



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PESTICIDE RESIDUES

52nd Session

(Virtual)

26-30 July and 3 August 2021

ESTABLISHMENT OF CODEX SCHEDULES AND PRIORITY LISTS
OF PESTICIDES FOR EVALUATION BY JMPR

(prepared by Australia as Chair of the Electronic Working Group on Priorities)

A. SCHEDULES AND PRIORITY LISTS 2022-2024

- Appendix A includes the CCPR Schedules and Priority Lists of Pesticides (Tables 1-4) as specified in the Codex Alimentarius Commission (CAC) Procedural Manual "Risk Analysis Principles Applied by the Codex Committee on Pesticide Residues (CCPR)".

B. FINALISING THE 2022 PROPOSED SCHEDULE

- To assist consideration of scheduling for 2022, the proposed 2022 CCPR Schedule of JMPR Evaluations is extracted from Tables 1 and 2A and appears in three worksheets with the prefix '2022'.
- The '2022 new cpd' worksheet lists six compounds in the 2022 new compound proposed schedule. National registrations have been confirmed for all six of the listed compounds.
- The '2022 new use – other' worksheet lists twenty-four nominations for new use. Of those twenty-four nominations, evidence of product labels / national registration has been provided for twenty-two compounds. The commodities for these twenty-two compounds are listed in upper case text. Note that two nominations were received for both difenoconazole and cyflumetofen. These are entered as separate lines in the table but counted as only one compound. The quota for new use and other evaluations is 20, therefore four of the compounds with product labels/national registrations have been given reserve status. These nominations should be prioritised for evaluation in 2022/23 based on evidence of registration and date stamp as well as on JMPR advice on capacity to conduct these evaluations.
- The '2022 periodrev' worksheet lists six compounds in the proposed 2022 Schedule of Periodic Reviews. The table shows an entry for a group of dithiocarbamates, including metiram, plus a separate entry for metiram. Both entries are counted as only one compound. Following up on previous reviews, four-year extensions have been requested for clethodim (187, reviewed by JMPR in 2019) and guazatine (114, previously scheduled for review in 2021). Sponsors for one compound scheduled for review in 2022 (hydrogen phosphide, 46) have requested a four-year extension.
- Currently, there is no evidence of support for one of the listed compounds (fenthion). At its September 2019 meeting, the JMPR strongly recommended that chlorpyrifos and iprodione be prioritised for periodic re-evaluation, given the significant time since the last JMPR review and the nature of potential concerns. JMPR and other members have requested that chlorpyrifos-methyl be reviewed alongside chlorpyrifos. At the time there was no sponsor for chlorpyrifos, but a new sponsor has been identified and requested deferral of the review to 2023.

C. PUBLIC HEALTH CONCERNS

- In accordance with the nomination process described in the Codex Procedural Manual "Risk Analysis Principles applied by the Codex Committee on Pesticide Residues", Members and Observers may lodge public health concerns (PHC) for any compound in the CCPR Pesticide List including those already listed in Tables 2A and 2B. In lodging a public health concern, the nominator must provide supporting scientific data. JMPR will assess the PHC nominations and advise CCPR if a periodic review is supported.

8. Four PHCs for chlorpyrifos, chlorpyrifos-methyl, chlorothalonil and propiconazole were received from the EU on 13 March 2020. The UK has also submitted a PHC for chlorothalonil on 21 March 2021. These compounds are tentatively scheduled for periodic review in 2023 (Table 2A), pending confirmation by JMPR that a periodic review is warranted.

D. UNSUPPORTED COMPOUNDS DESIGNATED FOR DELETION FROM CCPR PESTICIDE LIST

9. There are several compounds from the 2018 and 2019 schedules of periodic reviews which were not evaluated by JMPR. The compounds are amitraz (122), bromopropylate (070), fenarimol (192), dicloran (083), bromide ion (047), fenbutatin oxide (109). These compounds do not appear to be supported by a manufacturer and some are the subject of public health concerns lodged by the European Union (EU). Other compounds that seem to be unsupported compounds include carbaryl, 2-phenylphenol, dinocap, methamidophos, bitertanol, terbufos and fenthion (which is scheduled for periodic review in 2022).
10. A decision relating to ongoing retention on the CCPR List of Pesticides and maintenance of existing CXLs may be made regarding these unsupported compounds at this meeting. Further discussion concerning the management of unsupported compounds may assist CCPR to reach a decision regarding these compounds.

E. PERIODIC REVIEWS (UNSUPPORTED COMPOUNDS)

11. Member countries and Observers are strongly encouraged to review Tables 2A and 2B and if wishing to support a compound, should provide advice on availability of toxicology and residue trials data packages.

F. CONTINUATION OF ELECTRONIC WORKING GROUP

12. The Committee is invited to endorse continuation of the electronic working group to prepare the Schedules and Priority Lists of Pesticides for the next session of CCPR in 2023, working in English and chaired by Australia.

APPENDIX A

2022 - NEW COMPOUND EVALUATIONS										
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION CRITERIA			COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS > LOQ	FAO NOMINATION FORM RECEIVED?				
1	30/10/2015	Fluazinam	Fluazinam	Yes	Yes	Yes	USA-BUSHBERRY; LETTUCE, HEAD AND LEAF; MELONS; SQUASHES/CUCUMBERS; PEPPERS/EGGPLANTS; PEANUTS; TUBEROUS AND CORM VEGETABLES; SOYBEAN; TEA	USA&CAN: Blueberry (13); Head lettuce (7); Leaf lettuce (7); Cantaloupe (11); Cucumber (6); Summer squash (6); Bell pepper (9); Non-bell pepper (4); Peanut (9); Potato (12); Soybean (16); JPN: Tea (5)	USA / ISK Biosciences; Ishihara Sangyo Kaisha	Fungicide; Revised nomination form on 25 Nov 2015 / fungicide. 15 June 2021 labels provided.
2	26/11/2019	Isotianil	Isotianil	Yes	Yes	Yes	FRUITING VEGETABLES (GH+Field), POTATO, Mango, BANANA, CUCURBITS (GH+Field), Citrus	Tomato (20 + 2 processing), Bell pepper (16), Chili pepper (7), Potato (20 + 2 processing), Mango (4), Cucumber (20), Melon (20), Squash (20), Banana (13)	Bayer AG	Plant defense inducer/fungicide/bactericide
3	8/09/2016	Isocycloseram (formerly called SYN547407, SYN407)	Isocycloseram (formerly called SYN547407, SYN407)	Yes	Yes	Yes (from Syngenta; US submission completed)	BRASSICA HEAD and stem VEGETABLES, citrus, corn, cotton, CUCURBIT VEGETABLES, FRUITING VEGETABLES, GREEN ONIONS, pome fruit, POTATO, stone fruit and soybeans	Cabbage (10), broccoli (10), cauliflower (10), brussels sprout (4), citrus (25), corn (27), cotton (12), cucumber (8), squash (8), melons (8), tomato (16), peppers (16), green onions (6), apple (18), pear (12), potato (26), cherry (10), plum (10), peach (13) and soybean (21)	Syngenta	Insecticide Syngenta Nov-17: Please move to 2022, due to a change in registration strategy; previously listed as SYN407, expected to be registered June 2021. Notified 15 April 2021 that submission accepted by Guatemala, expect registration approval by July 2021. Proof of registration in Honduras provided 27 May 2021.
4	13/11/2019	Acynonapyr	Acynonapyr	Yes	Yes	Yes	Apples, Pears, Eggplant, Mandarins	Apples (8), Pears (8), Eggplant (8), Mandarins (8)	Japan/Nippon Soda Co Ltd	Insecticide
5	26/11/2020	1,4-dimethylnaphthalene (1,4-DMN)	1,4-dimethylnaphthalene (1,4-DMN)	Yes	Yes	Yes (from Germany)	POTATOES	Potatoes (15)	1,4GROUP, Inc. 2307 E. Commercial St. Ste. A Meridian ID 83642 USA	Represented by: RIFCON GmbH Goldbeckstrasse 13 D-69493 Hirschberg Germany
6	30/11/2020	Mepiquat chloride	Mepiquat chloride	Yes	Yes		GRAPES	Grapes (8)	Nisso/BASF	

2022 - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION CRITERIA		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS > LOQ				
1	4/11/2019	NA	Dinotefuran (255)	Yes	Yes	GOJI BERRY; GOJI BERRY, DRIED; TEA	Goji berry (4); tea (8)	China	Requested for 2022 JMPR review. (Mitsui Chemical nominations deferred to 2023).
2	28/11/2017	NA	Fluopyram (243)	Yes	Yes	Carrot (Morocco), WHEAT, BARLEY, SORGHUM	Wheat (12), barley (10), sorghum (4)	Bayer AG	Moved from 2020 to 2022 on request; Morocco proposed carrot; Bayer requested to move coffee to May 2021; Bayer requested to move cereals from 2020 to 2022; Bayer added avocado 26 November 2020; On 10 June 2021 company requested move of all commodities except cereals and carrots to 2024.
3	28/11/2017	NA	Flupyradifurone (285)	Yes	Yes	ASPARAGUS, SUNFLOWER, PINEAPPLE, SESAME, MANGO, PAPAYA	Asparagus (8), sunflower (10+1 processing), pineapple (5+1 processing), sesame (4+1 processing), mango (8), papaya (4)	Bayer AG	On 10 June 2021 company cancelled sweet sorghum and date nomination and requested olives and rapeseed move to 2023.
4	4/11/2019	NA	Difenoconazole (224)	Yes	Yes	PENCIL YAM; PENCIL YAM, DRIED; GOJI BERRY; GOJI BERRY, DRIED; TEA; GINGER FRESH	Pencil yam (4); goji berry (4)	China	Requested for 2022 JMPR review
4	29/11/2019	NA	Difenoconazole (224)	Yes	Yes	SUBGROUP OF CHERRIES (FS 0013); CHIVES (VA 4155); SUBGROUP OF PEACHES (FS 2001); SUBGROUP OF PLUMS (FS 0014); Subgroup 13B brassica leafy vegetables VL 0054; RADISH (VRO494); SUBGROUP OF TUBEROUS AND CORM VEGETABLES (VR 2071). , Subgroup 20E Maize cereals GC 2091, Subgroup 4A Cane Berries FB 2005	Cherries (6), chive (3), peaches (9), plum (6), plum, damson plum, turnips (5), radish (5) and sweet potato (5) , caneberries(8), corn (24)	Syngenta	Advice 29 September 2020 on label for peach, plum, guava, cherry. Advice on 26 February 2021 other commodities.
5	4/11/2019	NA	Diflubenzuron (130)	Yes	Yes	TEA	Tea (8)	China	Requested for 2022 JMPR review

2022 - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS >				
6	29/11/2019	Propiconazole (160)	Propiconazole (160)	Yes	Yes	AVOCADO (FI 0326); PEANUT, SHELLED (GROUNDNUT) (SO 0697); RICE	Avocado (6), peanuts (12)	Syngenta	Advice 29092020 on label for peanuts, avocado. Advice 11062021 on label for rice.
7	29/11/2019	Emamectin (247)	Emamectin (247)	Yes	Yes	SUBGROUP OF HERBS (HH 2095); SUBGROUP OF FLOWERHEAD BRASSICAS (VB 0042); CHIVES (VA 4155); SPINACH (VLO502), TURNIP GREEN (VLO506), TEA (DT1114), Coffee beans (SB 0716), Soya bean (dry) (VD 0541); VL 0401 broccoli, Chinese-Thailand	Basil (4), broccoli & cauliflower (13), chives (6), spinach (6), turnips (6), tea (5), coffee beans (5), soybean (20); broccoli, Chinese (16)-Thailand	Syngenta	Advice 29092020 on label for brassica leafy vegetables Coffee label should be approved by Dec 2021 and Soybean by April 2021. Advice on 26022021 tea classification.
8	29/11/2019 & China's nomination 12/11/2020	NA	Thiamethoxam (245), China included Clothianidin (238)	Yes	Yes	CELERY (VS 0624); GROUP OF TREE NUTS (TN 0085); SUBGROUP OF BULB ONIONS (VA 2031); ALFALFA HAY (AL3350), Oat (GC 0647); China: Goji berry; goji berry, dried	Celery (6), tree nuts (5), onions (7), alfalfa (24) Oat (12); goji berry (4)	Syngenta; China for goji berry	Advice 29 September 2020 on label for carrots, leafy vegetables, dry bulb onions, brassica leafy vegetables, treenuts, celery. China requested for 2022 JMPR review; clothianidin based on residue trials of thiamethoxam. Advice on 26 February 2021 other commodities.
9	28/11/2017; label provided 15/12/2020	NA	Spiromesifen (294)	Yes	Yes	Caneberries (Canada); carrot, fig, guava, mandarines (Morocco); ORANGES (Morocco & Bayer), COFFEE, MANGO, PAPAYA, DRY BEANS (CHICKPEA, LENTILS, PEAS)	Orange (9 + 2 processing), coffee (8), Mango (8), Papaya (4), Dry beans (10 dry shelled beans; 7 succulent shelled beans)	Bayer AG	Morocco proposed carrot, fig, guava, mandarines, oranges; Bayer proposed oranges, coffee, mango, papaya, dry beans
10	29/11/2019	NA	Mefenitrifluconazole (BAS 750 F)	Yes-All registered 2019; new uses expected latest 2021	Yes	ROOT AND TUBER VEGETABLES, SUGAR BEET, LEAFY VEGETABLES, brassica vegetables, stalk and stem vegetables, CANE BERRIES, BUSH BERRIES, STRAWBERRY, FRUITING VEGETABLES, BULB VEGETABLES, OILSEEDS, CUCURBITS, GRASS ALFALFA, CLOVER, SUGARCANE, globe artichoke, MANGO	Carrot (11), radish (7), sugarbeet (16), turnip (5), bulb onion (13), green onion (5), lettuce (16), spinach (8), mustard green (4), cabbage (8), broccoli (4), cauliflower (4), asparagus (4), celery (4), tomato (19), bell pepper (9), nonbell pepper (3), cucumber (9), squash (8), muskmelon (8), blackberry (6), blueberry (9), strawberry (11), grass (13), alfalfa (10), clover (10), cotton (12), sunflower (10), globe artichoke (4), mango (5)	USA/BASF	New uses currently under evaluation in USA, Europe and South America

2022 - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS >				
11	29/11/2019	NA	Cyantraniliprole (263)	Yes	Yes	SUBGROUP OF DRY PEAS (VD 2066); SUBGROUP OF DRY BEANS (VD 2065), Okra, Olives, Caneberries, Lettuce, Potato, Tomato, Grapes, Tea (DT1114?)	Dry peas and dry beans (15), chickpea (0) and lentils (0), Okra (), Olives (), Caneberries (), Lettuce (), Potato (), Tomato (), Grapes (), Tea ()	Syngenta	Advice 29 September 2020 on label/registration of top up uses - chickpea. Advice on 26 February 2021 others commodities.
12	29/11/2019	NA	Oxathiapiprolin (291)	Yes	Yes	SUBGROUP OF BUSH BERRIES (FB 2006); GROUP OF TREE NUTS (TN 0085); HOPS (DH 1100); SUBGROUP OF LOW GROWING BERRIES (FB 2009); AVOCADO (FI0326)	Blueberries (8), tree nuts (10), hops (5), strawberries (10), avocado (5)	Syngenta	Advice 29 September 2020 on label/registration of top up uses - blueberry, strawberry
13	16/10/2020	NA	Cyflumetofen (273)	Yes	Yes	STONE FRUITS, CUCURBITS WITH EDIBLE PEEL, FRUITING VEGETABLES - INEDIBLE PEEL, FRUITING VEGETABLES OTHER THAN CUCURBITS, HOPS	Stone fruits (40), cucurbits with edible peel (8), Fruiting vegetables – inedible peel (24), fruiting vegetables other than cucurbits (58) and hops (4)	BASF/OAT	
13	9/12/2020	NA	Cyflumetofen (273)	Yes	Yes	STONE FRUITS, CUCURBITS WITH EDIBLE PEEL, FRUITING VEGETABLES OTHER THAN CUCURBITS, HOPS	Stone fruits, cucurbits with edible peel, fruiting vegetables other than cucurbits, hops	The Netherlands	
14	11/06/2021	NA	Deltamethrin (135)	Yes	Yes	MANGO, PAPAYA	Mango (4), papaya (4)	Bayer AG	New nomination 26 November 2020. Awaiting registration in Brazil. Brazilian label provided by Bayer 11 June 2021.
15	27/11/2020	NA	Acetamiprid (246)	Yes	Yes	PULSES	Pulses (12)	Adama	A top-up evaluation is requested following the approval of acetamiprid on pulses in Australia to set a CXL of 0.1 mg/kg in line with the pending AUS MRL. APVMA label 121545.
16	29/11/2020	NA	Imazapyr (267)	Yes	Yes	RICE GRAIN	Rice (9)	BASF	Rice registered in Asia
17	29/11/2020	NA	Imazapic (266)	Yes	Yes	RICE GRAIN	Rice (9)	BASF	Request to increase current CXL for rice grain. Rice registered in Asia
18	29/11/2020	NA	Metconazole (313)	Yes	Yes	WHEAT GRAIN, straw	Wheat grain (16), wheat staw (16)	BASF	EU trials submitted to supplement US trials submitted for 2019 review. Wheat registered in multiple countries.

2022 - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS >				
19	1/12/2020	NA	Chlorantraniliprole (230)	Yes	Yes	AVOCADO, TEA	Avocado (5), Tea (8)	USA/FMC	
20	1/12/2020	NA	Cypermethrin zeta (118)	Yes	Yes	LEAFY VEGETABLES, CELERY, GREEN AND BULB ONION, BLUEBERRY, BLACKBERRY, AVOCADO	Lettuce leaf (8), Spinach (8), Celery (7), Mustard green (9), Green (2) and Bulb onion (3), Blueberry (6), Blackberry (3), Avocado (7)	USA/FMC	
RESERVE	1/12/2020	NA	Phosphonic acid (301)	Yes	Exempt from MRL in the US	CITRUS	Citrus (6 trials in the US and 6 trials in the EU)	USA/Luxembourg-Pamol, Inc	
RESERVE	19/07/2021	NA	Fosetyl Al (302)	Yes	Yes	RICE	Rice (6)	Thailand	
RESERVE		NA	Boscalid (BAS 510 F) (221)	No	Yes	Pomegranite	Pomegranite (4)	BASF	Registration expected EU spring 2021
RESERVE		NA	Methoprene (147)	No	Yes	Tree Nuts	Almonds (1, 5 farm sites), Pistachios (1, 5 farm sites)	USA/Wellmark	

2022 - PERIODIC REVIEW											
PRIORITY	YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARFD	Recommendation	
1	2021 (ON REQUEST, MOVED FROM 2020 RESERVE TO 2021, then 2022)	Aldicarb (117)	Aldicarb (117)	AgLogic Chemical LLC	Citrus (oranges, grapefruit, lemons, limes), Cotton, Dry Beans, Peanuts, Soybeans, Sugar Beets, Sweet Potatoes	Awaiting further advice on commodities from sponsor. UPDATE; may be moved to 2021 schedule if no advice received from sponsor; UPDATE October 2019-Awaiting data so requested to be moved to 2021.	Tox review conducted in 1997	0.003, 1995	0.003, 1995	No submission in 2021. Requested defer, so moved to 2022.	
2	2022	Dithiocarbamates (105) [Taminco]: (ferbam, maneb/mancozeb, propineb, thiram, ziram) - MOVE to 2020-22 2016 Additional advice; US Supports Mancozeb, Metiram, Propineb, Thiram, Ziram; moved to 2022 on request from manufacturers	Dithiocarbamates (105)	BASF, UPL, Indofil, Eastman Kodak-Taminco and Bayer Crop Science	Longan (Thailand – mancozeb) ¶ Mancozeb: Oranges (24), Mandarins (16), Nuts (10), Apples (48), Pears (4), Peaches (8), Apricot (8), Plums (28), Cherries (16), Grapes (2*), small fruits and berries (25), Potato (16), Carrot (24), Onions (24), Tomatoes (31), Pepper (18), Courgette (14), Cucumber (36), Melon (20), Broccoli (24), Cauliflower (20), Head cabbage (32), Lettuce (22), Witloof (4), Beans/Peas, fresh with pods (29), Beans, fresh without pods (8), Peas, fresh without pods (16), Asparagus (10), Leeks (19), Pulses, dry (24), Olives (15), Wheat (26), Barley (16), Sugar beet (16)¶ Additional trials in progress ¶ Metiram: Grape (23); Potato (23); Apple (15); Tomato (15); Onions (8); Lettuce (20); Cucurbits edible peel (8); Cucurbits inedible peel (8); Passion Fruit (4); Banana (12); Pineapple (4)¶ Propineb: apples (50); grape (54); mango (5); citrus (31); tomato (36); potato (31); chili pepper (11); cucumber (27); rice (8); shallot (8)¶ Thiram (foliar): Apple (25); Pear (10); Apricot (7); Peach (12); Cherry (28); Strawberry (40); Plum (12); Olive (8); Grape (13); Eggplant (2); Lettuce (9); Sunflower (4); Avocado (6); Mango (1); Banana (17)¶ Thiram (seed): Sugar beet (4); Maize (8); Oilseed rape (8)¶ Ziram (foliar): Peach (6); Apricot (4); Plum (11); Pear (21); Cherry (11); Grape (5); Tomato (7); Blueberries (4)	Residue definition applies to all DTC – propineb; mancozeb; ferbam; ziram; thiram; maneb; metiram; zineb ¶ Netherlands - public health concerns ¶Several (serious) public health risks have been identified for several dithiocarbamates (Maneb/mancozeb, propineb, thiram, ziram) using EU data (ARFD and MRLs with conversion factor corrections). ¶JMPR has not derived ARFDs for these substances (except an interim ARFD of 0.1 mg/kg bw for propineb) nor performed acute dietary risk assessment as it was not yet done at that time (before 2000). Various group ADI's for several dithiocarbamates (e.g. 0.03 mg/kg for maneb, mancozeb, metiram and zineb, 0.007 mg/kg for propineb, 0.003 mg/kg for ziram and ferbam, and 0.01 mg/kg for thiram). ¶We acknowledge that a periodic review of propineb has been performed in 2004. Still a risk has been identified for peppers and (dried) tomatoes using the HR for peppers of 13 mg/kg and the HR for tomatoes of 2.9 mg/kg for propineb and the interim ARFD of 0.1 mg/kg bw. Processing data have not been included in this calculation. ¶For thiram risks have been identified for e.g. use on apples and pears (recommended MRL of 5 mg/kg listed under ziram, no STMR or HR listed, Annex I, JMPR report 2004 from http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Reports_1991-2006/report2004/jmpr.pdf) falling back on the use of the ADI of 0.01 mg/kg bw/day (no ARFD exists). Using the EU ARFD of 0.6 mg/kg bw no risks are identified any more. ¶¶For ziram risk are identified e.g. use pome fruit, even if making use of the EU ARFD (0.08 mg/kg bw) instead of falling back on the ADI of 0.003 mg/kg bw/d in the absence of an JMPR ARFD. ¶Due to time constraints, we have not yet further explored the risks identified for maneb / mancozeb. The majority of the dithiocarbamates have been evaluated prior to the date that acute dietary risk assessment became part of the JMPR evaluations. ¶We propose therefore to update the evaluations with regard to the acute dietary risk assessment of all the dithiocarbamates in one overall assessment. This would enable identification of all the possible risks, establish whether re-evaluation of the existing data for specific uses is appropriate, whether an ARFD should be derived, and to determine whether they should subsequently be placed on the priority lists. ¶Conversion factors (from CS, to active substance) are not listed in the Annex: Mancozeb: 1.783, Maneb: 1.743, Propineb: 1.904, Thiram: 1.580, Ziram: 2.009	1996T, 1993R, (2004 propineb); BASF request delay to 2022. Each registrant will submit a separate dossier for the separate DTC compounds for review in 2022 (On behalf of BASF, Corvea, UPL, Indofil, Eastman Kodak-Taminco and Bayer Crop Science). Dossiers for Mancozeb & ETU planned for submission Nov-Dec 2021 by Exponent (on behalf of Corvea, UPL, Indofil, BASF), others to be confirmed.	Range of group ADIs	Interim ARFD - 0.1, 1995		
2	2022	Specific to metiram, submitted 01042021	Dithiocarbamates (105) - further details from BASF on the above item	BASF	01 Fruits *002 Pome fruits *003 Stone fruits o003A Cherries o003B Plums o003C Peaches *004 Berries and other small fruits o004D Small fruit vine climbing *006 Assorted tropical and subtropical fruits - inedible peel o006B Assorted tropical and subtropical fruits - inedible smooth peel - large o006C Assorted tropical and subtropical fruits - inedible rough or hairy peel - large o006E Assorted tropical and subtropical fruits - inedible peel - vines 02 Vegetables *009 Bulb vegetables o009A Bulb onions *011 Fruiting vegetables, Cucurbits	FP 0009 Pome fruits (9 trials; 5 x 1.575 kg as/ha, 21d PHI, cGAP) FP 0009 Pome fruits (10 trials; 3 x 2.1 kg as/ha, 21d PHI) FP 0226 Apple (10 trials; 3 x 1.4 kg as/ha, 21 d PHI, cGAP) FP 0226 Apple (10 trials; 3 x 1.4 kg as/ha, 28 d PHI) FP 0230 Pear (10 trials extrapolated from apple; 3 x 1.4 kg as/ha, 21 d PHI, cGAP) FS 0243 Cherry (sour) (2 trials; 4 x 0.105 kg as/ha, cGAP) FS 0244 Cherry (sweet) (2 trials; 4 x 0.105 kg as/ha, cGAP) FS 2234 Plum (4 trials; 1 x 3.5 kg as/ha, 21d PHI, cGAP) FS 0247 Peach (4 trials; 4 x 1.65 kg as/ha, 7d PHI, cGAP) FB 0269 Grapes (10 trials; 3 x 1.1 kg as/ha, 30d PHI, cGAP) FB 0269 Grapes (9 trials; 6 x 1.4 kg as/ha, 28d PHI) FB 0269 Grapes (10 trials; 3 x 1.4 kg as/ha, 56d PHI) FB 1236 Wine grapes (27 trials; 1 x 1.1 kg as/ha, 28d PHI, cGAP) FB 1236 Wine grapes (10 trials; 3 x 1-76 kg as/ha, 35d PHI) FI 0327 Banana (10 trials; 13 x 0.98 kg as/ha, 0d PHI) FI 0345 Mango (6 trials; 3 x 1.1 kg as/ha, F PHI, cGAP) FI 0353 Pineapple (9 trials; 4 x 1.65 kg as/ha, 3d PHI)					

2022 - PERIODIC REVIEW										
PRIORITY	YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARFD	Recommendation
3	2022	Iprodione (111)	Iprodione (111)	FMC	Tree nuts; cereals; beans, (dried); blackberry; broccoli; carrots; cheery; cucumber; grapes; kiwi; lettuce (head and leafy); onion; stone fruit; pome fruit; rapeseed; raspberry; sugar beet; sunflower; tomato; witloof ¶(All CXLs appear to be supported)	Moved at the request of manufacturer – await completion of EU, Canada and US reviews - FMC Trials. ¶Almonds (4); barley (13); blackberries (8); broccoli (4); carrot (12); cherry (5); lettuce, leaf (12); peach (9); raspberries, red/black (8); rice, husked (18); ¶Spices, seeds (4); spices, roots & rhizomes (4); apricots (8); artichoke (4); banana (8); bean, succulent- lima and snap (12); Brassica, head and stem vegetables (12); coffee (6); eggplant (8); mandarin (8); mango (4); melon (12); pea (12); peanut (12); plum (12); potato (16); soybean (12); wheat (16) Iprodione was initially evaluated by JMPR in 1992 and reviewed several times for toxicology and residue section (last review 2001). In the EU, the latest toxicological profile assessments are reported in an EFSA opinion from 2016. (see chapter data/information). In this report in respect of one metabolite, found as residue in plants and as impurity in the technical material, EFSA concluded that the genotoxic potential cannot be excluded and therefore the setting of reference values for that metabolite cannot be confirmed based on the information available. Moreover a new ADI of 0.02 mg/kg bw per day and a new ARFD of 0.06 mg/kg bw were established for parent iprodione. Based on these reference values, using the EFSA PRIMo model rev. 2.0 and Codex MRLs, the assessment resulted in an exceedance of the ARFD for at least cherries, peaches, blackberries, raspberries, carrot, tomatoes, broccoli, lettuce. For these crops, the exceedance ranged from 1733% to 132% of the ARFD. The estimated long-term dietary intake was in the range of 0% to 276% of the ADI; for three diets the long-term exposure exceeded the ADI (i.e. NL toddler (276% of the ADI), DE child (184% of the ADI) and NL child (130% of the ADI). The main contributors to the overall chronic exposure were commodities, which exceeded the ARFD in the acute risk assessment (broccoli, apples and carrots).	1992, 1995T, 1994, 2001R	0.06, 1995	N/A	
4	2022	Carbendazim (72)	Carbendazim (72)	Nippon Soda	Await further advice from JMPR at CCPR51.		1995T, 1998, 2003, 2005R			
5	2022	Fenthion (39)	Yes			No longer supported by the manufacturer		0.007, 1995	0.01, 1997	
6	2022	Pirimicarb (101)	Pirimicarb (101)	Syngenta & Collaborators	Supported by the manufacturer -Nov18. Collaborators needed for residue data package.	Public health concerns - acute dietary risk - Netherlands - check uses for peach and lettuce based on existing residue data and labels ¶Moved from 2017 New use and other evaluations	2004T, 2006R	0.02, 2006	0.1, 2006	
DEFER TO 2025 UNDER 4 YEAR RULE	2022, Requested under 4 year rule for 2025 review	Hydrogen phosphide, (zinc and aluminium salts) (46)	Hydrogen phosphide (46)	Degesch	Cereal grains, citrus, almonds	Request for additional preparation time	1971	NR	N/A	
DEFER TO 2025 UNDER 4 YEAR RULE	Requested under 4 year rule for 2025 review	Clethodim (187)	Clethodim (187)	UPL	Crops reviewed by JMPR in 2019: Artichoke, globe, broccoli, cabbage, head, carrot, VD 0071 Beans, dry, VP 0061 Beans, except broad bean and soya bean, AL 0061 Bean fodder, Bean, forage, VD 0561 Field pea (dry), Pea, fodder, Pea, vining, Hops, dry SO 0495, Rape seed, OC 0495 Rape seed oil, Crude OR 0495 Rape seed oil, Edible, VA 0381 Garlic, VA 0385 Onions, bulb, Strawberries Crops with CXLs withdrawn and not reviewed by JMPR in 2019: AL 1020 Alfalfa fodder, VD 0541 Soya bean (dry), OC 0541 Soya bean oil, crude, OR 0541 Soya bean oil, refine, VR 0596 Sugar beet, SO 0702 Sunflower seed, OC 0702 Sunflower seed oil, crude, VO 0448 Tomato, AM 1051 Fodder beet, SO 0697 Peanut, VR 0589 Potato, SO 0691 Cotton seed, OC 0691 Cotton seed oil, Crude, OR 0691 Cotton seed oil, Edible, MO 0105 Edible offal (mammalian), PE 0112 Eggs, MM 0095 Meat (from mammals other than marine animals), ML 0105 Milks, PM 0110 Poultry meat, PO 0111 Poultry, edible offal of	JMPR review in 2019. Additional data generated to address identified gaps. 22062021 company requested commencement of 4-year rule. If agreed, term should commence 2021 and expire 2025.	1999T(ARFD), 2019T, R			
DEFER TO 2025 UNDER 4 YEAR RULE	2021, Requested under 4 year rule for 2025 review	Guazatine (114)	Guazatine (114)	ICA (Adama)	Supported by the manufacturer	Guazatine appears to be a special case. In 1978 an ADI was derived, which was withdrawn in 1997 since "The Meeting concluded that it could not establish an ADI for guazatine owing to the inadequate information on its composition and concerns about the production of rare malignant tumours in mice". "The Meeting estimated the maximum residue level shown in Annex I.As the Meeting withdrew the ADI for guazatine this is recorded only as a Guideline level". As such no CXLs are supposed to be available. However, a CXL for cereal grains (0.05* mg/kg G = guideline value) and citrus fruit (5 mg/kg Po = post harvest use) can still be found in the Codex Alimentarius. ¶Annex 1 and Annex 2 of the JMPR 1997 evaluation, show that the CXL for Citrus fruits of 5 mg/kg Po is withdrawn, but that for cereals a maximum residue level of 0.05* mg/kg is proposed. The CXL of 5 mg/kg has been adopted by the CCPR in 1999. It is unclear which discussion is behind this. The problem is that this specific MRL-crop combination gives rise to a human health risk. Only "guideline levels" (5 mg/kg) for citrus exist since the ADI was withdrawn in 1997. It was recommended that these guideline levels would remain until a new ADI is recommended. It is proposed either to delete the guideline level or request sponsors to support a re-evaluation of guazatine. There are no CXLs in place in CX/PR 14/46/5 – instead guideline levels are set – clarification from Codex Secretariat is sought.	1997TR	1997 / Withdrawn	N/A	Incomplete

2023 AND BEYOND - NEW COMPOUND EVALUATIONS				PRIORITISATION CRITERIA			COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	REGISTERED	MRLS > LOQ	FAO NOMINATION FORM RECEIVED?				
2023	30/11/2020	Proquinazid	Proquinazid	Yes	Yes	Yes	APPLES, CEREALS, GRAPES (TABLE & WINE), STRAWBERRIES	Apples (9), Grapes (table & wine, min 18 trials), Wheat/rye (18), Barley/oat (27), Strawberries (8)	USA/Corteva	Fungicide. Nomination received 30 November 2020
2023	1/12/2020	Carfentrazone	Carfentrazone	Yes	Yes	Yes	WHEAT, BARLEY, SORGHUM, RICE, COTTON, SUNFLOWER, BEANS, PEAS	Wheat (14), Barley (0, supported by wheat trials), Sorghum (10), Rice (10), Cotton (15), Sunflower (5), Beans (5), Peas (11)	USA/FMC	Requested by USA 01 December 2020
2023	2/12/2019	SYN522 (Cyclobutrifluram)	SYN522 (Cyclobutrifluram)	Yes	Yes	Yes (from Canada)	Soybean, corn, vegetables (fruiting cucurbit), fruit and potato	Soybean (20-US), corn (20 field-US; 4 popcorn-US), potato (6-CAN, 10-US, 6-Arg), tomato (16-US, 6-Arg), cucumber (8-US), squash (8-US), melon (8-US), watermelon (8-GUA).	Canada/Syngenta	To be submitted December 2021; first registrations Guatemala/Argentina in September 2021. Other countries to follow (USA, Canada, Brazil, Mexico, China, Japan, India, Korea). Requested to be moved to 2023. Honduras label provided 3 June 2021.
2023	21/04/2021	Fenpropidin	Fenpropidin	Yes	Yes	Yes	Banana (FI 0327), cereals (GC 0080), soybean (VD 0541), sugarbeet (VR 0596), grapes (FB 0269)	Bananas (23), barley (18), wheat (18), soybean (1), grapes (6)	Syngenta	Requested on 21 April 2021 as lower priority than cyclobutrifluram. Product registered but approved labels were not submitted in the eWG portal.
2023	29/08/2018	Fluoxapiprolin (BCS-CS55621)	Fluoxapiprolin (BCS-CS55621)	No	Yes	Yes	Potatoes, Tomato, Onion	Potatoes (9 + 3 processing), Tomato (13 + 3 processing), Onion (9)	Bayer AG, Division Crop Science	Fungicide; was not in JMPR data call in for 2020 so moved to 2021. In November 2019 the company requested this move to 2022 schedule. 10 June 2021 moved to 2023 schedule on request from company.
2023	7/11/2017	XDE-659 (florylpicoxamid)	XDE-659 (florylpicoxamid)	No (2021-2022)	Yes (TBC 2019)	yes	Cucumber, Melon, Squash, Grapes, Strawberry, Mango, Banana, Lettuce, Dry beans and peas, Lettuce, Pepper, Tomato, Canola, Wheat, Sugarbeets, Barley	Cucumber (18+ 8 GH), Melon (17), Squash (14), Grapes (42), Strawberry (19), Mango (8), Banana (26), Lettuce (24 + 8), Dry beans and peas (14+10), Sugarbeet (18), Pepper (24), Tomato (40 +8), Canola (22), Wheat (59), Barley (38)	Corteva / USA	Fungicide for 2023 schedule; Crops in red to be postponed to JMPR 2025 review of New Uses, barley has been added now to the list for 2023 review.

2023 AND BEYOND - NEW COMPOUND EVALUATIONS				PRIORITISATION CRITERIA			COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	REGISTERED	MRLS > LOQ	FAO NOMINATION FORM RECEIVED?				
2023	Nomination received 29/11/2019	XDE-481	XDE-481	No	Yes	Yes	Bananas	Bananas (12)	USA/Corteva	Fungicide for 2023 schedule
2024	13/11/2019	XDE-747	XDE-747	No (Argentina by mid 2023)	Yes	Yes	Soybeans	Soybeans (12 trials, 6 Brazil + 6 Argentina)	Corteva AgriSciences/Argentina	Fungicide for 2023 schedule
2024	1/12/2020	Tiafenacil	Tiafenacil	Approval expected on 4Q2023	Yes	No	Corn (Subgroup 20E, 20F), Wheat (20A), Barley (20B), Cotton, Grape, Tree nuts (022), Citrus (001), Pome fruit (002), Stone fruit (003), Pulses (15A, Dry Pea, Dry Beans, Soybean) Oilseed Rape (023A)	Corn (31), Cotton (18), Grape (15), Soybean (21), Wheat (53), Barley (18), Dry pea (9), Dry Bean (13), Citrus (23), Tree nuts (10), Oilseed Rape (14), Pome fruit (17), Stone fruit (36)	USA / ISK Biosciences; Ishihara Sangyo Kaisha; Farm Hannong	Request nomination in JMPR 2024 after the registration in US in 2023.

2023 AND BEYOND - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION CRITERIA		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS > LOQ				
2023	27/11/2019	NA	Dinotefuran (255)	Yes	Yes	SOYBEAN, GREEN TEA, PERSIMMON, PEAR, edible offal (mammalian), eggs, meat (from mammals other than marine mammals), milks, poultry meat, poultry, edible offal of	soybean (25: USA, Brazil, Argentina, Japan), green tea (10: Japan), persimmon (5: Japan), pear (6 or more: Japan, Korea), edible offal (mammalian), eggs, meat (from mammals other than marine mammals), milks, poultry meat, poultry, edible offal of	Mitsui Chemicals Agro	On 08 December 2020, Mitsui requested deferral to 2022. Commodities also updated. On 22 December 2020 updates made to commodities and residue trials. On 23 July 2021 requested to defer to 2023.
2023	28/11/2019	NA	Tetraniliprole (999)	Yes	Yes	RICE (foliar)	Rice (12)	Bayer AG	Requested for 2022 JMPR review; 10 June 2021 company requested to move to 2023
2023	26/11/2019	NA	Buprofezin (173)	Yes	Yes	Rice	Rice (10+2 processing)	Republic of Korea	Requested for 2023 JMPR review
2023	26/11/2019	NA	Etofenprox (184)	Yes	Yes	Rice	Rice (10+2 processing)	Republic of Korea	Requested for 2023 JMPR review
2023	26/11/2019	NA	Flubendiamide (242)	Yes	Yes	Rice	Rice (10+2 processing)	Republic of Korea	Requested for 2023 JMPR review
2023	26/11/2019	NA	Tebufenozide (196)	Yes	Yes	Rice	Rice (10+2 processing)	Republic of Korea	Requested for 2023 JMPR review
2023	29/11/2019	NA	Flutriafol (248)	No	Yes	Potato, Sugarcane	Potato (12), Sugarcane (8)	USA/FMC	USA label is expected by 1Q2022
2023		NA	Dimethomorph (225)	Yes	Yes	Ginseng: ginseng, dried	Ginseng (4)	China	Requested for 2023 JMPR review
2023		NA	Tebuconazole (189)	Yes	Yes	Goji berry; Goji berry, dried	Goji berry (4)	China	Requested for 2023 JMPR review
2023		NA	Azoxystrobin (229)	Yes	Yes	Goji berry; Goji berry, dried	Goji berry (4)	China	Requested for 2023 JMPR review
2023		NA	Etoazole (241)	Yes	Yes	Goji berry; Goji berry, dried	Goji berry (4)	China	Requested for 2023 JMPR review
2023		NA	Lambda-cyhalothrin (146)	Yes	Yes	Tea (green, red)	Tea (8)	China	Requested for 2023 JMPR review
2023		NA	Fenazaquin (297)	Yes	Yes	Tea (green, red)	Tea (8)	China	Requested for 2023 JMPR review
2023		NA	Etofenprox (184)	Yes	Yes	Tea (green, red)	Tea (8)	China	Requested for 2023 JMPR review
2023		NA	Glyphosate (158)			Coffee	Coffee (10 + 2 processing)	Bayer AG	Requested for 2023 JMPR review
2023		Pyraziflumid (999)	Pyraziflumid (999)	TBD	Yes	Tree Nuts, Stone Fruit	Tree Nuts [12 total trials – pecan (6) and almond (6)], Stone Fruit [23 total trials – cherry (6), peach (9) and plum (8)]	USA/Nichino America, Inc (Nihon Nohyaku)	Requested by USA 01 December 2020; registered in Japan; US approval date December 2021.
2023	26/02/2021	No	Pydiflumetofen	Yes	Yes	BANANA (F10327), MANDARINE (Subgroup 1B Mandarin FC 0003)	Banana (9), Mandarine (16)	Syngenta	Requested and posted in EWG including approved label on 26 February 2021
2023	23/04/2021	NA	Fludioxonil	Yes	Yes	TREE NUTS (TNO085), SUGARBEET (VRO596)	Pecan (5), almond (5), sugarbeet (6)	Syngenta	Requested and posted in EWG including approved label on 23 April 2021
2023	23/04/2021	Acibenzolar	Acibenzolar	Yes	Yes	PEAR (VOO445), CELERY (VS2080)	Pear (5), celery (6)	Syngenta	Requested and posted in EWG including approved label on 23 April 2021
2023	28/11/2017	NA	Flupyradifurone (285)	Yes	Yes	OLIVE, rapeseed	Olive (8), rapeseed (12 = 1 processing)	Bayer AG	On 10 June 2021 company cancelled sweet sorghum and date nomination and requested olives and rapeseed move to 2023.
2023	9/09/2017	NA	Fluensulfone (265)	by 2020	Yes	Soyabean	Soyabean (16)	Adama	Moved from 2020 to 2022 on request. On 10 June 2021 company requested move to 2023.

2023 AND BEYOND - NEW USES AND OTHER EVALUATIONS									
PRIORITY	DATE STAMP	TOXICOLOGY	RESIDUE	PRIORITISATION CRITERIA		COMMODITIES	RESIDUE TRIALS	MEMBER / MANUFACTURER	COMMENTS
				REGISTERED	MRLS > LOQ				
2024	4/09/2019	NA	Kresoxim-methyl (199)	Yes	Yes	POME FRUIT; Carrot (Morocco)		BASF	4 year rule CCPR51; Morocco proposed carrot
2024		Fluazaindoline (999)	Fluazaindoline (999)	Yes	Yes	Citrus fruit, Stone Fruit, Grapes, Strawberry, Tree Nuts	Orange/Mandarin (16), Lemon (10), Grapefruit (7), Orange processing (3); Cherry (9), Peach (10), Plum (8), Plum processing (3); Grape (13), Grape processing (3); Strawberry (9); Almond (6), Pecan (6)	USA/Corteva	Requested by USA 01 December 2020; registration expected in US in Q2 2023.
2024	26/11/2020	NA	Trifloxystrobin (213)	Yes	Yes	AVOCADO	Avocado (4)	Bayer AG	Australian label provided 26 November 2020. On 10 June 2021 company requested move to 2024.
2024	28/11/2017	NA	Fluopyram (243)	Yes	Yes	MELON, PINEAPPLE, PAPAYA, MINT, GINSENG, POMEGRANATE, GUAVA, AVOCADO	Melon (16), pineapple (10), papaya (4), avocado (4)	Bayer AG	Moved from 2020 to 2022 on request; Morocco proposed carrot; Bayer requested to move coffee to May 2021; Bayer requested to move cereals from 2020 to 2022; Bayer added avocado 26 November 2020; On 10 June 2021 company requested move of all commodities except cereals and carrots to 2024.
2025	10/07/2021	NA	XDE-659 (florylpicoxamid)	No	Yes	Cherry, Peach, Plum, Apple, Pear, Papaya	Cherry (15), Peach (9), Plum (8), Apple (6), Pear (4), Papaya (4)	Corteva / USA	Fungicide for 2023 schedule; Advised 10 July 2021. Some crops postponed to JMPR 2025 review of New Uses.

TABLE 2A: PRIORITY LISTS OF PERIODIC REVIEWS – 2023-2024

Note 1: NR denotes "following evaluation, JMPR has deemed the establishment of an ARfD unnecessary"

Note 2: N/A denotes "not assessed – JMPR has not had the opportunity to consider, or determine the need for, an ARfD"

YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARfD
160	Propiconazole (160)	Propiconazole (160)	Syngenta		<p>Periodic review pending JMPR advice on PHC. The most recent JMPR evaluation for toxicology of propiconazole was in 2004. An ADI was set at 0.7 mg/kg bw/day (Reproductive toxicity in rats with safety factor of 100) and an ARfD at 0.3 mg/kg bw (Developmental toxicity in rats with safety factor of 100). Propiconazole was evaluated by EFSA in 2017. An ADI was set at 0.04 mg/kg bw/day (Chronic rat study with safety factor of 100) and an ARfD at 0.1 mg/kg bw (Developmental study in rat with safety factor of 300). EFSA could not finalise the consumer dietary risk assessment considering the outstanding data to finalise the residue definition for risk assessment for plants and the livestock exposure assessment. No conclusion could be drawn on the toxicity of several metabolites, even genotoxicity has not been studied for some of the metabolites. Endocrine effects of propiconazole have not been finalized.</p> <p>In addition, an acute intake concern was identified for European consumer from some existing and proposed CXLs. EFSA, 2017: Conclusion on the peer review of the pesticide risk assessment of the active substance propiconazole. EFSA Journal 2017;15(7):4887. https://www.efsa.europa.eu/en/efsajournal/pub/4887</p>	2004	0-0.07	0.3
81	Chlorothalonil	Chlorothalonil	Syngenta		<p>Periodic review pending JMPR advice on PHC. EU: Chlorothalonil was initially evaluated by JMPR in 1990 and reviewed several times for toxicology and residues (last review in 2015). During the EU peer review, the consumer risk assessment could not be finalised in view of the multiple identified data gaps, leading to derivation of preliminary residue definitions in plant, including processed commodities, and in animal commodities. Since R182281 (SDS-3701) is a pertinent residue in all these commodities and in the absence of toxicological reference values for R182281, even an indicative consumer risk assessment using the preliminary residue definitions could not be conducted. It is noted that for R182281 a genotoxic potential could not be excluded. Moreover, under processing conditions employing higher temperatures, degradation of chlorothalonil into R613636 was observed next to formation of R182281. Also for R613636, a genotoxic potential could not be excluded. Further to that, a genotoxic potential could not be excluded for R417888, a medium to very high persistent soil metabolite that together with R611965 formed the major residue in the rotational crop metabolism study but was not investigated in rotational crop residue trials.</p> <p>In addition, the ARfD for parent has decreased to 0.05 mg/kg bw/day during the recent EU peer review. New toxicological studies were submitted during the EU peer review which have not been evaluated by the JMPR. It is suggested to schedule chlorothalonil and specifically its metabolites for toxicological and exposure assessment in light of these findings. EFSA, 2017. Peer review of the pesticide risk assessment of the active substance chlorothalonil. EFSA Journal 2018;16(1):5126. doi: 10.2903/j.efsa.2018.5126 https://www.efsa.europa.eu/en/efsajournal/pub/5126</p>	2015	0-0.02	0.6

TABLE 2A: PRIORITY LISTS OF PERIODIC REVIEWS – 2023-2024

Note 1: NR denotes "following evaluation, JMPR has deemed the establishment of an ARfD unnecessary"

Note 2: N/A denotes "not assessed – JMPR has not had the opportunity to consider, or determine the need for, an ARfD"

YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARfD
201	Chlorpropham	Chlorpropham	Cerex Agri	potato	Periodic review pending JMPR advice on PHC. Chlorpropham was first evaluated by JMPR in 2000 (toxicology) and 2001 (residues) and reviewed for toxicology (ADI, ARfD) in 2005 and residues (milk, milk fat) in 2008. During the EU peer review, a final consumer risk assessment could not be finalised due to a number of data gaps. Metabolite 3-chloroaniline was identified in metabolism studies on stored potatoes treated with chlorpropham and in processing studies. For chlorpropham an acceptable daily intake (ADI) of 0.05 mg/kg bw per day and an acute reference dose (ARfD) of 0.5 mg/kg bw per day were proposed. For 3-chloroaniline an ADI of 0.007 mg/kg bw per day and an ARfD of 0.03 mg/kg bw per day were proposed. In an indicative assessment, the highest chronic exposure to chlorpropham (including metabolite 4-hydroxychlorpropham) in relation to a calculated MRL of 20 mg/kg was exceeding the ADI (180%). The chronic exposure to 3-chloroaniline was also exceeding the ADI (195%). In an acute risk assessment, the ARfD was exceeded by 797% for chlorpropham (including metabolite 4-hydroxychlorpropham) and 2360% for 3-chloroaniline. Based on the above risk assessment a CXL of 30 mg/kg for potatoes cannot be supported.	2000, 2005T (ADI, ARfD)	0-0.05	0.5
2023	Chlorpyrifos (17)	Chlorpyrifos (17)	Advised 30 May 2020 that Corteva was not providing further support. 30 March 2021 - Adama has indicated they will lead a submission and request deferral to 2023.	Adama to advise on supported commodities.	Chlorpyrifos was originally evaluated by JMPR in 1972. It was evaluated for toxicology in 1982 by JMPR and for residues in 1995 and it was reviewed for toxicology in 1999 (confirmed ADI of 0-0.01 mg/kg bw and ARfD 0.1 mg/kg bw) and for residues in 2000, 2004 and 2006. There is a 20 years' gap since chlorpyrifos was last reviewed by JMPR, as it is also indicated in General considerations (point 2.6) of 2019 Report of the extra Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues. During the 2019 EU Peer Review of the active substance, and based on the information available from the European Food Safety Authority's Statement on the available outcomes of the human health assessment of the active substance chlorpyrifos, concerns were identified with regard to: •The genotoxic potential of chlorpyrifos which cannot be ruled out based on the information available: positive findings were found in an in vitro chromosome aberration study and two in vitro unscheduled DNA synthesis assays; in vivo positive findings were found in open literature on chromosome aberration and on DNA damage caused through oxidative stress or by topoisomerase II inhibition, which is considered a molecular initiating event for infant leukaemia. Consequently, health based reference values cannot be established for chlorpyrifos and the dietary and non-dietary risk assessments cannot be conducted. •Developmental neurotoxicity (DNT) effects were observed in the available study on developmental neurotoxicity in rats (adverse effects were seen at the lowest dose tested in rats and a no observed adverse effects level 'NOAEL' could not be established) and epidemiological evidence exists showing an association between exposure to chlorpyrifos and/or chlorpyrifos-methyl during development and adverse neurodevelopmental outcomes in children. •Based on the evidence for DNT, experts during the peer review suggested that classification of chlorpyrifos as toxic for reproduction, category 1B, H360D 'May damage the unborn child', in accordance with the criteria set out in Commission Regulation (EC) No 1272/2008 would be appropriate. For all these reasons, it is considered that a re-evaluation for toxicology and residues of chlorpyrifos and all their CXLs is necessary and this task should be prioritized on the JMPR calendar. It was noted that aspects of epidemiology should be included. EFSA (European Food Safety Authority), 2019. Statement on the available outcomes of the human health assessment in the context of the pesticides peer review of the active substance chlorpyrifos. EFSA Journal 2019;17(5):5809 DOI: 10.2903/j.efsa.2019.5809 https://www.efsa.europa.eu/en/efsajournal/pub/5809	1982 (T), 1995 (R), 1999 (T), 2000 (R), 2004 (R), 2006 (R)	0-0.01	0.1

TABLE 2A: PRIORITY LISTS OF PERIODIC REVIEWS – 2023-2024								
Note 1: NR denotes "following evaluation, JMPR has deemed the establishment of an ARfD unnecessary"								
Note 2: N/A denotes "not assessed – JMPR has not had the opportunity to consider, or determine the need for, an ARfD"								
YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARFD
2023	Chlorpyrifos-methyl (90)	Chlorpyrifos-methyl (90)	Advised 30 May 2020 that Corteva was not providing further support	Not supported.	Moved to 2023 to align with chlorpyrifos.	1975, 2009	0-0.01, 2009	0.1, 2009
2023 (moved from 2022 on request of FMC)	Malathion (49)	Malathion (49)	FMC	Awaiting advice on supported commodities.	October 2020-FMC requested deferral to 2023, awaiting reviews in US and Europe in 2022.	FMC/USA	0.3, 1997	2.0, 2003
Requested to move to 2023	Permethrin (120)	Permethrin (120)	FMC and collaborators	Not supported. May 2020 update: FMC seeking collaborators-request deferral to 2023.	Not supported by manufacturer. Last reviewed over 25 years ago. May 2020 update: FMC seeking collaborators-request deferral to 2023.	1987	0.05, 1999	NR - 1999
2023	Carbosulfan (145)/Carbofuran (96)	Carbosulfan (145)/Carbofuran (96)	FMC	Awaiting advice on supported commodities - ASPARAGUS; EGG PLANT, MANGO (Thailand)	Netherlands – public health concerns¶Carbosulfan: Not approved (September 2007, RMS BE) - Information insufficient with regard to consumer exposure¶Concerns identified with regard to toxicity of the substance and presence of unknown levels of carcinogenic impurities which may increase during storage, Consumers exposure inconclusive due to uncertainties regarding the effects of certain metabolites, some of which could be genotoxic¶Carbofuran: Not approved (September 2007, RMS BE) - Information insufficient with regard to consumer exposure.¶Concerns identified - High toxicity of the substance and some of its metabolites, Consumer exposure inconclusive¶Deferred to JMPR 2020 due to workload. In May 2020, deferred to JMPR 2023 to conduct additional residue trials and tox studies.	1997	0.01, 1986/ 0.001, 1996	0.02, 2003 / 0.001, 2009
2023	Parathion-methyl (059)	Parathion-methyl (059)	Cheminova	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1994R, 1995T	0.003, 1995	0.03, 1995
2023	Piperonyl butoxide (062)	Piperonyl butoxide (062)	Endura	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1995T, 2001T (ARfD), 2001R	0.2, 1995	NR
2024	2,4-D (020)	2,4-D (020)	Corteva	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1996T, 1998R, 2001T (ARfD)	0.01, 1996	NR
2024	Maleic hydrazide (102)	Maleic hydrazide (102)	Chemtura	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1976, 1996T, 1998R	0.3, 1996	N/A
2024	Tebufenozide (196)	Tebufenozide (196)	Nippon Soda Co., Ltd	Orange, Citrus, Pome fruits, Grape (table and wine), Tomatoes, sweet peppers, bell peppers, aubergines/eggplants, maize/corn	Moved from Table 2B to Table 2A under 25 year rule.	1996, 2003T (ARfD)	0.02, 1996	0.9, 2003
2024	Captan (07)	Captan (07)	Adama / UPL (co-sponsors)	Tree nuts, berries and other small fruits (blueberries, currants, gooseberries, raspberries, blackberries, dewberries, loganberries), strawberries, grapes, stone fruits (apricot, cherries, peach, nectarine, plums), pome fruits, citrus fruits, persimmon, potato, carrots, cucurbits edible peel, cucurbits inedible peel, chili peppers, sweet peppers, tomatoes, eggplant, bulb onion, garlic, maize, cotton, cereal grains, rice, rapeseed, soybean, root and rhizome	Moved from Table 3 to Table 2A under 25 year rule. Existing CXLs plus additional global uses/MRLs proposed. Periodic re-evaluation with additional supporting residues trials data for new commodities and updated data where available. An update on the number of studies can be provided in due course. Update provided by sponsor 27112020.	1963, 1995T, 2000R, 2007T (ARfD)	0-0.1, 1995	0.3, 2007

TABLE 2A: PRIORITY LISTS OF PERIODIC REVIEWS – 2023-2024

Note 1: NR denotes "following evaluation, JMPR has deemed the establishment of an ARFD unnecessary"

Note 2: N/A denotes "not assessed – JMPR has not had the opportunity to consider, or determine the need for, an ARFD"

YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARFD
2024	Folpet (041)	Folpet (041)	Adama	Pome fruit, grapes, strawberry, avocado, tomato, eggplant, cucurbits edible peel, cucurbits inedible peel, head lettuce, bulb onion, shallot, garlic, potato, radishes, cereal grains, hops	Moved from Table 3 to Table 2A under 25 year rule. Existing CXLs plus additional global uses/MRLs proposed. Periodic re-evaluation with additional supporting residues trials data for new commodities and updated data where available. An update on the number of studies can be provided in due course. Update provided by sponsor 27112020.	1969, 1995T, 1998R, 2007T (ARFD)	0-0.1, 1995	0.2, 2004
2024	Disulfoton (74)	Disulfoton (74)	No longer supported by the manufacturer	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1973, 1996 (ARFD)	0.0003, 2006	0.003 - 2006
2024	Pirimiphos-methyl (86)	Pirimiphos-methyl (86)	Syngenta	Awaiting advice on supported commodities.	Moved from Table 2B to Table 2A under 25 year rule.	1974, 1992T, 2006T(ARFD), 2003R	0.03, 2006	0.2, 2006
2024	Flumethrin (195)	Flumethrin (195)	Bayer CropScience; sent to JECFA 2019	Awaiting advice on supported commodities.	Moved from Table 3 to Table 2A under 25 year rule.	1996	0.004, 1996	NR

TABLE 2B: PERIODIC REVIEW LIST (COMPOUNDS LISTED UNDER 15 YEAR RULE BUT NOT YET SCHEDULED OR LISTED)							
Compounds listed in this table have not been evaluated for at least 15 years. Decisions on the prioritization of these compounds should be based on the relevant criteria specified in pp159-161 of the Codex Procedural Manual. Compounds are listed in Table 2b awaiting advice on supporting data packages and/or an indication of manufacturer/member country support. ¶							
CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARfD	MANUFACTURER	COMMENT
8	Carbaryl	Yes	1965, 2001T(ADI, ARfD), 2002R	0.006, 2001	0.2, 2001	Bayer CropScience	No longer supported by the manufacturer
83	Dichloran	No?	1974, 1977, 1998	0.01	NR	Gowan previously?	Awaiting confirmation of support
30	Diphenylamine	Yes	1998T, 2001R	0.08, 1998	NR	Cerex Agri	Awaiting advice on supported commodities
56	2-phenylphenol	Yes	1999	0.4, 1999	NR 1999		manufacturer unknown
63	Pyrethrins	Yes	1965, 2000R, 2003T	0.04, 2005	0.2, 1999	No manufacturer	Awaiting advice on supported commodities
79	Amitrole	Yes	1997T, 1998R	0.002, 1997	N/A	Nufarm	Awaiting advice on supported commodities
84	Dodine		1974, 2000T, 2003R	0.1, 2000	0.2, 2000	Nufarm	Awaiting advice on supported commodities
87	Dinocap	Yes	1969, 1998T, 2000T(ARfD)	0.008, 1998	0.008 WCBA - 0.03 general		No longer supported by the manufacturer
94, 154	Methomyl / thiodicarb	Yes	2001TR, 2004R	0.02, 2001	0.02, 2001	Corteva	Awaiting advice on supported commodities
100	Methamidophos		1976, 2002T, 2003R	0.004, 2002	0.01, 2002	Bayer CropScience	No longer supported by the manufacturer
103	Phosmet		1976, 1994T, 2003T, 1997R, 2002R	0.01, 1998	0.2, 2003	Gowan	Awaiting advice on supported commodities
113	Propargite	Yes	1977, 1999T, 2002R	0.01, 1999	NR, 1999, 2006	Chemtura	Awaiting advice on supported commodities
135	Deltamethrin	Yes	1980, 2000T, 2002R	0.01, 2000	0.05, 2000	Bayer CropScience	Awaiting advice on supported commodities
144	Bitertanol	Yes	1983, 1998T, 1999R	0.01, 1998	NR 1998	Bayer CropScience	No longer supported by the manufacturer
166	Oxydemeton-methyl		1989, 2002T, 1998R	0.0003, 2004	0.002, 2002	United Phosphorous	Awaiting advice on supported commodities
167	Terbufos		1989, 2003T	0.0006, 1989	0.002, 2003	AMVAC	No longer supported by the manufacturer
197	Fenbuconazole	Yes	1997TR, 2009, 2012, 2013R	0.03, 1997	0.2, 2012	Corteva	Awaiting advice on supported commodities
200	Pyriproxyfen	Yes	1999T, 2000R, 2001T	0.1 1999	NR, 1999	Sumitomo Chemical / Valent Canada	Awaiting advice on supported commodities
203	Spinosad	Yes	2001T, (2004, 2008, 2011)R	0.02, 2001	NR, 2001	Corteva	Awaiting advice on supported commodities
204	Esfenvalerate	Yes	2002TR	0.02, 2002	0.02, 2002	Sumitomo	Awaiting advice on supported commodities
205	Flutolanil	Yes	2002TR, 2013R	0.09, 2002	NR, 2002	Nihon Nohyaku	Awaiting advice on supported commodities
206	Imidacloprid	Yes	2001T, (2002,06,08,12,15,17)R	0.06, 2002	0.4, 2002	Bayer CropScience	Awaiting advice on supported commodities
207	Cyprodinil	Yes	2003TR, (2013, 2015, 2017)R	0.03, 2003	NR, 2003	Syngenta	pulses subgroups VD 2065 2066 (new uses)
208	Famoxadone	Yes	2003TR	0.006, 2003	0.6, 2003	Corteva	Awaiting advice on supported commodities
209	Methoxyfenozide	Yes	2003T, (2003, 2006, 2009, 2012)R	0.1, 2003	0.9, 2003	Corteva	Basil (new uses)
210	Pyraclastrobin	Yes	2003T, (2004,2006, 2011, 2012, 2014)R	0.03, 2003	0.05, 2003	BASF	Awaiting advice on supported commodities
211	Fludioxonil	Yes	2004	0-0.04, 2004	NR	Syngenta	Awaiting advice on supported commodities
213	Trifloxystrobin	Yes	2004	0-0.04, 2004	NR	Bayer CropScience	Awaiting advice on supported commodities
214	Dimethanimid-P		2005	0-0.07, 2005	0.5	BASF	Awaiting advice on supported commodities
215	Fenhexamid		2005	0-0.2	NR	Bayer CropScience	Awaiting advice on supported commodities
216	Indoxacarb		2005	0-0.01	0.1	FMC	Awaiting advice on supported commodities
217	Novaluron		2005	0-0.01	NR	Adama	Awaiting advice on supported commodities
218	Sulfuryl fluoride		2005	0-0.01	0.3	Douglas Company	Awaiting advice on supported commodities
67	Cyhexatin		1970, 2005T, 2005R	0.007	NR	Cerex Agri	Awaiting advice on supported commodities
95	Acephate		1976, 2005T, 2003R	0-0.03	0.1	Arysta Life Science	Awaiting advice on supported commodities

TABLE 2B: PERIODIC REVIEW LIST (COMPOUNDS LISTED UNDER 15 YEAR RULE BUT NOT YET SCHEDULED OR LISTED)

Compounds listed in this table have not been evaluated for at least 15 years. Decisions on the prioritization of these compounds should be based on the relevant criteria specified in pp159-161 of the Codex Procedural Manual. Compounds are listed in Table 2b awaiting advice on supporting data packages and/or an indication of manufacturer/member country support. ¶

CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARFD	MANUFACTURER	COMMENT
112	Phorate		1977, 2004T, 2005R	0-0.0007	0.003	BASF / AMVAC	Awaiting advice on supported commodities
129	Azocyclotin		1979, 2005T, 2005R	0-0.003	0.02	Cerex Agri	Awaiting advice on supported commodities
132	Methiocarb		1981, 1998T, 1999R, 2005R (ARfD)	0-0.02	0.02	Bayer CropScience	Awaiting advice on supported commodities
147	Methoprene		1984, 2001T, 2005R	0.09 (R,S racemate) & 0.05 (S-methoprene)	NR	Syngenta?	Awaiting advice on supported commodities
149	Ethoprophos		1983, 1999T, 2004R	0-0.0004	0.05	Bayer CropScience	Awaiting advice on supported commodities
151	Dimethipin		1985, 1999T, 2004T(ARfD), 2001R	0-0.02	0.2	Chemtura	Awaiting advice on supported commodities
158	Glyphosate		1986, 2004	0-1	NR	Bayer Crop Science (Monsanto)	Awaiting advice on supported commodities
195	Flumethrin		1996	0.004		Bayer CropScience; sent to JECFA	Awaiting advice on supported commodities
160	Propiconazole		1987, 2004T, 2007R	0-0.07	0.3	Syngenta	Awaiting advice on supported commodities
17	Chlorpyrifos		1972, 1999T, 2000R, 2006 (ARfD)	0-0.01	0.1	Adama	Awaiting advice on supported commodities
201	Chlorpropham		2000, 2005T (ADI, ARfD)	0-0.05	0.5	Cerex Agri	Awaiting advice on supported commodities
32	Endosulfan		1965, 1998T, 2006R	0.006	0.02	Adama	Awaiting advice on supported commodities
133	Triadimefon/triadimenol		1979, 2004T, 2007R	0-0.03	0.08	133 /168 - Bayer CropScience	Awaiting advice on supported commodities
143	Triazophos		1982, 2002T, 2007R	0-0.001	0.001	Bayer CropScience	Awaiting advice on supported commodities
148	Propamocarb		1984, 2005T, 2006R	0-0.4	2	Bayer CropScience	Awaiting advice on supported commodities
155	Benalaxyl		1986, 2005T, 2009R	0-0.07	0.1	FMC	Awaiting advice on supported commodities
156	Clofentezine		1986, 2005T, 2007R	0-0.02	NR	Adama	Awaiting advice on supported commodities

TABLE 2B: PERIODIC REVIEW LIST - NOT YET SCHEDULED (PUBLIC HEALTH CONCERNS LODGED FOR COMPOUNDS NOT LISTED UNDER 15 YEAR RULE)

CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARfD	MANUFACTURER	COMMENT
130	Diflubenzuron	Yes	2001 (T), 2002(R).	0-0.02	Unnecessary	Chemtura	Diflubenzuron was evaluated by JMPR in 1981 and reviewed in 2001 (T) and 2002(R). In its peer review in 2015, EFSA identified a new concern related to the potential exposure to the metabolite and impurity 4-chloroaniline (PCA). Given the genotoxic properties of PCA identified on the basis of the confirmatory information, and given the carcinogenic properties of PCA and the absence of a threshold for acceptable exposure, EFSA found that the potential toxicological relevance of PCA needs to be further investigated. In 2019 JMPR did not receive any new data on 4-chloroaniline but was aware of the JECFA veterinary drugs meeting scheduled for October 2019 was reviewing diflubenzuron.
160	Propiconazole	Yes	2004	0-0.07	0.3	Syngenta	The most recent JMPR evaluation for toxicology of propiconazole was in 2004. An ADI was set at 0.7 mg/kg bw/day (Reproductive toxicity in rats with safety factor of 100) and an ARfD at 0.3 mg/kg bw (Developmental toxicity in rats with safety factor of 100). Propiconazole was evaluated by EFSA in 2017. An ADI was set at 0.04 mg/kg bw/day (Chronic rat study with safety factor of 100) and an ARfD at 0.1 mg/kg bw (Developmental study in rat with safety factor of 300). EFSA could not finalise the consumer dietary risk assessment considering the outstanding data to finalise the residue definition for risk assessment for plants and the livestock exposure assessment. No conclusion could be drawn on the toxicity of several metabolites, even genotoxicity has not been studied for some of the metabolites. Endocrine effects of propiconazole have not been finalized. In addition, an acute intake concern was identified for European consumer from some existing and proposed CXLs. EFSA, 2017: Conclusion on the peer review of the pesticide risk assessment of the active substance propiconazole. EFSA Journal 2017;15(7):4887. https://www.efsa.europa.eu/en/efsajournal/pub/4887
81	Chlorothalonil	Yes	2015	0-0.02	0.6	Syngenta	EU: Chlorothalonil was initially evaluated by JMPR in 1990 and reviewed several times for toxicology and residues (last review in 2015). During the EU peer review, the consumer risk assessment could not be finalised in view of the multiple identified data gaps, leading to derivation of preliminary residue definitions in plant, including processed commodities, and in animal commodities. Since R182281 (SDS-3701) is a pertinent residue in all these commodities and in the absence of toxicological reference values for R182281, even an indicative consumer risk assessment using the preliminary residue definitions could not be conducted. It is noted that for R182281 a genotoxic potential could not be excluded. Moreover, under processing conditions employing higher temperatures, degradation of chlorothalonil into R613636 was observed next to formation of R182281. Also for R613636, a genotoxic potential could not be excluded. Further to that, a genotoxic potential could not be excluded for R417888, a medium to very high persistent soil metabolite that together with R611965 formed the major residue in the rotational crop metabolism study but was not investigated in rotational crop residue trials. In addition, the ARfD for parent has decreased to 0.05 mg/kg bw/day during the recent EU peer review. New toxicological studies were submitted during the EU peer review which have not been evaluated by the JMPR. It is suggested to schedule chlorothalonil and specifically its metabolites for toxicological and exposure assessment in light of these findings. EFSA, 2017. Peer review of the pesticide risk assessment of the active substance chlorothalonil. EFSA Journal 2018;16(1):5126. doi: 10.2903/j.efsa.2018.5126 https://www.efsa.europa.eu/en/efsajournal/pub/5126

TABLE 2B: PERIODIC REVIEW LIST - NOT YET SCHEDULED (PUBLIC HEALTH CONCERNS LODGED FOR COMPOUNDS NOT LISTED UNDER 15 YEAR RULE)							
CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARfD	MANUFACTURER	COMMENT
81	Chlorothalonil	Yes	2015	0-0.02	0.6	Syngenta	<p>UK: The UK is concerned that the advancement of the proposed CXL for cranberries is not appropriate on the basis of the points set out below, and requests additional clarification and assurance on the scientific basis for the proposal:</p> <ul style="list-style-type: none"> •The chronic exposure estimated for the metabolite R613636 exceeded the threshold below which no adverse effects for human health are expected •The overall chronic exposure to the metabolite R613636 from all commodities has not been addressed •The acute exposure to the metabolite R613636 has not been addressed <p>The metabolite R613636 was found to be a major degradation product on hydrolysis of chlorothalonil and therefore has the potential to be found in processed cranberries. In particular the residue levels in cranberry juice and sauce, rather than the fresh cranberries, is of a concern.</p> <p>The chronic exposure to this metabolite has been estimated on the basis of the hydrolysis study.</p> <p>The OECD test guideline 507 outlines the purposes of the hydrolysis study, which includes information on the nature of the residue in processed foods. The study is not designed to be used to estimate the magnitude of residue levels in processed foods. The levels of the metabolite R613636 in processed cranberries should be based on magnitude studies (i.e. OECD test guideline 508).</p> <p>The FAO manual is also clear that the purpose of the hydrolysis study is to determine whether or not breakdown or reaction products of residues in the raw commodities are formed during processing which may require a separate risk assessment. Processing factors derived under realistic conditions are required for MRL setting and/or refinement of the consumer exposure assessment.</p> <p>The UK would accept that using the hydrolysis study to provide an estimate of the exposure level would be an acceptable approach under specific circumstances. For example if the exposures estimated were significantly below the toxicological reference values or the generic threshold.</p> <p>However, in this specific case the exposures were above the generic threshold and therefore data generated on the residue levels in processed cranberries (or suitable surrogates) would ensure more accurate exposures for the metabolite can be determined. This would provide the evidence to support the JMPR statement that there are unlikely to be public health concerns, even though the exposure exceeds the threshold, as it seems very unlikely that the daily diet contains a high percentage (> 50 %) of cranberries subject to high temperature treatment.</p> <p>Specific toxicological reference values could not be established for this metabolite owing to the lack of toxicological data. The acceptability of the chronic exposure has therefore been assessed using the TTC (threshold of toxicological concern). The chronic exposure estimated by the JMPR exceeded the generic threshold of 1.5 µg/kg bw/day (for compounds categorised in Cramer class III).</p> <p>In the Codex Alimentarius Commission procedural manual (27th edition) if either the IESTIs exceed the ARfD or the IEDIs exceed the ADI the JMPR should indicate additional data are necessary to refine the calculations. The same approach should be taken when the acceptability of the exposures have been determined on the basis of a generic threshold as analyte specific toxicological reference values cannot be established.</p> <p>The UK fully supports the use of the TTC to determine the acceptability of the exposure to this metabolite. The TTC provides a conservative exposure threshold in the absence of sufficient chemical specific toxicological data. However, a fundamental principle of using the TTC is that where exposures are below the threshold further data are not required and where the exposures exceed the threshold then it must be a priority to provide further data. Setting additional thresholds above the established threshold is not appropriate for MRL setting and could undermine confidence in the codex MRLs. In this specific case, as the exposure for the metabolite has only been estimated using the hydrolysis study, with no actual crop treated, there are additional uncertainties. In addition, Codex MRLs are currently established for a wide range of crops which can be processed. The new data assessed by the JMPR, including toxicological data, has led to the consideration of R613636 in the dietary exposure assessment. Therefore, the residue levels of this metabolite for all relevant commodities should be presented and hence the chronic exposure to all sources of this metabolite should be estimated. Based on the information provided the total chronic exposure for metabolite R613636 is</p>

TABLE 2B: PERIODIC REVIEW LIST - NOT YET SCHEDULED (PUBLIC HEALTH CONCERNS LODGED FOR COMPOUNDS NOT LISTED UNDER 15 YEAR RULE)

CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARfD	MANUFACTURER	COMMENT
17	Chlorpyrifos	Yes	1982 (T), 1995 (R), 1999 (T), 2000 (R), 2004 (R), 2006 (R)	0-0.01	0.1	Corteva Agriscience (May 2020 advised unsupported). Adama to advise on supported commodities.	<p>Chlorpyrifos was originally evaluated by JMPR in 1972. It was evaluated for toxicology in 1982 by JMPR and for residues in 1995 and it was reviewed for toxicology in 1999 (confirmed ADI of 0-0.01 mg/kg bw and ARfD 0.1 mg/kg bw) and for residues in 2000, 2004 and 2006.</p> <p>There is a 20 years' gap since chlorpyrifos was last reviewed by JMPR, as it is also indicated in General considerations (point 2.6) of 2019 Report of the extra Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues.</p> <p>During the 2019 EU Peer Review of the active substance, and based on the information available from the European Food Safety Authority's Statement on the available outcomes of the human health assessment of the active substance chlorpyrifos, concerns were identified with regard to:</p> <ul style="list-style-type: none"> •The genotoxic potential of chlorpyrifos which cannot be ruled out based on the information available: positive findings were found in an in vitro chromosome aberration study and two in vitro unscheduled DNA synthesis assays; in vivo positive findings were found in open literature on chromosome aberration and on DNA damage caused through oxidative stress or by topoisomerase II inhibition, which is considered a molecular initiating event for infant leukaemia. Consequently, health based reference values cannot be established for chlorpyrifos and the dietary and non-dietary risk assessments cannot be conducted. •Developmental neurotoxicity (DNT) effects were observed in the available study on developmental neurotoxicity in rats (adverse effects were seen at the lowest dose tested in rats and a no observed adverse effects level 'NOAEL' could not be established) and epidemiological evidence exists showing an association between exposure to chlorpyrifos and/or chlorpyrifos-methyl during development and adverse neurodevelopmental outcomes in children. •Based on the evidence for DNT, experts during the peer review suggested that classification of chlorpyrifos as toxic for reproduction, category 1B, H360D 'May damage the unborn child', in accordance with the criteria set out in Commission Regulation (EC) No 1272/2008 would be appropriate. <p>For all these reasons, it is considered that a re-evaluation for toxicology and residues of chlorpyrifos and all their CXLs is necessary and this task should be prioritized on the JMPR calendar. It was noted that aspects of epidemiology should be included. EFSA (European Food Safety Authority), 2019. Statement on the available outcomes of the human health assessment in the context of the pesticides peer review of the active substance chlorpyrifos. EFSA Journal 2019;17(5):5809 DOI: 10.2903/j.efsa.2019.5809 https://www.efsa.europa.eu/en/efsajournal/pub/5809</p>
90	Chlorpyrifos methyl	Yes	1975, 2009	0-0.01	0.1	Corteva Agriscience (May 2020 advised unsupported)	<p>Chlorpyrifos-methyl was originally evaluated by the JMPR in 1975. It was evaluated for both, toxicology and residues in 1991 by JMPR and it was reviewed for toxicology in 1992 and 2001 (ADI of 0-0.01 mg/kg bw/day and ARfD unnecessary) and for residues in 1993, 1994, 2009 and 2013.</p> <p>During the 2019 EU Peer Review of the active substance, and based on the information available from the European Food Safety Authority's Statement on the available outcomes of the human health assessment of chlorpyrifos methyl, concerns were identified with regard to:</p> <ul style="list-style-type: none"> •The genotoxic potential of chlorpyrifos-methyl, which cannot be ruled out when taking into account the concerns raised for chlorpyrifos concerning chromosome aberration and DNA damage that may also apply to chlorpyrifos-methyl. In addition, the available scientific open literature on chlorpyrifos-methyl, although presenting some limitations, should be considered in a weight of evidence approach and raises some concerns about the potential for chlorpyrifos-methyl to damage DNA. Consequently, health based reference values cannot be established for chlorpyrifos-methyl and the dietary and non-dietary risk assessments cannot be conducted. • Developmental neurotoxicity (DNT) – the available DNT study on chlorpyrifos-methyl did not allow for a full assessment of effects on brain development, in particular since effects on cerebellum height could not be evaluated due to the lack of controls in females and a no observed adverse effects level 'NOAEL' for DNT could not be established. Since DNT effects were observed in the available developmental neurotoxicity on chlorpyrifos (adverse effects were seen at the lowest dose tested in rats and a NOAEL could not be established) concerns exist also for chlorpyrifos-methyl. Moreover, epidemiological evidence exists showing an association between exposure to chlorpyrifos and/or chlorpyrifos-methyl during development and adverse neurodevelopmental outcomes in children. •Based on the evidence for developmental neurotoxicity (DNT), experts during the peer review suggested that classification of chlorpyrifos-methyl as toxic for the reproduction category 1B, H360D 'May damage the unborn child', in accordance with the criteria set out in Commission Regulation (EC) No 1272/2008 would be appropriate. <p>For all these reasons, it is considered that a re-evaluation for toxicology and residues of chlorpyrifos methyl and all their CXLs is necessary and this task should be prioritized on JMPR calendar. It was noted that aspects of epidemiology should be included. European Food Safety Authority (EFSA), 2019. Updated statement on the available outcomes of the human health assessment in the context of the pesticides peer review of the active substance chlorpyrifos-methyl. EFSA Journal 2019;17(11):5908. doi: 10.2903/j.efsa.2019.5908. https://www.efsa.europa.eu/en/efsajournal/pub/5908</p>
201	Chlorpropham	potato	2000, 2005T (ADI, ARfD)	0-0.05	0.5	Cerex Agri	<p>Chlorpropham was first evaluated by JMPR in 2000 (toxicology) and 2001 (residues) and reviewed for toxicology (ADI, ARfD) in 2005 and residues (milk, milk fat) in 2008. During the EU peer review, a final consumer risk assessment could not be finalised due to a number of data gaps. Metabolite 3-chloroaniline was identified in metabolism studies on stored potatoes treated with chlorpropham and in processing studies. For chlorpropham an acceptable daily intake (ADI) of 0.05 mg/kg bw per day and an acute reference dose (ARfD) of 0.5 mg/kg bw per day were proposed. For 3-chloroaniline an ADI of 0.007 mg/kg bw per day and an ARfD of 0.03 mg/kg bw per day were proposed. In an indicative assessment, the highest chronic exposure to chlorpropham (including metabolite 4-hydroxychlorpropham) in relation to a calculated MRL of 20 mg/kg was exceeding the ADI (180%). The chronic exposure to 3-chloroaniline was also exceeding the ADI (195%). In an acute risk assessment, the ARfD was exceeded by 797% for chlorpropham (including metabolite 4-hydroxychlorpropham) and 2360% for 3-chloroaniline. Based on the above risk assessment a CXL of 30 mg/kg for potatoes cannot be supported.</p>

TABLE 3: RECORD OF REVIEW

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
8	Carbaryl	1965	2001T(ADI, ARfD), 2002R	2019	2019	Bayer CropScience
27	Dimethoate	1965	1996T, 2003T(ARfD), 1998R, 2019T, R	2019/2021	2019/2021	
96	Carbofuran	1976	1996T, 2008T(ARfD), 1997R, 2019 (postponed due to insufficient information)	2019	2019	FMC
145	Carbosulfan	1984	2003T, 1997R, 2019 (postponed due to insufficient information)	2023	2023	FMC
187	Clethodim	1994	1999T(ARfD), 2019T, R	2019	2019	Support from USA, UPL
191	Tolclofos-methyl	1994	2019T, R	2019	2019	Sumitomo Chemical
22	Diazinon	1965	2006T, 1993	2020	2020	Adama
35	Ethoxyquin	1969	2005T, 1999R	2021	2021	Pace (Sumitomo Chemical Company)
51	Methidathion	1972	1997T, 1992	2020	2020	Not supported
64	Quintozene	1969	1995	2021	2021	Chemtura
117	Aldicarb	1979	1992T, 1995T(ARfD), 1994R	2021	2021	AgLogicChemcial LLC
138	Metalaxyl	1982	2002T	2020	2020	Quimicas del Vallés - SCC GmbH
142	Prochloraz	1983	2001T, 2004R	2021	2021	Bayer CropScience
202	Fipronil	2000/2001	None	2020	2020	BASF
212	Metalaxyl-M	2002	None	2020	2020	Syngenta
46	Hydrogen phosphide	1965	1966T	2022	2022	Phosphine Producers Association
47	Bromide ion	1968	1988T	2021	2021	Support unknown
101	Pirimicarb	1976	2004	2022	2022	Syngenta
105	Dithiocarbamates	1965	1993R/1996T ferbam/ziram, 2004 propineb	2022	2022	Includes - incl propineb, ferbam, ziram / individual DTCs are evaluated, propineb 2004, ferbam/ziram
109	Fenbutatin oxide	1977	1992T, 1993R	2021	2021	Not supported by BASF
114	Guazatine	1977	1997	2021	2021	Guideline limits – citrus, pome fruit
120	Permethrin	1979	1999T	2023	2023	Not supported by BASF; FMC seeking collaborators
72	Carbendazim	1973	1995T, 2005T(ARfD), 1998R	2022	2022	Nippon Soda
111	Iprodione	1977	1995T, 1994R	2022	2022	Support from BASF
130	Diflubenzuron	1981	2001T, 2002R	JECFA comments		Chemtura
211	Fludioxonil	2004	None	Table 2B	Table 2B	Syngenta
213	Trifloxystrobin	2004	None	Table 2B	Table 2B	Bayer CropScience
214	Dimethenamid-P	2005	None	Table 2B	Table 2B	BASF
215	Fenhexamid	2005	None	Table 2B	Table 2B	Bayer CropScience
216	Indoxacarb	2005	None	Table 2B	Table 2B	FMC
217	Novaluron	2005	None	Table 2B	Table 2B	Adama
218	Sulfuryl fluoride	2005	None	Table 2B	Table 2B	Dow AgroSciences
219	Bifenazate	2006	None	Never scheduled	Never scheduled	Chemtura
220	Aminopyralid	2007	None	Never scheduled	Never scheduled	Dow AgroSciences

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
221	Boscalid	2006	2019T (ARfD)	Never scheduled	Never scheduled	BASF
222	Quinoxifen	2006	None	Never scheduled	Never scheduled	Dow AgroSciences
223	Thiacloprid	2006	None	Never scheduled	Never scheduled	Bayer CropScience
224	Difenoconazole	2007	None	Never scheduled	Never scheduled	Syngenta
225	Dimethomorph	2007	None	Never scheduled	Never scheduled	BASF
226	Pyrimethanil	2007	None	Never scheduled	Never scheduled	Bayer CropScience
227	Zoxamide	2007	None	Never scheduled	Never scheduled	Gowan
229	Azoxystrobin	2008	None	Never scheduled	Never scheduled	Syngenta
230	Chlorantraniliprole	2008	None	Never scheduled	Never scheduled	FMC
231	Mandipropamid	2008	None	Never scheduled	Never scheduled	Syngenta
232	Prothioconazole	2008	None	Never scheduled	Never scheduled	Bayer CropScience
233	Spinetoram	2008	None	Never scheduled	Never scheduled	Dow AgroSciences
234	Spirotetramat	2008	None	Never scheduled	Never scheduled	Bayer CropScience
235	Fluopicolide	2009	None	Never scheduled	Never scheduled	Bayer CropScience
236	Metaflumizone	2009	2019T (ARfD)	Never scheduled	Never scheduled	BASF
237	Spirodiclofen	2009	None	Never scheduled	Never scheduled	Bayer CropScience
238	Clothianidin	2010	None	Never scheduled	Never scheduled	Sumitomo Chemical
239	Cyproconazole	2010	None	Never scheduled	Never scheduled	Syngenta
240	Dicamba	2010	2019T (ARfD)	Never scheduled	Never scheduled	BASF
241	Etoazole	2010	None	Never scheduled	Never scheduled	Sumitomo Chemical
242	Flubendiamide	2010	None	Never scheduled	Never scheduled	Nihon Nohyaku
243	Fluopyram	2010	None	Never scheduled	Never scheduled	Bayer CropScience
244	Meptyldinocap	2010	None	Never scheduled	Never scheduled	Dow AgroSciences
245	Thiamethoxam	2010	None	Never scheduled	Never scheduled	Syngenta
246	Acetamiprid	2011	None	Never scheduled	Never scheduled	Nippon Soda
247	Emamectin-benzoate	2011	None	Never scheduled	Never scheduled	Syngenta
248	Flutriafol	2011	None	Never scheduled	Never scheduled	Chemnova
249	Isoprazam	2011	None	Never scheduled	Never scheduled	Syngenta
250	Propylene oxide	2011	None	Never scheduled	Never scheduled	Aberco
251	Saflufenacil	2011	None	Never scheduled	Never scheduled	BASF
252	Sulfoxaflor	2011	None	Never scheduled	Never scheduled	Dow AgroSciences
253	Penthiopyrad	2011	None	Never scheduled	Never scheduled	DuPont
253	Ametoctradin	2012	None	Never scheduled	Never scheduled	[BASF] – USA
254	Chlorfenapyr	2018 R, 2012T	None	Never scheduled	Never scheduled	[BASF] – Brazil
255	Dinotefuran	2012	None	Never scheduled	Never scheduled	[Mitsui Chemicals Agro] – Japan
256	Fluxapyroxad	2012	None	Never scheduled	Never scheduled	[BASF] – USA
257	MCPA	2012	None	Never scheduled	Never scheduled	[Nufarm] – USA
258	Picoxystrobin	2012	None	Never scheduled	Never scheduled	[Dupont] -USA
259	Sedaxane	2012	None	Never scheduled	Never scheduled	[Syngenta] – USA
261	Benzovindiflupyr	2013	None	Never scheduled	Never scheduled	Syngenta

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
262	Bixafen	2013	None	Never scheduled	Never scheduled	Bayer CropScience
263	Cyantraniliprole	2013	None	Never scheduled	Never scheduled	FMC
264	Fenamidone	2013/14	None	Never scheduled	Never scheduled	Bayer CropScience
265	Fluensulfone	2013/14	None	Never scheduled	Never scheduled	Adama
266	Imazapic	2013	None	Never scheduled	Never scheduled	BASF
267	Imazapyr	2013	None	Never scheduled	Never scheduled	BASF
268	Isoxaflutole	2013	None	Never scheduled	Never scheduled	Bayer CropScience
269	Tolfenpyrad	2013	None	Never scheduled	Never scheduled	Nihon Nohyaku
270	Triflumizole	2013	None	Never scheduled	Never scheduled	Nippon Soda
271	Trinexapac ethyl	2013	None	Never scheduled	Never scheduled	Syngenta
272	Aminocyclopyrachlor	2014	None	Never scheduled	Never scheduled	DuPont
273	Cyflumetofen	2014	None	Never scheduled	Never scheduled	BASF
274	Dichlobenil	2014	None	Never scheduled	Never scheduled	Chemtura
275	Flufenoxuron	2014	None	Never scheduled	Never scheduled	BASF
276	Imazamox	2014	None	Never scheduled	Never scheduled	BASF
277	Mesotrione	2014	2019T (ARFD)	Never scheduled	Never scheduled	Syngenta
278	Metrafenone	2014	None	Never scheduled	Never scheduled	BASF
279	Pymetrozine	2014	None	Never scheduled	Never scheduled	Syngenta
280	Acetochlor	2015	2019T (ARFD)	Never scheduled	Never scheduled	Monsanto
281	Cyazofamid	2015	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
282	Flonicamid	2015	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
283	Fluazifop-p-butyl	2015	None	Never scheduled	Never scheduled	Syngenta
284	Flumioxazin	2015	None	Never scheduled	Never scheduled	Sumitomo
285	Flupyradifurone	2015	None	Never scheduled	Never scheduled	Bayer CropScience
286	Lufenuron	2015	None	Never scheduled	Never scheduled	Syngenta
287	Quinclorac	2015	None	Never scheduled	Never scheduled	BASF
288	Acibenzolar-S methyl	2016	None	Never scheduled	Never scheduled	Syngenta
289	Imazethapyr	2016	None	Never scheduled	Never scheduled	BASF
290	Isofetamid	2016	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
291	Oxathiapiprolin	2016	None	Never scheduled	Never scheduled	DuPont
292	Pendimethalin	2016	None	Never scheduled	Never scheduled	BASF
293	Pinoxaden	2016	None	Never scheduled	Never scheduled	Syngenta
294	Spiromesifen	2016	None	Never scheduled	Never scheduled	Bayer CropScience
295	Bicyclopyrone	2017	None	Never scheduled	Never scheduled	Syngenta
296	Cyclaniliprole	2017	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
297	Fenazaquin	2017	None	Never scheduled	Never scheduled	Gowan
298	Fenpyrazamine	2017	None	Never scheduled	Never scheduled	Sumitomo chemical
299	Isoprothiolane	2017	None	Never scheduled	Never scheduled	Nihon Nohyaku
300	Natamycin	2017	None	Never scheduled	Never scheduled	DSM Food Specialities
301	Phosphonic acid	2017	None	Never scheduled	Never scheduled	Nufarm / Bayer CropScience

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
302	Fosetyl Al	2017	None	Never scheduled	Never scheduled	Nufarm / Bayer CropScience
303	Triflumezopyrim	2017	None	Never scheduled	Never scheduled	DuPont
20	2,4-D	1970	1996T, 1998R, 2001T(ARfD)	Table 2B	Table 2B	Dow AgroSciences
30	Diphenylamine	1969	1998T, 2001R	Table 2B	Table 2B	Cerex Agri
39	Fenthion	1971	1995, 1997T(ARfD)	Table 2B	Table 2B	Not supported by manufacturer
49	Malathion	1965	1997T, 2003T(ARfD), 1999R	Table 2B	Table 2B	FMC
56	2-phenylphenol	1969	1999	Table 2B	Table 2B	No manufacturer
59	Parathion-methyl	1965	1995T, 2000R	Table 2B	Table 2B	Cheminova
62	Piperonyl butoxide	1965	1995T, 2001T(ARfD), 2001R	Table 2B	Table 2B	Endura
63	Pyrethrins	1965	2000R, 2003T	Table 2B	Table 2B	No manufacturer
74	Disulfoton	1973	1996T(ARfD)	Table 2B	Table 2B	Bayer CropScience
79	Amitrole	1974	1997T, 1998R	Table 2B	Table 2B	Nufarm
84	Dodine	1974	2000T, 2003R	Table 2B	Table 2B	AgriPhar SA
86	Pirimiphos-methyl	1974	1992T, 2006T(ARfD), 2003R	Table 2B	Table 2B	Syngenta
87	Dinocap	1969	1998T, 2000T(ARfD)	Table 2B	Table 2B	Not supported by manufacturer
94	Methomyl	1975	2001	Table 2B	Table 2B	DuPont
100	Methamidophos	1976	2002T, 2003R	Table 2B	Table 2B	Bayer CropScience
102	Maleic hydrazide	1976	1996T, 1998R	Table 2B	Table 2B	Chemtura
103	Phosmet	1976	1994T, 2003T, 1997R 2002R	Table 2B	Table 2B	Gowan
113	Propargite	1977	1999T, 2002R	Table 2B	Table 2B	Chemtura
135	Deltamethrin	1980	2000T, 2002R	Table 2B	Table 2B	Bayer CropScience
144	Bitertanol	1983	1998T, 1999R	Table 2B	Table 2B	Bayer CropScience
166	Oxydemeton-methyl	1989	2002T, 1998R	Table 2B	Table 2B	United Phosphorous
167	Terbufos	1989	2003T	Table 2B	Table 2B	AMVAC
196	Tebufenozide	1996	2003T(ARfD)	Table 2B	Table 2B	Nippon Soda
197	Fenbuconazole	1997	None	Table 2B	Table 2B	Dow AgroSciences
200	Pyriproxyfen	1999	None	Table 2B	Table 2B	Sumitomo Chemical / Valent Canada
203	Spinosad	2001	None	Table 2B	Table 2B	Dow AgroSciences
204	Esfenvalerate	2002	None	Table 2B	Table 2B	Sumitomo Chemical
205	Flutolanil	2002	None	Table 2B	Table 2B	Nihon Nohyaku
206	Imidacloprid	2001	None	Table 2B	Table 2B	Bayer CropScience
207	Cyprodinil	2003	2019T (ARfD)	Table 2B	Table 2B	Syngenta
208	Famoxadone	2003	None	Table 2B	Table 2B	DuPont
209	Methoxyfenozide	2003	None	Table 2B	Table 2B	Dow AgroSciences
210	Pyraclostrobin	2003	None	Table 2B	Table 2B	BASF
315	Pyridate	2019	None		also 2020	Belchim Crop Protection
999	Pyrasulfatole	2020	None		also 2020	Bayer AG CropScience
2	Azinphos-methyl	1965	2007T			To be added to the list of compounds removed from the CCPR pesticide list

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
7	Captan	1963	1995T, 2000R, 2007T (ARfD)	2024	2024	Arysta Life Science
15	Chlormequat	1970	1997T, 1999T (ARfD), 1994, 2017			Support from BASF
17	Chlorpyrifos	1972	1999T, 2000R, 2006T (ARfD)	2022	2022	Not supported by manufacturer
25	Dichlorvos	1965	2011T, 2012R			AMVAC
26	Dicofol	1968	1992, 2011T			Not supported by manufacturer
31	Diquat	1970	1993T, 1994R, 2013			Syngenta
32	Endosulfan	1965	1998T, 2006R	Table 2B	Table 2B	Adama
37	Fenitrothion	1969	2003R, 2007T (ADI, ARfD)			Sumitomo
41	Folpet	1969	1995T, 1998R, 2007T (ARfD)	2024	2024	Adama
48	Lindane	1965	2002T, 2003R, 2015			EMRLs proposed
57	Paraquat	1970	2003T, 2004R, 2009 (ARfD)			Syngenta
60	Phosalone	1972	1997T, 2001T (ARfD), 1994R			To be added to the list of compounds removed from the CCPR pesticide list
65	Thiabendazole	1970	1997T, 1997R, 2006T (ARfD), 2019T (ARfD)			Syngenta
67	Cyhexatin	1970	2005T, 2005R	Table 2B	Table 2B	Cerex Agri
70	Bromopropylate	1973	1993			not supported; possible deletion
81	Chlorothalonil	1974	2009T, 2010R, 2019T (ARfD)			Syngenta
83	Dichloran	1974	1977, 1998	Table 2B	Table 2B	Gowan; possible deletion
85	Fenamiphos	1974	1997T, 1999R, 2006T (ARfD)			Adama
90	Chlorpyrifos-methyl	1975	2009			Dow AgroSciences
95	Acephate	1976	2005T, 2003R	Table 2B	Table 2B	Arysta Life Science
106	Ethephon	1977	2002T (ARfD), 2015			Bayer CropScience
110	Imazalil	1977	1977, 2000T, 2005T (ARfD), 2018			Janssen
112	Phorate	1977	2004T, 2005R	Table 2B	Table 2B	BASF / AMVAC
116	Triforine	1977	1997T, 2014			Support from Sumitomo Co.
118	Cypermethrin	1979	2006T, 2008R			FMC / AgriPhar
119	Fenvalerate	1979	2012			Sumitomo Chemical
122	Amitraz	1980	1998T			Arysta Lifesciences; possible deletion
126	Oxamyl	1980	2002, 2017			Dupont
129	Azocyclotin	1979	2005T, 2005R	Table 2B	Table 2B	Cerex Agri
132	Methiocarb	1981	1998T, 1999R, 2005R (ARfD)	Table 2B	Table 2B	Bayer CropScience
133	Triadimefon/triadimenol	1979	2004T, 2007R	Table 2B	Table 2B	133 /168 - Bayer CropScience
143	Triazophos	1982	2002T, 2007R	Table 2B	Table 2B	Bayer CropScience
146	Lambda-cyhalothrin	1984	2007T, 2008R			Syngenta
147	Methoprene	1984	2001T, 2005R	Table 2B	Table 2B	Dow AgroSciences
148	Propamocarb	1984	2005T, 2006R	Table 2B	Table 2B	Bayer CropScience
149	Ethoprophos	1983	1999T, 2004R	Table 2B	Table 2B	Bayer CropScience
151	Dimethipin	1985	1999T, 2004T (ARfD), 2001R	Table 2B	Table 2B	Chemtura
155	Benalaxyl	1986	2005T, 2009R	Table 2B	Table 2B	FMC

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
156	Clofentezine	1986	2005T, 2007R	Table 2B	Table 2B	Adama
157	Cyfluthrin	1986	2006T, 2007R			Adama / Bayer
158	Glyphosate	1986	2004	Table 2B	Table 2B	Monsanto
160	Propiconazole	1987	2004T, 2007R	Table 2B	Table 2B	Syngenta
165	Flusilazole	1989	2007			DuPont
169	Cyromazine	1990	2006T, 2007R			Syngenta
171	Profenofos	1990	2007T, 2008R			Syngenta
172	Bentazone	1991	2012T, 2004T (ARfD), 2013			BASF
173	Buprofezin	1991	2008, 2019T (aniline)			Nihon Nohyaku
174	Cadusafos	1991	2009T, 2010R			FMC
175	Glufosinate-ammonium	1991	2012			Bayer CropScience
176	Hexythiazox	1991	2008T, 2009R			Nippon Soda Co., Ltd
177	Abamectin	1992	1997T, 2015			Syngenta
178	Bifenthrin	1992	2009T, 2010R			FMC
179	Cycloxydim	1992	2009T, 2012R			BASF
180	Dithianon	1992	2010T, 2013R			BASF
181	Myclobutanil	1992	2014			Support from Dow AgroSciences
182	Penconazole	1992	2016			Syngenta
184	Etofenprox	1993	2011T,R			Mitsui Chemical Inc
185	Fenpropathrin	1993	2012T, 2014			Sumitomo Chemical
188	Fenpropimorph	1994	2004T (ARfD), 2017			BASF
189	Tebuconazole	1994	2010T, 2011R			Bayer CropScience
190	Teflubenzuron	1994	2016			Support unknown
192	Fenarimol	1995	None			Possible deletion
193	Fenpyroximate	1995	2007T (ARfD), 2017			Nihon Nohyaku
194	Haloxypop	1995	2006T, 2009R			Dow AgroSciences
195	Flumethrin	1996	None			Bayer CropScience; sent to JECFA 2019
199	Kresoxim-methyl	1998	2018			BASF
201	Chlorpropham	2000	2005T (ADI, ARfD)	Table 2B	Table 2B	Cerex Agri
304	Ethiprole	2018	None			Bayer CropScience
305	Fenpicoxamid	2018	None			Dow AgroSciences
306	Fluazinam	2022	None			ISK Biosciences / Isihara Sangyo Kaisha
307	Mandestrobin	2018	None			Sumitomo Chemical
308	Norflurazon	2018	None			Tessenderlo Kerley Inc.
309	Pydiflumetofen	2018	None			Syngenta
310	Pyriofenone	2018	None			ISK Biosciences / Isihara Sangyo Kaisha
311	Tioxazafen	2018	None			Monsanto
316	Pyrifluquinazon	2019	None			Nihon Nohyaku
313	Metconazole	2019	None			Valent USA / Kureha
312	Afidopyropen	2019	None			Meiji SeikaPharma / BASF

CODE	COMPOUND	INITIAL JMPR EVALUATION	PERIODIC REVIEWS	SCHEDULED TOX REVIEW	SCHEDULED RESIDUE REVIEW	MANUFACTURER/COMMENT
317	Triflumuron	2019, completed 2021	None			Bayer
314	Pyflubumide	2019	None			Nihon Nohyaku
318	Valifenalate	2019	None			Belchim Crop Protection
999	Ethalfuralin	2020	None			Gowan
999	BCS-CN88460 Isoflucypram	2021	None			Bayer CropScience
999	BAS 750F Mefentrifluconazole	2020	None			BASF
999	Tetraniliprole	2020	None			Bayer AG CropScience
999	Pyraziflumid	2020	None			Nihon Nohyaku
999	SYN546330 Spiropidion	2020	None			Syngenta
999	Inpyrfluxam	2020	None			Sumitomo chemical
999	Flutianil	2020	None			OAT Agrio
999	BCS-55621	2020	None			Bayer CropScience
999	Broflanilide	2021	None			Landis International / Mitsui Chemicals
999	Benzpyrimoxan	2021	None			Nihon Nohyaku
999	Fluindapyr	2021	None			FMC
999	Fluazaindolizine	2021	None			DuPont
999	Isocycloseram (SYN54707, SYN407)	2022	None			Syngenta
999	XDE-659	2023	None			Dow AgroSciences
999	XDE-747	2023 or 2024?	None			Corteva AgriSciences
999	Fluoxapiprolin (BCS-CS55621)	2022?	None			Bayer
999	Acynonapyr	2022?	None			Japan/Nippon Soda Co Ltd
999	XDE-481	2023?	None			Corteva AgriSciences
999	Tricyclazole	2021	None			Corteva AgriSciences
999	Isotianil	2022?	None			Bayer AG/Sumitomo Chemicals Company
999	SYN522 (Cyclobutrifluram)	2022?	None			Canada/Syngenta
999	1,4-dimethylnaphthalene (1,4-DMN)	2022?	None			1,4GROUP, Inc., 2307 E. Commercial St., Ste. A Meridian ID 83642 USA
999	Mepiquat chloride	2022?	None			Nisso/BASF
999	Proquinazid	2023?	None			USA/Corteva
999	Carfentrazone	2023?	None			USA/FMC
999	SYN522 (Cyclobutrifluram)	2023?	None			Canada/Syngenta
999	Fenpropidin	2023?	None			Syngenta
999	Fluoxapiprolin (BCS-CS55621)	2023?	None			Bayer AG, Division Crop Science
999	XDE-659	2023?	None			Dow / USA
999	XDE-481	2023?	None			USA/Corteva
999	XDE-747	2024?	None			Corteva AgriSciences/Argentina
999	Tiafenacil	2024?	None			USA / ISK Biosciences; Ishihara Sangyo Kaisha; Farm Hannong

HISTORICAL AND RESOLVED PHC - FOR RECORD ONLY							
CODE	COMPOUND	CURRENT NATIONAL REGISTRATIONS	PREVIOUS EVALUATION	ADI	ARfD	MANUFACTURER	COMMENT
173	Buprofezin	Yes	2008	0-0.009, 2008	0.5, 2008	Nihon Nohyaku	The toxicological profile of the active substance was investigated under the Peer Review and data were sufficient to conclude on an ADI value of 0.01 mg/Kg bw/day and an ARfD of 0.5 mg/Kg bw/day. Parent buprofezin was shown to be the major constituent of the residues, accounting for 47 to 89 % of the TRR, with minor additional metabolites (BF-09, BF-12 and BF-026). However, under standard hydrolysis conditions simulating pasteurisation, boiling and sterilisation, buprofezin was significantly degraded to aniline (up to 19% AR).The potential exposure to aniline as a residue should be considered a priori as a concern since a threshold for a genotoxic carcinogen cannot be assumed. The European Union is in the process of deleting buprofezin MRLs¶ 2019 JMPR review concluded that the predicted exposures to aniline from residues of buprofezin in commodities, which are subsequently processed, did not represent a public health concern (see 5.5 of the 2019 JMPR Report).
258	Picoxystrobin	Yes	2012	0.09	0.043	Corteva	Picoxystrobin was evaluated by JMPR in 2012. In the EU, the last toxicological evaluation by EFSA (2016) stated that: - the setting of reference values and the finalisation of human health risk assessment could not be conducted, as no conclusion on the genotoxic potential of picoxystrobin could be drawn (Picoxystrobin was positive in the in vitro mammalian gene mutation assay); - the clastogenic and aneugenic potential of the metabolite IN-H8612 found as residue cannot be excluded; -the compliance of the toxicity studies compared to the technical specification and the relevance of impurities should be reconsidered once the genotoxic potential of picoxystrobin is properly addressed; and -data gaps concerning the toxicological profile of metabolites, in vitro comparative metabolism studies and further data to address the endocrine disruption potential of picoxystrobin lead to issues that could not be finalised. Plant and animal residue definitions for risk assessment could not be proposed pending submission of further data to address the toxicity of some metabolites. As toxicological reference values could not be proposed for the active substance, a consumer risk assessment could not be performed¶ 2019 JMPR found that JMPR and EFSA differ in their interpretations of the genotoxicity data for picoxystrobin and IN-H8612. At the 2012 and 2013 Meetings, the WHO panel of JMPR included a specialist genotoxicity expert. The specification issue is outside the remit of the JMPR, is considered to be of questionable relevance to residues in treated commodities, but could be referred to the JMPS. The meeting noted the lack of information on EU specific requirements such as "endocrine disruption". Within the EU framework, endocrine disruption is a hazard identification process but JMPR includes these aspects as part of their risk assessments. The meeting concluded that the concerns identified about dietary exposures to picoxystrobin were unlikely to represent a public health concern.

TABLE 4: UNSUPPORTED GAP		
Code	Chemical	Comments
49	Malathion	Apple; citrus; grapes (EU GAP no longer supported by EU)
39	Fenthion	Cherry; citrus fruits; olive oil (virgin); olives (EU GAP no longer supported by EU)

2021 - PERIODIC REVIEW - UNSUPPORTED COMPOUNDS										
YEAR	TOXICOLOGY	RESIDUE	MEMBER / MANUFACTURER	COMMODITIES	COMMENTS	PREVIOUS EVALUATION	ADI	ARfD	RECOMMENDED FOR CXL REMOVAL	
2020?	Fenbutatin oxide (109)	Fenbutatin oxide (109)		Not supported	National registrations - Y¶No supporting member country ¶No longer supported by manufacturer	1992T, 1993R	0.03, 1992	N/A	YES	NO PHC BUT EU SUPPORT DELETION
2020?	Bromide ion (47)	Bromide ion (47)		Not supported	No Croplife manufacturer responsible ¶Last reviewed over 25 years ago - Not cleared toxicologically by JMPR¶Bromide ion from all sources but not including covalently bound bromine, Methyl bromide (52) – guideline CXLs	1988	1.0, 1998	N/A	YES	NO PHC BUT EU SUPPORT DELETION
	Carbaryl (008)	Carbaryl (008)		Not supported	Scheduled for tox review 2019	1965, 2001T(ADI, ARfD), 2002R	0.006, 2001	0.2, 2001		EU PROPOSE TO PUT ON 2022 PERIODIC REVIEW
	2-phenylphenol (056)	2-phenylphenol (056)		Not supported		1999	0.4, 1999	NR 1999		
	Dinocap (087)	Dinocap (087)		Not supported		1969, 1998T, 2000T(ARfD)	0.008, 1998	0.008 WCBA - 0.03 general		
	Methamidophos (100)	Methamidophos (100)		Not supported		1976, 2002T, 2003R	0.004, 2002	0.01, 2002		
	Bitertanol (144)	Bitertanol (144)		Not supported		1983, 1998T, 1999R	0.01, 1998	NR 1998		
	Terbufos (167)	Terbufos (167)		Not supported		1989, 2003T	0.0006, 1989	0.002, 2003		
	Bromopropylate (70)	Bromopropylate (70)		Not supported	Possible deletion	1973, 1993	0.03 (1993)	N/A		EU SUPPORT DELETION
	Amitraz (122)	Amitraz (122)	To go to CCRVDF?	Not supported	Arysta Lifesciences; possible deletion	1980, 1998T	0.01 (1998)	0.01 (1998)		EU SUPPORT DELETION
	Fenarimol (192)	Fenarimol (192)			Possible deletion	1995	0.01, 1995			EU SUPPORT DELETION
	Dichloran (83)	PHC LODGED, moved to TABLE 2B			Gowan previously?; possible deletion	1974, 1998	0.01, 1998	NR 2003		EU SUPPORT DELETION