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CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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CL 2024/44-PR
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TO: Codex Contact Points
Contact Points of international organizations having observer status with Codex

FROM: Secretariat, Codex Alimentarius Commission,
Joint FAO/WHO Food Standards Programme

SUBJECT: **Request for comments at Step 3 on the recommendations of the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) (2023)[1]**

DEADLINE: **5 May 2024**

Background

1. The Joint FAO/WHO Meeting on Pesticide Residues (JMPR) was held from 19 to 28 September 2023.

2. During the meeting, the FAO Panel of Experts was responsible for reviewing residue and analytical aspects of the pesticides under consideration, including data on their metabolism, fate in the environment and use patterns, and for estimating the maximum levels of residues that might occur as a result of use of the pesticides according to good agricultural practice (GAP). Maximum residue levels and supervised trials median residue (STMR) values were estimated for commodities of animal origin. The WHO Core Assessment Group was responsible for reviewing toxicological and related data in order to establish acceptable daily intakes (ADIs) and acute reference doses (ARfDs), where necessary

3. The Meeting evaluated 35 pesticides, including 6 new compounds and 8 compounds that were re-evaluated within the periodic review programme of the Codex Committee on Pesticide Residues (CCPR), for toxicity or residues, or both.

4. The Meeting established ADIs and ARfDs, estimated maximum residue levels and recommended them for use by CCPR, and estimated STMR and highest residue (HR) levels as a basis for estimating dietary intake.

5. The Meeting also estimated the dietary exposures (both short-term and long-term) of the pesticides reviewed and, on this basis, performed a dietary risk assessment in relation to the relevant ADI and where necessary ARfD. Cases in which ADIs or ARfDs may be exceeded were clearly indicated in order to facilitate the decision-making process by CCPR.

6. Pesticides for which the estimated dietary exposure might, on the basis of the available information, exceed their ADIs are marked with footnotes, which 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. The allocations and estimates are shown in the tables in the Annex.

7. The tables include the Codex reference numbers of the compounds, and the Codex classification numbers (CCNs) of the commodities, to facilitate reference to the Codex MRLs and other Codex documents. Compounds are listed in alphabetical order.

8. Apart from the abbreviations indicated above, the following qualifications are used in the tables.

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

(*) (following recommended maximum residue level)	At or about the limit of quantification
(ar)	The median or highest residue is reported at the moisture content of the feed commodity "as received"
Dw	The value is reported in the dry weight of the feed commodity
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.

9. The report of the 2023 meeting (including the full Annex I) is available in English only at:

FAO: https://www.fao.org/3/cc9755en/cc9755en.pdf
WHO: https://www.who.int/publications/i/item/9789240090187

Should there are problems in downloading the above documents, please contact the FAO and/or WHO JMPR Secretariats at the following addresses in order to get a copy as an email attachment:

FAO JMPR Secretariat
E-mail: Pesticide-Management@fao.org

WHO JMPR Secretariat
E-mail: JMPR@WHO.INT

REQUEST FOR COMMENTS

10. Codex members and observer international organizations having granted observer status in Codex wishing to submit comments on the proposed MRLs that correspond to Step 3 of the Codex Procedure as proposed by the 2023 JMPR Meeting and also on other recommendations which are relevant to the work of CCPR55 (see tables in the Annex), as well as concern forms, should do so in writing, in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (*Codex Alimentarius Procedural Manual*) by the deadline indicated on cover page.

11. Concern forms should be sent separately to the Codex Secretariat (codex@fao.org) with a copy to the CCPR Secretariat (ccpr@agri.gov.cn) in word file to facilitate their compilation.

12. Circular letters are available on the Codex website[2] (Circular Letters, 2024) and also on the CCPR55 website[3].

13. Codex members and observers are invited to provide comments on the MRLs as shown in the Annex to this CL, which is uploaded to the Codex Online Commenting System (OCS): https://ocs.codexalimentarius.org/, as per the guidance below, while taking into account the data and information provided in the report of the JMPR (2023).

[2] http://www.fao.org/fao-who-codexalimentarius/circular-letters/en
[3] https://www.fao.org/fao-who-codexalimentarius/committees/committee/related-circular-letters/en/?committee=CCPR

GUIDANCE ON THE PROVISION OF COMMENTS

14. Comments should be submitted through the Codex Contact Points of Codex members and observers using the OCS.

15. Contact Points of Codex members and observers may login to the OCS and access the document open for comments by selecting “Enter” in the “My reviews” page, available after login to the system.

16. Other OCS resources, including Frequently Asked Questions (FAQ), as well as the user manual and short guide, can be found at the following link: http://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/.

17. For questions on the OCS, please contact Codex-OCS@fao.org.

ANNEX
ACCEPTABLE DAILY INTAKES, ACUTE REFERENCE DOSES, RECOMMENDED MAXIMUM RESIDUE LEVELS, SUPERVISED TRIALS MEDIAN RESIDUE VALUES AND OTHER VALUES RECORDED BY THE 2023 JMPR MEETING
(Original language only)

1,4-Dimethylnaphthalene (331)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
1,4-Dimethylnaphthalene (331) ADI: 0–0.3 mg/kg bw ARfD: Unnecessary		Baked potato (unpeeled)	-	-	5.1	-
		Boiled potato (peeled)	-	-	0.17	-
		Boiled potato (unpeeled)	-	-	2.3	-
		Canned potatoes (unpeeled)	-	-	2.2	-
	MO 0105	Edible offal (mammalian)	0.5	-	0.22	-
	PE 0112	Eggs	0.03	-	0.017	-
		Fried potato (unpeeled)	-	-	5.2	-
	MF 0100	Mammalian fats	0.03	-	0.018	-
	MM 0095	Meat (from mammals other than marine mammals)	0.03 (fat)	-	0.014 (muscle) 0.018 (fat)	-
		Microwaved potatoes (unpeeled)	-	-	1.5	-
	ML 0106	Milks	0.03	-	0.02	-
		Peeled potato	-	-	2.1	-
	VR 0589	Potato	15 (Po)	-	8.65	-
		Potato crisps (peeled)	-	-	1.2	-
		Potato crisps (unpeeled)	-	-	1.6	-
		Potato dried pulp			28	-
	DV 0589	Potato flakes (flour)	-	-	1.3	-
		Potato fries (chips) (peeled)	-	-	0.43	-
		Potato fries (chips) (unpeeled)	-	-	1.6	-
		Potato process waste	-	-	2.5	-
		Potato starch	-	-	3.9	-
	PO 0111	Poultry edible offal	0.2	-	0.12	-
	PF 0111	Poultry fats	0.3	-	0.11	-
	PM 0110	Poultry meat	0.3 (fat)	-	0.043 (muscle) 0.11 (fat)	-
		Sliced potato	-	-	3.9	-

Definition of the residue for compliance with the MRL for plant commodities: *1,4-dimethylnaphthalene.*
Definition of the residue for dietary risk assessment for plant commodities: *Sum of 1,4-dimethylnaphthalene and metabolite 1-hydroxymethyl-4-methylnaphthalene (M21), expressed as 1,4-dimethylnaphthalene.*
Definition of the residue for compliance with the MRL for animal commodities, except milk: *Sum of 1,4-dimethylnaphthalene and metabolite 4-methyl-1-naphthoic acid (M23), expressed as 1,4-dimethylnaphthalene.*
The residue in animal commodities except milk is fat-soluble.
Definition of the residue for compliance with the MRL for milk: *Glycine conjugate of 4-methyl-1-naphthoic acid (M02).*
The residue definition in milk is not fat-soluble.
Definition of the residue for dietary risk assessment for animal commodities: *Sum of 1,4-dimethylnaphthalene, metabolite 4-methyl-1-naphthoic* acid (*M23), and its glycine conjugate 4-methyl-1-naphthoic acid (M02) expressed as 1,4-dimethylnaphthalene.*

Acetamiprid (246)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Acetamiprid (246)	VP 0546	Soya bean (dry)	0.01	-	0.01	-
Definition of the residue for compliance with the MRL and for dietary risk assessment for plant commodities: *Acetamiprid*. Definition of the residue for compliance with the MRL and for dietary risk assessment for animal commodities: *Sum of acetamiprid and desmethyl-acetamiprid, expressed as acetamiprid.* The residue is not fat-soluble.						

Boscalid (221)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Boscalid (221) ADI: 0—0.04 mg/kg bw ARfD: Unnecessary (2006)	FI 0355	Pomegranate	2	-	0.041	-
Definition of the residue for compliance with the MRL for plant commodities and for dietary risk assessment for plant and animal commodities: *Boscalid.* Definition of the residue for dietary risk assessment 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.						

Carbendazim (72)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Carbendazim (72)	-	-	-	-	-	-
The 2023 JMPR was asked by the CCPR to re-evaluate carbendazim under the periodic review programme. However, insufficient toxicological information was submitted to allow a re-evaluation of this substance to confirm or amend the reference values established in 1995 (ADI) and 2005 (ARfD). On this basis, the WHO Core Assessment Group withdraws the current ADI and ARfD values. Recommendations for maximum residue levels for carbendazim are reported under thiophanate-methyl (77)						

Carbofuran (96)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Carbofuran (96) ADI: 0–0.001 mg/kg ARfD: 0.001 mg/kg bw	FC 0004	Oranges, Sweet, Sour (subgroup)	W	0.5	-	-
	AL 1020	Alfalfa fodder	W	10	-	-
	AL 1021	*Alfalfa forage (green)*	W	10	-	-
	FI 0237	Banana	W	0.01 (*)	-	-
	VC 4199	Cantaloupe	W	0.2	-	-
	MF 0812	Cattle fat	W	0.05 (*)	-	-
	AB 0001	Citrus pulp, Dry [(1)]	W	2.0	-	-
	SB 0716	Coffee beans	W	1.0	-	-
	SO 0691	Cotton seed	W	0.1	-	-
	VC 0424	Cucumber	W	0.3	-	-
	MO 0105	Edible offal of cattle, goats, horses, pigs & sheep	W	0.05 (*)	-	-
	MF 0814	Goat fat	W	0.05 (*)	-	-
	MF 0816	Horse fat	W	0.05 (*)	-	-
	AF 0645	*Maize forage*[(1)]	W	0.5	-	-
	GC 0645	Maize[(1)]	W	0.05 (*)	-	-
	FC 0206	Mandarin[(1)]	W	0.5	-	-
	MM 0096	Meat of cattle, goats, horses, pigs & sheep	W	0.05 (*)	-	-
	ML 0106	Milks	W	0.05 (*)	-	-
	MF 0818	Pig fat	W	0.05 (*)	-	-
	VR 0589	Potato	W	0.2	-	-
	SO 0495	Rape seed	W	0.05 (*)	-	-
	AS 0649	Rice straw and fodder, dry	W	1.0	-	-
	CM 0649	Rice, husked	W	0.1	-	-
	MF 0822	Sheep fat	W	0.05 (*)	-	-
	GC 0651	Sorghum	W	0.1 (*)	-	-
	AF 0651	*Sorghum forage (green)*	W	2	-	-
	AS 0651	Sorghum straw and fodder, dry	W	0.5	-	-
	HS 0193	Spices, roots and rhizomes	W	0.1	-	-
	VC 0431	Squash, summer	W	0.3	-	-
	AV 0596	*Sugar beet leaves or tops*[(1)]	W	0.07	-	-
	VR 0596	Sugar beet[(1)]	W	0.2	-	-
	GS 0659	Sugar cane	W	0.1 (*)	-	-
	SO 0702	Sunflower seed	W	0.1 (*)	-	-
	VO 0447	Sweet corn (corn-on-the-cob)	W	0.1	-	-
[(1)]Arising from the use of carbosulfan						

Carbosulfan (145)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		$STMR_{chronic}$ or $STMR\text{-}P_{chronic}$ (mg/kg)	$STMR_{acute}$ or $STMR\text{-}P_{acute}$ (mg/kg)	$HR_{(acute)}$ or $HR\text{-}P_{(acute)}$ (mg/kg)
			New	Previous			
Carbosulfan (145) ADI: 0–0.01 mg/kg bw ARfD: 0.02 mg/kg bw	AB 0001	Citrus pulp, Dry	W	0.1	-	-	-
	SO 0691	Cotton seed	W	0.03 (*)	0.11	0.21	-
	MO 0105	Edible offal (mammalian)	W	0.05 (*)	-	-	-
	VO 0440	Eggplant	0.15		0.36	0.71	0.91
	PE 0112	Eggs	W	0.05 (*)	-	-	-
	GC 0645	Maize	W	0.05 (*)	-	-	-
	AF 0645	Maize forage	W	0.05 (*)	-	-	-
	FC 0206	Mandarin	W	0.1	-	-	-
	FI 0345	Mango	0.1	-	0.265	0.52	1.3
	MM 0095	Meat (from mammals other than marine mammals)	W	0.05 (*) fat	-	-	-
	ML 0106	Milks	W	0.03 (*)	-	-	-
	FC 0004	Oranges, sweet, sour (subgroup)	W	0.1	-	-	-
	VR 0589	Potato	W	0.05	-	-	-
	PM 0110	Poultry meat	W	0.05 (*)	-	-	-
	PO 0111	Poultry, edible offal of	W	0.05 (*)	-	-	-
	GC 0649	Rice	W	0.05 (*)	-	-	-
	AS 0649	Rice straw and fodder, dry	W	0.05 (*)	-	-	-
	HS 0191	Spices, fruits and Berries	W	0.07	-	-	-
	HS 0193	Spices, roots and rhizomes	W	0.1	-	-	-
	VR 0596	Sugar beet	W	0.3	-	-	-
	AV 0596	Sugar beet leaves or tops	W	0.05 (*)	-	-	-

$STMR(\text{-}P)_{chronic}$ Expressed as toxic equivalent residues (carbosulfan +10×carbofuran)

$STMR(\text{-}P)_{acute}$ Expressed as toxic equivalent residues (carbosulfan + 20×carbofuran)

$HR_{(acute)}$ Expressed as toxic equivalent residues (carbosulfan + 20×carbofuran)

Definition of the residue for compliance with the MRL for plant commodities: *Carbosulfan plus carbofuran (expressed as carbosulfan).*

Definition of the residue for dietary risk assessment for plant commodities: *Carbosulfan plus 10×(sum of carbofuran, 3-hydroxy carbofuran (free and conjugated), 3-hydroxy-7-phenol and 3-keto-7-phenol), expressed as carbosulfan* for long-term dietary exposure and *Carbosulfan plus 20×(sum of carbofuran, 3-hydroxy carbofuran (free and conjugated), 3-hydroxy-7-phenol and 3-keto-7-phenol), expressed as carbosulfan* for acute dietary exposure.

Definition of the residue for compliance with the MRL and for dietary risk assessment for animal commodities: *Not established.*

Clothianidin (238)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Clothianidin (238)	AM 0660	Almond hulls	0.1 (dw) T	-	0.02 (as)	-
	VS 0624	Celery	W	0.04, T	-	-
	HS 0780	Cumin seed	1	-	0.25	-
	VO 0050	Fruiting vegetables other than cucurbits	W	0.05	-	-
	VO 0050	Fruiting vegetables other than cucurbits except goji berry	0.05, T	-	0.02, T	0.03, T
	VO 2704	Goji berry	0.06, T	-	0.01, T	0.034, T
	DV 2704	Goji berry, dried	0.3, T	-	0.051, T	0.18, T
	TN 0085	Group of tree nuts	0.01*, T	-	0.01, T	0.01, T
	VA 0385	Onion, bulb	0.01*, T	-	0.01, T	0.01, T
	TN 0672	Pecan	W	0.01*	-	-
	VS 2080	Subgroup of stems and petioles	0.04 T	-	0.01 T	0.02 T

T: based on thiamethoxam use only
C: based on clothianidin use only
(as): as received
(dw): dry weight
Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities:
Clothianidin.
The residue is not fat-soluble.

Cyantraniliprole (263)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Cyantraniliprole (263) ADI: 0–0.03 mg/kg bw ARfD: Unnecessary	FI 0326	Avocado	0.4	-	0.03	-
	VD 0071	Bean (dry)	W	0.3		
	VD 2065	Beans, dry, subgroup of	0.6	-	0.032	-
	FB 2005	Cane berries, subgroup of	4	-	1	-
	PE 0112	Eggs	0.3	0.15	0.048	-
	AB 0269	Grape pomace, dried	15	-	3.4	-
	DF 0269	Grape, dried (=Currants, raisins, and sultanas)	3	-	0.73	-
	FB 0269	Grapes	2	-	0.56	-
	FT 0305	Olives	1	-	0.33	-
	SO 0305	Olives for oil production	1	-	0.33	-
	VD 2066	Peas, dry, subgroup of	0.6		0.032	-
	VD 4521	Soya bean (dry)	W	0.4	-	-
	DT 1114	Tea, green, black (black, fermented, and dried)	50	-	4.05	-
	FB 1236	Wine-grapes	W	1	-	-

Definition of the residue for compliance with the MRL for plant and animal commodities: *Cyantraniliprole*.
Definition of residue for estimation of dietary intake for unprocessed plant commodities: *Cyantraniliprole*.
Definition of residue for estimation of dietary intake for processed plant commodities: *Sum of cyantraniliprole and IN-J9Z38, expressed as cyantraniliprole*.
Definition of residue for estimation of dietary intake for animal commodities: *Sum of cyantraniliprole, 2-[3-Bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-3,4-dihydro-3,8-dimethyl-4-oxo-6-quinazolinecarbonitrile [IN-J9Z38], 2-[3-Bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-1,4-dihydro-8-methyl-4-oxo-6-quinazolinecarbonitrile [IN-MLA84], 3-Bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2-(hydroxymethyl)-6-[(methylamino)carbonyl]phenyl]-1H-pyrazole-5-carboxamide [IN- N7B69] and3-Bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2[[(hydroxymethyl)amino]carbonyl]-6-methylphenyl]-1H-pyrazole-5-carboxamide [IN-MYX98], expressed a cyantraniliprole*.
The residue is not fat-soluble.
Note: metabolites IN-K5A78, IN-F6L99, and IN-N5M09 are assessed using Cramer Class III threshold of 1.5 µg/kg per day.

Cyflumetofen (273)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Cyflumetofen (273)	SB 0716	Coffee bean	0.08	-	0.043	-
		Coffee beans instant powder	-	-	0.010	-
	SM 0716	Coffee beans roasted		-	0.027	-
	VC 0424	Cucumber	0.5	-	0.085	-
		Hops beer	-	-	0.049	-
		Hops extract	-	-	13.9	-
	MU 1100	Hops, dried	15	-	3.6	-
		Nectarine canned	-	-	0.012	-
		Nectarine jam	-	-	0.028	-
	DF 0245	Nectarine, dried	2	-	1.1	-
		Peach canned	-	-	0.012	-
		Peach jam	-	-	0.028	-
	DF 0247	Peach, dried	2	-	1.1	-
	FS 0013	Subgroup of cherries	0.4	-	0.106	-
	FS 2001	Subgroup of peaches	0.3	-	0.125	-
Definition of the residue for plant commodities (for compliance with the MRL): *Cyflumetofen.* Definition of the residue for plant commodities (for estimation of dietary intake): *Sum of cyflumetofen and 2-trifluoromethylbenzoic acid (metabolite B-1), expressed as cyflumetofen.* Definition of the residue for animal commodities (for compliance with the MRL and estimation of dietary intake): *Sum of cyflumetofen and 2-trifluoromethylbenzoic acid (metabolite B-1), expressed as cyflumetofen.* Residue is not fat-soluble.						

Deltamethrin (135)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Deltamethrin (135)	FI 0350	Papaya	0.2	-	0.01	0.01
Definition of the residue for compliance with the MRL and for dietary risk assessment for plant and animal commodities: *Sum of the deltamethrin and its trans- and α-R- isomers.* The residue is fat-soluble.						

Difenoconazole (224)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Difenoconazole (224)	FB 2005	Cane berries	3	-	0.69	1.7
	CF 3516	Maize aspirated grain fractions [a]	-	-	0.5	-
	CF 3517	Maize gluten [a]	0.05	-	0.031	-
	OC 0645	Maize oil, crude	0.02	-	0.012	-
	AS 3569	Maize, bran [a]	-	-	0.032	-
	CF 1255	Maize, flour	0.015	-	0.008	-
	AS 0645	Maize, hay and/or straw [a]	15 (dw)	-	2.4 (as received)	8.5 (as received)
	VL 0485	Mustard greens	8	-	1.6	6.1
	FS 0014	Prunes	4	-	0.94	2.6
	VR 0494	Radish	0.7	-	0.17	0.31
	VL 0494	Radish leaves	8	-	1.6	6.1
	FS 0012	Stone fruits	1.5	-	0.365	1.02
	GC 2091	Subgroup of maize Cereals	0.015	-	0.01	-
	VR 0508	Sweet potato	4	-	1.2	1.9

(a): Value not relevant for IEDI assessment calculations.
The definition of the residue for compliance with MRL and for dietary intake for plant commodities is parent *difenoconazole*, while for animal commodities it is defined as sum of difenoconazole and 1-[2-chloro-4-(4-chloro-phenoxy)-phenyl]-2-(1,2,4-triazol)-1-yl-ethanol (CGA205375), expressed as difenoconazole.
The residue is fat-soluble.

Diflubenzuron (130)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Diflubenzuron (130)	DT 1114	Black, Green tea infusions	-	-	0.038	-
		Tea, Black, Green, dried and fermented (subgroup)	40	-	9.4	-

Definition of the residue for compliance with the MRL for plant and animal commodities: *Diflubenzuron*
Definition of the residue for dietary risk assessment for plant and animal commodities: *Diflubenzuron*
The residue is fat-soluble.

Dinotefuran (255)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Dinotefuran (255)	VO 2704	Goji berry	0.6	-	0.12	0.34
	DV 2704	Goji berry, dried	2	-	0.26	1.1
	VO 0050	Group of fruiting vegetables other than cucurbits (except sweet corn and mushrooms)	W	0.5	-	-
	VO 0050	Group of fruiting vegetables other than cucurbits (except goji berry)	0.5	-	0.15 A)	0.55 A)
A) Residue recommendations were made by the 2012 JMPR. Definition of the residue for compliance with the MRL for plant commodities: *Dinotefuran*. Definition of the residue for dietary risk assessment for plant commodities: Sum of *dinotefuran, UF, and DN, expressed as dinotefuran*. Definition of the residue for compliance with the MRL and for dietary risk assessment for animal commodities: *Sum of dinotefuran and UF, expressed as dinotefuran*. The residue is not fat-soluble.						

Emamectin (247)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Emamectin (247) (addendum) ADI: 0–0.0005 mg/kg bw ARfD: 0.02 mg/kg bw	-	-	-	-	-	-
Emamectin was previously evaluated at JMPR (2011) when an ADI of 0–0.000 5 mg/kg bw and ARfD of 0.03 mg/kg bw were established for emamectin benzoate. Emamectin benzoate was evaluated by JECFA (2013). The committee confirmed the HBGVs established by JMPR 2011. At JMPR 2014 Meeting the ARfD of 0.03 mg/kg bw was withdrawn and an ARfD of 0.02 mg/kg bw established. Emamectin was evaluated by the present JMPR, due to a request for additional information on analytical methodology, storage stability and MRLs. The results of the newly submitted studies did not affect the previously established ADI or ARfD for emamectin benzoate.						

Florylpicoxamid (332)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Florylpicoxamid (332) ADI: 0–0.1 mg/kg bw ARfD: Unnecessary	FB 0269	Grapes	3	-	0.375	-
	FB 0275	Strawberry	1.5	-	0.26	-
	FI 0327	Banana	0.4	-	0.021	-
	FI 0345	Mango	0.5	-	0.021	-
	VC 2039	Subgroup of fruiting vegetables, cucurbits - cucumbers and summer squashes	0.3	-	0.063	-
	VC 2040	Subgroup of fruiting vegetables, cucurbits – melons, pumpkins, and winter squashes	0.4	-	0.0795	-
	VO 2045	Subgroup of tomatoes	0.9	-	0.12	-
	VO 0444	Peppers, chili	0.8	-	0.15	-
	VO 0445	Peppers, sweet	0.8	-	0.15	-
	HS 0444	Peppers, chili, dried	8	-	1.5	-
	VO 2046	Subgroup of eggplants	0.9	-	0.12	-
	VD 0533	Lentil (dry)	0.02	-	0	-
	VR 0596	Sugar beet	0.05	-	0.021	-
	GC 0654	Wheat	0.03	-	0.021	-
	SO 0495	Rape seed	0.15	-	0.021	-
	DF 0269	Grape, dried	7	-	0.8	-
	JF 0269	Grape, juice	-	-	0.1	-
		Grape, jelly	-	-	0.023	-
		Grape, wine (red)	-	-	0.02	-
		Grape, wine (white)	-	-	0.01	-
	DV 0448	Tomato, dried	6	-	0.72	-
	DM 0448	Tomato, paste/ puree	-	-	0.076	-
	JF 0448	Tomato, juice	-	-	0.01	-
		Tomato, canned fruit	-	-	<0.004	-
	DM 3523	Refined sugar	-	-	<0.004	-
	CM 0654	Wheat bran (unprocessed)	0.07	-	0.046	-
		Wheat white flour (550)	-	-	<0.019	-
		Wheat wholemeal flour	-	-	0.025	-
		Wheat wholemeal bread	-	-	0.021	-
	CF 1210	Wheat germ	-	-	<0.019	-
		Wheat starch	-	-	<0.019	-
	CF 3522	Wheat gluten	0.04	-	0.027	-
	MO 0105	Edible offal (Mammalian)	0.09	-	0.023 (liver) 0.022 (kidney)	-
	PE 0269	Eggs	0.02	-	0	-
	MF 0100	Mammalian fats (except milk fats)	0.15	-	0.043	-
	MM 0095	Meat (from mammals other than marine mammals)	0.15	-	0.024 (muscle) 0.043 (fat)	-
	ML 0095	Milks	0.03	-	0.013	-
	PF 0111	Poultry fats	0.02	-	0	-
	PM 0111	Poultry meat	0.02	-	0	-
	PO 0111	Poultry, edible offal of	0.02	-	0	-
	AS 0654	Wheat, hay and/or straw	2 (dw)	-	0.086 (as received)	-

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Definition of the residue for compliance with the MRL and dietary exposure for plant commodities: *Sum of florylpicoxamid and X12485649 expressed as florylpicoxamid.* Definition of the residue definition for compliance with the MRL and dietary exposure for animal commodities: *Sum of florylpicoxamid and X12485649 expressed as florylpicoxamid.* The residue is fat-soluble.						

Fluazinam (333)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Fluazinam (333)	-	-	-	-	-	-
Definition of the residue for plant commodities for enforcement of MRLs: *Fluazinam* Definition of the residue for plants for dietary risk assessment: *JMPR was unable to conclude on a residue definition for risk assessment.*						

Fluopyram (243)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Fluopyram (243)	GC 0640	Barley	0.4	0.2	0.041	-
	GC 0641	Buckwheat	0.4		0.041	-
	MO 0105	Edible offal, (mammalian)	8	8	3.8	7.4
	PE 0112	Eggs	2	2	0.46	1.5
	MF 0100	Mammalian fats (except milk fats)	1.5	1.5	0.67	1.5
	MM 0095	Meat (from mammals other than marine mammals)	1.5	1.5	Muscle: 0.51 Fat: 0.67	Muscle: 1.0 Fat: 1.5
	ML 0106	Milks	0.8	0.8	0.48	-
	GC 0647	Oats	0.4	0.2	0.041	-
	PO 111	Poultry, edible offal of	4	5	0.88	3.1
	PF 0111	Poultry fats	1	1	0.28	0.90
	PM 0110	Poultry meat	1.5	1.5	Muscle: 0.19 Fat: 0.28	Muscle: 0.97 Fat: 0.90
	GC 0650	Rye	0.2	0.9	0.035	-
	GC 0651	Sorghum	0.6		0.18	-
	GC 0653	Triticale	0.2	0.9	0.035	-
	GC 0654	Wheat	0.2	0.9	0.035	-
	CF 0654	Wheat bran	0.6	-	0.081	-
	CF 1211	Wheat flour	-	-	0.0036	-
	CF 1210	Wheat germ	0.5	-	0.072	-
		(animal feed commodities)			**(median)**	**(highest)**
		Aspirated grain fraction of wheat	-	-	2.1	
	AS 0640	Barley, hay and/or straw	6 (dw)	-	Straw: 0.67 Hay: 1.2 (ar)	Straw: 1.9 Hay: 4.1 (ar)
	AS 0640	Barley straw and fodder, dry	W	2	-	-
	AS 3559	Oat, hay and/or straw	6 (dw)	-	Straw: 0.67 Hay: 1.2 (ar)	Straw: 1.9 Hay: 4.1 (ar)
	AS 0647	Oat straw and fodder, dry	W	2	-	-
	AS 0650	Rye, forage	-	-	0.24 (ar)	1.3 (ar)
	AS 3560	Rye, hay and/or straw	6 (dw)		Straw: 0.67 Hay: 1.2 (ar)	Straw: 1.9 Hay: 4.1 (ar)
	AS 0650	Rye straw and fodder, dry	W	23	-	-
	AS 0651	Sorghum, forage (green)	-	-	0.43 (ar)	3.2 (ar)
	AS 3561	Sorghum, stover	3 (dw)	-	0.45 (ar)	1.5 (ar)
	AS 0653	Triticale, forage			0.24 (ar)	1.3 (ar)
	AS 0653	Triticale, hay and/or straw	6 (dw)	-	Straw: 0.67 Hay: 1.2 (ar)	Straw: 1.9 Hay: 4.1 (ar)
	AS 0653	Triticale straw and fodder, dry	W	23	-	-
	AS 3552	Wheat, forage	-	-	0.24 (ar)	1.3 (ar)
	AS 0654	Wheat, hay and/or straw	6 (dw)	-	Straw: 0.67 Hay: 1.2 (ar)	Straw: 1.9 Hay: 4.1 (ar)
	AS 0654	Wheat straw and fodder, dry	W	23	-	-

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
(ar): as received (dw): dry weight basis Definition of the residue for compliance with MRL and for estimation of dietary risk assessment for plant commodities: *Fluopyram.* Definition of the residue for compliance with the MRL for animal commodities: *Sum of fluopyram and 2-(trifluoromethyl)benzamide, expressed as fluopyram.* Definition of the residue for dietary risk assessment for animal commodities: *Sum of fluopyram, 2-(trifluoromethyl)benzamide and the combined residues of N-(E)-2-[3-chloro-5-(trifluoromethyl)pyridine-2-yl]ethenyl)-2-trifluoromethyl)benzamide and N-(Z)-2-[3-chloro-5-(trifluoromethyl)pyridine-2-yl]ethenyl)-2-trifluoromethyl)benzamide, all expressed as fluopyram.* The residue is not fat-soluble.						

Imazapyr (267)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Imazapyr (267)	GC 0649	Rice	0.06	-	0.01	-
	CM 1206	Rice bran, unprocessed	0.2	-	0.015	-
	AS 0649	Rice, hay and/or straw	0.015	-	-	-
	CM 0649	Rice, husked	0.07	-	0.01	-
	CM 1205	Rice, polished	0.05	-	0.01	-
	GC 0654	Wheat	0.6	0.05 *	0.079	-
	CM 0654	Wheat bran, unprocessed	1	-	0.116	-
	CF 1210	Wheat germ	1	-	0.11	-
	AS 0654	Wheat straw and fodder, dry	W	0.05 *	-	-
	AS 0654	Wheat, hay and/or straw	1 (dw)	-	-	-
(as): as received (dw): dry weight Definition of the residue for compliance with the MRL and for dietary risk assessment for plant and animal commodities: *Imazapyr*. The residue is not fat-soluble.						

Iprodione (111)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Iprodione (111) ADI: 0–0.06 mg/kg bw ARfD: 0.6 mg/kg bw	TN 0660	Almond	0.3	0.2	0.17	0.0395
	AM 0660	Almond hulls	50 (dw)	2	n.a.	14.85 (ar)
	FP 0226	Apple (in 1994 10 Po was withdrawn)	-	-	-	-
	GC 0640	Barley	W	2	-	-
	AL 0061	Bean, hay and/or straw *(Phaseolus* spp)	20 (dw)	100	highest: 7.72 (ar)	median: 3.7 (ar)
	VD 0071	Beans (*Phaseolus* spp) - dry	W	0.1	-	-
	VP 0061	Beans with pods (*Phaseolus* spp) - immature pods and succulent seeds	1.5	-	0.81	0.31
	FB 0264	Blackberries	W	30	-	-
	VB 0400	Broccoli [a]	40	25	24	9.4
	FB 2005	Cane berries, subgroup of	50	-	22.6	13.5
	VR 0577	Carrot	W	10 (Po)	-	-
	FS 0013	Cherries, subgroup of	0.3	10	0.14	0.042
	VP 2845	Common bean (pods and/or immature seeds)	W	2	-	-
	VC 0424	Cucumber	W	2	-	-
	FB 0269	Grapes	W	10	-	-
	FI 0341	Kiwifruit	W	5	-	-
	VL 0482	Lettuce, head	W	10	-	-
	VL 0483	Lettuce, leaf	W	25	-	-
	VA 0385	Onion, bulb	0.15	0.2	0.11	0.05
	FS 2001	Peaches (including Nectarines and Apricots), Subgroup of	0.05*	-	0.05	0.05
	FS 0247	Peaches	W	10	-	-
	FP 0009	Pome fruits (group)	W	5 (Po)	-	-
	VR 0589	Potato	0.05*	-	0.05	0.05
	VR 0589	Potato culls	0.15	-	n.a.	0.10
	DV 0589	Potato flakes/granules	0.05*	-	-	0.0145
	SO 0495	Rape seed	W	0.5	-	-
	FB 0272	Raspberries, red, black	W	30	-	-
	GM 0649	Rice, husked	W	10	-	-
	HS 0193	Spices, roots and rhizomes	W	0.1	-	-
	HS 0190	Spices, seeds	W	0.05 (*)	-	-
	FB 0275	Strawberry	W	10	-	-
	VR 0596	Sugar beet	W	0.1 (*)	-	-
	SO 2091	Sunflower seed	W	0.5	-	-
	VO 0448	Tomato	W	5	-	-
	VL 2832	Witloof chicory (sprouts)	W	1	-	-
		Potato chips	-	-	n.a.	0.023
	Residue level for feed					
	AL 1030	Bean, forage (*Phaseolus* spp)	n.a.	-	12.2 (ar)	7.4 (ar)
	VR 0589	Potato culls	0.15	-	n.a.	0.10

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
(ar):as received (dw): dry weight (n.a.): not applicable [a] On the basis of the information provided to the JMPR it was concluded that the estimated acute dietary exposure to residues of iprodione for the consumption of broccoli may present a public health concern. Definition of the residue for compliance with the MRL and for dietary risk assessment for plant commodities: *Iprodione*. Definition of the residue for compliance with the MRL for animal commodities: *Not concluded.* Definition of the residue for dietary risk assessment for animal commodities: *Iprodione + 3-(3,5-dichlorophenyl)-2,4-dioxoimidazolidine-1-carboxamide (RP302490) + N-(3,5-dichloro-4-hydroxyphenyl)-2-carbamoylacetamide (RP36114).*						

Isocycloseram (334)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Isocycloseram (334) ADI: 0–0.02 mg/kg bw ARfD: 0.5 mg/kg bw general population 0.08 mg/kg bw women of child-bearing age	AB 1230	Apple pomace, wet	1	-	0.25	-
	VB 0400	Broccoli	0.7	-	0.211	0.46
	VB 0402	Brussels sprouts	2	-	0.072	0.81
	VB 0041	Cabbages, head	4	-	0.0385	1.2
	VB 0404	Cauliflower	0.5	-	0.051	0.32
	OR 0001	Citrus Oil	80	-	13	-
	SB 0716	Coffee bean	0.04	-	0.01	-
	SO 0691	Cotton seed	0.5	-	0.11	-
	VC 0424	Cucumber	0.1	-	0.024	0.063
	MO 0105	Edible offal (Mammalian)	0.3	-	0.013	0.16
	VO 0440	Eggplant	0.3	-	0.07	0.18
	FP 0009	Group of pome fruits	0.4	-	0.105	0.27
	GC 0645	Maize	0.01(*)	-	0.01	-
	AL 3558	Maize, stover	1.5	-	0.46	1
	MF 0100	Mammalian fats (except milk fats)	0.4	-	0.024	0.37
	MM 0095	Meat (from mammals other than marine mammals)	0.02	-	Muscle (0.0022) Fat (0.024)	Muscle (0.011) Fat (0.362)
	VC 0046	Melons, except watermelon	0.15	-	0.024	0.078
	ML 0106	Milks	0.05	-	0.0021	0.043
	VA 0385	Onion, bulb	0.01(*)	-	0.01	0.01
	AB 0004	Oranges, dried pulp	3	-	0.41	
	VO 0444	Peppers, chili	0.6	-	0.15	0.4
	HS 0444	Peppers, chili, dried	4.2	-	1.1	2.8
	VO 0445	Peppers, sweet	0.3	-	0.0935	0.18
	VR 0589	Potato	0.01(*)	-	0	0
	DF 0014	Prune, dried	1.5	-	0.22	-
	VD 0541	Soya bean (dry)	0.15	-	0.0225	-
	AL 3533	Soya bean hulls	1	-	0.14	-
	AL 0541	Soya bean, hay and/or straw	20	-	5.3	14
	VC 0431	Squash, summer	0.09	-	0.012	0.063
	FS 0013	Subgroup of cherries	1	-	0.344	0.62
	FC 0002	Subgroup of lemons and limes (including citron)	0.5	-	0.052	0.25
	FC 0003	Subgroup of Mandarins (including mandarin-like hybrids)	0.4	-	0.088	0.25
	FC 0004	Subgroup of oranges, sweet, sour (including orange-like hybrids)	0.4	-	0.064	0.22
	FS 2001	Subgroup of peaches (including nectarine and apricots)	0.3	-	0.0985	0.23
	FS 0014	Subgroup of plums (including fresh Prunes)	0.4	-	0.071	0.32

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	FC 0005	Subgroup of pummelo and grapefruits (including shaddock-like hybrids, among other grapefruit)	0.3	-	0.0645	0.15
	VO 0448	Tomato	0.5	-	0.1	0.43
	DV 0448	Tomato, dried	2	-	0.32	1.4
	DM 3525	Tomato, pomace	8	-	1.6	-
Definition of the residue for compliance with the MRL for plant commodities and for dietary risk assessment for plant commodities: *Isocycloseram*. Definition of the residue for compliance with the MRL for animal commodities: *Isocycloseram*. Definition of the residue for dietary risk assessment for animal commodities: Sum of *isocycloseram and metabolites* N-[2-amino-1-(hydroxymethyl)-2-oxo-ethyl]-4-[5-(3,5-dichloro-4-fluoro-phenyl)-5-(trifluoromethyl)-4H-isoxazol-3-yl]-2-methyl-benzamide and 4-[5-(3,5-dichloro-4-fluoro-phenyl)-5-(trifluoromethyl)-4*H*-isoxazol-3-yl]-2-methyl-*N*-(3-oxoisoxazolidin-4-yl)benzamide (expressed as isocycloseram). The residue is fat-soluble.						

Isoflucypram (330)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Isoflucypram (330) ADI: 0–0.06 mg/kg bw ARfD: Unnecessary	GC 0640	Barley	0.1	-	0.020	
	GC 0653	Triticale	0.05	-	0.020	
	GC 0654	Wheat	0.05	-	0.020	
	AS 0640	Barley, hay and/or straw	5	-	Median: 0.70 (dw)	
	AS 0653	Triticale, hay and/or straw	5	-	Median: 1.1 (dw)	
	AS 0654	Wheat, hay and/or straw	5	-	Median: 1.1 (dw)	
	ML 0106	Milks	0.005*	-	0.012	
	FM 0183	Milk fats	0.005*	-	-	
	MM 0095	Meat (from mammals other than marine mammals)	0.01*	-	Muscle: 0.034 Fat: 0.034	
	MF 0100	Mammalian fats (except milk fats)	0.01*	-	0.034	
	MO 0105	Edible offal (mammalian)	0.01*	-	0.034	
	PE 0112	Eggs	0.01*	-	0.012	
	PM 0110	Poultry meat	0.01*	-	Muscle: 0.012 Fat: 0.0012	
	PF 0111	Poultry fats	0.01*	-	0.012	
	PO 0111	Poultry, edible offal of	0.01*	-	0.012	
	-	Barley brewer's grain	-	-	Median: 0.028	
	-	Barley beer	-	-	0.0076	
	-	Pearl barley	-	-	0.0076	
	CF 3511	Barley flour	0.02	-	0.035	
	CM 3510	Barley bran, unprocessed	0.05	-	Median: 0.064	
	CF 1210	Wheat germ	0.015	-	-	
	-	Wheat bran, unprocessed	0.015	-	-	

Definition of the residue for compliance with the MRL for plant and animal commodities: *Isoflucypram*.
Definition of the residue for dietary risk assessment for plant commodities: *Sum of isoflucypram and isoflucypram-propanol (free and conjugated), expressed as isoflucypram.*
Definition of the residue for dietary risk assessment for animal commodities: *Sum of isoflucypram, isoflucypram-propanol (free and conjugated), isoflucypram-carboxylic acid, isoflucypram-desmethyl-carboxylic acid, and isoflucypram-2-propanol (free and conjugated), expressed as isoflucypram.*
The residue is fat-soluble.

Isotianil (335)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Isotianil (335) ADI: 0–0.05 mg/kg bw ARfD: Unnecessary	FI 0327	Banana	0.01 (*)	-	0	-
	FC 0002	Subgroup of lemons and limes (including citron)	0.5	-	0.012	-
	FC 0003	Subgroup of Mandarins (including mandarin-like hybrids)	0.4	-	0.012	-
	FC 0004	Subgroup of oranges, sweet, sour (including orange-like hybrids)	0.4	-	0.012	-
	FC 0005	Subgroup of Pummelo and grapefruits (including shaddock-like hybrids, among other grapefruit)	0.2	-	0.00715	-
	PO 0111	Poultry, Edible offal of	0.02 (*)	-	0	-
	PF 0111	Poultry fats	0.02 (*)	-	0	-
	PM 0110	Poultry meat	0.02 (*)	-	0	-
	MO 0105	Edible offal (Mammalian)	0.02 (*)	-	0	-
	MF 0100	Mammalian fats (except milk fats)	0.02 (*)	-	0	-
	MM 0095	Meat (from mammals other than marine mammals)	0.02 (*)	-	0	-
	ML 0106	Milks	0.02 (*)	-	0	-
	OR 0001	Citrus oil, edible	40	-	7.86	-
		Orange juice		-	0.0204	-
		Orange oil		-	7.86	-
		Orange peel processed		-	0.216	-
		Marmalade		-	0.0204	-

Mepiquat-chloride (336)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Mepiquat-chloride (336) ADI: 0–0.3 mg/kg bw ARfD: 0.6 mg/kg bw	SO 0691	Cotton seed	4	-	1.3	-
	OC 0691	Cotton seed oil, crude	-	-	0.056	-
	OR 0691	Cotton seed oil, edible	-	-	0.052	-
	MO 0105	Edible offal (mammalian)	0.04	-	Liver: 0.047 Kidney: 0.027	Liver: 0.059 Kidney: 0.036
	PE 0112	Eggs	0.008(*)	-	0	0
	FB 0269	Grapes	4	-	0.705	2.6
	DF 0269	Grape, dried (=currants, raisins and sultanas)	20	-	2.7	10
	JF 0269	Grape juice		-	0.78	-
	MF 0100	Mammalian fat (except milk fats)	0.01	-	0.0092	0.0092
	MM 0095	Meat (from mammals other than marine mammals)	0.01	-	Muscle: 0.0092 Fat: 0.0092	Muscle: 0.0092 Fat: 0.0092
	ML 0106	Milk	0.008(*)	-	0.018	-
	PO 0111	Poultry, edible offal of	0.008(*)	-	0	0
	PF 0111	Poultry fats	0.008(*)	-	0	0
	PM 0110	Poultry meat	0.008(*)	-	0	0
		(animal feed commodities)	-	-	**Median**	-
		Cotton delinted seed	1.6	-		-
	AM 3588	Cotton seed hulls		-	0.36	-
	AM 3589	Cotton seed meal	8	-	2.5	-
	AB 0269	Grape pomace, dried	15	-	1.8	-
		Grape pomace, wet		-	0.78	-

All residue estimates above are expressed as mepiquat cation.
Definition of the residue for compliance with the MRL for plant and animal commodities: *Mepiquat cation*
Definition of the residue for dietary exposure assessment for plant commodities: *Mepiquat cation*
Definition of the residue for dietary exposure assessment for animal commodities: *Mepiquat cation and 4-hydroxy-1,1-dimethylpiperidinium cation (4-hydroxymepiquat cation, free and conjugated), expressed as mepiquat cation.*
The residue is not fat-soluble.

Oxathiapiprolin (291)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Oxathiapiprolin (291)	AM 0660	Almond hulls	0.05	-	0.02	-
	FI 0326	Avocado	0.09	-	0.0575	-
	TN 0085	Group of tree nuts	0.01 (*)	-	0.01	0.01
	MU 1100	Hops, dried	5	-	1.55	
	FB 2006	Subgroup of bush berries	0.5	-	0.056	-
(as): as received (dw): dry weight Definition of the residue for compliance with the MRL: *Oxathiapiprolin.* Definition of the residue for dietary risk assessment for plant and animal commodities: *Sum of oxathiapiprolin, 5-(trifluoromethyl)-1H-pyrazole-3-carboxylic acid and 1-ß-D-glucopyranosyl-3-(-(trifluoromethyl)- H-pyrazole-5-carboxylic acid, expressed as parent equivalents*. The residue is not fat-soluble.						

Permethrin (120)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Permethrin (120)	-	-	-	-	-	-
Definition of the residue for plant and animal commodities (for compliance with the MRL): Permethrin (sum of *cis* and *trans* isomers). Definition of the residue for plants and animals for dietary risk assessment: JMPR was unable to conclude on a residue definition for risk assessment. The Meeting was unable to conclude on a residue definition for risk assessment. No MRLs are recommended, nor are levels estimated for use in long-term and acute dietary exposure assessments as the Meeting could not reach a conclusion on the residue definition for risk assessment for plants and animals, and due to late submission of the relevant key data.						

Piperonyl butoxide (062)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Piperonyl butoxide (062)	-	-	-	-	-	-
Due to insufficient trials or limited data obtained from supervised trials, JMPR did not make any recommendations for establishing MRLs and for IEDI assessments. Definition of the residue for compliance with MRLs and for dietary risk assessment for plant and animal commodities: *Piperonyl butoxide*. The residue is fat-soluble.						

Prochloraz (142)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Prochloraz (142) ADI: 0–0.02 mg/kg bw ARfD: 0.2 mg/kg bw	-	-	-	-	-	-
JMPR did not finalize the review for residues and will continue the periodic review in 2024.						

Propiconazole (160)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Propiconazole (160)	FI 0326	Avocado	0.02	-	0.085	0.12
	MO 0105	Edible offal (mammalian)	0.2	0.5	2.4	4.5 (liver) 5.0 (kidney)
	PE 0112	Eggs			0.08	0.10
	MF 0100	Mammalian fats (except milk fats)	0.05	0.01 (*)	0.11	0.23
	MM 0095	Meat (from mammals other than marine mammals)	-	-	0.07 (muscle) 0.11 (fat)	0.12 (muscle) 0.24 (fat)
	ML 0106	Milks	-	-	0.03	
	SO 0697	Peanut	0.03	-	0.03	0.05
	AL 0697	Peanut, hay and/or straw	50 (dw)	-	36.5 (as received)	91 (as received)
	PF 0111	Poultry fats	0.01 (*)	-	0.05	0.05
	PM 0110	Poultry meat	0.01(*)	-	0.05	0.05
	PO 0111	Poultry, edible offal of	0.01 (*)	-	0.11	0.12
	CM 1206	Rice bran, processed	80	-	48	-
	GC 0649	Rice grain	30[a]	-	16.5	-
	CM 1207	Rice, hulls	80	-	67	-
	CM 0649	Rice, husked	4	-		-
	CM 1205	Rice, polished	10	-	1.95	-
Definition of the residue for compliance with the MRL for plant and animal commodities: *Propiconazole.* Definition of the residue for dietary risk assessment for plant and animal commodities: *Propiconazole plus all metabolites convertible to 2,4-dichlorobenzoic acid, expressed as propiconazole.* The residue is fat-soluble.						

Pyrethrins (063)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Pyrethrins (063)	-	-	-	-	-	-
On the basis of the data obtained from supervised trials, JMPR did not make any recommendations for establishing MRLs and for IEDI assessments. This was due to the fact that no trial matched the GAP and / or insufficient data. Definition of the residue for compliance with MRLs and for dietary risk assessment for plant and animal commodities: *Total pyrethrins, calculated as the sum of pyrethrins 1 and 2, cinerins 1 and 2, and jasmolins 1 and 2, determined after calibration with World Standard pyrethrum extract*. The residue is fat-soluble						

Tetraniliprole (324)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Tetraniliprole (324)	FC 0003	Subgroup of mandarins (including mandarin-like hybrids)	1.5	1.0	0.19	-

The critical GAP for mandarins and lemons is the same (citrus fruit). As such the residues from both crops can be assessed against the critical GAP in the USA for citrus fruit of three foliar applications at 60 g ai/ha, with a retreatment interval of 5 days and a PHI of 1 day.

- Residues of tetraniliprole in mandarins both for maximum residue estimation and risk assessment in ranked order were (n=4): 0.17, 0.18, 0.19 and 0.54 mg/kg in whole fruit.
- Residues of tetraniliprole in lemons both for maximum residue estimation and risk assessment in ranked order were (n=5): 0.062, 0.13, 0.19, 0.20 and 0.77 mg/kg in whole fruit.

The combined dataset for residues in mandarins and lemons both for MRL and risk assessment in ranked order were (n=9): 0.062, 0.13, 0.17, 0.18, 0.19, 0.19, 0.20, 0.54 and 0.77 mg/kg in whole fruit.
Mandarins are a major crop and as such at least 6 trials should be available. Considering the request of the EU, noting that the median residues for mandarins and lemons are similar and the datasets are of a similar population (Mann-Whitney) the 2023 JMPR agreed to combine the datasets.
The 2023 JMPR estimated a maximum residue level of 1.5 mg/kg, and an STMR of 0.19 mg/kg for Subgroup of Mandarins (including mandarin-like hybrids), based on the combined dataset of mandarins and lemons. Thereby replacing its previous recommendation (JMPR 2022) of a maximum residue level of 1.0 mg/kg and an STMR of 0.185 mg/kg for tetraniliprole in the Subgroup of Mandarins (including mandarin-like hybrids).

Thiamethoxam (245)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Thiamethoxam (245)	AM 0660	Almond hulls	2 (dw)	-	0.32 (as)	-
	VS 0624	Celery	W	1	-	-
	HS 0780	Cumin seed	1	-	0.26	-
	VO 0050	Fruiting vegetables other than cucurbits	W	0.7	-	-
	VO 0050	Fruiting vegetables other than cucurbits except goji berry	0.7	-	0.08	0.47
	VO 2704	Goji berry	1.5	-	0.21	0.65
	DV 2704	Goji berry, dried	5	-	0.225	1.7
	TN 0085	Group of tree nuts	0.01*	-	0.01	0.01
	VA 0385	Onion, bulb	0.02	-	0.01	0.014
	TN 0672	Pecan	W	0.01*	-	-
	VS 2080	Subgroup of stems and petioles	0.8	-	0.215	0.4

(as): as received
(dw): dry weight
Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: *Thiamethoxam.*
Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities (except poultry): *Thiamethoxam and clothianidin* (considered separately).
Definition of the residue for dietary risk assessment for poultry: *Sum of thiamethoxam, CGA 265307, and MU3, expressed as thiamethoxam and clothianidin* (clothianidin considered separately).
The residue is not fat-soluble.

Thiophanate-methyl (077)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)			STMR or STMR-P mg/kg		HR or HR-P mg/kg	
			New	Previous					
Thiophanate-methyl (077) ADI: 0–0.09 mg/kg bw ARfD: 1 mg/kg bw	TN 0660	Almond	0.15*	0.1		TM MBC	0.05 0.05	TM MBC	0.05 0.05
	FS 0240	Apricot	W	2	B	-	-	-	-
	VS 0621	Asparagus	W	0.2	C	-	-	-	-
	FI 0327	Banana	W	0.2	B	-	-	-	-
	GC 0640	Barley	W	0.5	C	-	-	-	-
	AS 0640	Barley, hay and/or straw	W	2	C	-	-	-	-
	VD 0071	Beans (dry)	W	0.5	Th	-	-	-	-
	FB 0018	Berries and other small fruits, except grapes	W	1	B, Th	-	-	-	-
	VB 0402	Brussels sprouts	W	0.5	B	-	-	-	-
	VR 0577	Carrot	W	0.2	B	-	-	-	-
	MM 0812	Cattle meat	W	0.05*	B	-	-	-	-
	FS 0013	Cherries (subgroup)	W	10	T	-	-	-	-
	PF 0840	Chicken fat	W	0.05	B	-	-	-	-
	SB 0716	Coffee beans	W	0.1	C	-	-	-	-
	VP 0526	Common bean (pods and/or immature seeds)	W	0.5	T	-	-	-	-
	VC 0424	Cucumber	W	0.05*	B, C	-	-	-	-
	MO 0105	Edible offal (mammalian)	W	0.05*	B	-	-	-	-
	PE 0112	Eggs	W	0.05*	B	-	-	-	-
	VP 0529	Garden pea, shelled (succulent seeds)	W	0.02	T	-	-	-	-
	VC 0425	Gherkin	W	0.05*	B, C	-	-	-	-
	FB 0269	Grapes	W	3	B, T	-	-	-	-
	VL 0482	Lettuce, head	W	5	T	-	-	-	-
	FI 0345	Mango	W	5	C	-	-	-	-
	ML 0106	Milks	W	0.05*	B	-	-	-	-
	FS 0245	Nectarine	W	2	B	-	-	-	-
	FC 0004	Oranges, sweet, sour (including orange-like hybrids) (subgroup)	W	1	B	-	-	-	-
	FS 0247	Peach	W	2	B	-	-	-	-
	SO 0697	Peanut	W	0.1*	T	-	-	-	-
	AL 0697	Peanut fodder	W	3	T	-	-	-	-
	VO 0444	Peppers chili	W	2	T	-	-	-	-
	HS 0444	Peppers chili, dried	W	20	C	-	-	-	-
	FI 0353	Pineapple	W	5	B	-	-	-	-
	FS 0014	Plums (including fresh prunes) (subgroup)	W	0.5	B	-	-	-	-
	FP 0009	Pome fruits (group)	W	3	B, C, T	-	-	-	-
	PM 0110	Poultry meat	W	0.05*	B	-	-	-	-
	SO 0495	Rape seed	W	0.05*	C	-	-	-	-
	AS 0469	Rice, hay and/or straw	W	15	C	-	-	-	-
	CM 0649	Rice, husked	W	2*	B	-	-	-	-
	GC 0650	Rye	W	0.1	C, T	-	-	-	-
	VD 0541	Soya bean (dry)	W	0.5	T	-	-	-	-
	AL 0541	Soya bean, hay and/or straw	W	0.1	C	-	-	-	-

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)			STMR or STMR-P mg/kg		HR or HR-P mg/kg	
			New	Previous					
	HS 0191	Spices, fruits, and berries	W	0.1		-	-	-	-
	HS 0193	Spices, roots, and rhizomes	W	0.1		-	-	-	-
	HS 0190	Spices, seeds	W	5		-	-	-	-
	VC 0431	Squash, summer	W	0.5	T	-	-	-	-
	VR 0596	Sugar beet	W	0.1*	T	-	-	-	-
	VO 0448	Tomato	W	0.5	B, C	-	-	-	-
	TN 0085	Tree nuts (group)	W	0.1*	B	-	-	-	-
	GC 0654	Wheat	W	0.05*	B, T	-	-	-	-
	AS 0654	Wheat, hay and/or straw	W	1	Risk a	-	-	-	-

Note: Previous MRL was the sum of benomyl, carbendazim, and thiophanate-methyl, expressed as carbendazim. Letters in upper case indicate the source(s) of the data on which the MRL is based. (B: benomyl; C: carbendazim; T: thiophanate-methyl).
Definition of the residue for compliance with the MRL for plant commodities: *Sum of thiophanate-methyl and carbendazim, expressed as thiophanate-methyl.*
Definition of the residue for compliance with the MRL for animal commodities: *Sum of thiophanate-methyl, carbendazim, and sodium 2-(methoxycarbonylamino)-1H-benzimidazol-5-yl (5-OH-MBC) (free and conjugated), expressed as thiophanate-methyl.*
Definition of the residue for dietary risk assessment for plant and animal commodities: *Thiophanate-methyl.*
Carbendazim and 5-OH-MBC (free and conjugated) need to be assessed, separately, against the TTC Cramer Class III threshold. The threshold applies to both chronic and acute exposure estimates.
The residue is not fat-soluble.

Tricyclazole (337)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Tricyclazole (337) ADI: 0–0.05 mg/kg bw ARfD: 0.05 mg/kg bw	MO 0105	Edible offal (mammalian)	0.1	-	Liver 0.016 (Kidney 0.008)	Liver 0.18 (Kidney 0.025)
	PE 0112	Eggs	0.01 (*)	-	0	0
	CM 0649	Husked rice	0.3	-	0.01	-
	MF 0100	Mammalian fats (except milk fats)	0.01 (*)	-	0	0
	MM 0095	Meat (from mammals other than marine mammals)	0.01 (*)	-	0	0
	ML 0106	Milks	0.01 (*)	-	0	-
	CM 1205	Polished rice	0.3	-	0.01	-
	PF 0111	Poultry fats	0.01 (*)	-	0	0
	PM 0110	Poultry meat	0.01 (*)	-	0	0
	PO 0111	Poultry, edible offal of	0.01 (*)	-	0.009	0.010
	GC 0649	Rice	5	-	0.735	-
	AS 0649	Rice, hay and/or straw	5 (dw)	-	0.01 (median, ar)	3.47 (highest, ar)
	AS 3570	Rice, hulls	15 (dw)	-	0.02 (median, ar)	-
(as): as received (dw): dry weight Definition of the residue for compliance with the MRL for plant and animal commodities: *Tricyclazole.* Definition of the residue for risk assessment for plant and animal commodities: *Sum of tricyclazole and 1,3,4-triazolo[3,4-b][1,3]benzo-thiazol-5-methanol, expressed as tricyclazole.* The residue is not fat-soluble.						

Zeta-cypermethrin (118)

Compound	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
Zeta-cypermethrin (118)	FI 0326	Avocado	0.5	-	0.14	0.28
	VA 2031	Subgroup of bulb onions	0.05*	0.01*	0	0
	FB 2006	Subgroup of bush berries	1.5	-	0.40	0.53
Definition of the residue for both compliance with MRL and estimation of dietary intake for plant and animal commodities: *Cypermethrins (sum of alpha and zeta).* The residue is fat-soluble.						