

DITHIOCARBAMATES (105)

APPRAISAL

Mancozeb, maneb and propineb were reviewed in the periodic review programme in 1993 and MRLs for dithiocarbamates were recommended.

Metiram, another dithiocarbamate, has now been evaluated by the present Meeting as a new compound, and the evaluation is elsewhere. The maximum residues arising from the use of metiram according to GAP do not exceed the current recommendations for dithiocarbamates, where these exist, but additional MRLs are needed for commodities that are not already covered.

The Meeting believed that it would be useful to have a consolidated list of the current recommendations that showed the compound(s) contributing to the recommendation for each commodity, and such a list is given in the Table of recommendations below.

The 1993 JMPR had estimated a maximum residue level of 2 mg/kg for dithiocarbamates on mangoes arising from the use of mancozeb (Report, p.85), but the entry had been inadvertently omitted from Annex I. The entry is included in the following Table as a JMPR recommendation.

The Meeting noted that there is a CXL for dithiocarbamate in endive, but no recommendation had been made during the 1993 periodic review of mancozeb, maneb and propineb. In the absence of adequate data the recommendation for an MRL should have been withdrawn. The recommendation to withdraw the CXL is now included in the following Table.

RECOMMENDATIONS

The maximum residue levels listed below are recommended for use as MRLs.

Definition of the residue: The MRLs refer to total dithiocarbamates, determined as CS₂ evolved during acid digestion and expressed as mg CS₂/kg.

Commodity		Recommended MRL, mg/kg	Compounds on which recommendations are based ¹			
CCN	Name					
AM 0660	Almond hulls	20		<u>maneb</u>		
TN 0660	Almonds	0.1*	mancozeb	maneb		
VS 0621	Asparagus	0.1	<u>mancozeb</u>			
FI 0327	Banana	2	<u>mancozeb</u>			
GC 0640	Barley	1	<u>mancozeb</u>			
AS 0640	Barley straw and fodder, dry	25	<u>mancozeb</u>	maneb		
VB 0041	Cabbages, Head	5	mancozeb	<u>maneb</u>		
VR 0577	Carrot	1	<u>mancozeb</u>			
VS 0624	Celery	Withdrawn ²				
FS 0013	Cherries	Withdrawn ²				

Commodity		Recommended MRL, mg/kg	Compounds on which recommendations are based ¹			
CCN	Name					
VP 0526	Common bean (pods and/or immature seeds)	1				<u>metiram</u>
VL 0510	Cos lettuce	10		<u>maneb</u>		
FB 0265	Cranberry	5	<u>mancozeb</u>			
VC 0424	Cucumber	2	mancozeb	<u>maneb</u>		
FB 0021	Currants, Black, Red, White	10	<u>mancozeb</u>			metiram
MO 0105	Edible offal (Mammalian)	0.1	<u>mancozeb</u>			metiram
PE 0112	Eggs	0.05*	mancozeb			
VL 0476	Endive	Withdrawn ⁴				
VA 0381	Garlic	0.5	<u>mancozeb</u>			
FB 0269	Grapes	5	<u>mancozeb</u>	maneb	propineb	metiram
DH 1100	Hops, dry	30				<u>metiram</u>
VL 0480	Kale	15	mancozeb	<u>maneb</u>		
VA 0384	Leek	0.5	<u>mancozeb</u>			
VL 0482	Lettuce, Head	10	<u>mancozeb</u>	<u>maneb</u>		metiram
AS 0645	Maize fodder	2	<u>mancozeb</u>			
FC 0003	Mandarins	10	<u>mancozeb</u>			
FI 0345	Mango	2	<u>mancozeb</u>			
MM 0095	Meat	0.02*	mancozeb			metiram
VC 0046	Melons, except Watermelon	0.5	<u>mancozeb</u>		propineb	
ML 0106	Milks	0.05*	mancozeb			metiram
VA 0385	Onion, Bulb	0.5	<u>mancozeb</u>		propineb	
FC 0004	Oranges, Sweet, Sour	2	<u>mancozeb</u>			
FI 0350	Papaya	5	<u>mancozeb</u>			
FS 0247	Peach	Withdrawn ⁵				
SO 0697	Peanut	0.1*	mancozeb			
AL 0697	Peanut fodder	5	<u>mancozeb</u>			
VO 0445	Peppers, Sweet	1	<u>mancozeb</u>	<u>maneb</u>		
FS 0014	Plums (including Prunes)	Withdrawn ²				
FP 0009	Pome fruits	5	<u>mancozeb</u>		propineb	<u>metiram</u>
VR 0589	Potato	0.2	<u>mancozeb</u>	<u>maneb</u>	<u>propineb</u>	<u>metiram</u>
PO 0111	Poultry, Edible offal of	0.1	<u>mancozeb</u>			
PM 0110	Poultry meat	0.1	<u>mancozeb</u>			
VC 0429	Pumpkins	0.2	<u>mancozeb</u>			
VA 0389	Spring onion	10		<u>maneb</u>		
VC 0431	Squash, Summer	1	<u>mancozeb</u>			
FB 0275	Strawberry	Withdrawn ⁵				
VR 0596	Sugar beet	0.5	<u>mancozeb</u>	maneb		
AV 0596	Sugar beet leaves or tops	20	<u>mancozeb</u>	maneb		
VO 0447	Sweet corn (corn-on-the-cob)	0.1*	mancozeb			
VO 0448	Tomato	5	<u>mancozeb</u>	maneb	propineb	metiram
VC 0432	Watermelon	1	mancozeb	<u>maneb</u>		
GC 0654	Wheat	1	<u>mancozeb</u>	maneb		metiram

Commodity		Recommended MRL, mg/kg	Compounds on which recommendations are based ¹			
CCN	Name					
AS 0654	Wheat straw and fodder, dry	25	<u>mancozeb</u>	maneb		metiram
VC 0433	Winter squash	0.1	<u>mancozeb</u>			

¹ The underlined compound(s) have principally determined the estimated maximum residue level

² 1993 recommendation

³ 1995 recommendation

⁴ 1995 recommendation, omitted in 1993 in error

⁵ Withdrawal recommended by 1993 JMPR; withdrawn by 21st CAC