beans (dry) should be withdrawn and that the MRL for kidney beans and Lima beans should be replaced by an MRL for "beans, except broad bean and soya bean" at the same level.

No further information from supervised trials was received, nor any data on residues in commerce or at consumption. The manufacturer advised that there were no plans to obtain information on the effects of cooking, processing or storage.

There was no information from crop rotation studies under field conditions but a published study carried out in The Netherlands had shown that less than 5% of the oxamyl applied to water-saturated anaerobic sub-soils remained after 1 day. Though the conversion rates in aerobic soils were slower they were such as to degrade most oxamyl residues before rotational crops would be planted and harvested. The meeting therefore deleted the requirement for further crop rotation studies.

A number of countries have established additional MRLs and these were noted.

RECOMMENDATIONS

The meeting recommended that the temporary MRL for kidney beans (dry) be withdrawn and that the MRL for kidney beans and Lima beans be replaced by an MRL for "beans, except broad bean and soya bean" (VP 0061) at the same level (5 mg/kg).

REFERENCES

Du Pont. 1986. Oxamyl - Du Pont response to 1985 JMPR Report; Further work or information. Letter from E.I. DuPont de Nemours and Company to FAO, 20 February 1986.

Netherlands. 1986. Information from The Netherlands on pesticides to be considered by JMPR 1986. Dated June 1986.

Smelt, J.H., Dekker, A., Leistra, M. and Houx, N.W.H. 1983. Conversion of four carbamoyloximes in soil samples from above and below the soil water table. *Pestic. Sci.* 14, 173-181.