DICOFOL (026)

EXPLANATION

Dicofol was originally evaluated by the JMPR in 1968 and was re-evaluated for residues several times up to 1992, when it was reviewed in the CCPR periodic review programme.

At the 1994 CCPR several delegations expressed their reservations concerning the MRLs proposed for grapes, the edible offal of cattle, and poultry meat (ALINORM 95/24). France stated that the proposed MRL for grapes should be reconsidered as the French residue data provided to the 1992 JMPR were not considered valid and French GAP was reported incorrectly. France also expressed reservations about the MRLs proposed for pome fruit, peas, tea and poultry meat (fat), and commented critically on the GAP for citrus fruits.

France, the USA and the EU criticized the residue definition as applied to the edible offal of cattle because it did not include a major metabolite, 2,2-dichloro-1,1-bis(4-chlorophenyl)ethanol (FW 152). Delegations were requested to provide their written comments on the residue definition in animal commodities for consideration by the JMPR.

Germany expressed reservations regarding the adequacy of the available feeding study on poultry and doubted whether it could be extrapolated to the residues expected in feed items.

The Meeting received from France explanatory notes on GAP for grapes and on the residue trials on grapes reviewed in 1992, and comments on the proposed MRLs for grapes, peas, tea and products of animal origin. Germany and the USA submitted comments on the residue definition and proposed MRLs for animal products.

USE PATTERN

France supplied corrected information on French Gap for grapes. The information on GAP for re-evaluated commodities (grapes, peas and tea) is summarized in Table 1.

Table 1. Registered uses of dicofol on grapes, peas and tea, additional to those listed in the 1992 monograph.

Crop	Country	Application			PHI, days
		Rate, kg ai/ha	Spray conc., kg ai/hl	No.	
Grapes	Australia		0.03-0.048	1-2	28
	Canada	0.61-1.9		1-2	7
	France	0.5			21
	Japan	0.4 -1		2	7
	Spain	0.72-1.1		1-2	15
	USA	0.59-1.4		2	7
Garden pea	Australia		0.04-0.06	1-3	7
(young	Canada	0.4 -0.8		1	7
pods)	Japan	0.3 -0.53		2	3
	Spain	0.48-0.96		2-3	15
Tea	Japan	0.4 -1.1		2	20
	Indonesia	0.086-0.17			
	Sri Lanka	0.3			
	Bangladesh	0.49			

RESIDUES RESULTING FROM SUPERVISED TRIALS

Grapes. Explanatory notes from France (Potier, 1994) on the French residue trials on grapes reported in Table 13, page 349, of the 1992 evaluation demonstrated that most of the results were not valid: there were unacceptably high blank values in the control samples, ranging from 0.1 to 0.5 mg/kg, and some trials were not carried out according to GAP because the application date was too late in the season to control mites. It can be concluded that, of the French trials reviewed in 1992, only those carried out in 1987 are acceptable in terms of sampling and analytical practice, but even these cannot be used for evaluation because the application rate of 0.96 kg ai/ha is not within GAP (0.5 kg ai/ha), and the *o,p*'-isomer was not determined.

Furthermore, there is an error in the 1992 evaluation, page 149 (Table 13) where the first entry should read Spain/1991 instead of France/1991. The residue data are summarized again in Table 2 below, but without either the processing studies or the studies in which only the *p,p′*-isomer was determined as these were not considered for re-evaluation.

Table 2. Residues of dicofol on grapes.

Country, Year	Application	PHI, days	Residues, mg/kg	Reference

	No	kg ai/ha	kg ai/hl		*p,p′*	*o,p′*		
Australia			0.03*	0	0.21	0.09	0.3	Clark,
1990				14	0.21	0.08	0.3	1990
				28	0.12	0.07	0.2	
				56	0.18	0.07	0.2	
	1		0.036*	0	1	0.19	1.2	
				14	1.2	0.19	1.4	
				28	0.08	<0.05	0.1	
				56	0.31	0.07	0.4	
	1		0.06*	0	2.3	0.59	2.9	
				14	0.79	0.14	0.9	
				28	0.21	0.08	0.3	
				56	0.64	0.08	0.7	
	1		0.072*	0	3.1	1.2	4.3	
				14	2.9	0.89	3.8	
				28	0.82	0.13	0.9	
				56	0.81	0.08	0.9	
Germany	3	0.21		0	0.63	0.1	0.73	Lang, 1991
1986		+0.21		21	0.15	0.05	0.2	
		+0.51		28	0.15	0.04	0.19	
				35	0.2	0.05	0.25	
				42	0.19	0.03	0.22	
	3	0.32		0	0.44	0.11	0.55	
		+0.51		21	0.33	0.09	0.42	
		+0.7		28	0.26	0.08	0.34	
				35	0.26	0.07	0.33	
				42	0.12	0.04	0.16	
	3	0.57		0	1.1	0.08	1.2	
		+0.57		21	0.26	0.12	0.38	
		+0.62		28	0.28	0.08	0.36	
				35	0.21	0.03	0.24	
				42	0.11	0.02	0.13	
Italy	1	0.58		0			0.37	Pessina,
1991				15			0.32	1992
				45			0.27	
				60			0.29	
	1	0.72		0			0.37	
				15			0.32	
				45			0.2	
				60			0.25	
Spain	1	0.4		0	0.62	0.13	0.75	Lang,1992
1991				14	1.4	0.2	1.6	
				22	0.66	0.07	0.73	

Country, Year	Application			PHI, days	Residues, mg/kg			Reference
	No	kg ai/ha	kg ai/hl		*p,p′*	*o,p′*		
				28	0.5	0.06	0.56	
	1	0.5		0	0.45	0.1	0.55	
				14	0.33	<0.01	0.33	
				22	0.37	<0.01	0.37	
				28	0.3	<0.01	0.3	
	1	0.72		0	2.1	0.38	2.5	
				14	1.6	0.24	1.9	
				22	0.9	0.09	0.99	
				28	0.52	0.06	0.58	
	1	0.9		0	0.51	0.11	0.62	
				14	0.46	0.08	0.54	
				22	0.82	0.01	0.82	
				28	0.41	<0.01	0.41	
USA	2	1.5		7	1.1	0.16	1.2	Mazza,
1985				13	0.98	0.11	1.1	1986
				21	1.1	0.11	1.2	
	2	1.3		7	2.2	0.46	2.6	
				14	2.2	0.41	2.6	
				21	2.3	0.38	2.7	
	2	1.3		7	0.66	0.09	0.75	
				14	0.26	0.04	0.3	
				21	0.11	0.01	0.12	
	2	1.3		7	0.86	0.14	1	
				14	0.54	0.08	0.62	
				21	4.6	0.6	5.2	
	2	1.3		7	0.52	0.1	0.62	
				14	0.19	<0.01	0.19	
				21	<0.01	<0.01	<0.01	
	2	1.3		7	0.24	0.03	0.27	
				14	0.18	0.02	0.2	
				21	0.13	<0.01	0.13	
	2	2.2		7	2.6	0.47	3	
				14	2.9	0.5	3.4	
				21	2.2	0.34	2.5	
	5	1.3		7	6.4	1.1	7.5	
				14	7.4	1.3	8.7	
				21	4.2	0.67	4.8	

* Application was made to run-off

Garden pea (young pods). The use of dicofol on garden peas is registered in Australia, Canada, Japan and Spain with application rates ranging from 0.3 to 0.96 kg ai/ha and PHIs from 3 to 15 days. The

residues found in the supervised trials in Japan reviewed in 1992 are shown again in Table 3.

Table 3. Residues of dicofol in garden peas (young pods) from trials in Japan (1989).

Application, kg ai/ha	PHI, days	Residue, *p,p′* + *o,p′*, mg/kg	Reference
2 x 0.67	1	1.7	Endo,
	3	1.4	1991a
	7	0.88	
2 x 0.53	1	1.7	
	3	1.3	
	7	0.6	

Tea, Green, Black (black, fermented and dried). The use of dicofol on tea is registered only in Japan with application rates from 0.4 to 1.1 kg ai/ha and a 20-day PHI. The supervised trials reviewed in 1992 are summarized again in Table 4.

Table 4. Residues of dicofol in tea.

Country, Year	Application		PHI, days	Residues in processed dried leaves, mg/kg			Reference
	No	kg ai/ha		*p,p′*	*o,p′*	sum	
Japan 1974	1	1.1	14			15	Endo, 1991b
	2	1.1	21			4.4	
	1	1.1	21			3	
	1	1.1	28			0.82	
	1	1.1	14			29	
	2	1.1	21			10	
	1	1.1	21			8.7	
	1	1.1	28			2.3	
India 1991	1	0.19	7	5.1	0.06	5.2	Gordon, 1991
	1	0.19	7	16	1	17	
	1	0.19	7	38	2.7	41	
	1	0.19	7	22	1.3	24	
	1	0.19	7	28	2.4	31	
	1	0.19	7	27	2	29	

Animal transfer studies and definition of residue in animal products

Metabolism studies on hens and goats carried out with ^{14}C-labelled dicofol reported in the 1992 evaluation (pages 356-360) showed extensive metabolism of dicofol to polar metabolites, namely 2,2-dichloro-1,1-bis(4-chlorophenyl)ethanol (dichloro-dicofol, FW 152), *p,p′*-dichlorobenzophenone (DCBP) and *p,p′*-dichlorobenzhydrol (DCBH), which were detected in the tissues, organs, milk and eggs. The 1992 JMPR also reviewed feeding studies by Shaffer (1987, 1988). Table 19 of the 1992 evaluation (page 359) showed the average total residues (sum of dicofol, DCBP and FW 152) found in

milk, meat, organs and tissues, and Table 20 (page 360) the average residue levels of dicofol alone. On the basis of these results the 1992 Meeting estimated maximum residue levels for commodities of animal origin, but the metabolite FW 152 was not included in the definition of the residue.

Detailed comments on the residue definition for animal products were submitted by the USA (Ives, 1994) and Germany. The Meeting noted that metabolism studies (Cairns, 1988a,b; Deckert, 1986; Jamison and Shaffer, 1986) had shown that residues of FW 152 could constitute a high proportion of the residue in the milk and tissues of ruminants and eggs and tissues of hens (Table 5).

Table 5. Proportion of FW 152 in the total radioactive residue in goats and hens.

Sample	FW 152 as % of total radioactive residue	
	Goat	Hen
Milk	67	-
Fat	55	17
Muscle	56	22
Kidney	28	38
Liver	47	33
Eggs	-	17

The data summarized in Tables 6 and 7 demonstrate the contribution of FW 152 to residues in poultry and ruminants respectively.

Laying hens. In the lowest dose group (equivalent to 0.5 ppm in the diet) the only detectable residues were found in heart at 0.07 mg/kg (*p,p′*-dicofol) and in fat at 0.4 mg/kg (*p,p′*-dicofol). No metabolites were found. The results are summarized in Table 6.

Table 6. Residues of dicofol, DCBP and FW 152 in tissues, organs and eggs of laying hens.

Feeding level, sample	Residues, mg/kg		
	dicofol	DCBP	FW 152
	o,p′ *p,p′*	*o,p′* *p,p′*	*o,p′* *p,p′*
0.5 ppm			
Tissue (day 29)			
muscle,breast	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
muscle, thigh	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
gizzard	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
heart	<0.05 0.07	<0.05 <0.05	<0.05 <0.05
kidney	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
liver	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03
fat	<0.15 0.4	<0.15 <0.15	<0.15 <0.15
Eggs (day 27)			

Feeding level, sample	Residues, mg/kg		
	dicofol	DCBP	FW 152
	o,p′ *p,p′*	*o,p′* *p,p′*	*o,p′* *p,p′*
whole	<0.03 0.04	<0.03 <0.03	<0.03 <0.03
yolk	<0.03 0.12	<0.03 <0.05	<0.03 <0.03
white	<0.03 <0.03		<0.03 <0.03
1.5 ppm			
Tissue (day 29)			
muscle,breast	<0.05 <0.05		<0.05 <0.05
muscle, thigh	<0.05 0.07	<0.05 <0.05	<0.05 <0.05
gizzard	<0.05 0.06	<0.05 <0.05	<0.05 <0.05
heart	<0.05 0.14	<0.05 <0.05	<0.05 <0.05
kidney	<0.05 0.08	<0.05 <0.05	<0.05 <0.05
liver	<0.03 <0.03		<0.03 0.08
fat	<0.15 1.3	<0.15 <0.15	<0.15 <0.15
Eggs (day 27)			
whole	<0.03 0.16	<0.03 <0.03	<0.03 <0.03
yolk	<0.03 0.16	<0.03 <0.05	<0.03 0.03
white	<0.03 <0.03		<0.03 <0.03
5 ppm			
Tissue (day 29)			
muscle,breast	<0.05 <0.05		<0.05 <0.05
muscle, thigh	<0.05 0.23	<0.05 0.08	<0.05 <0.05
gizzard	<0.05 0.23	<0.05 <0.05	<0.05 <0.05
heart	<0.05 0.5	<0.05 <0.05	<0.05 0.05
kidney	<0.05 0.29	<0.05 <0.05	<0.05 <0.05
liver	<0.03 <0.03		<0.03 0.21
fat	<0.15 3.1	<0.15 <0.15	<0.15 0.16
Eggs (day 27)			
whole	<0.03 0.62	<0.03 0.08	<0.03 0.06
yolk	<0.03 1.2	<0.03 0.06	<0.03 0.09
white	<0.03 <0.03	<0.05 <0.05	<0.03 <0.03

Dairy cows. The residues from the feeding study can be used to estimate maximum residue levels in ruminants (cattle, goats and sheep). The metabolites *o,p′*- and *p,p′*-DCBP were not found. The principal metabolite in the milk and tissues was *p,p′*-FW 152. The results are shown in Table 7.

Table 7. Residues of dicofol, DCBP and FW 152 in tissues, organs and milk of dairy cows.

Feeding level, sample	Residues, mg/kg		
	dicofol	DCBP	FW 152
	o,p′ *p,p′*	*o,p′* *p,p′*	*o,p′* *p,p′*
10 ppm			
Tissue (day 29)			
muscle	<0.05 0.05	<0.05 <0.05	<0.05 0.14
heart	<0.05 0.07	<0.05 <0.05	<0.05 0.31
kidney	<0.05 <0.05	<0.05 <0.05	<0.05 0.19
liver	<0.05 <0.05	<0.05 <0.05	<0.05 0.65
fat	<0.05 0.5	<0.05 <0.05	0.06 2.1
milk (day 21)	<0.01 0.025	<0.01 <0.01	<0.01 0.14
milk (day 28)	<0.01 0.034	<0.01 <0.01	<0.01 0.1
30 ppm			
Tissue (day 29)			
muscle	<0.05 0.06	<0.05 <0.05	<0.05 0.33
heart	<0.05 0.36	<0.05 <0.05	0.07 1.4
kidney	<0.05 0.07	<0.05 <0.05	<0.05 0.34
liver	<0.05 <0.05	<0.05 <0.05	<0.05 1.05
fat	<0.05 2.9	0.06 <0.05	0.5 10
milk (day 21)	0.02 0.15	<0.01 <0.01	0.03 0.68
milk (day 28)	0.01 0.13	<0.01 <0.01	0.02 0.53
100 ppm			
Tissue (day 29)			
muscle	<0.05 0.21	<0.05 <0.05	0.08 1.5
heart	<0.05 0.63	<0.05 <0.05	0.23 3.8
kidney	<0.05 0.28	<0.05 <0.05	0.09 1.5
liver	<0.05 <0.05	<0.05 <0.05	0.18 2.3
fat	<0.05 9.5	<0.05 0.43	2.5 43
milk (day 21)	<0.01 0.33	<0.01 <0.01	0.09 1.8
milk (day 28)	<0.01 0.61	<0.01 0.015	0.16 3.3

APPRAISAL

Dicofol was originally evaluated by the JMPR in 1968 and was re-evaluated under the CCPR periodic review programme by the 1992 JMPR. At the 1994 CCPR several delegations expressed their reservations (ALINORM 95/24) with regard to the following points.

France stated that the proposed MRL for grapes should be reassessed as the French residue data provided to the 1992 JMPR were not considered valid and French GAP was reported incorrectly. France also expressed reservations on the proposals for pome fruit, peas, tea, milks and poultry meat (fat), and questioned the reported GAP for citrus fruits.

The delegations of France and the USA and the representative of the EU considered that the definition of the residue was unsatisfactory for the edible offal of cattle in view of the presence of a major metabolite, 2,2-dichloro-1,1-bis(4-chlorophenyl)ethanol (FW 152), in cattle liver. The JMPR was requested to re-evaluate the definition of the residue.

Germany expressed reservations regarding the adequacy of the available feeding study on poultry and doubted whether it could be extrapolated to the residues expected in feed items.

Delegations were requested to provide their written comments on the residue definition in animal tissues for consideration by the JMPR.

The Meeting received explanatory notes from France on French GAP for grapes, on the French residue trials on grapes reviewed in 1992, and the proposed MRLs for citrus fruits, apples, grapes, peas, tea and products of animal origin. Germany and the USA submitted comments on the residue definition and proposed MRLs for animal products.

The Meeting reviewed the new information in the context of that previously evaluated.

Grapes. Dicofol is registered for use on grapes in Australia, Canada, France, Japan, Spain and the USA with application rates from 0.4 to 1.9 kg ai/ha. The Meeting re-evaluated the residue data reviewed in 1992. It noted that France had considered the French trials to be invalid because of high control values, but the results associated with these control values had not been included in the evaluation, nor had the studies in which only the *p,p′*-isomer was determined.

The re-evaluation was based largely on six US trials according to GAP with applications at 1.3-1.5 kg ai/ha and a 7-day PHI which gave residues from 0.27 to 2.6 mg/kg.

Two Australian trials (0.03-0.035 kg ai/hl, 28-day PHI) with residues of 0.1 and 0.2 mg/kg, and two trials from Spain (0.72 and 0.9 kg ai/ha, 14-day PHI) with residues of 0.54 and 1.9 mg/kg were also in accordance with GAP, and one Italian trial was evaluated on the basis of Spanish GAP (0.72 kg ai/ha, 15-day PHI, residue 0.32 mg/kg). Of all the German trials received in 1992, both isomers (*p,p′*- and *o,p′*-dicofol) were determined in only three and these could be used for re-evaluation on the basis of French GAP. The residues ranged from 0.2 to 0.42 mg/kg 21 days after application. The Meeting confirmed the previous recommendation (5 mg/kg).

Garden pea (young pods). France, supported by Germany, expressed a firm reservation against the proposed MRL (ALINORM 95/24, para 91), because the recommendation was based on only two trials.

Dicofol is registered for use on garden peas in Australia, Canada, Japan and Spain, with application rates ranging from 0.3 to 0.96 kg ai/ha and PHIs from 3 to 14 days. In the two trials in Japan reviewed in 1992 the product was applied at 0.53 and 0.67 kg ai/ha and the residues after a 3-day PHI were 1.3 and 1.4 mg/kg respectively.

The Meeting concluded that the data were insufficient to recommend an MRL and agreed to withdraw the previous recommendation for garden pea (young pods) of 2 mg/kg.

Tea, Green, Black (black, fermented and dried). France and Germany expressed their reservations against the GAP on which the evaluation was based (ALINORM 95/24, para 99).

Information was available on GAP in Japan (0.4 to 1.1 kg ai/ha, 20-day PHI), India (0.19 kg ai/ha, 14-day PHI), Indonesia, Sri Lanka and Bangladesh (0.086 to 0.49 kg ai/ha).

The Meeting evaluated results from four trials in Japan (1.1 kg ai/ha, 21-day PHI) and six trials in India (0.19 kg ai/ha, 7-day PHI). The PHI is of little importance because of the sequential way in which tea is harvested. The residues in processed dried leaves from the Japanese trials ranged from 3 to 10 mg/kg, and in the Indian trials from 5.2 to 41 mg/kg. These levels are consistent with the previously reviewed results and the Meeting agreed that they supported the current MRL for 50 mg/kg for tea, green, black (black, fermented and dried).

Animal transfer studies and definition of the residue for animal products. Re-evaluation of the metabolism and feeding studies on hens and goats with [^{14}C]dicofol showed that the residues include both dicofol and FW 152. The metabolism studies showed that residues of FW 152 may constitute a significant proportion of the total radioactive residue in the milk and tissues of ruminants and eggs and tissues of hens.

The Meeting concluded that FW 152 should be included in the definition of the residue for animal commodities and changed the definition for animal products as shown in Annex I. The residue definition for plant commodities (sum of *p,p′*-dicofol and *o,p′*-dicofol) is unchanged.

Cattle meat, fat, kidney, and liver. Feeding studies on dairy cows for 35 days (10, 30 and 100 ppm in the feed) with analysis of muscle, heart, kidney, liver, fat and milk showed that in the 10 ppm group on day 29 after treatment the only detectable residue in the tissues except fat was FW 152 (muscle 0.14 mg/kg, fat 2.1 mg/kg, kidney 0.19 mg/kg, liver 0.65 mg/kg). In fat *p,p′*-dicofol (0.5 mg/kg) and *o,p′*-FW 152 (0.06 mg/kg) were also found. If it is assumed that fruit pomace accounts for a maximum of 30% and 10% of the daily feed of beef and dairy cattle respectively, and that residues can reach 30 mg/kg in apple pomace (see 1992 evaluation, US data) the residues in the daily feed of beef and dairy cattle should not exceed 10 mg/kg and 3 mg/kg, respectively. The residue intake from other feedingstuffs would be considerably less, e.g. pulses at a maximum of 20% of the daily feed and with a residue level of 0.3 mg/kg would contribute 0.06 mg/kg in the daily feed of cattle. The results show that the data from the lowest-dose (10 ppm) feeding group can be used to estimate maximum residue levels.

The Meeting agreed to increase the recommendation for cattle meat (fat) from 0.5 to 3 mg/kg to accommodate residues of FW 152, and to replace the previous recommendation for the edible offal of cattle (0.05* mg/kg) by 1 mg/kg in order to accommodate possible residues of FW 152 in the liver and kidney.

Cattle milk. The recommended MRL for milk is based on a residue level of 3 mg/kg in feed according to the following data.

p,p′-dicofol found on day 21 after application:
in 10 ppm feeding group: 0.025 mg/kg, extrapolated to 0.0075 mg/kg;
in 30 ppm feeding group: 0.15 mg/kg, extrapolated to 0.015 mg/kg;
in 100 ppm feeding group: 0.33 mg/kg, extrapolated to 0.01 mg/kg.

p,p′-dicofol found on day 28 after application:
in 10 ppm feeding group: 0.034 mg/kg, extrapolated to 0.01 mg/kg;

in 30 ppm feeding group: 0.13 mg/kg, extrapolated to 0.013 mg/kg;
in 100 ppm feeding group: 0.61 mg/kg, extrapolated to 0.018 mg/kg.

p,p′-FW 152 found on day 21 after application:
in 10 ppm feeding group: 0.14 mg/kg, extrapolated to 0.042 mg/kg;
in 30 ppm feeding group: 0.68 mg/kg, extrapolated to 0.068 mg/kg;
in 100 ppm feeding group: 1.8 mg/kg, extrapolated to 0.054 mg/kg.

p,p′-FW 152 found on day 28 after application:
in 10 ppm feeding group: 0.1 mg/kg, extrapolated to 0.03 mg/kg;
in 30 ppm feeding group: 0.53 mg/kg, extrapolated to 0.053 mg/kg;
in 100 ppm feeding group: 3.3 mg/kg, extrapolated to 0.099 mg/kg.

The maximum combined residue level in milk based on a residue of 3 mg/kg dicofol in the feed is expected to be 0.1 mg/kg. The Meeting estimated a maximum residue level for milks of 0.1 mg/kg (F) for the sum of *o,p′*-dicofol, *p,p′*-dicofol and *p,p′*-FW 152, expressed as dicofol, to replace the previous recommendation (0.05 mg/kg (F) for the sum of *o,p′*-dicofol and *p,p′*-dicofol).

Poultry meat and edible offal, eggs. Feeding studies were carried out on laying hens for 42 days (0.5, 1.5 and 5 ppm in the feed) with analysis of muscle, gizzard, heart, kidney, liver, fat and eggs. In the 0.5 ppm group the only detectable residues were found on day 29 after treatment in heart, with 0.07 mg/kg *p,p′*-dicofol, and fat, with 0.4 mg/kg *p,p′*-dicofol. Assuming that poultry feed contains a maximum of 30% pulses with a residue level of 0.3 mg/kg (see 1992 evaluation), not more than 0.1 mg/kg is to be expected in the daily feed (1/5 of the lowest level in the feeding trial).

The Meeting estimated a maximum residue level for poultry meat of 0.1 mg/kg (fat), to replace the previous recommendation of 0.5 mg/kg (fat). It agreed to maintain the current recommendations for eggs of 0.05 mg/kg and for the edible offal of poultry of 0.05* mg/kg, as being a practical limit of determination.

RECOMMENDATIONS

The Meeting estimated the maximum residue levels listed below which are recommended for use as MRLs.

Definition of the residue	
Plant commodities:	dicofol (sum of *o,p′* and *p,p′* isomers) (fat-soluble)
Animal commodities:	sum of dicofol (sum of *o,p¢* and *p,p¢* isomers) and 2,2-dichloro-1,1-bis(4-chlorophenyl)ethanol (*p,p′*-FW 152), expressed as dicofol (fat-soluble)

Commodity	Recommended MRL		
CCN	Name	New	Previous
MO 0812	Cattle, Edible offal of	1	0.05 (*)
MM 0812	Cattle, meat	3 (fat)	0.5 (fat)
VP 0528	Garden pea (young pods)	W	2
ML 0106	Milks	0.1 F	0.05 F
PM 0110	Poultry meat	0.1 (fat)	0.5 (fat)

W: the previous recommendation is withdrawn

FURTHER WORK OR INFORMATION

Desirable

The items listed by the 1992 JMPR:

1. Details of rate of application (kg ai/ha or kg ai/hl) for the trials in Thailand on grapes submitted to the JMPR together with information on GAP.

2. Additional data from supervised trials on crops where limited information is available, namely figs, coffee beans, zucchini, watermelons, tea, strawberries and gherkins.

3. Information on GAP for application to coffee beans.

4. Residue trials on crops where GAP was reported but no residue data were supplied, namely almond, apricot, banana, crab-apple, egg plant, mushrooms, papaya, quince and raspberry.

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