

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
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TO: Codex Contact Points
Interested International Organizations

FROM: Secretary,
Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme
FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy

SUBJECT: **REQUEST FOR COMMENTS ON THE RECOMMENDATIONS OF THE
2008 JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES (JMPR)¹ AND
PESTICIDE MRLS AT STEP 6 OF THE PROCEDURE**

DEADLINE: **1 March 2009**

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BACKGROUND

A. MRLs AT STEP 3 OF THE PROCEDURE

1. The annual Joint FAO/WHO Meeting on Pesticide Residues (JMPR) was held in Rome, Italy, from 8 to 19 September 2008. The following extracts of the results of the annual Joint FAO/WHO Meeting on Pesticide Residues (JMPR) are provided to make them accessible to interested parties at an early date.

2. The Meeting evaluated 28 pesticides, of which 6 were new compounds, and 5 were re-evaluated within the periodic review programme of the Codex Committee on Pesticide Residues (CCPR). The Meeting established acceptable daily intakes (ADIs) and acute reference doses (ARfDs).

3. The Meeting estimated maximum residue levels, which it recommended for use as maximum residue limits (MRLs) by the CCPR. It also estimated supervised trials median residue (STMR) and highest residue (HR) levels as a basis for estimation of the dietary intake of residues of the pesticides reviewed. Application of HR levels is explained in the report of the 1999 Meeting (Section 2.4). The allocations and estimates are shown in the table.

¹ The recommendations of the JMPR for pesticide maximum residue limits correspond to Step 3 of the Codex Procedure.

4. Pesticides for which the estimated dietary intakes might, on the basis of the available information, exceed their ADIs are marked with footnotes, as explained in detail in the report of the 1999 Meeting (Section 2.2). Footnotes are also applied to specific commodities when the available information indicated that the ARfD of a pesticide might be exceeded when the commodity was consumed. It should be noted that these distinctions apply only to new compounds and those re-evaluated within the CCPR periodic review programme.

5. The table includes the Codex reference numbers of the compounds and the Codex classification numbers (CCNs) of the commodities, to facilitate reference to the Codex maximum limits for pesticide residues (*Codex Alimentarius*, Vol. 2B) and other documents and working documents of the Codex Alimentarius Commission. Both compounds and commodities are listed in alphabetical order.

6. Apart from the abbreviations indicated above, the following qualifications are used in the Table:

* (following name of pesticide)	New compound
** (following name of pesticide)	Compound reviewed within CCPR periodic review programme
* (following recommended MRL)	At or about the limit of quantification
HR-P	Highest residue in a processed commodity, in mg/kg, calculated by multiplying the HR in the raw commodity by the processing factor
Po	The recommendation accommodates post-harvest treatment of the commodity.
PoP (following recommendation for processed foods (classes D and E in the Codex classification))	The recommendation accommodates post-harvest treatment of the primary food commodity.
STMR-P	An STMR for a processed commodity calculated by applying the concentration or reduction factor for the process to the STMR calculated for the raw agricultural commodity.
W (in place of a recommended MRL)	The previous recommendation is withdrawn, or withdrawal of the recommended MRL or existing Codex or draft MRL is recommended.

7. The Annex is also available from the website below:

<http://www.fao.org/ag/AGP/AGPP/Pesticid/JMPR/Download/2008AnnexIFinal.pdf>

8. Should anybody have problems in downloading the above documents, please contact Mrs Yong Zhen Yang at the following addresses in order to get a copy as an email attachment:

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9. Governments and interested international organizations are invited to comment on the newly proposed draft MRLs that correspond to Step 3 of the Codex Procedure as proposed by the 2008 JMPR and also on other recommendations which are relevant to the work of the 41st Session of the CCPR (see Table below) to the addresses indicated on cover page by **1 March 2009**.

B. MRLS AT STEP 6 OF THE PROCEDURE

10. The 31st Session of the Commission adopted the draft MRLs as proposed in Appendix IV of ALINORM 08/31/24 at Step 5 and advanced them to Step 6, (see ALINORM 08/31/REP, para. 72)

elaborated by the Codex Committee on Pesticide Residues (see ALINORM 07/30/24, Appendix IV) noting the reservations expressed by the Delegations of the European Community and Norway on the draft MRLs for triadimefon (133) for grapes, cyfluthrin/beta-cyfluthrin (157) for broccoli and head cabbage, and Flusilazole (165) for pome fruits, peach, nectarine and bovine edible offal.

11. The 40th Session of the CCPR had returned to Step 6 a number of MRLs as presented in Appendix VII of ALINORM 07/30/24.

12. These documents were previously distributed to the Codex Contact Points and are available from the following website:

<http://www.codexalimentarius.net>

13. Member governments and interested international organizations are invited to provide comments on the above MRLs at Step 6 of the Procedure and should do so in writing in conformity with the Uniform Procedure for the Elaboration of Codex Standards and Related Texts (see *Procedural Manual of the Codex Alimentarius Commission, Seventeenth Edition*), preferably by an email to the addresses indicated on cover page by **1 March 2009**.

ANNEX 1: ACCEPTABLE DAILY INTAKES, SHORT-TERM DIETARY INTAKES, ACUTE REFERENCE DOSES, RECOMMENDED MAXIMUM RESIDUE LIMITS AND SUPERVISED TRIALS MEDIAN RESIDUE VALUES RECORDED BY THE 2008 MEETING

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Azoxystrobin (229)*	AB 0660	Almond hulls	7		2.1	
ADI: 0–0.2 mg/kg bw	VS 0620	Artichoke, globe	5	–	1.8	
ARfD: unnecessary	VS 0621	Asparagus	0.01*	-	0.01	
	FI 0327	Banana	2	-	0.03 a)	
	GC 0640	Barley grain	0.5	-	0.08	
		Barley malt			0.01	
		Barley spent grain			0.01	
		Beer			0.002	
	FB 0018	Berries and other small fruits, except cranberry, grapes, and strawberry	5	-	1.0	
	VB 0040	Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassica	5	-	1.2	
	VA 0035	Bulb vegetables	10	-	2.2	
	VS 0624	Celery	5	-	0.43	
	FC 0001	Citrus fruit	15	-	4.9	
	SO 0691	Cotton seed	0.7	-	0.01	
	FB 0265	Cranberry	0.5	-	0.23	
	DF 0269	Dried grapes (= currants, raisins and sultanas)			0.24	
	DH 0170	Dried herbs, except dry hops	300	-	152	
	MO 0105	Edible offal (mammalian)	0.07	-	0.01	
	PE 0112	Eggs	0.01*	-	0	
	VC 0045	Fruiting vegetables, Cucurbits	1	-	0.17 (0.02b)	
	VO 0050	Fruiting vegetables, other than Cucurbits, except Mushrooms and Sweet corn	3	-	0.35	
	FB 0269	Grapes	2	-	0.53	
	JF 0269	Grape juice			0.19	
		Grape must			0.28	
	HH 0092	Herbs	70	-	23	
	DH 1100	Hops, dry	30	-	11	
	VP 0060	Legume vegetables	3	-	1.0	
	VL 0482	Lettuce, Head	3	-	0.28	
	VL 0483	Lettuce, Leaf	3	-	0.28	
	CF 1255	Maize flour			0.01	
	GC 0645	Maize grain	0.02	-	0.01	
		Maize grits			0.003	
	CF 0645	Maize meal			0.01	

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	AS 0654	Maize, fodder	40 dw		5.0 dw	
	OR 0645	Maize oil, edible	0.1	-	0.06	
		Maize starch			0.001	
	FI 0345	Mango	0.7		0.05 a)	
	MM 0095	Meat from mammals (other than marine mammals)	0.05 (fat)		0.01	
	FM 0183	Milk fats	0.03	-	0.03	
	ML 0106	Milks	0.01	-	0.01	
	GC 0647	Oat grain	0.5	-	0.08	
	JF 0004	Orange juice			0.39	
		Orange oil, cold-pressed			24	
	FI 0350	Papaya	0.3	-	0.02 a)	
	SO 0697	Peanut	0.2	-	0.01	
	AL 1270	Peanut fodder	30		5.1	
	OR 0697	Peanut oil, edible			0.03	
	HS 0444	Peppers, chili (dried)	30	-	3.5	
	TN 0675	Pistachios	1	-	0.44	
	FI 0354	Plantain	2	-	0.03 a)	
	PM 0110	Poultry meat	0.01*	-	0	
	PO 0111	Poultry, Edible offal of	0.01*	-	0	
	DF 0014	Prunes			0.14	
	GC 0649	Rice	5	-	0.68	
	CF 0649	Rice bran, processed			0.82	
	CM 1205	Rice, polished			0.06	
	VR 0075	Root and tuber vegetables	1	-	0.23	
	GC 0650	Rye	0.2	-	0.01	
	OR 0541	Soya bean oil, refined			0.05	
	VD 0541	Soya bean (dry)	0.5	-	0.06	
	AL 0541	Soya bean fodder (dry)	100 dw		36 dw	
	FS 0012	Stone fruits	2	-	0.74	
	FB 0275	Strawberry	10	-	1.3	
	AS 0081	Straw and fodder (dry) of cereal grains, except maize	15 dw		1.7 dw	
	OR 0702	Sunflower seed oil, edible			0.01	
	SO 0702	Sunflower seed	0.5	-	0.04	
		Tomato conserve			0.05	
	JF 0448	Tomato juice			0.16	
		Tomato ketchup			0.21	
	VW 0448	Tomato paste			1.1	
		Tomato purée			0.35	
	TN 0085	Tree nuts, except pistachios	0.01	-	0.01	
	GC 0653	Triticale	0.2	-	0.01	
	CF 0654	Wheat bran, processed			0.004	
	CP 1211	White bread			0.001	
	CP 1212	Wholemeal bread			0.001	
		Wheat flour, low grade			0.003	

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
		Wheat flour, patent			0.003	
	CF 1212	Wheat flour, wholemeal			0.003	
	GC 0654	Wheat	0.2	-	0.01	
		Wheat shorts			0.001	
		Wine			0.36	
	VS 0469	Witloof chicory (sprouts)	0.3	-	0.05	
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: azoxystrobin. The residue is fat soluble. a) STMR and HR values in edible portion (pulp). b) Melons only						
Bifenazate (219)						
ADI: 0–0.01 mg/kg bw	An incomplete data submission precluded the estimation of MRL or STMR values					
ARfD: Unnecessary						
Boscalid (221)	FI 0327	Banana	0.6	0.2	0.05	
ADI: 0–0.04 mg/kg bw	FI 0341	Kiwi fruit	5	-	0.073	
ARfD: Unnecessary						
Definition of the residue (for compliance with the MRL for plant and animal commodities and for estimation of dietary intake for plant commodities): boscalid. Definition of the residue (for estimation of dietary intake for animal commodities): sum of boscalid, 2-chloro-N-(4'-chloro-5-hydroxybiphenyl-2-yl)nicotinamide including its conjugate, expressed as boscalid. The residue is fat soluble.						
Buprofezin (173)**	FC 0001	Citrus fruits	1	-	0.04	0.1
ADI: 0–0.009 mg/kg bw	JF 0004	Citrus juice			0.13	
ARfD: 0.5 mg/kg bw	FC 0004	Oranges, sweet and sour	W	0.5	-	-
	FI 0345	Mango	0.1	-	0.01	0.01
	VC 0424	Cucumber	0.2	-	0.035	0.1
	VO 0448	Tomato	1	1	0.24	0.52
	JF 0448	Tomato juice			0.053	-
	VW 0448	Tomato paste			0.22	-
		Tomato, peeled			0.041	0.088
	MM 0095	Meat from mammals (other than marine mammals)	0.05*	-	0	0
	MO 0105	Edible offal (Mammalian)	0.05*	-	0	0
	ML 0106	Milks	0.01*	-	0	0
		Citrus pulp, Dry	2			
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: buprofezin						
Carbaryl (008)	The Meeting concluded that there was insufficient data to support alternative GAP assessments for citrus, cherries and grapes.					

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
ADI: 0–0.008 mg/kg bw ARfD: 0.2 mg/kg bw Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: carbaryl						
Carbofuran (096) ADI: 0–0.001 mg/kg bw ARfD: 0.001 mg/kg bw Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: sum of carbofuran, 3-hydroxycarbofuran and conjugated 3-hydroxycarbofuran, expressed as carbofuran.						
Chlorantraniliprole (230)*	VS 0624	Celery	7	-	2.1	
ADI: 0–2 mg/kg bw	GC 0080	Cereal grains	0.02	-	0.01	
ARfD: Unnecessary	SO 0691	Cotton seed	0.3	-	0.049	
	PE 0112	Eggs	0.01*	-	0	
	VC 0045	Fruiting vegetables, Cucurbits	0.3	-	0.065	
	VO 0050	Fruiting vegetables, other than Cucurbits (except Mushrooms and Sweet corn)	0.6	-	0.066	
	HS 0444	Peppers, chili (dried)	5	-	0.46	
	JF 0448	Tomato juice			0.0589	
		Tomato ketchup			0.0691	
		Tomato purée			0.102	
	VW 0448	Tomato paste			0.109	
	FB 0269	Grapes	1	-	0.119	
	JF 0269	Grape juice			0.0869	
	DF 5263	Raisins			0.411	
		White wine			0.0262	
		Red wine			0.140	
	VL 0053	Leafy vegetables	20	-	7.3	
	MO 0105	Edible offal (Mammalian)	0.01*	-	0	
	ML 0106	Milks	0.01*	-	0	
	FM 0183	Milk fats	0.1	-	0.047	
	MM 0095	Meat (from mammals other than marine mammals)	0.01* (fat)	-	0 M 0 F	
	FP 0009	Pome fruits	0.4	-	0.07	
	JF 0226	Apple juice			0.0098	
		Apple purée			0.0063	
		Apple sauce			0.0189	
	PM 0110	Poultry meat	0.01* (fat)	-	0 M 0 F	
	PO 0111	Poultry, Edible offal of	0.01*	-	0	
	VR 0075	Root and tuber vegetables	0.02	-	0.01	

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	FS 0012	Stone fruits	1	-	0.2	
	AS 0081	Straw and fodder (dry) of cereal grains	0.3	-	0.51	
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: chlorantraniliprole The residue is fat-soluble						
Chlorpropham (201)	ML 0812	Cattle Milk	W	0.0005* F	0.0003	
ADI: 0–0.05 mg/kg bw	ML 0106	Milks	0.01*	-	0.00195	0.0085
ARfD: 0.5 mg/kg bw	FM 0183	Milk fats	0.02	-	0.00195	0.011
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: Chlorpropham The residue is fat-soluble						
Cyhalothrin (146)** (includes lambda-cyhalothrin)	AB 0660	Almond hulls	2		0.42	
	JF 0226	Apple, juice			0.008	-
Group ADI: 0–0.02 mg/kg bw	FS 0240	Apricots	0.5	-	0.1	0.33
Group ARfD: 0.02 mg/kg bw	VS 0621	Asparagus	0.02	-	0.01	0.01
	GC 0640	Barley	0.5	-	0.02	-
	FB 0018	Berries and other small fruits	0.2	-	0.02	0.09
	VA 0035	Bulb vegetables	0.2	-	0.05	0.11
	VB 0041	Cabbages, Head	0.3	0.2	0.08	0.17
	FS 0013	Cherries	0.3	-	0.125	0.18
	FC 0001	Citrus fruits	0.2	-	0.01	0.01
	OC 0691	Cotton seed, crude oil	W	0.02*	0.005	-
	OR 0691	Cotton seed, refined oil	W	0.02*	0.001	-
	SO 0691	Cotton seeds	W	0.02*	0.01	
	DF 0269	Dried grapes (= currants, Raisins and Sultanias)	0.3	-	0.06	0.27
	VB 0042	Flowerhead brassica	0.5	-	0.215	0.3
	VC 0045	Fruiting vegetables, Cucurbits	0.05	-	0.01	0.02
	VO 0050	Fruiting vegetables, other than Cucurbits except Mushrooms	0.3	-	0.03	0.18
	JF 0269	Grape, juice			0.01	-
	MO 0098	Kidney of cattle, goats, pigs and sheep	0.2	-	0.03	0.09
	VP 0060	Legume vegetables	0.2	-	0.02	0.11
	MO 0099	Liver of cattle, goats, pigs and sheep	0.05	-	0.008	0.02
	GC 0645	Maize	0.02	-	0.01	
	FI 0345	Mango	0.2	-	0.03	0.07
	MM 0095	Meat (from mammals	3 (fat)	-	0.04	0.1

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
		other than marine mammals)			(muscle) 1 (fat)	(muscle) 2.2 (fat)
	ML 0106	Milks	0.2	-	0.08	-
	FS 0245	Nectarine	0.5	-	0.1	0.33
	GC 0647	Oats	0.05	-	0.01	-
	SO 0088	Oilseeds	0.2	-	0.01	-
	OR 0305	Olive oil, refined			0.077	-
	OR 0305	Olive oil, virgin			0.091	-
	FT 0305	Olives	1	-	0.125	0.42
	JF 0004	Orange, juice			0.0165	-
	-	Orange, marmalade			0.05	-
	FS 0247	Peaches	0.5	-	0.1	0.33
	HS 0444	Peppers, chili (dried)	3	-	0.35	1.5
	FS 0014	Plums, except prunes	0.2	-	0.02	0.1
	FP 0009	Pome fruits	0.2	0.2	0.08	0.1
	VR 0589	Potato	W	0.02*	0	0
	VD 0070	Pulses	0.05	-	0.01	-
	GC 0649	Rice	1	-	0.295	-
	CM 0649	Rice bran, unprocessed			0.065	-
	CM 1205	Rice, polished			0.003	-
	VR 0075	Root and tuber vegetables	0.01*	-	0	0
	GC 0650	Rye	0.05	-	0.01	-
	AS 0081	Straw and fodder (dry) of cereal grains	2 dw		0.54 dw	-
	GS 0659	Sugar cane	0.05	-	0.02	0.03
	DM 0659	Sugar cane, molasses			0.001	-
	-	Sugar cane, refined sugar			0.001	-
	JF 0048	Tomato, juice			0.002	-
	VW 0448	Tomato, paste			0.007	-
	TN 0085	Tree nuts	0.01*	-	0.01	0.01
	GC 0653	Triticale	0.05	-	0.01	-
	GC 0654	Wheat	0.05	-	0.01	0.03
	CF 0654	Wheat bran, unprocessed	0.1	-	0.045	-
	CF 1211	Wheat, flour			0.005	-
	-	Wine			0.01	-
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: cyhalothrin (sum of isomers)						
a) on dry matter basis						
Cypermethrins (118) **	AL 1020	Alfalfa fodder	30 acZ		11.5	20
ADI: 0–0.02 mg/kg bw	VS 0620	Artichoke, Globe	0.1 Ac	-	0.025	0.04
ARfD: 0.04 mg/kg bw	VS 0621	Asparagus	0.01* Ac	-	0.01	0.01
	GC 0640	Barley	W 1)	0.5		
	AL 0061	Bean fodder	2 Acz	-	0.58	1.3
	VP 0062	Beans, Shelled	W 1)	0.05*		
	FB 0018	Berries and other small fruits	W	0.5		
	VB 0040	Brassica (cole or	1 cAz	1	0.02	0.65

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
		cabbage) vegetables, Head cabbages, Flowerhead brassica				
	FT 0289	Carambola	0.2 C	-	0.02	0.09
	GC 0080	Cereal grains, except rice	0.3 Acz	-	0.035	
	FS 0013	Cherries	W 1)	1		
	HS 0444	Peppers, chili (dried)	10 C	-	3.5	4.8
	FC 0001	Citrus fruits	W	2		
	SB 0716	Coffee beans	0.05* aZ	0.05*	0	
	VP 0526	Common bean (pods and/or immature seeds)	W 1)	0.5		
	VC 0424	Cucumber	W 1)	0.2		
	DF 0269	Dried grapes (=Currants, Raisins and Sultanans)	0.5 cA	-	0.033	0.3
	FI 0334	Durian	1 C	-	0.135	0.47
	MO 0105	Edible offal (mammalian)	0.05* 3)	0.05*	0.014	0.04
	VO 0440	Egg plant	0.03 A	0.2	0.01	0.02
	PE 0112	Eggs	0.01*	0.05*	0.001	0.0033
	VC 0045	Fruiting vegetables, Cucurbits	0.07 cAz	-	0.01 (0.01)5)	0.05 (0.01) 5)
	FB 0269	Grapes	0.2 cA	-	0.01	0.09
	VL 0480	Kale	W 1)	1		
	VL 0053	Leafy vegetables	0.7 cAz	-	0.07	0.52
	VA 0384	Leek	0.05 cA	0.5	0.01	0.03
	VP 0060	Legume vegetables	0.7 caZ	-	0.22	0.45
	VL 0482	Lettuce, Head	W 1)	2		
	FI 0343	Litchi	2 C	-	0.495	0.79
	FI 0342	Longan	1 C	-	0.3	0.47
	GC 0645	Maize	W 1)	0.05 *		
	AS 0645	Maize fodder	W 1)	5 dry wt		
	FI 0345	Mango	0.7 C	-	0.19	0.35
	MM 0095	Meat (from mammals other than marine mammals)	2 (fat) 3)	0.2 (fat)	0.15 fat 0.014 muscle	0.76 fat 0.04 muscle
	VC 0046	Melons, except Watermelon	W 1)	-	0.01	0.01
	FM 0183	Milk fats	0.5	0.15		
	ML 0106	Milks	0.05	0.05 F.	0.011	
	VO 0450	Mushrooms	W	0.05*		
	FS 0245	Nectarine	W 1)	2		
	SO 0088	Oilseed	0.1 Acz	-	0.05	
	SO 0089	Oilseed, except peanut	W 1)	0.2		
	VO 0442	Okra	0.5 C	-	0.08	0.2
	OR 0305	Olive oil, refined	0.5 cA	-	0.41	
	OC 0305	Olive oil, virgin	0.5 cA	-	0.38	
	FT 0305	Olives	0.05* cA	-	0.05	0.05
	VA 0385	Onion, Bulb	0.01* cAz	0.1	0.01	0.01
	FI 0350	Papaya	0.5 C	-	0.135	0.23

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	AL 0072	Pea hay or Pea fodder (dry)	2 Acz		0.42	1.1
	FS 0247	Peach	W 1)	2		
	SO 0697	Peanut	W 1)	0.05*		
	VO 0051	Peppers	W	0.5		
	VO 0444	Peppers, Chili	2 Cz	-	0.495	0.69
	VO 0445	Peppers, Sweet	0.1 aZ	-	0.05	0.07
	FS 0014	Plums (including prunes)	W 1)	1		
	FP 0009	Pome fruits	0.7 aZ 4)	2	0.205	0.56
	PM 0110	Poultry meat	0.05* (fat)	0.05*	0.002 muscle 0.008 fat	0.007 muscle 0.027 fat
	PO 0111	Poultry, Edible offal of	0.05*	-	0.002	0.007
	DF 0014	Prunes	W 1)	-	1.9	3
	VD 0070	Pulses	0.05* aZ	-	0.05	
	GC 0649	Rice	2 aZ	-	0.57	
	VR 0075	Root and tuber vegetables	W 1)	0.05*		
	VR 0075	Root and tuber vegetables (except sugar beet)	0.01* ACz	-	0.01	0.01
	AS 0651	Sorghum straw and fodder, dry	W 1)			
	VD 0541	Soya bean (dry)	W 1)	0.05*		
	VL 0502	Spinach	W 1)	2		
	FS 0012	Stone fruits	2 aZ		0.59	0.94
	AS 0081	Straw and fodder (dry) of cereal grains	10		3.6	6.9
	FB 0275	Strawberry	0.07 A	-	0.01	0.05
	VR 0596	Sugar beet	0.1 Acz	-	0.01	
	GS 0659	Sugar cane	0.2 Z	-	0.05	0.17
	VO 0447	Sweet corn (corn-on-the-cob)	0.05* Z	0.05*	0	0
	DT 1114	Tea, Green, Black	W	20		
	VO 0448	Tomato	0.2 caZ	0.5	0.05	0.08
	OR 0172	Vegetable oils, Edible	W 2)	0.5		
	GC 0654	Wheat	W 1)	0.2		
	OR 0495	Rape seed oil, edible			0.06	
	JF 0448	Tomato juice			0.015	
	CM 0654	Wheat bran, unprocessed			0.084	
	CF 1211	Wheat flour			0.015	
	CF 1210	Wheat germ			0.02	
	AS 0654	Wheat straw and fodder, Dry	W	5		
		Beer			0.0011	
		Tomato canned			0.006	
		Tomato puree			0.025	
		Wine			0.001	

Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: cypermethrin (sum of isomers).

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
The residue is fat soluble.						
1) Replaced by commodity group MRL						
2) Replaced by olive oil MRLs. Other vegetable oils are covered by the oilseeds MRL.						
3) CCRVDF has established veterinary drug MRLs for cypermethrin and alpha-cypermethrin in cattle muscle (50 µg/kg), cattle liver (50µg/kg), cattle kidney (50 µg/kg) and cattle fat (1000 µg/kg) and the same for sheep muscle (50 µg/kg), sheep liver (50 µg/kg), sheep kidney (50 µg/kg) and sheep fat (1000 µg/kg).						
4) Source of data supporting the proposed MRL: a: alpha-cypermethrin. c: cypermethrin. z: zeta-cypermethrin. Capital letters show the source of data responsible for the MRL estimate. Small letters show the sources of other data for that commodity						
5) Melons only						
Dimethoate (027)	VL 0482	Lettuce, Head	0.3	3	0.13	0.76
ADI: 0–0.002 mg/kg bw	VO 0445	Peppers, sweet	0.5	5	0.28	1.3
ARfD:0.02 mg/kg bw	HS 0444	Peppers, chili (dried)	3	50	2.8	13
Definition of the residue for compliance with MRLs: dimethoate						
Definition of the residue for estimation of dietary intake: dimethoate and omethoate.						
Diphenylamine (030)	ML 0812	Cattle milk	W	0.0004*	0.00015	-
ADI: 0–0.08 mg/kg bw	ML 0106	Milks	0.01*	-	0.0019	-
ARfD: unnecessary	FM 0183	Milk fats	0.01	-	0.0075	-
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: diphenylamine.						
Ethoxyquin (035)						
ADI: 0–0.005 mg/kg bw	FP 0230	Pears	3	W	5	6
ARfD: 0.5 mg/kg bw						
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: ethoxyquin						
Hexythiazox (176)**						
ADI: 0–0.03 mg/kg bw						
ARfD: Unnecessary						
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: hexythiazox.						
Imidacloprid (206)	AM 0660	Almond hulls	5		1.7	
ADI: 0–0.06 mg/kg bw	FB 0018	Berries and small fruits (except cranberries, grapes and strawberries)	5	-	0.89	2.8
ARfD: 0.4 mg/kg bw	SB 0716	Coffee beans	1	-	0.35	-
	MO 0095	Edible offal (Mammalian)	0.3	0.05	0.06	0.18
	PE 0112	Eggs	0.02	0.02	0.003	0.007
	ML 0106	Milks	0.1	0.02*	0.018	
	MM 0095	Meat (from mammals other than marine mammals)	0.1	0.02*	0.012 (muscle)	0.04 (muscle)
					0.007 (fat)	0.02 (fat)

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	VD 0072	Peas (dry)	2	-	0.62	-
	VP 0063	Peas (pods and succulent = immature seeds)	5	-	0.60	3.8
	VP 0064	Pea, shelled (succulent seeds)	2	-	0.58	1.1
	SO 0697	Peanut	1	-	0.12	0.40
	AL 1270	Peanut fodder				
	TN 0672	Pecan	W	0.05		
	FI 0355	Pomegranate	1	-	0.43	0.55
	VR 0589	Potato	W	0.5		
	PM 0110	Poultry meat	0.02	0.02	0.001 (muscle) 0.0004 (fat)	0.003 (muscle) 0.001 (fat)
	PO 0111	Poultry, edible offal of	0.05	0.02*	0.007	0.02
	VL 0494	Radish leaves (including Radish tops)	5	-	0.70	2.7
	VR 0075	Root and tuber vegetables	0.5	-	0.05	0.28
	FB 0275	Strawberry	0.5	-	0.17	0.35
	VR 0596	Sugar beet	W	0.05*		
	SO 0702	Sunflower seed	0.05*	-	0.05	
	TN 0660	Tree nuts	0.01	-	0.01	0.01
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: Sum of imidacloprid and its metabolites containing the 6-chloropyridinyl moiety, expressed as imidacloprid a on dry matter basis						
Malathion (049) ADI: 0–0.3 mg/kg bw ARfD: 2 mg/kg bw	GC 0654	Wheat	10	0.5	10	10
	CF 1211	Wheat flour	W	0.2	0.87	0.87
	CM 0654	Wheat bran, unprocessed	25	-	25	25
	CF 1212	Wheat wholemeal			7.5	7.5
		Wheat gluten			0.012	0.012
	CP 1212	Wholemeal bread			1.2	1.2
	CP 1211	White bread			0.2	0.2
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: malathion.						
Mandipropamid (231) * ADI: 0–0.2 mg/kg bw ARfD: Unnecessary	VB 0400	Broccoli	2	-	0.435	
	VB 0041	Cabbages, Head	3	-	0.01	
	VS 0624	Celery	20	-	2.70	
	HS 0444	Peppers, chili (dried)	10	-	0.84	
	VC 0424	Cucumber	0.2	-	0.02	
	FB 0269	Grapes	2	-	0.51	
	DF 0269	Dried grapes (= Currants, Raisins, Sultanas)	5	-	1.68	
		Wine			0.366	
	JF 0269	Grape, juice			0.14	
	VL 0053	Leafy vegetables	25	-	5.65	

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	VC 0046	Melons, except Watermelon	0.5	-	0.115	
	VA 0385	Onion, Bulb	0.1	-	0.01	
	VO 0051	Peppers	1	-	0.12	
	VR 0589	Potatoes	0.01*	-	0.01	
	VA 0389	Spring onion	7	-	0.48	
	VC 0431	Squash, summer	0.2	-	0.04	
	VO 0448	Tomato	0.3	-	0.06	
	JF 0448	Tomato juice			0.059	
		Tomato puree			0.068	
		Canned tomatoes			0.022	
Definition of the residue (for compliance with the MRL and for estimation of dietary intake for plant and animal commodities): mandipropamid						
Methomyl (094) ADI: 0–0.02 mg/kg bw	FP 0226	Apples	0.3 1)	2 2)	0.09	0.17
	VB 0400	Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassica	W	7 3)		
ARfD: 0.02 mg/kg bw	VS 0624	Celery	W	3 1)		
	VC 0045	Fruiting vegetables, Cucurbits	0.1 4)	0.1 1)	0.02	0.07
	FB 0269	Grapes	0.3 1)	7 1)	0.01 0.09 (for processing)	0.08 0.2 (for processing)
	VL 0482	Lettuce, Head	0.2 1)	-	0.01	0.07
	VL 0483	Lettuce, Leaf	0.2 1))	-	0.01	0.07
	VL 0053	Leafy vegetables	W	30 3)		
	FP 0230	Pear	0.3 4)	0.3 1)	0.09	0.18
	VO 0448	Tomato	1 4)	1 2)	0.16	0.73
	JF 0226	Apple juice			0.026	
	VW 0448	Tomato paste			0.0085	
		Wine			0.053	
	JF 0269	Grape, juice			0.0198	
	DF 0269	Dried grapes (= Currants, Raisins, Sultanas)			0.018	0.04
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: sum of methomyl and thiodicarb expressed as methomyl						
1) Resulting from data on supervised trials with methomyl						
2) Resulting from data on supervised trials with thiodicarb						
3) Resulting from data on supervised trials with methomyl plus thiodicarb						
4) Previous MRL confirmed.						
Oxamyl (126)	The Meeting concluded that there was insufficient data to support alternative GAP assessments for citrus, cucumber, melons (except watermelon), summer squash, peppers and tomatoes.					
Profenofos (171) **	VB 0041	Cabbages, Head	W	1		

[illegible]

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
			Definition of the residue (for compliance with MRL) for animal commodities: prothioconazole-desthio. Definition of the residue (for the estimation of dietary intake) for animal commodities: the sum of prothioconazole-desthio, prothioconazole-desthio-3-hydroxy, prothioconazole-desthio-4-hydroxy and their conjugates expressed as prothioconazole-desthio.			
Spinetoram (233) *	MO 0105	Edible offal (Mammalian)	0.01*	-	0.00625	
ADI: 0–0.05 mg/kg bw ARfD: Unnecessary	VL 0482	Lettuce, Head	10	-	0.0895	
	VL 0483	Lettuce, Leaf	10		0.0895	
	MM 0095	Meat (from mammals other than marine mammals)	0.2 (fat)	-	0.00625 (muscle) 0.042 (fat)	
	FM 0183	Milk fats	0.1	-	0.12	
	ML 0106	Milks	0.01*	-	0.00925	
	FC 0004	Oranges, sweet, sour	0.07	-	0.0435	
	JF 0004	Orange juice			0.003	
	FP 0009	Pome fruits	0.05	-	0.025	
	JF 0226	Apple juice			0.011	
		Apple puree or sauce			0.012	
	VR 0596	Sugar beet	0.01*	-	0.02	
	VO 0448	Tomato	0.06	-	0.02	
	TN 0085	Tree nuts	0.01	-	0.02	
	Definition of the residue for compliance with MRLs: Spinetoram Definition of the residue for estimation of dietary intake: Spinetoram and N-demethyl and N-formyl metabolites of the major spinetoram component. The residue is fat soluble.					
Spinosad (203) ADI: 0–0.02 mg/kg bw ARfD: Unnecessary	An incomplete data submission precluded the estimation of MRL or STMR values					
Spirotetramat (234)* ADI: 0–0.5 mg/kg bw ARfD: 1.0 mg/kg/bw	AB 0660	Almond hulls	10		4.9	
	VB 0041	Cabbages, Head	2	-	0.23	0.92
	VS 0624	Celery	4	-	0.58	2.6
	FS 0012	Stone Fruit	3	-	1.6	2.1
	FC 0001	Citrus fruit	0.5	-	0.33	0.47
	VC 0011	Fruiting Vegetables, Cucurbits	0.2	-	0.057	0.18
	DF 0269	Dried grapes (=currants, Raisins and Sultanas)	4	-	1.1	3.4
	MO 0105	Edible offal (Mammalian)	0.03	-	0.014	0.024
	VB 0042	Flowerhead Brassica	1	-	0.50	0.87
	VO 0050	Fruiting vegetables, other than Cucurbits (except sweet corn, mushrooms and chili pepper)	1	-	0.43	1.1
	FB 0269	Grapes	2	-	0.41	1.3

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	AB 0269	Grape pomace (dry)	4		0.74	
	DH 1100	Hops (dry)	15	-	5.2	
	VL 0053	Leafy vegetables	7	-	3.7	5.5
	MM 0095	Meat (from mammals other than marine mammals)	0.01*	-	0 muscle 0 fat	0 muscle 0 fat
	ML 0106	Milks	0.005*	-	0	0
	VO 0444	Pepper, chili (non-bell)	2	-	0.95	1.5
	HS 0444	Peppers, Chili (Dry)	15	-	6.6	11
	FP 0009	Pome fruits	0.7	-	0.17	0.55
	VR 0589	Potato	0.8	-	0.12	0.46
	DF 0014	Prunes (dried plums)	5	-	3.5	4.6
	TN 0022	Tree nuts	0.5	-	0.084	0.29
	JF 0226	Apple juice			0.082	
		Beer hops			0.11	
	JF 0269	Grape juice			0.27	
		Grape wine			0.23	
		Grape jelly			0.11	
	JF 0004	Orange juice			0.18	
		Tomato, dried			5.0	
	JF 0448	Tomato juice			0.27	
	VW 0448	Tomato paste			3.2	
<p>Definition of the residue (for compliance with MRL) for plant commodities: Spirotetramat and its enol metabolite, 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat.</p> <p>Definition of the residue (for estimation of dietary intake) for plant commodities: Spirotetramat, enol metabolite 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, ketohydroxy metabolite 3-(2,5-dimethylphenyl)-3-hydroxy-8-methoxy-1-azaspiro[4.5]decane-2,4-dione, monohydroxy metabolite cis-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]decan -2-one, and enol glucoside metabolite glucoside of 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat.</p> <p>Definition of the residue (for compliance with MRL and estimation of dietary intake) for animal commodities: Spirotetramat enol metabolite, 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat.</p>						
Tebuconazole (189) ADI: 0–0.03 mg/kg bw	DF 0226	Apple dried			0.19	
	JF 0226	Apple juice			0.08	
		Apple sauce			0.08	
	VS 0620	Artichoke, globe	0.5	-	0.15	0.32
	GC 0640	Barley	2	0.2	0.06	
	AS 0640	Barley straw and fodder, dry	30	10		
		Beer			0.001	
	VB 0400	Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassica	1	-	0.07	0.56
	VP 0526	Common bean (pods and/or immature seeds)	2	-	0.49	1.2
		Common bean (pods			0.096	

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
		and/or immature seeds) cooked				
	VR 0577	Carrot	0.5	-	0.11	0.22
	MO 0812	Cattle, Edible offal of	W	0.05*		
	MM 0812	Cattle meat	W	0.05*		
	ML 0812	Cattle milk	W	0.05*		
	PE 0840	Chicken eggs	W	0.05*		
	PO 0840	Chicken, Edible offal	W	0.05*		
	PM 0840	Chicken meat	W	0.05*		
	SB 0716	Coffee beans	0.1	-	0.1	
	SM 0716	Coffee beans, roasted	0.5	-	0.2	
		Coffee instant			0.08	
	MO 0105	Edible offal (Mammalian)	0.5	-	0.2	0.2
	PE 0112	Eggs	0.05*	-	0	0
	FB 0267	Elderberries	2	-	0.345	0.70
	VA 0381	Garlic	0.1	-	0.02	0.06
	DH 1100	Hops, dry	30	-	9.65	
		Beer, from hops			0.009	
	VA 0384	Leek	1	-	0.195	0.44
	VL 0482	Lettuce, Head	5	-	0.98	3.2
	GC 0645	Maize	0.1	-	0.1	
	FI 0345	Mango	0.1	-	0.02	0.1
	MM 0095	Meat (from mammals other than marine mammals)	0.05*	-	0	0
	VC 0106	Melons, except Watermelon	0.2	-	0.02	0.02
	ML 0106	Milks	0.01*	-	0	0
	VA 0385	Onion, Bulb	0.1	-	0.05	0.06
	FI 0350	Papaya	2	-	0.18	1.2
	SO 0697	Peanut	0.1	0.05	0.04	
	FS 0014	Plums, excluding prunes	0.2	-	0.055	0.12
	FP 0009	Pome fruits	1	0.5	0.19	0.47
	PM 0110	Poultry meat	0.05*	-	0	0
	PO 0111	Poultry, Edible offal of	0.05*	-	0	0.05
	DF 0014	Prunes	0.5	-	0.18	
	SO 0495	Rape seed	0.5	0.05	0.09	
	OR 0495	Rape seed oil, edible			0.064	
	GC 0649	Rice	2	-	0.275	
	VD 0541	Soya bean (dry)	0.1	-	0.02	
	OR 0541	Soya bean oil, refined			0.001	
	VO 0447	Sweet corn (on-the-cob)	0.1	-	0.1	0.1
	VO 0448	Tomato	0.5	0.2	0.19	0.46
	JF 0448	Tomato juice			0.1	
		Tomato preserve			0.057	
	VW 0448	Tomato paste			0.16	
		Tomato purée			0.06	
		Tomato peeled			0.05	0.115
	VC 0432	Watermelon	0.1	-	0.02	0.02

Pesticide (Codex reference number)	CCN	Commodity	Recommended MRL mg/kg		STM or STM-P	HR or HR-P
			New	Previous	mg/kg	mg/kg
Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: tebuconazole						
Metabolites of triazoles 1, 2, 4- Triazole ADI: 0–0.2 mg/kg bw ARfD: 0.3 mg/kg bw						
Triazole alanine and Triazole acetic acid Group ADI: 0–1 mg/kg bw Group ARfD: Unnecessary						