



JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEx COMMITTEE ON PESTICIDE RESIDUES

48th Session

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ESTABLISHMENT OF THE CODEx SCHEDULES AND PRIORITY LISTS OF PESTICIDES (prepared by Australia)

A. SCHEDULES AND PRIORITY LISTS 2017-2021

1. The 'Contents' in the Appendix indicates the location of each element of the CCPR Schedules and Priority Lists of Pesticides (Tables 1-4) as specified in the 'Risk Analysis Principles Applied by the Codex Committee on Pesticide Residues' in the Codex Alimentarius Commission Procedural Manual.
2. Amendments to the CCPR Schedules and Priority Lists following comments received since CAC38 approved on-going work on priority setting, as outlined in the report of the CCPR47 (REP15/PR, Appendix XII), are shown in red text. Every effort is made to accurately record nominations lodged during this period. As this is a working document, amendments can be made without delay should errors be identified.
 - a) For some compounds, inconsistent information has been received from different sources. These include fosetyl-AI and fenpyroximate. As a result, there may be some information presented in the schedules and tables that does not accurately reflect the input from particular members. Members and observers are requested to check their entries in the schedules and tables thoroughly for any changes made since circulation of REP15/PR.
3. The 2016 CCPR Schedule of JMPR Evaluations is closed and is included at this stage for reference only. However, it should be noted that the relevant member has requested withdrawal of the nomination for MCPB and postponement of the evaluation of norflurazon to 2018. These evaluations will be replaced by the two reserve compounds, pinoxaden and cyclaniliprole.
4. To assist consideration of scheduling for 2017, the proposed 2017 CCPR Schedule of JMPR Evaluations is extracted from Tables 1 and 2A. The Proposed Schedule includes 9 compounds for new compound evaluation, 41 compounds for new uses and other evaluations and 5 compounds for periodic review. **The expected workload far exceeds available JMPR resources.**
5. The 2018 CCPR Priority List of JMPR Evaluations as shown in Table 1 and Table 2A includes 11 compounds for new compound evaluation, 22 compounds for new uses and other evaluations and 8 compounds for periodic review. **The expected workload far exceeds available JMPR resources.**
6. Table 1 includes the 2018-2019 CCPR Priority List of JMPR Evaluations.
7. Table 2A includes priority lists for periodic reviews in 2018 (8 compounds), 2019 (8 compounds), 2020 (6 compounds) and 2021 (5 compounds). All of the listed compounds, except Metalaxyl, meet the '15 year rule' with the majority nominated for periodic review scheduling on the basis of public health concerns. At least 50% of the compounds have no supporting member country or manufacturer.

8. Table 2B lists 20 compounds which meet the '15 year rule' but have not yet been listed for evaluation.
9. A compilation of national registration for compounds is provided in Tables 2A and 2B.
10. Table 3 provides a record of all periodic reviews (past, present and future).
11. Table 4 records chemical-commodity combinations for which specific GAP is no longer supported.

B. WORKLOADS and JMPR RESOURCES

12. The expected workload associated with the proposed 2017 CCPR Schedule of JMPR Evaluations far exceeds JMPR resources. In recent years, the JMPR Secretariat has indicated a quota of 11 compounds (new and periodic review) for full evaluation with approximately 20 new use and other evaluations. The proposed 2017 Schedule includes 14 full evaluations and 41 new use and other evaluations.

a) It appears 3 compounds need to be rescheduled from 2017 to 2018 for full evaluation. Those to be rescheduled could include quinalphos and tricyclazole since no manufacturer has indicated support and nor has CCPR been informed of the availability of a toxicological data package or the expected number of field trials.

The nominating member countries are encouraged to provide the requisite information prior to CCPR48.

13. In regard to the 41 new uses and other evaluations, 15 compounds have no information on the number of field trials and 2 compounds (ethion [34] and hexaconazole [170]) were removed from the Pesticide List at least 10 years ago. JMPR would expect toxicological data to be included in the package submitted for ethion and hexaconazole.

The nominating member countries are encouraged to provide the requisite information prior to CCPR48.

14. Any decisions taken by CCPR concerning rescheduling compounds listed in the proposed 2017 schedule will be based on the CCPR risk analysis principles.

C. PERIODIC REVIEWS (UNSUPPORTED COMPOUNDS)

15. 2018: the compounds permethrin [120] and bromopropylate [70] remain unsupported. Notifications from the EWG Priorities have been provided for at least 5 years.

Member countries with an interest are strongly encouraged to provide advice on the compounds at CCPR48.

16. 2019: the compounds hydrogen phosphide (46), bromide ion [47], fenbutatin oxide [109], fenarimol [192] and dimethoate [27] remain unsupported.

At CCPR47, the Chair of the eWG Priorities advised that should no indication of support for the compound fenbutatin oxide be provided by the next session, a recommendation would be made at CCPR48 to remove the compound from the Pesticide List and revoke all CXLs.

17. 2020: the compounds guazatine [114], dicloran [83], diclofluanid [82] and tolyfluanid [162] remain unsupported.

18. 2021: the compound azinphos-methyl [02] remains unsupported. The status of the other compounds listed for 2021 periodic review is unclear.

19. The issue of JMPR evaluation quota exceedances is compounded for the 2018 and 2019 priority lists. There are 8 compounds listed for periodic review in 2018 and 6 for 2019.

20. **For all compounds scheduled in Table 2A, members and observers are requested to provide advice on supported commodities and the number of trials as soon as practicable.**

D. NATIONAL REGISTRATIONS FOR COMPOUNDS LISTS IN TABLE 2A AND 2B

21. The current national registrations for compounds can be found in Tables 2A and 2B.

22. At CCPR47, the eWG Priorities Chair indicated a recommendation to remove compounds from the Pesticide List would be made at CCPR48 where a national registration could not be identified (REP15/PR, paras171-174).

The following compounds currently appear to have no national registrations, nationally approved use patterns or stocks remaining in commercial trade: bioresmethrin (93), tecnazene (115), diclofluanid (82, and tolyfluanid (162).

The compounds aldicarb (117) and dicloran [83] were noted in REP15/PR for inclusion in this process but two members have since advised of current registrations.

23. Therefore, at this stage, four compounds noted above in addition to fenbutatin oxide will be recommended for removal from the Pesticide List and all CXLs revoked at CCPR48.
23. **All members are encouraged to input information to the national registrations table.**

E. PUBLIC HEALTH CONCERNS

24. In accordance with the nomination process described in the CCPR Risk Analysis Principles, members and observers may lodge public health concerns for any compound in the Pesticide List including those already listed in Tables 2A and 2B. In lodging a public health concern, the nominator must provide supporting scientific data. Nominated compounds are added to a 'public health concern' sub-table for JMPR review.

Subject to JMPR and eWG Priorities review, the nominated compounds may be placed in Table 2A (if not already listed) for consideration of CCPR and possible scheduling for periodic review. If a pesticide is added to Table 2A due to public health concerns, a summary of the concerns are included in Table 2A.

F. BALANCE OF NEW COMPOUND EVALUATIONS AND PERIODIC REVIEWS

25. The current ratio of new and old compound evaluations is approximately 2:1. Noting the JMPR workload quota of 11-12 per annum, the average numbers of new and periodic evaluations are 8 and 4, respectively.
26. In response to a recent suggestion to alter the ratio in favour of increased numbers of periodic reviews, there were two streams of thought centred around which prioritisation criteria should be pre-eminent: the 15 year rule or public health concerns. Some members believe that periodic reviews must occur within a reasonable timeframe (referencing the 15 year rule) to ensure current science is taken into account.

Other members suggested that the '15 year rule' is simply a marker to draw attention to older chemistry but instead the science-based public health concern criterion is the primary reason for scheduling and prioritisation of public health concerns.

27. Most of the respondents believe current concern about the growing list of compounds (now more than 50) for which the '15 year rule' applies is not necessarily significant. The general feeling was that the focus of attention should be to compounds for which public health concerns have been identified as a matter of priority above all other criteria. In this case, there are about 16 'public health concern' compounds scheduled or prioritised for periodic review in the period 2017-2021. This means about 3-4 of these compounds can be reviewed each year.
28. Nevertheless, should the number of nominations for new compound decrease in the coming years, there will be the opportunity to increase the focus on older chemistry
29. **Members and observers will have an opportunity to discuss this further at CCPR48.**

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2016 CCPR SCHEDULE OF JMPR EVALUATIONS (CLOSED)

NEW COMPOUND EVALUATIONS

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Acibenzolar-S methyl (999) (fungicide) [Syngenta] NZ USA	Acibenzolar-S methyl	Registered MRL>LOQ	NZ - Kiwifruit USA - Onion, bulb; Strawberry, Pome fruit, stone fruit, citrus, leafy veg., cucurbits, potato, wheat, tomato, banana, cabbage	Onion, bulb (12), Strawberry (10), Pome fruit (21), peach, apricot (8), leafy veg. (25), cucurbits (25), kiwifruit (24), potato (10), wheat (15), banana (13), cabbage (9), tomato (24), citrus (23)
Cyclaniliprole [Ishihara Sangyo Kaisha] USA (999) (insecticide) RESERVE 2	Cyclaniliprole	Not Registered until March 2016 MRLs > LOQ	Potato; broccoli; cabbage; mustard green; brussels sprout; kale; cauliflower; soybean, dried; soybean, immature (with pods); tomato; pepper; apple; pear; cherry; peach; plum; apricot; plum; nectarine; almond hulls; almond; pecan; lettuce, head; lettuce, leaf; spinach; grape; cucumber; muskmelon; summer squash; tea	Potato (8); broccoli (21); cabbage (34); mustard green (5); brussels sprout (6); kale (4); cauliflower (8); soybean, dried (6); soybean, immature (with pods) (3); tomato (53); pepper (36); apple (46); pear (16); cherry (17); peach (24); plum (26); apricot (6); plum (26); nectarine (2); almond hulls (5); almond (5); pecan (5); lettuce, head (9); lettuce, leaf (11); spinach (9); grape (43); cucumber (9); muskmelon (10); summer squash (9); tea (6)
Imazethapyr BASF – USA (999) (herbicide)	Imazethapyr	Registered? Yes MRLs > LOQ? Yes	Alfalfa; canola; clover; corn; lentils; peanut; fresh peas; dry peas; fresh beans; dry beans; rice; soybean; sunflower Canada Rapeseed/canola	Alfalfa (35); canola (11); clover (12); corn (35); lentils (10); peanut (12); fresh peas (22); dry peas; (26); fresh beans (6); dry beans (14); rice (19); soybean (32); sunflower (5); rapeseed/canola (trials?)
isofetamid [Ishihara Sangyo Kaisha] USA (999) (fungicide)	Isofetamid	Registered MRLs > LOQ	lettuce; apricot; cherry; peach; plum; grape; strawberry; almond; canola/oilseed rape	Lettuce (49); apricot (8); cherry (8); peach (8); plum (12); grape (40); strawberry (33); almond (5); canola/oilseed rape (24)
MCPB [Nufarm]—USA Herbicide (999)	MCPB USA- Request to withdraw nomination	Registered—yes MRLs>LOQ—No	Peas (fresh and dried)	Peas (fresh and dried)—8 US trials & EU trials

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
<p>Norflurazon-USA (herbicide) (999) moved from 2014 Tessenlerlo Kerley Inc.</p>	<p>Norflurazon USA- Request to Move to 2018 by nominator</p>	<p>Registered MRLs > LOQ</p>	<p>Almond; apple; apricot; asparagus; avocado; blackberry; blueberry; cranberry; cherry (sweet and tart); citrus fruits group; cottonseed; grape; hazelnut; hops; nectarine; peach; peanut; pear; pecan; plums and prunes; raspberry; soybean; walnut</p>	<p>Almond: 7; apple: 8; apricot: 2; asparagus: 6; avocado: 3; blackberry: 1; blueberry: 6; cranberry: 5; cherry: 3; citrus fruits: 8; cottonseed: 10; filberts: 3; grapes: 14; nectarine: 2; peach: 4; peanut: 10; pear: 4; pecans: 4; plums: 6; raspberry: 6; soybeans: 22; walnuts: 2</p>
<p>Oxathiapiprolin [Du Pont] – USA (fungicide) (999)</p>	<p>Oxathiapiprolin</p>	<p>Registered MRLs > LOQ</p>	<p>Grapes; potato; dry bulb onion; green onion; tomato; bell pepper; non-bell pepper; courgette; cucumber; melon; summer squash; cantaloupe; broccoli; cauliflower; head cabbage; lettuce; spinach; succulent peas; ginseng; and tobacco</p>	<p>Grapes (16); potato (40); dry bulb onion (12); green onion (5); tomato (37); bell pepper (12); non-bell pepper (6); courgette (18); cucumber (16); melon (17); summer squash (10); cantaloupe (12); broccoli (6); cauliflower (4); head cabbage (10); lettuce (40); spinach (10); succulent peas (12); ginseng (4); tobacco (6)</p>
<p>Pinoxaden [Syngenta] Switzerland (herbicide) (999) RESERVE 1</p>	<p>Pinoxaden</p>	<p>Registered MRLs > LOQ</p>	<p>Wheat; barley</p>	<p>Wheat (60); barley (60)</p>
<p>Pendimethalin (herbicide) BASF – USA (999)</p>	<p>Pendimethalin</p>	<p>Registered? y MRLs > LOQ? Most</p>	<p>Leafy Lettuce; leafy brassica (mustard greens, kale); alfalfa and grass hay; fresh legumes/dry pulses; citrus; tree nuts; carrot/other root and tuber; bulbs: onion; dry and green onion; asparagus; leeks; celery, celeriac</p>	<p>Leafy brassica (kale)(7); alfalfa (23); grass hay (12); fresh legumes/dry pulses (21); citrus (13); tree nuts (5); carrot (16); celeriac (9); green onion (3); asparagus (4); leeks (7); celery (11) US Data: Leafy lettuce (9); leafy brassica (mustard greens (9); grass hay (8); citrus (16); tree nuts (23); carrot (10); green onion and onion (13); asparagus (6)</p>

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Spiromesifen Germany [Bayer CropScience] (insecticide) (999)	Spiromesifen	Registered MRLs > LOQ	Legume vegetables (beans/peas (dry, succulent, edible podded); leafy vegetables (head lettuce, leaf lettuce, spinach, celery); brassica vegetables (broccoli, cabbage, mustard, green); root and tuber vegetables (potato); fruiting vegetables (tomato, bell pepper, chili pepper); cucurbits (cucumber, melon, summer squash); pulses; (beans dry, peas dry); cereals (wheat, maize, sweet corn, field corn, popcorn); berries (strawberries); tea, coffee, herbal infusions and cocoa (tea, coffee); tropical fruits (papaya, passion fruit); herbs; rotational crops (alfalfa, barley, oat, sugar beet, bulb vegetables (Welsh / green onions, wheat), sorghum, India Tea	Legume vegetables (27); leafy vegetables (26); brassica vegetables (21); root and tuber vegetables (16); fruiting vegetables (67); cucurbits (34); pulses (19); cereals (88); berries (16); tea (8); coffee (10); herbs (5); tropical fruits (9); rotational crops (66), sorghum (12)

NEW USES AND OTHER EVALUATIONS

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Benzovindiflupyr (261) (fungicide) [Syngenta] - Canada	Cereal small grains (wheat, barley, oats, rye, triticale), canola, grapes, pome (apples and pears), pulses, vegetable (fruiting, cucurbits), corn/maize, cotton, peanuts, soybean (included second time for JMPR review based on US critical use pattern), potatoes, sugarcane, Jerusalem artichokes, ginger, turmeric	Wheat (33 trials), barley (21 trials), oats (extrapolated from barley), rye and triticale (extrapolated from wheat), canola (13 trials), grapes (17 trials), pome fruits (30 trials for apples and pears), dry beans (14 trials), dry peas (10 trials), fruiting vegetables (tomato (12 trials) and bell and non-bell peppers (9 trials)), cucurbits (cucumbers (6 trials), summer squash (5 trials), cantaloupe (6 trials)), field corn, popcorn and sweet corn (total of 36 trials), cotton (12 trials), peanuts (15 trials), soybeans (23 US trials), potatoes (16 trials), sugarcane (12 trials), Jerusalem artichokes, ginger and turmeric (extrapolated from potatoes)
	Bixafen [Bayer CropScience] (262)	FAO followup evaluation to consider rotational crop scenario	4 limited field rotational crop studies
	Buprofezin [Nihon] (173)	Soya bean (Brasil, USA), Basil (Thailand) USA- papaya, avocado	Papaya (3), avocado (4), soya bean (5), basil (xx)
	Chlorantraniliprole (230)	USA - Green onions (Welsh onion, scallion); peanut; wheat; barley; sorghum	Green onion (5); peanut (6); wheat (5); barley (3); grain sorghum (3)
	Deltamethrin (135) [Bayer CropSciences] – Canada	Rapeseed/canola - MRL>LOQ	Rapeseed/canola (13 trials)
	Dimethomorph (225) [BASF]	Leaf lettuce – alternative GAP	
	Fenpropathrin (185) [Sumitomo]	Peaches, cherries, pome fruit – alternative GAP	
	Fipronil (202) [BASF]	Basil (Thailand)	Basil (xx)
90 day study (BSA)	Fluensulfone (265) [Makhteshim]	Carrot, potato, strawberry, brassica vegetables, radish, Japanese leafy vegetables, rotational crops	Carrot (12), potato (16), strawberry (8), brassica vegetables (17), radish (4), Japanese leafy vegetables (8), rotational crops
	Metrafenone 278) [BASF]	Pome fruit, stone fruit, hops, melons	Pome fruit (18), stone fruit (32), hops (?), melons (25)
	S-Methoprene (147) USA [Wellmark]	Cottonseed, Safflower Seed, Linseed, Sunflower Seed, Rapeseed, Whole Commodity	Sunflower (4)
	Penthiopyrad (253) (USA- Request to reschedule blueberry, caneberry to 2018)	Maize fodder, Mustard greens (alternative GAP) USA – Blueberry; Caneberry	Blueberry (9) and caneberry (7)

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Saflufenacil [BASF] USA (251)	Alfalfa; Barley and Wheat Hay/Straw/Fodder; Cereal Grains (desiccant uses); Forage Grasses; Linseed; Peanuts; Poppy seed; Sesame seed; Mustard seed; Safflower; Borage; Gold of Pleasure; Castor Bean; Olive; Sugarcane; Pomegranate; Animal products	Alfalfa (12); cereals (wheat 25; barley 15), Hay/Straw/Forage Grasses (16), Peanuts (8), [Linseed, Borage, Mustard seed, Poppy seed, Sesame seed, Gold of Pleasure - extrapolation from canola (16)], [Castor Bean, Safflower - extrapolation from sunflower (12)], Olive (4), Sugarcane (9), Pomegranate (4), Animal products (new dietary burdens, no new trials)
Sulfoxaflor (252) [Dow AgroSciences] USA - Re-evaluation of developmental tox, based upon new data.	Sulfoxaflor [Dow AgroSciences] – USA Request for new MRLs, based upon new residue data	Corn, grain; corn, sweet; sorghum, grain; pineapple, cacao, beans, rice, grain; avocado Tree nut (USA)	Corn, field (15); corn, sweet (9); sorghum (9); pineapple (8); cacao (8); rice (12); avocado (5) Tree nut
	Tolfenpyrad [Nihon Nohyaku] – USA (269)	Almonds; pecans; pistachio; hazelnuts; walnuts; grape (table); raisin; juice (if MRL not included under table grape); apricots; plum; prunes; peach; nectarine; cherry; pear; lemon; lime; grapefruit; tangerine (mandarin); oranges; cantaloupe; cucumbers; summer squash; pumpkin; watermelon; peppers; tomatoes; cabbage; head lettuce; leaf lettuce; celery; spinach; cauliflower; potatoes; cotton seed; and corresponding animal commodities. Tree nuts (almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, hazelnut, hickory nut, macadamia nut, pecan, walnut); Potatoes; and Corresponding animal commodities.	Brassica (cole) leafy vegetable: Cabbage (6); cauliflower (6); mustard greens (5); cotton (12); Citrus fruit: Grapefruit (6); lemon (5); orange (12); Fruiting vegetables, cucurbits (cantaloupe (6); cucumber (6); summer squash (5); Fruiting vegetables, other than cucurbits: pepper (9); tomato (12); Berries and other small fruits: Grape (12); raisin (1); Leafy vegetable: Head lettuce (6); leaf lettuce (6); spinach (6); pear (6); Root and tuber vegetables: Potato (16); Stalk and stem vegetables: Celery (6); Stone fruits: Cherry, sweet (6); peach (9); plum (6); prune (dried plum) (2); Tree nuts: Almond (5); pecan (5) Root and tuber vegetables: Potato (16); Tree nuts: Almond (5); pecan (5)

PERIODIC REVIEW

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Chlormequat (15) [BASF] Moved from 2015 RESERVE 2	Chlormequat (15) Plant growth regulator	Cereals; cottonseed; maize; rapeseed; maize fodder; cereals fodder/straw; meat; milk; eggs All CXLs supported	Cereals - 64 trials (16 trials each for wheat, barley; oats and rye); grapes - 8 trials; soybean - 8 trials; cottonseed - 4 trials; potato - 4 trials; onion - 4 trials; meat/milk/eggs	1994	0.05 1997	0.05 1999

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Fenpropimorph (188) [BASF] RESERVE 1	Fenpropimorph (188) fungicide	Banana; cereals; sugar beet; cereals fodder/straw; meat; milk; eggs All CXLs supported	Cereals (56 trials); banana (23); sugar beet (8)	1993	0.03 2006	N/A
Methidathion (51) Not supported by the manufacturer Concern form lodged	Methidathion (51) insecticide	The active substance has been re-evaluated for residues (after its first inclusion in 1972) in 1992. An ARfD was derived in the toxicological re-evaluation in 1997. As a consequence of this ARfD a couple of MRLs are not safe for consumers. Due to the fact that no periodic re-evaluation of residues took place in 42 years it is proposed to carry out a new evaluation.	The JMPR has established an ADI of 0.001 mg/kg bw/d and an ARfD of 0.01 mg/kg bw/d in 1997. A risk assessment was performed using the EFSA PRIMo including all MRLs that were considered relevant for international trade. The ADI was exceeded for 25 European diets with the highest exposure representing 2392% of the ADI. Citrus fruits, olives for oil production and milk were shown to be the main contributors. Citrus fruits also exceeded the ARfD (up to 6631%). A second exposure calculation delete the existing MRLs for citrus fruits, pome fruits and sunflower seeds still showed an that the ADI for 5 European diets was exceeded (up to 301%). For further details see EFSA evaluation on the internet at http://www.efsa.europa.eu/en/efsajournal/doc/1639.pdf .	1992	0.00 1 - 1997	0.01 - 1997
Penconazole (182) [Syngenta] Moved at request of manufacturer MOVED FROM 2015	Penconazole (182) fungicide	Pome fruit; stone fruit; grapes; cane berries; bush berries; strawberries; fruiting vegetables other than cucurbits; fruiting vegetables cucurbits, globe artichokes (appears to be no support for animal product CXLs)	Apples/Pears (18); peach (12); cherries (4); grapes (16); raspberry/Blackberry (4); currants (4); gooseberry (4); strawberry (29); tomatoes/aubergines (20); peppers (12); cucumbers/gherkins (24); melons (23); globe artichokes (8)	1992	0.03 1992	N/A
Teflubenzuron (190) [BASF]	Teflubenzuron (190)	Apple; orange; coffee; field corn; soybean; sugarcane; sunflower; tomato; melon; broccoli; cauliflower; grape; papaya - (no support for plum; potato; cabbage and Brussels sprout CXLs)	Apple (12); orange (16); coffee (9); field corn (6); soybean (5); sugarcane (5); sunflower (8); tomato (12); melon (8); broccoli (8); cauliflower (8); grape (12); papaya (4); mango (4); cucumber (8); gherkin (4); sweet pepper (4)	1996	0.01 1994	N/A

2017 CCPR SCHEDULE OF JMPR EVALUATIONS (PROPOSED)

NEW COMPOUND EVALUATIONS

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Bicyclopyrone (999); (herbicide); [Syngenta] - USA	Bicyclopyrone (999)	Registered; MRLs > LOQ? Y	Corn; Barley; Wheat; Sugarcane; Soybean	Corn (29); Barley (12); Wheat (20); Sugarcane (11); Soybean (20)
Fenazaquin (999) (insecticide) [Gowan] USA Moved from 2015 following discussion	Fenazaquin (999)	Registered MRLs > LOQ	Alfalfa; apples; apricots; berries; citrus; cotton; cucurbits (cucumbers, melons, zucchini, squash, pumpkin); eggplant; grapes; hops; nectarines; peaches; pears; peppers; pineapples; plums; prunes; strawberries; tea; tomatoes; tree nuts; zucchini India - Tea	Cucurbits (cucumbers – 6; cantaloupe – 6; zucchini squash – 5); stone fruit (sweet cherries – 3; sour cherries – 3; peach – 9; plum – 6); fruiting vegetable (tomato – 12; bell peppers – 6; chili peppers – 3); strawberries – 8; tree nuts (pecan – 5; almond – 5); berries (blueberry – 6; raspberry – 5); Hops – 3; mint (spearmint – 1; peppermint – 4); alfalfa – 4; corn (field, sweet) – 24; cotton – 12; bean (edible podded legumes – 9; succulent shelled pea & bean – 11; dried shelled pea & bean – 14); grape – 12; avocado – 5; citrus (orange – 12; lemon – 5; grapefruit – 6)
Fenpyrazamine (fungicide) Japan [Sumitomo Chemical] (999)	Fenpyrazamine	Registered USA, EU, Japan	[Sumitomo] Almond; apricot; bushberry subgroup; caneberry subgroup; cherry; cucumber; eggplant; ginseng; grape (table, wine and juice); lettuce (head and leaf); peach; pepper; pistachio; plum; strawberry; tomato	[Sumitomo] Almond (nutmeats - 7, hulls - 7); apricot (8); bushberry subgroup (blueberry - 8); caneberry subgroup (caneberry - 5); cherry (12); cucumber (protected - 8); ginseng (3); grape (table, wine and juice) (US - 19), (EU - 16); lettuce (head and leaf) (head w/wo wrapper leaves - 10+10, leaf - 10); peach (12); pepper (protected - 8); plum (12); strawberry (24); tomato (protected - 8)
Isoprothiolane (999) Japan fungicide Nihon Nohyaku	Isoprothiolane (999) Japan		Rice Nihon Nohyaku	Rice 6
Natamycin (999); (Fungistat); [DSM Food Specialties]; USA	Natamycin (999)	Registered; MRLs > LOQ? <u>Y</u>	Mushroom; Pineapple	Mushroom (2); Pineapple (2)

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Phosphorous acid (999) [Nufarm] Australia; Fosetyl-aluminium [Bayer CropScience] Germany (fungicide)	Phosphorous acid (999) fosetyl-aluminium	Registered; MRLs >LOQ	BCS: Table and wine grapes; Pome fruit; Citrus fruit; Berries and other small fruit; Avocado; i, Pineapple; Tomato; Peppers, sweet; Peppers, chili; Cucumber; Gherkin; Melon; Watermelon; Lettuce, head; Lettuce, leaf; Spinach; Cabbage, head; Cauliflower; Hops; Coffee; US add on: Citrus Post harvest, tree nuts, grapes	USA: navel orange (5); mandarin orange (5), lemon (5), grapefruit (5); Valencia (5); almond (5); walnut (5); pistachio (5); avocado (5) Bayer - fosetyl: Table and wine grapes (39), Pome fruit (42), Citrus fruit (46), Berries and other small fruits (54), Avocado (10), Pineapple (23), Tomato (43), Sweet pepper, chili (23), Cucumber + gherkin (44), Spinach (15), Melon + watermelon (35), Head + leafy lettuce (40), Cabbage, head (28), Cauliflower (15), Hops (14), Coffee (5)
Quinalphos (999) India insecticide	Quinalphos (999) India		Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grape, spices India - Tea	
Tricyclazole (999) India fungicide	Tricyclazole (999) India		Rice	
Triflumezopyrim (999); Insecticide; DuPont - USA	Triflumezopyrim (999)	Registered No expected Oct 2016; MRLs > LOQ (not yet known)	Rice	Rice (30 trials from various countries))

NEW USES AND OTHER EVALUATIONS

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	2,4-D (020) [Dow AgroSciences]	India Tea USA- Cotton	Tea; Cotton (22 total; 18 USA, 4 Brazil)
	Acephate (95) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes	Await field trial information

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
Review of new tox. Data See comment	Acetamiprid (246) [Nippon Soda]	India - Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea Iran - pistachios	Await field trial information COMMENT: Although acetamiprid was quite recently reviewed by JMPR (2011), there are new toxicological data on development neurotoxicity which may lead to a lowering of the current ARfD (0.1 mg/kg bw). EFSA, in its reasoned opinion on developmental neurotoxicity of acetamiprid and imidacloprid (December 2013) recommends a lower ARfD of 0.025 mg/kg bw. With such a lowered ARfD, the CXLs for apple, chard and citrus fruit may be of concern.
	Azoxystrobin (229) [Syngenta]	Indonesia and Vietnam: dragon fruit; Egypt: guava; Canola, sugarcane	Dragon Fruit (7); Guava (6); Canola (21) sugarcane (16)
	Bifenthrin (178) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea, strawberry, mango	Await field trial information
	Captan (7) (fungicide) [Arysta USA]	Ginseng	Ginseng (3)
MOVED TO 2017 PERIODIC REVIEW	Carbendazim (72) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea	Await field trial information
	Chlorpyrifos (017) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes	Await field trial information
	Cyprodinil (207) [Syngenta] France	carrots; beans, except broad bean and soya bean (green pods and immature seeds), celery, cucumber, globe artichoke, guava, pomegranate, potato, almond. Pecan	carrot (8), beans with pods (9), celery (8), cucumber (5), globe artichoke (4), guava (5), pomegranate (4), potato (16), almond (4). Pecan (5)
	Diazinon (22) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes	Await field trial information

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Difenoconazole (224) [Syngenta]	Indonesia and Vietnam: dragon fruit; Egypt: guava; Republic of Korea: paprika; chili pepper USA: almonds, pulses, blueberries, ginseng, globe artichoke, apple, pear, sweet corn, watermelon, coffee, strawberry, rice, citrus, corn, dry beans, peas	Dragon Fruit (7); Guava (6), Paprika (6); chili pepper (6), Almond (5), Dry bean (10), dry pea (5), lentils (3), blueberries (11), ginseng (4), globe artichoke (4), apple (5), pear (4), sweet corn (9), watermelon (4), coffee (4), strawberry (9), rice (10)rice (10)
	Dimethoate (27) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea	Await field trial information
Cpd removed from the Pesticide List (36-85) One CXL for spice	Ethion (34) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, tea	Await field trial information COMMENT: This compound was removed from the Pesticide List (36-85) and all CXLs revoked. A full toxicological package will be required.
	Flonicamid (999) Insecticide [Ishihara Sangyo Kaisha] USA	Pulses (VD 0070) and Legume Vegetables (VD 0060) USA- Citrus fruits	Dry Bean (12); Dry Pea (5); Succulent Bean (13); Succulent Pea (13) Orange (12); Grapefruit (6); Lemon (5)
Moved from 2016 on request	Fenamidone (264) [Bayer CropSciences]	Mustard green, spinach – alternative GAP	
	Fluxapyroxad (256) [BASF]	Citrus	Citrus (13)
	Fluensulfone (265) [Adama]	Grapes, peanuts, tree nuts, cereals, citrus	Grapes (12), peanuts (12), tree nuts (10), cereals (56), citrus (23)
	Fluopyram (243) [Bayer CropScience]	Artichoke, Barley, Chicory, Citrus, Cotton, Herbs (dry), Hops, Maize, Mango, Peanut, Rape seed, Rice, Soya bean, Spices, Sunflower seed, Wheat	Artichoke (4), Chicory (8), Citrus (48), Cotton (11), Herbs (dry) (9), Hops (13), Maize (16), Mango (8), Peanut (12), Rape seed (24), Rice (8), Soya bean (21), Spices (4), Sunflower seed (24), Wheat and Barley (44)
	Flupyradifurone (999) [Bayer CropScience]	Stone fruit	Stone fruit (40)
No current CXLs for this compound	Hexaconazole (170)	India Tea	Tea COMMENT: This compound was removed from the Pesticide List in 1978 and all CXLs revoked. A full toxicological package will be required.

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Imidacloprid (206) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea, Pistachio (Iran)	Await field trial information
	Imazamox (276), imazapyr (267) [BASF] Australia	Barley	Barley (12)
	Isopyrazam (249) [Syngenta]	tomato, melon, pepper, cucumber, cereals, oil seeds, peanuts, peach, apricot, pome fruit, carrots,	Wheat (16), barley (16), oil seed rape (16), peanuts (4), peach (4), apricot (4), apples (16) carrot (16), tomato (16), peppers (14), cucumbers (24), melons (24)
	Isoxaflutole [Bayer CropScience] (268)	Soya bean (label review)	
	Lambda-cyhalothrin (146) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea, coffee	Await field trial information Coffee (4)
	Methomyl (94) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes	Await field trial information
Moved at request of USA and DuPont	Picoxystrobin– [Dupont] – USA (258)	Fruiting vegetables, cucurbits; stone fruit; pome fruit; grapes; legume vegetables; bulb vegetables; strawberry; brassica vegetables; leafy vegetables; root and tuber vegetables; sunflower; tree nut; peanut; rice; cotton and tomato	Brassica (broccoli, cauliflower, cabbage, mustard greens), 30; bulb vegetables (green onion, dry bulb onion), 15; coffee, 4; cotton, 13; cucurbits, 30 (cucumbers, 12); muskmelons, 9; summer squash, 9; fruiting vegetables, 44 (tomatoes, 24); bell peppers, 13; (7 non-bell peppers); grape, 13; leafy vegetables, 44 trials (leaf lettuce 10); head lettuce, 11; celery, 10; spinach, 9; peanut, 13; pome (apple, pear), 26 (apple 17, pear 9); rice, 11; root and tuber vegetables, 56 trials (potatoes, 21; sugarbeets, 13; radishes, 6; carrots, 10; turnips, 6); stone fruit (cherries; peaches, plums), 30; strawberry, 9; succulent/edible podded legumes, 40 (8 edible podded bean, 4 edible podded pea, 17 succulent bean, and 11 succulent pea); sugarcane, 4; sunflower, 9; tree nuts, 12 (6 almond, 6 pecan)
	Pirimicarb (101) [Syngenta]	Public health concerns - acute dietary risk– Netherlands – check uses for peach and lettuce based on existing residue data and labels	

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Profenofos (171) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter melon, cucumber, brinjal and capsicum), grapes, Tea, coffee	Await field trial information Coffee (7)
	Propiconazole (160)	India Tea Citrus, stone fruit, pineapple	Tea Citrus – orange, mandarin, lemon, grapefruit (16), Stone fruit – cherry, peach, nectarine and plum (28), Pineapple (4)
Propylene oxide [Balchem] (250) – USA - JMPR 2013	Propylene oxide [Balchem] (250)	Tree nuts	Moved at the request of manufacturer
	Prothioconazole (232) [Bayer CropScience]	Cotton	Cotton (16)
Pyraclostrobin (210) [BASF] Partly applicable: Evaluation of metabolite data being relevant for new uses	Pyraclostrobin (210) Registered? Yes MRLs > LOQ? Yes - all commodities listed for evaluation:	Pome fruits, olives, persimmon, tropical fruits (mango, papaya, passion fruit, pine apple), leek, brassica vegetables, fruiting vegetables, corn salad (lamb's lettuce), spinach, legume vegetables (beans and peas), root and tuber vegetables, stem vegetables, rice, sugar cane, peanuts, cacao, coffee, tea	Pome fruits (8), olives (12), persimmon (3), tropical fruits (mango (8), papaya (4), passion fruit (8), pine apple (8)), leek (8), brassica vegetables (20), fruiting vegetables (15), corn salad (lamb's lettuce) (4), spinach (extrapolation from lettuce, head (29)), legume vegetables (beans and peas) (43), root and tuber vegetables (46), stem vegetables (33), rice (about 20), sugar cane (48), peanuts (31), cacao (4), coffee (7), tea (8 - 10)
	Pyriproxyfen (200) - Costa Rica (from 2016 as requested) [Valent USA Corporation; subsidiary of Sumitomo Chemical Co., Ltd.] - USA	Costa Rica: banana; Philippines: papaya; Malaysia/Singapore: mango; Panama: pineapple USA- Cucurbit vegetables Canada - Greenhouse tomatoes, and greenhouse bell peppers	Summer Squash (6), Cucumber (6), Cantaloupe (7) Greenhouse tomatoes (11), greenhouse bell peppers (8)
	Quinclorac [BASF] (287)	Canola, rice	Canola (8), rice (8)
	Sedaxane (259) [Syngenta]	Cereals	Await field trial information
	Spinetoram (233) – [Dow AgroSciences] Thailand; Columbia; New Zealand; USA	USA: cucurbits; pepper; strawberries; plum; cherry; apricot; potato; soybean; corn; tangerine; sweetcorn; kiwi; passion fruit NZ: feijoa, passionfruit, tamarillo Thailand: mango, lichi Colombia: avocado	US: cucurbits (8); pepper (8); strawberries (8); plum (8); cherry (8); apricot (4); potato (4); soybean (4); corn (4); tangerine (8); sweetcorn (4); kiwi (3); passion fruit (4) NZ: feijoa (4); passionfruit (4); avocado (4); tamarillo (4). Thailand: mango (6); litchi (6) Colombia: avocado (6)

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Spiroteramat (234) Bayer	Iran - pistachios	
	Spiromesifen (999) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes, Tea	Await field trial information
	Tebuconazole (189) [Bayer CropScience] USA	Kenya (common beans) India Tea	Await field trial information
	Triazophos (143) India	Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), grapes	Await field trial information
	Trifloxystrobin (213) [Bayer CropScience]	Cotton; Ginseng (Korea) Celery, head cabbage, Cauliflower + broccoli, Spinach, Head + leafy lettuce	Cotton (12) Ginseng (6), Celery (6), head cabbage (6), Cauliflower + broccoli (6), Spinach (6), Head + leafy lettuce (11)

PERIODIC REVIEW

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Clethodim (187) USA Arysta LifeScience	Clethodim (187)	Bean; broccoli; cabbage; carrot; cranberry; cucurbits; hops; lettuce; pea; strawberry; blueberry USA – Artichoke; Caneberry; Safflower, Apple, Pear, Cherry, Peach, Plum	Blueberry (9) – Awaiting further advice Artichoke (3); Caneberry (6); Safflower (4); Apple (14), Pear (6), Cherry (15), Peach (9), Plum (6)	1994	0.01 1994	NR 2004
Fenpyroximate (193) [Nihon Nohyaku]	Fenpyroximate (193) [Nihon Nohyaku]	US Add-ons: potato; bean (snap); melons; cucumber; stone fruit; avocado; mint, Banana; Caneberry; Celery; Pepper; tomato; Summer squash; watermelon Brazil – coffee, papaya	US Data: potato (16); bean (snap) (8); melons (8); cucumber (9); cherry (8); peach (10); plum (6); avocado (5); mint (6) Banana(5); Caneberry (7); Celery (8); Pepper(16); tomato(19); Summer squash(5); watermelon (4), Brazil - coffee (8), papays (3)	1995	0.01 1995	0.02 2007

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
<p>Carbendazim [Nippon Soda Co] (72)</p> <p>Supported Scheduling subject to availability of full data package</p>	Carbendazim	<p>Mandarins(8), Orange (8), Hazelnut(4), Almond(5), Pecan(9), Pistachio(3), Apple(11), Pear(10), Apricot(13), Peach(9), Nectarine(2), Plum(17), Cherry(8), Strawberry(10), Grape(16), Banana(4), Potato(3), Green Onion(3), Tomato(8), Squash, summer(10), Cucumber(11), Melon(16), Watermelon(9), Brussels sprouts(4), Bean, snap(11), Bean dry(10), Soya beans(23), Canola seed(7), Barley(11), Oats(8), Wheat(11), Peanut(18)</p> <p>India Rice, fresh vegetables (cabbage, cauliflower, okra, green chilli, green pea, bitter gourd, cucumber, brinjal and capsicum), Tea - Await field trial data</p>	<p>Manufacturer of thiophanate-methyl will support Codex MRLs for carbendazim (72) which covers thiophanate-methyl (77). all the relevant studies required to maintain the Codex MRLs for thiophanate-methyl (expressed as carbendazim) will be submitted Public health concerns were lodged by the EU – see next table</p> <p>The last periodic re-evaluation of carbendazim was in 1998. Active substances benomyl and thiophanate-methyl are no longer supported by the sponsor but the CXLs for carbendazim still cover uses of these two active substances meaning that a couple of CXLs are obsolete. Moreover, the EU has a lower ARfD. Acute health risks were identified for several commodities in the 2006 CCPR. In addition, the EU received an import tolerance application for the use of carbendazim in rice and it turned out that the existing CXL for rice is based likely on an obsolete US GAP on benomyl. In this case as well an acute risk could not be excluded</p>			
<p>Kresoxim-methyl (199) Periodic evaluation (BASF)</p>	<p>Kresoxim-methyl (199) Registered? Yes MRLs > LOQ? fungicide</p>	<p>Citrus, pome fruits, stone fruits, strawberry, small berries, sunflower, grapes, grape leaves, dried grapes, bulb vegetables, leek, cucurbits - inedible peel, cucurbits - edible peel, wheat, barley, straw and fodder of cereals, olives, mango, pecans, beetroots, bell peppers, tomato, egg plants, animal products</p>	<p>Citrus (19), pome fruits (37), stone fruits (10), strawberry (24), small berries (6), sunflower (10), grapes (12), grape leaves (16), bulb vegetables (16), leek (16), cucurbits - inedible peel (14), cucurbits - edible peel (8), wheat (20), barley (14), straw and fodder of cereals (34), olives (8), mango (4), pecans (6), beetroots (10), bell peppers (10), tomato (12)</p>	1998	0.4 (1998)	NR (1998)

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Oxamyl (126) [Dupont]	Oxamyl (126)	Potato, Root and tuber vegetables, including Carrot, Parsnips, Sugar beet, Brussels sprouts -, Citrus (mandarin) (orange), Banana, Tomato, Pepper, Aubergine, Edible-peel cucurbit (cucumbers – gherkins – courgettes, Inedible-peel cucurbit	Potato (16), Root and tuber vegetables, including Carrot, Parsnips (9), Sugar beet (19), Brussels sprouts (3 - minor crop, <LOQ residues, Citrus (8 mandarin) (8 orange), Banana (4 <LOQ residues), Tomato (22 protected), Pepper (10 protected), Aubergine (8 protected), Edible-peel cucurbit (11 cucumbers protected – gherkins – 11 courgettes protected), Inedible-peel cucurbit (8 protected)	1986R 2002T	0.009 2002	0.009 2002

TABLE 1: CCPR PRIORITY LISTS OF PESTICIDES (NEW COMPOUNDS, NEW USES AND OTHER EVALUATIONS)

2018 NEW COMPOUND EVALUATIONS

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Chlorfenapyr Tox 2012	Chlorfenapyr [BASF] (254)	Registered	Bell peppers, eggplant, melon, papaya, soybean, soybean processed, tea, tomato, tomato processed, water melon	Bell peppers (8), eggplant (5), melon (8), papaya (5), soybean (10), soybean processed (3), tea (6), tomato (8), tomato processed (3), water melon (8)
Ethiprole (999) (insecticide) [Bayer CropScience] – Germany	Ethiprole (999)	Registered MRLs > LOQ	Coffee; corn/maize; rice; soybean and food of animal origin	Coffee (15); corn/maize (10); rice (12); soybean (10)
Mandestrobin (999) (fungicide) [Sumitomo Chemical]	Mandestrobin	Registered, MRLs>LOQ	Canola, Grape, Strawberry	Canola (23); Grape (16); Strawberry (10)
Norflurazon USA (herbicide) (999) [Tessenderlo Kerley Inc.]	Norflurazon (Moved from 2016 at request of nominator)	Registered MRLs > LOQ	Almond; apple; apricot; asparagus; avocado; blackberry; blueberry; cranberry; cherry (sweet /tart); citrus fruits group; cottonseed; grape; hazelnut; hops; nectarine; peach; peanut; pear; pecan; plums and prunes; raspberry; soybean; walnut	Almond: 7; apple: 8; apricot: 2; asparagus: 6; avocado: 3; blackberry: 1; blueberry: 6; cranberry: 5; cherry: 3; citrus fruits: 8; cottonseed: 10; filberts: 3; grapes: 14; nectarine: 2; peach: 4; peanut: 10; pear: 4; pecans: 4; plums: 6; raspberry: 6; soybeans: 22; walnuts: 2

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Pyrifluquinazon (999) (insecticide) [Nihon Nohyaku] Japan	Pyrifluquinazon [moved from 2015 at the request of manufacturer]	Registered Japan; KOREA	Citrus; pome fruits; potatoes; stone fruits; grapes; tree nuts; melons; tea; grapes (table grapes, raisins, wine); fruiting vegetables, cucurbits; cotton; leafy vegetables; brassica leafy and head/stem vegetables	Almonds (10); pecans (10); grape (table) (24); raisin, juice (if MRL not included under table grape); plum (18); peach (24); cherry (16); apple (24); pear (12); lemon (10); grapefruits (12); oranges (24); cantaloupe (12); cucumbers (14); summer squash (10); peppers (24); tomatoes (28); cauliflower/broccoli (12); cabbage (16); potatoes (33); cotton seed (24); tea (6) and corresponding animal commodity MRLs
Pydiflumetofen SYN545794 (999) (fungicide) Canada [Syngenta]	Pydiflumetofen SYN545794 (999) [Moved from 2017 on request]	Registered – No (2014 status) MRL>LOQ	Soybean seed; Pulses (dry beans, dry peas, lentils, chickpeas), grapes; fruiting vegetables; cucurbits; leafy vegetables; potato; corn; wheat; barley; oats, peanuts, apples, canola	Wheat (33 trials), barley (21 trials), oats (22 trials), canola (21 trials), grapes (12 trials), apples (8 trials), dry beans (11 trials), dry peas (10 trials), fruiting vegetables (tomato (12 trials), bell and non-bell peppers (9 trials)), leafy vegetables (head and leaf lettuce (16 trials), spinach (8 trials), celery (8 trials)), cucurbits (cucumber (7 field and 3 protected), squash (6 trials), cantaloupe (6 trials)), corn (field and popcorn (23 trials), peanuts (12 trials), soybeans (21 trials), potatoes (26 trials)
XDE-777 (999) Dow AgroSciences United Kingdom fungicide	XDE-777 (999) Dow AgroSciences; France	Registered - Soon MesoAndean countries (2015-6); UK (2018) MRLs > LOQ – Y	Bananas, Wheat, triticale, rye and durum	Banana – 8 trials, Cereals (Wheat 8 trials)

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Metconazole (999) [Valent USA Corporation, on behalf of Kureha Corporation Japan] (fungicide)	Metaconazole [Valent USA Corporation] (999)	Registered US MRLs > LOQ	USA- Stone fruit group; Blueberry; Banana; Garlic; Onion, Bulb; Legume vegetables; Pulses; Soya bean; Root and tuber vegetables ¹ (except Sugar beet (root)); Sugar beet (roots); Barley; Maize; Oats; Rye; Triticale; Wheat; Sugar cane; Tree nuts; Oilseed (except Cotton seed, Peanuts, Soya bean and Sunflower)**; Cotton seed; Peanuts; Sunflower seed; Meat (from mammals other than marine mammals); Mammalian fats (except milk fats); Edible offal (Mammalian); Milks; Poultry meat; Poultry fats; Poultry, Edible offal; Egg; Peanut oil, crude	USA- Banana (12), barley grain (28), blueberry (11), cotton seed (12), corn/maize (20), sweet corn (12), tree nuts (10), peanuts (14), soya bean (30), stone fruits (22), sugar beet roots (12), sugarcane cane (8), sunflower (12), oats (12), rape oilseed (16), dried shelled peas pulses (15), dry beans (19), triticale wheat (31), potato (32), fresh legumes, peas without pod (13), onion (4), garlic (3)
Fluazinam (999) [ISK Biosciences; Ishihara Sangyo Kaisha] USA (fungicide)	Fluazinam (999)	Registered MRLs > LOQ	USA- Apples; Mayhaw; Brassica (Cole) Leafy Vegetables plus Turnip greens; Bushberry; Carrot; Ginseng; Lettuce, Head and Leaf; Edible-podded Legume Vegetables, Except Peas; Succulent Bean, includes Lima Bean, Except Peas; Dry Beans, Except Peas and Soybeans; Onions, Bulb; Melons; Squashes/ Cucumbers; Peppers/ Eggplants; Peanuts; Tuberous and Corm vegetables; Soybean; Wine grape; Tea	USA&CAN: Apple (20); Broccoli (13); Cabbage (20); Mustard greens (11); Blueberry (13); Carrot (13); Ginseng (5); Head lettuce (7); Leaf lettuce (7); Succulent beans (11); Lima beans (7); Dried beans (18); Onion (9); Cantaloupe (11); Cucumber (6); Summer squash (6); Bell pepper (9); Non-bell pepper (4); Peanut (10); Potato (12); Soybean (16); USA, CAN, GRC, FRA, ITA, DEU, ESP, CHL: Grape (23) JPN: Tea (5)
Pyriofenone (999) [Ishihara Sangyo Kaisha/ISK Biosciences] USA	Pyriofenone (999)	Registered in EU and Japan MRLs > LOQ	USA- Berries and other small fruits; Fruiting vegetables; Mango	USA&CAN: Grape (12); Strawberry (9); Blueberry (10); Blackberry (6); Kiwi (3); Cucumbers (9); Summer Squash (9); Cantaloupe (5); BRA: Mango (4); EU: Table and Wine Grapes (20)

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Tioxazafen (999) [Monsanto]- USA (nematicide)	Tioxazafen and its metabolite benzamidine (999)	Registered? no MRLs > LOQ? Corn and cotton seed no, soybean seed yes	USA- Corn, cotton, soybean	Corn (22), Cotton (13), Soybean (22)

2018 NEW USES AND OTHER EVALUATIONS

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Abamectin [Syngenta] (177)	Caneberry, Sweetcorn, Green Onion, Beans - shelled, Soybean, Pineapple	Caneberry (7), sweetcorn (12), green onions (5), lima bean (7), soybean (20), pineapple (8)
	Bentazone [BASF] (172)	Field pea (USA) - 4 year rule granted in 2014 Possible move to periodic review	
	Benzovindiflupyr (261) [Syngenta]	Coffee	
	Bifenthrin [FMC] (178)	Barley; barley (straw fodder); - 4 year rule granted in 2014	
	Chlorothalonil (81); (fungicide) [Syngenta]	Orange; Lemon; Grapefruit; Lettuce; Strawberry; Almond; Radish (root veg); mustard greens; guava; lychee, USA- Cranberry (under the 4 year rule).	Orange (12), Lemon (5), Grapefruit (6), Lettuce (13), Strawberry (8), Almond (5) radish (7); mustard greens (9); guava (5); lychee (4)
	Cyantranilprole [DuPont] USA	USA- fruiting vegetables, other than cucurbits (except sweetcorn); grapes; strawberries; cucurbit vegetables (greenhouse); olives; artichoke, Globe; mangos; cranberries; rice	[fruiting vegetables - tomatoes (19), peppers (24)]; grapes (18); strawberries (29); [cucurbit vegetables (greenhouse cucumbers) (5)]; olives (9); artichokes, Globe (5); mangos (8); cranberries (6); rice (6)
	Cyazofamid [ISK Biosciences] USA	USA- Herbs, bulb vegetables	USA- Chive (9); Green Onions (5); Dry Bulb Onions (10)
	Diquat [Syngenta] (031)	Cereals—wheat, barley, oat (Australia); Pulse (Canada)—4 year rule (2014)	
	Dithianon [BASF] (180)	Shaddock / pomelo and mandarin (4 year rule granted in 2014)	
	Fluazifop-p-butyl (999) (herbicide) [Syngenta] USA	Blueberry; Caneberry; Lettuce; Strawberry; Onion; Mustard Greens; papaya	Blueberry (9); Caneberry (6); Lettuce (26); Strawberry (6); Onion, green (4); Mustard Greens (12); papaya (8)

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Fludioxonil [Syngenta]	Carrots, Celery, Guava, Pineapple, Kale, Pomegranate	Carrots (4), celery (8), guava (5), pineapple (4), mustard green (7), cabbage (6), broccoli (6), pomegranate (4)
	Fluensulfone (265) [Adama]	Stone fruit, Pome fruit, Sugarcane	Stone fruit (21), Pome fruit (26) and Sugarcane (8)
	Isofetamid [Ishihara Sangyo Kaisha] USA	USA- Pome fruits; Stone fruits; Berries and other small fruits; Legume vegetables; Pulses; Almond; Soybean	USA&CAN: Apple (20); Pear (10); Peach (13); Plum (9); Cherry (15); Blueberry (10); Raspberry (5); Kiwi (3); Snap bean (8); Dry bean (15); Almond (5); BRA: Soybean (4)
Isoprothiolane (999) LATAM fungicide Nihon Nohyaku	Isoprothiolane (999) LATAM	Nihon Nohyaku– banana	Banana (16)
	Lufenuron [Syngenta]	citrus, coffee	citrus (12), coffee (5)
	Mesotrione [Syngenta]	Citrus, Pome Fruit, Stone Fruit, Tree Nuts	Citrus – orange, grapefruit, lemon (23), Pome fruit – apple, pear (18), Stone fruit – cherry, peach, plum (21), Tree nuts – almond, pecan (10)
	Metalaxyl-M [Syngenta] (212)	Cocoa beans (4 year rule granted in 2014), Republic of Korea (ginseng)	Ginseng (4) Comment from Manufacturer - Consider aligning with Metalaxyl review, if needed to avoid MRL gaps. There are CXLs for metalaxyl-M pending at Step 5/8, which could replace any metalaxyl CXLs that might be withdrawn during review. In addition for cocoa, the MRL at Step 5/8 is not aligned with today's practice (no OECD MRL calculator used, Syngenta consider the MRL at Step 5/8 too low). Syngenta is also generating new trials on cocoa.
Moved from 2017	Penthiopyrad (253) USA	USA – Blueberry; Caneberry	Blueberry (9) and Cranberry (7)
	Propamocarb (148) [Bayer CropSciences]	Feeding studies	
Sulfoxaflor (252) [Dow AgroSciences] USA - Re-evaluation of developmental tox, based upon new data	Sulfoxaflor [Dow AgroSciences] USA Request for new MRLs, based upon new residue data	Kenya, Tanzania, Uganda: passion fruit; Ghana and Senegal: mango	Passion fruit (6); mango (6)

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Thiabendazole [Syngenta]	Legumes and Pulses	Legumes and pulses (48)
	Trinexapac [Syngenta]	Rice, Rye	Rice (16)

2019 NEW COMPOUND EVALUATIONS

TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Broflanilide (999) (insecticide) [Landis International on behalf of Mitsui Chemicals] [USA]	Broflanilide (999)	Registered? No (first registration expected in 2019) MRLs > LOQ? Yes, for majority of crops and food of animal origin	USA- Brassica vegetables; Fruiting vegetables; Leafy vegetables; Legume vegetables; Pulses; Root vegetables	Brassica vegetables (35 + 16 trials), Fruiting vegetables(35 trials), Leafy vegetables (35 + 10 trials), Soybean with pod (3 trials), Pulses: Soybeans (31 trials), dry beans (7 trials), Root vegetables: Potatoes (25 trials), radishes (6 trials), sweet potato(6 trials), turnip(3 trials), Stalk / stem vegetables: Leek (3 trials), green onion (3 trials), Cereals: Grain/Hay/Straw/Fodder (50 trials); Sugarcane (6 trials); Coffee (9 trials), Tea (6 trials), Feeding studies in cow and hen
BAS 750 F (fungicide) (999) [USA]	BAS 750 F [BASF] (999)	Registered? NO MRLs > LOQ? YES	USA- wheat, field corn, rice, sorghum, barley, sweet corn, dried beans, succulent beans, dried peas, succulent peas, lentils, soybean, sugar beet, peanut, canola, apple, pear, almond, pecan, pistachio, cherry, peach, plum, grape	US- Wheat, 25 (US/CA), 16 (EU); Field corn, 16; Rice, 12; Sorghum, 9; Barley, 16 (US/CA), 16 (EU); Sweet corn, 12; dried bean, 10; dry pea, 9; succulent pea, 9; lentil, 8; soybean, 20; sugar beet, 15; peanut, 12; canola, 13; apple, 15; pear, 10; almond, 5; pecan, 5; pistachio, 3; cherry, 8; peach, 12; plum, 8; grape, 13
Afidopyropen (999) [Meiji SeikaPharma/ BASF] [USA] (insecticide)	Afidopyropen [BASF] (999)	Registered? n MRLs >LOQ? y	USA- Citrus fruits, Pome fruits, Stone fruits, Brassica (Head, flowering), Fruiting vegetables (tomatoes, peppers), Fruiting vegetables (Cucurbits), Leafy (head, leafy lettuce, spinach), Brassica, leafy (Mustard greens), Soybeans, Potatoes, Celery, Tree nuts, Cotton	Citrus (lemon, 8; oranges, 12; grapefruit, 6); pome fruit (apple, 15; pear, 9); stone fruit (peaches, 13; plum, 10; cherry, 8); Brassica (head cabbage, 10; broccoli, 10); cucurbits (cucumber, 9; cantaloupe, 8, squash, 10); fruiting vegetables (tomatoes, 20; sweet bell peppers, 7; nonbell peppers, 3); leafy lettuce (8); head lettuce (9); spinach (9); mustard greens (8); soybean (20); potato (20); celery (10); tree nuts (almonds, 5; pecans, 5; pistachios, 3); cotton

2019 NEW USES AND OTHER EVALUATIONS

TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Chlorpyrifos-methyl (90) [Dow AgroSciences] Australia	Wheat, barley, sorghum 4 YEAR RULE from 2015	
	Cypermethrins (118) [BASF], [FMC]	Public health concerns - acute dietary risk– Netherlands – check uses for peach based on existing residue data and labels; Republic of Korea (ginseng)	Ginseng (4)
	Spirotetramat (234)	Strawberry; carrot; sugarbeet	Strawberry (10); carrot (24); sugarbeet (19)
	Thiamethoxam(245) [Syngenta]	Persimmon (Korea); Rice [Syngenta]	Persimmon (6); Rice (8)

TABLE 2A: PRIORITY LISTS OF PERIODIC REVIEWS – 2018-2021

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”

2018 PERIODIC REVIEW

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Iprodione (111) (BASF) Moved at the request of manufacturer – await EU and US reviews	Iprodione (111)	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)	BASF Trials: Almond (6); hazelnut (4); cherry (9); peach (22); plums (18); grapes, table & wine (38); strawberry (28); raspberry (6); currants, red, black, white (9); carrots (34); onion, bulb (17); onion, spring (10); tomato (18); pepper (8); cucumber (21); cucurbits w inedible peel (8); cauliflower (18); Brussel sprouts (8); Chinese cabbage (12); lettuce (38); witloof (4); beans, fresh w pods (15); peas, fresh w/o pods (16); asparagus (4); peas, dry (19); rapeseed (12); rice (8) 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); mandarins (8); mango (4); melon (12); pea (12); peanut (12); plum (12); potato (16); soybean (12); wheat (16)	1994	0.06 1995	N/A

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Flumethrin (195) [Bayer CropScience]	Flumethrin (195)	Cattle milk; cattle meat		1996	0.004, 1996	N/A
Metalaxyl (138) Quimicas del Vallés - SCC GmbH	Metalaxyl (138)	Review in 2004 for residues was for evaluation of metalaxyl-M; support from Quimicas del Vallés - SCC GmbH; USA – Grapes; tomatoes; potatos; lettuce; oranges; strawberries; broccoli; cauliflower; head cabbage; onion Supervised trials by Thailand – pineapples	Grapes (21); tomatoes (20); potatos (16); lettuce (10); oranges (4); strawberries (8); broccoli (8); cauliflower (4); head cabbage (4); onion (8) Thailand has agreed to provide field trials – pineapples Comment: Manufacturer requests consideration to align with Metalaxyl-M review, if needed to avoid MRL-gaps. There are CXLs for metalaxyl-M pending at Step 5/8, which could replace any metalaxyl CXLs that might be withdrawn during review. In addition for cocoa, the MRL at Step 5/8 is not aligned with today's practice (no OECD MRL calculator used, Syngenta consider the MRL at Step 5/8 too low). Syngenta is also generating new trials on cocoa, which we propose to review.	2004	0.08 2004	NR 2004
Permethrin (120) Not supported	Permethrin (120)		Not supported by manufacturer Last reviewed over 25 years ago	1987	0.05 - 1999	NR - 1999
Tolclofos-methyl (191) [Sumitomo Chemical]	Tolclofos-methyl (191)	Lettuce head; lettuce leaf; potato; radish	Await advice – moved from 2017 on request	1994	0.07 1994	N/A
Dithiocarbamates (105) [Taminco] (ferbam, maneb/mancozeb, propineb, thiram, ziram)	Dithiocarbamates (105)	Await advice	Residue definition applies to all DTC – propineb; mancozeb; ferbam; ziram; thiram; maneb; metiram; zineb Netherlands - public health concerns	1996T, 1993R, (2004 propineb)	Range of group ADIs	Interim ARfD propineb 0.1 mg/kg 1995

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
			<p>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).</p> <p>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.</p> <p>For <u>thiram</u> 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/report2004jmpr.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.</p> <p>For <u>ziram</u> 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.</p> <p>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.</p> <p>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.</p> <p>Conversion factors (from CS₂ to active substance) are not listed in the Annex: Mancozeb: 1.783, Maneb: 1.743, Propineb: 1.904, Thiram: 1.580, Ziram: 2.009</p>			

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Imazalil (110) [Janssen]	Imazalil (110)	<p>Support / Retain: Banana, Citrus fruits (Grapefruit, oranges, lemons, limes mandarins), Cucumber, Melons, except watermelons, Pome fruits (Apples, pear), Potato, Wheat, Wheat straw & fodder, dry</p> <p>Add Gerkin, Courgette (zucchini), Barley, Maize, Millet, Oats, Rye, Sorghum, Barley straw fodder dry, tomato</p> <p>Not supported Persimmon, Raspberry, Strawberry</p>	<p>Pome fruit: 39, Banana: 8, Cereal (seed treatment): 8, Citrus: 36, Cucurbits (edible peel plus melon): 17, Potatoes: 24, Tomatoes: 10 EU – public health concerns <i>The active substance has not been re-evaluated for residues since it was included the first time in 1977. Toxicological re-evaluation was done in 2000 and an ARfD was derived in 2005. (see CX/PR 12/44/14-Add.1 March 2012)</i> <i>As a consequence of this ARfD a couple of MRLs are not safe for consumers. Due to the fact that no periodic re-evaluation of residue took place since 35 years all MRLs should be reviewed.</i> From EFSA evaluation an ADI of 0,025 mg/kg bw and an ARfD of 0.05 mg/kg bw was derived in 2010. This is in line with the current JMPR values of 0.03 mg/kg bw (ADI, 2001) and 0.05 mg/kg bw (ARfD, 2005). A risk assessment was performed using the EFSA PRIMo including the current CXLs for banana, citrus fruit, cucumber, gherkins, melons exc. watermelons, Japanese persimmons, pome fruit, potato, raspberries, strawberries and wheat. Due to the rather old residue evaluation a refinement using HR and STMR values was impossible. Distribution between pulp and peel was not taken into account. As can be seen from this rather rough estimation ADI is exceed for a couple of WHO clusters, i. e. cluster B, E, F, D, with residues in potatoes account for a major part of the residues. It can also be stated that for European consumers children are most likely at risk. For European consumers the ARfD is exceeded for potatoes, pome fruit, Japanese persimmon as well as for citrus fruit, banana and melons, not taking into account distribution between peel and pulp. Changing the variability factor to 3 as used by JMPR will change the outcome of the assessment dramatically. Potatoes, pome fruits as well as citrus fruit, bananas and melons, not taking into account distribution between peel and pulp are still exceeding the ARfD. Await advice from JMPR on public health concerns</p>	1994R, 2005T	0.03 2001	0.05 2005

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Bromopropylate (70) Not supported by the manufacturer Concern Form lodged	Bromopropylate (70)	The active substance was first included in 1973 and re-evaluated in 1993, but not since. In the evaluation of 1993 an ADI was set at 0.03 mg/kg bw/d but no ARfD. Since no ARfD was ever set and data for evaluation are missing (supervised field trials, processing studies), the MRLs should be re-evaluated after 41 years	Since in 1993 it was not yet common practice to set an ARfD, EFSA used the ADI to assess the acute effects in the short term intake. A risk assessment was performed using the EFSA PRIMo including the existing CXLs for citrus fruits, pome fruits and grapes. The highest chronic exposure was calculated for the German child, representing 124% of the ADI. Since there were no supervised field trials complying with the critical GAP or reliable processing studies, the intake could not be further refined. The acute intake assessment (using the ADI-value) shows exceedance of the toxicological reference value for citrus fruits (884% for oranges, 594% for grapefruit, 371% for mandarins, 230% for lemons, and 134% for limes), pome fruits (653% for apples, 607% for pears), table grapes (437%) and wine grapes (158%). For further details see EFSA evaluation on the internet at http://www.efsa.europa.eu/en/efsajournal/doc/1640.pdf .	1993	0.03 - 1993	N/A

2019 PERIODIC REVIEW

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Aldicarb (117) [AgLogic Chemical LLC] Tox conducted in 1997	aldicarb	Awaiting advice on commodities to be supported	Yes	1995	0.003 - 1992	0.003 - 1995
Bromide ion (47) (Methyl bromide) No Croplife manufacturer responsible	Bromide ion (47)		Last reviewed over 25 years ago Bromide ion from all sources but not including covalently bound bromine Methyl bromide (52) – guideline CXLs Not cleared toxicologically by JMPR	1988	1.0 - 1988	N/A

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Hydrogen phosphide, (zinc and aluminium salts) (46) No Croplife manufacturer responsible	Hydrogen phosphide (46)		Last reviewed over 40 years ago	1971	NR	N/A
Fenbutatin oxide (109)	Fenbutatin oxide		National registrations No supporting member country No longer supported by manufacturer Recommendation – remove compound and all CXLs	1992	0.03 - 1992	N/A
Carbosulfan (145) Carbofuran (96) [FMC Corporation]	Carbosulfan Carbofuran	Awaiting advice on supported commodities Asparagus; egg plant (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	1997 1997	0.01 (1986) 0.001 (1996)	0.02 (2003) 0.001 (2009)

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Fenarimol (192) [Gowan] Not supported by the manufacturer Concern form lodged	Fenarimol	Fenarimol was first included as active substance in 1995. The ADI was set at 0.01 mg/kg bw/d. The COM set an ADI of 0.01 mg/kg bw/d in 2007 as well as an ARfD of 0.02 mg/kg bw/d. Since the JMPR hasn't evaluated the active substance in 19 years whereas now an ARfD-value is available it is proposed to re-evaluate all MRLs.	An ADI- and ARfD-value were derived in a peer-review under 91/414/EEC. EFSA identified in the acute risk assessment for children a possible risk for peppers (157.4%), peaches (148.3%), apples (146.9%), tomatoes (145.4%), pears (136.6%) and bananas (125.4%). A refined calculation was carried out using the HR. For further details see EFSA evaluation on the internet at http://www.efsa.europa.eu/en/efsajournal/doc/161r.pdf .	1995	0.01 - 1995	N/A
Dimethoate [Cheminova] (027)	Dimethoate		EU concerns ARfD JMPR 2003 Acute risk for citrus and cherries Sum of dimethoate and omethoate expressed as dimethoate In the 2003 evaluation by JMPR an ARfD was established. However, in the exposure assessment for the acute risk the highest residue was not used in the case of citrus. Using the HR would lead to an exceedance of the ARfD of 230%. Furthermore, the CXL of 2 mg/kg for cherries leads to an unacceptable acute risk for children and should be revised. Await advice from JMPR on public health concerns		0.002, 1996	0.02, 2003

2020 PERIODIC REVIEW

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Prochloraz (142) [Bayer CropScience]			Last reviewed by JMPR in 2001. In 2011, Prochloraz was re-evaluated in the EU and a lower acute toxicological endpoint of 0.025 mg/kg/bw/d was established compared to a value of 0.1 set by JMPR in 2001. From the JMPR report (2004) the IESTI was calculated to be greater than 25% of the ARfD at 0.1 for several commodities. With a lowering of the ARfD by a factor of 4, the CXLs for banana, edible offal (mammalian), grapefruit, mandarin, orange, papaya, pineapple, shaddocks/pomelos are expected to be of concern. The EU values were derived from 2 studies that do not appear to have featured in the JMPR evaluation. The multi-generation rat study "Reader 1993" submitted as part of a dossier by a notifier and a 90 day dog study "Lancaster 1979" submitted by another notifier. In addition a change in the interpretation the significance of extended gestation in both the "Cozen 1980 study" and the "Reader 1993" study also impacted. It should also be noted the many papers reviewed as part of the literature search around prochloraz were also considered when the list of endpoints and critical values were set.		0.01, 1983 confirmed 2001	0.1, 2009
Ethoxyquin (35) One CXL - pear	Ethoxyquin (35)		The substance is not authorised in the EU and no import tolerances exist. EFSA concluded that the metabolism data used by JMPR for establishing the residue definition for enforcement and risk assessment could not be confirmed as the metabolism data showed deficiencies using the JMPR residue definition. EFSA concluded that the CXL for pears exceeded the ARfD (109%) and proposed to lower the EU MRL to the LOD. The last periodic review of residues was performed by JMPR in 1999 and of toxicology in 1998. This is approximately 15 years ago. It seems that Japan has recently performed a toxicological evaluation of the substance. COMMENT: a toxicological review occurred in 2005 – reviewed ADI and set ARfD		0.005, 2005	0.5, 2005

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Guazatine (114)	Guazatine (114)		<p>Guazatine was first discarded as not having an ADI/ARfD at all. However, this 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.</p> <p>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.</p> <p>There are no CXLs in place in CX/PR 14/46/5 – instead guideline levels are set – clarification from Codex Secretariat is sought</p>		Withdrawn 1997	N/A
Dicloran (83)	Dicloran (83)		<p>Not approved (April 2008 and May 2011, RMS ES)</p> <ul style="list-style-type: none"> - Concerns identified with regard to the the toxicological relevance of several impurities in the technical material (relevent for residues in food?) and with regard to consumer risk assessment in following crops. 	1998	0.01 (1998)	NR (2003)
Dichlofluanid (82) RECOMMEND REMOVAL FROM CCPR LIST OF PESTICIDES – NO KNOWN NATIONAL REGISTRATIONS	Dichlofluani d (82)		Last reviewed over 30 years ago	1983	0.3 - 1983	N/A

TOXICOLOGY	RESIDUE	Commodities	Comments	Previous evaluation	ADI	ARfD
Tolyfluanid (162) RECOMMEND REMOVAL FROM CCPR LIST OF PESTICIDES – NO KNOWN NATIONAL REGISTRATIONS			EFSA identified an exceedance of the ARfD for apples, pears, table grapes and lettuce representing 159 %, 147 %, 146 % and 127 % of the ARfD, respectively. For grapes the CXL is not sufficiently supported by data and a risk to consumers cannot be excluded. For quinces, medlar, loquat, strawberries, blackberries, raspberries, currants, tomatoes, peppers, cucumbers, leek and hops the existing CXLs are supported by data and no risk to consumers is identified. However these CXLs were initially based on an EU GAP which is no longer authorised; there are no relevant authorisations or import tolerances reported at EU level. EU GAPs are no longer valid and the substance s no longer used worldwide. All MRLs were set to LOQ in the EU by Regulation (EU) No 899/2012 and no comments received during SPS notification. JMPR has a higher ARfD (0.5 mg/kg bw/d) than EFSA (0.25 mg/kg bw/day) but this is based on the same data. EFSA included two more metabolites in the RD than JMPR. Substance is currently listed in Table 4 of the Priority list (substances for which specific GAP is no longer supported) and to our information is no longer supported worldwide. The EU therefore requests the revocation of the CXLs.		0.08, 2002	0.5, 2002

2021 PERIODIC REVIEW

Substance	Rationale
Azinphos-methyl (2) Not supported JMPR 2007 ADI 0.03 JMPR 2007 ARfD 0.1	The EU submitted a concern form in October 2015. Azinphos-methyl was re-evaluated concerning toxicology in 2007 with concerns mentioned by EU in CCPR 2008 due to the use of human data. The re-evaluation for residue behaviour was announced for 2010 but then did not take place as the substance was no longer supported. The substance is not authorised in the EU. It is of public health concern as the ARfD established by JMPR is exceeded for several commodities when using EU consumption data: 185% of ARfD for pears; 135% oranges which might be of no concern taking into account distribution between peel and pulp; Peaches (120%); Pine apples (105%). As the substance is falling under the 15 year rule and it has been confirmed at several meetings of the CCPR that it is no longer supported worldwide, the existing CXLs should urgently been withdrawn (2010 CCPR, para 178; 2011 CCPR, Appendix X; 2012 CCPR, para 166; 2014 CCPR, Appendix XV; 2015 CCPR, Appendix XV).

Substance	Rationale
<p>Diazinon (22) [Makhteshim–Agan] Note: Diazinon is already scheduled for toxicological and residue assessment by an interim JMPR to be held in Spring 2016, based on concerns raised by IARC on the possible carcinogenic properties of the substance (see Summary Report JMPR2015). ADI 0.005 – 2006 JMPR ARfD 0.03 – 2006 JMPR</p>	<p>Falls under the 15-year rule (listed in Table 2B), last evaluation in 1996. EU Concerns are as follows: The substance is not authorised in the EU. The EU-ADI of 0.0002 mg/kg bw/day) is much lower than the JMPR ADI (0.005 mg/kg bw/day). Using the existing CXLs and the EU ARfD/ADI in the EFSA PRIMo model, serious public health concerns are identified after long-term dietary exposure of diazinon. An acute dietary risk assessment was performed using CXLs. When using the JMPR IESTI model, the JMPR-ARfD is not exceeded. By using the EFSA PRIMo model and the CXLs, the EU-ARfD is exceeded (IESTI 1) in case of scarole (175%), plums (132%), carrots (127%), melons (121%), apples (118%), broccoli (117%), tomatoes (116%), pears (105%), head cabbage (105%), bovine meat (102%). Refinement (IESTI 2) of the variability factors would still lead to exceedances of the ARfD for scarole, melons, plums and bovine meat (102-175%). Use of the HR would lower the short term exposure by a factor of 2 which would not result in an exceedance of ARfD. Even without including the LOQs for the crops without MRLs, the highest calculated TMDI values in % (EU) ADI are 376-4990% in various populations (child, toddlers, general public) and countries, with meats, pome fruit, carrots and sugar beets contributing the most (all >>100 % of the ADI). It is acknowledged that the use of the STMRs would lower the long-term dietary exposure by approximately a factor of 4-5, but this would still lead to an exceedance of the ADI.</p>
<p>Phosalon (60) [Cheminova] ADI 0.02 – 1997 JMPR ARfD 0.3 – 2001 JMPR</p>	<p>Falls under the 15-year rule (listed in Table 2B), last evaluation in 1997. The EU proposes submit a concern form on the basis of public health concerns. The substance is not authorised in the EU. EU has established a lower ADI and ARfD than JMPR. Using the EU ARfD and ADI of 0.01 mg/kg, the EU MRLs and the Codex MRL for apple and pome fruit for phosalone leads to exceedance of ADI, with apple contributing most (114-639 %) in various populations. In the short-term dietary risk assessment these MRLs lead to exceedances of the EU ARfD not only in apples (490%), but also in pears (180%) and peaches (120%). The impact of the metabolite oxaphosalone has not been taken into account, but will only add to the dietary exposure. With the ARfD of the JMPR at 0.3 mg/kg bw and the ADI at 0.02 mg/kg bw/day, there are no exposure concerns. Awaiting advice on supported commodities Durian (Thailand)</p>
<p>Quintozene (64) [Crompton–AMVAC] ADI 0.01 – 1995 JMPR ARfD N/A</p>	<p>Falls under the 15-year rule (listed in Table 2B), last evaluation in 1995. The EU proposes submit a concern form on the basis of public health concerns. Quintozene containing more than 0.1% hexachlorobenzene is banned in the EU. For quintozene (containing less than 0.1% hexachlorobenzene), the necessity for deriving an ARfD has not been assessed (EU or JMPR). Using the CXLs, the JMPR IESTI model and the ADI as surrogate ARfD, an exceedance of the ARfD is found for ginger root (240%); no exceedance is found for the EFSA PRIMo model. Using the (temporary) ADI of 0.01 mg/kg bw/day, the TMDI in the long-term dietary risk assessment does not exceed the ADI using the Codex MRLs and the EFSA PRIMo model. However, there are many uncertainties regarding the metabolites that can be formed, depending on application of the active substance at growth stage and on type of plant. There is a lack of sufficient data to exclude consumer risks.</p>

Substance	Rationale
<p data-bbox="159 244 409 300">Amitraz (122) [Arysta Lifesciences]</p> <p data-bbox="159 336 456 392">ADI 0.01 – 1998 JMPR ARfD 0.01 – 1998 JMPR</p>	<p data-bbox="573 244 2018 300">Falls under the 15-year rule (listed in Table 2B), last evaluation in 1998. The EU proposes to submit a concern form on the basis of public health concerns.</p> <p data-bbox="573 304 2063 547">The EU and JMPR ARfD and ADI for amitraz are equal. All EU MRLs are set at LOQ. No EU evaluation of residue trials is available. Therefore the acute risk assessment was performed with the existing CXLs. However, when applied in the EFSA PRIMo model exceedances are observed for oranges (663%), apples (490%), pear (455%), peaches (297%), cucumber (292%), tomatoes (291%) for children. Refinement (IESTI 2) of the variability factors would still lead to exceedances of the ARfD for the same crops (211-480%). In addition, even without including the LOQs for the crops without MRLs, the highest calculated TMDI values in % ADI are 254 and 146 in DE and NL child, with pome fruit attributing the most (>100 % of the ADI). It is acknowledged that the use of the STMRs would lower the long-term dietary exposure by approximately a factor of 4-5, whereby exceedance of the ADI is no longer envisaged.</p> <p data-bbox="573 552 2074 638">Using the FAO IESTI spreadsheets and JMPR ARfD, the ARfD is exceeded in case of oranges (150-290%), apple (280-360%), pear (280-290%), peaches (150-260%), cucumber (130-200%), tomatoes (110-320%). It is acknowledged that the use of HRs would lower the dietary exposure by approximately a factor of 2, but this would still result in exceedances of the ARfD.</p>

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.

TOXICOLOGY	RESIDUE	Issue – Commodities supported	Current national registrations	Previous evaluation	ADI	ARfD
Bioresmethrin (93) RECOMMEND REMOVAL FROM CCPR LIST OF PESTICIDES – NO KNOWN NATIONAL REGISTRATIONS	bioresmethrin	No longer supported by the manufacturer	no	1991	0.03 - 1991	N/A
Tecnazene (115) RECOMMEND REMOVAL FROM CCPR LIST OF PESTICIDES – NO KNOWN NATIONAL REGISTRATIONS	tecnazene	No known supporting manufacturer	no	1994	0.02 - 1994	N/A
Fenthion (39)	fenthion	No longer supported by the manufacturer	yes	1995	0.007 - 1995	0.01 - 1997
Disulfoton (74)	disulfoton	No longer supported by the manufacturer	yes	1996	0.0003 - 2006	0.003 - 2006
Fenbuconazole (197) [Dow AgroSciences]	fenbuconazole	Awaiting advice on supported commodities	yes	1997	0.03 (1997)	0.2 (2012)
Dinocap (87)	dinocap	No longer supported by the manufacturer	yes	1998	0.008 - 1998	0.008 WCBA 0.03 general
Maleic hydrazide (102) [Chemtura]	maleic hydrazide	Awaiting advice on supported commodities	yes	1998	0.3 (1996)	N/A
Amitrole (79) [Nufarm]	amitrole	Awaiting advice on supported commodities	yes	1998	0.002 (1997)	N/A
Pyriproxyfen [Sumitomo] (200)	pyriproxyfen	Awaiting advice on supported commodities	yes	1999	0.1 (1999)	NR (1999)
Malathion [Cheminova] (049)	malathion	Awaiting advice on supported commodities	yes	1999	0.3 (1997)	2.0 (2003)
2-phenylphenol (056) [???	2-phenylphenol	manufacturer unkown	yes	1999	0.4, 1999	NR 1999

COMPOUND	EU	Aust	Canada	USA	Japan	Phil	Moro	Korea	Chile	NZ	Brazil	Overall
Disulfoton (74)	N	N	N		Y	N	N	N	N	N	Y	
Fenarimol (192)	N	Y			Y	N	N	Y	Y	N	N	
Fenbuconazole (197)	Y	Y	Y		Y	N	N	Y	Y	N	N	
FENBUTATIN OXIDE (109)	N	Y	Y		Y	N	N	Y	N	N	N	
Fenthion (39)	N	N	N		Y	Y	Y	Y	N	N	N	
Hydrogen phosphide (46)	Y	Y		Y	N	Y	N	Y	Y	N	Y	
Malathion (049)	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	
Maleic hydrazide (102)	Y	Y	Y		Y	N	Y	N	N	Y	Y	
Methidathion (51)	N	Y			Y	N	N	N	Y	Y	Y	
Permethrin (120)	N	Y			Y	Y	N	N	Y	Y	Y	
Phosalone (60)	N	N	N		Y	N	N	N	N	N	N	
Pyriproxyfen (200)	Y	Y	Y		Y	N	N	Y	Y	Y	Y	
Quintozene (64)	N	Y			N	N	N	N	N	N	Y	
TECNAZENE (115)	N	N	N		N	N	N	N	N	N	N	NO
TOLYFLUANID (162)	N	N			N	N	No	N	N	N	N	NO
2-phenylphenol (056)	Y	Y						N	N	N		
Parathion-methyl (059)	N	Y						N	N	N		
Bitertanol (144)	N	Y						Y	N	N		
2,4-D (020)	Y	Y						Y	Y	Y		
Diphenylamine (030)	N	Y						N	Y	N		
Piperonyl butoxide (062)	Y	Y						N	N	Y		
Methomyl (094)	Y	Y						N	Y	Y		
Fipronil (202)	Y	Y						Y	Y	Y		
Spinosad (203)	Y	Y						Y	Y	Y		
Imidacloprid (206)	Y	Y						Y	Y	Y		

TABLE 3: RECORD OF PERIODIC REVIEWS

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
007	Captan	1963	1995T, 2004T(ARfD), 2000R			Arysta Life Science
008	Carbaryl	1965	2001T(ADI, ARfD), 2002R			Bayer CropScience
017	Chlorpyrifos	1972	1999T, 2000R, 2006 (ARfD)			Dow AgroSciences
025	Dichlorvos	1965	2011T, 2012R			AMVAC
026	Dicofol	1968	1992, 2011T			Not supported by manufacturer
031	Diquat	1970	1993T, 1994R, 2013			Syngenta
032	Endosulfan	1965	1998T, 2006R			Makhteshim Agan
037	Fenitrothion	1969	2007T(ADI, ARfD), 2003R			Sumitomo

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
041	Folpet	1969	1995T, 2007T(ARfD), 1998R			Makhteshim Agan
048	Lindane	1965	2002T, 2003R, 2015			EMRLs proposed
057	Paraquat	1970	2003T, 2004R			Syngenta
063	Pyrethrins	1965	2003T, 2000R			No manufacturer
065	Thiabendazole	1970	1997T, 1997R, 2006T(ARfD)			Syngenta
067	Cyhexatin	1970	2005T, 2005R			Cerex Agri
081	Chlorothalonil	1974	2009T, 2010R			Syngenta
084	Dodine	1974	2000T, 2003R			AgriPhar SA
085	Fenamiphos	1974	1997T, 1999R, 2006T(ARfD)			Makhteshim Agan
086	Pirimiphos-methyl	1974	1992T, 2006T(ARfD), 2003R			Syngenta
090	Chlorpyrifos-methyl	1975	2009			Dow AgroSciences
095	Acephate	1976	2005T, 2003R			Arysta Life Science
100	Methamidophos	1976	2002T, 2003R			Bayer CropScience
101	Pirimicarb	1976	2004			Syngenta
103	Phosmet	1976	1994T, 2003T, 1997R 2002R			Gowan
106	Ethephon	1977	2002T(ARfD), 2015			Bayer CropScience
112	Phorate	1977	2004T, 2005R			BASF / AMVAC
113	Propargite	1977	1999T, 2002R			Chemtura
116	Triforine	1977	1997T, 2014			Support from Sumitomo Co.
118	Cypermethrin	1979	2006T, 2008R			FMC / AgriPhar
119	Fenvalerate	1979	2012			Sumitomo Chemical
129	Azocyclotin	1979	2005T, 2005R			Cerex Agri
132	Methiocarb	1981	1998T, 1999R, 2005R (ARfD)			Bayer CropScience
133	Triadimefon/triadimenol	1979	2004T, 2007R			133 /168 - Bayer CropScience
135	Deltamethrin	1980	2000T, 2002R			Bayer CropScience
143	Triazophos	1982	2002T, 2007R			Bayer CropScience
146	Lambda-cyhalothrin	1984	2007T, 2008R			Syngenta
147	Methoprene	1984	2001T, 2005R			Dow AgroSciences
148	Propamocarb	1984	2005T, 2006R			Bayer CropScience
149	Ethoprophos	1983	1999T, 2004R			Bayer CropScience

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
151	Dimethipin	1985	1999T, 2004T(ARfD), 2001R			Chemtura
155	Benalaxyl	1986	2005T, 2009R			FMC
156	Clofentezine	1986	2005T, 2007R			Makhteshim Agan
157	Cyfluthrin	1986	2006T, 2007R			Makhteshim Agan / Bayer
158	Glyphosate	1986	2004			Monsanto
160	Propiconazole	1987	2004T, 2007R			Syngenta
165	Flusilazole	1989	2007			DuPont
166	Oxydemeton-methyl	1989	2002T, 1998R			United Phosphorous
167	Terbufos	1989	2003T			AMVAC
169	Cyromazine	1990	2006T, 2007R			Syngenta
171	Profenofos	1990	2007T, 2008R			Syngenta
172	Bentazone	1991	2012T, 2004T(ARfD), 2013			BASF
173	Buprofezin	1991	2008			Nihon Nohyaku
174	Cadusafos	1991	2009T, 2010R			FMC
175	Glufosinate-ammonium	1991	2012			Bayer CropScience
176	Hexythiazox	1991	2008T, 2009R			Nippon Soda
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
184	Etofenprox	1993	2011T,R			Mitsui Chemical Inc
185	Fenpropathrin	1993	2012T, 2014			Sumitomo Chemical
189	Tebuconazole	1994	2010T, 2011R			Bayer CropScience
194	Haloxypop	1995	2006T, 2009R			Dow AgroSciences
196	Tebufenozide	1996	2003T(ARfD)			Dow AgroSciences
201	Chlorpropham	2000	2005T(ADI, ARfD)			Cerex Agri
015	Chlormequat	1970	1997T, 1999T(ARfD) 1994	2016	2016	Support from BASF
051	Methidathion	1972	1997T, 1992	2016	2016	Not supported
182	Penconazole	1992	None	2016	2016	Syngenta
188	Fenpropimorph	1994	2004T(ARfD)	2016	2016	Support from BASF
190	Teflubenzuron	1994	None	2016	2016	Support unknown

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
072	Carbendazim	1973	1995T, 2005T(ARfD), 1998R	2017	2017	Nippon Soda
126	Oxamyl	1980	2002	2017	2017	Dupont
187	Clethodim	1994	1999T(ARfD)	2017	2017	Support from USA
193	Fenpyroximate	1995	2007T(ARfD)	2017	2017	Nihon Nohyaku
199	Kresoxim-methyl	1998	None	2017	2017	BASF
070	Bromopropylate	1973	1993	2018	2018	not supported
105	Dithiocarbamates - incl propineb, ferbam, ziram	1965	1993R, 1996T ferbam, ziram, 2004 propineb	2018	2018	Individual DTCs are evaluated, propineb 2004, ferbam/ziram 1996
110	Imazalil	1977	1977, 2000T, 2005T(ARfD)	2018	2018	Janssen
111	Iprodione	1977	1995T, 1994R	2018	2018	Support from BASF
120	Permethrin	1979	1999T	2018	2018	Not supported by manufacturer
138	Metalaxyl	1982	2002T	2018	2018	Quimicas del Vallés - SCC GmbH
191	Tolclofos-methyl	1994	None	2018	2018	Sumitomo Chemical
195	Flumethrin	1996	None	2018	2018	Bayer CropScience
027	Dimethoate	1965	1996T, 2003T(ARfD), 1998R	2019	2019	
046	Hydrogen phosphide	1965	1966T	2019	2019	Support unknown
047	Bromide ion	1968	1988T	2019	2019	Support unknown
096	Carbofuran	1976	1996T, 2008T(ARfD), 1997R	2019	2019	FMC
109	Fenbutatin oxide	1977	1992T, 1993R	2019	2019	Not supported by BASF
117	Aldicarb	1979	1992T, 1995T(ARfD), 1994R	2019	2019	AgLogic Chemcial LLC
145	Carbosulfan	1984	2003T, 1997R	2019	2019	
192	Fenarimol	1995	None	2019	2019	
035	Ethoxyquin	1969	2005T, 1999R	2020	2020	No manufacturer
082	Dichlofluanid	1969	1983T	2020	2020	Not supported by manufacturer
083	Dicloran	1974	1998	2020	2020	Gowan
114	Guazatine	1977	1997	2020	2020	Guideline limits – citrus, pome fruit
142	Prochloraz	1983	2001T, 2004R	2020	2020	Bayer CropScience
162	Tolyfluanid	1988	2002	2020	2020	Bayer CropScience

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
002	Azinphos-methyl	1965	2007T	2021	2021	Makhteshim
022	Diazinon	1965	2006T, 1993	2021	2021	Makhteshim-Agan
060	Phosalone	1972	1997T, 2001T(ARfD), 1994R	2021	2021	Chemnova
064	Quintozene	1969	1995	2021	2021	Chemtura
122	Amitraz	1980	1998T	2021	2021	Arysta Lifesciences
130	Diflubenzuron	1981	2001T, 2002R	JECFA comments		Chemtura
020	2,4-D	1970	1996T, 1998R, 2001T(ARfD),	Listed-not scheduled	Listed-not scheduled	Dow AgroSciences
030	Diphenylamine	1969	1998T, 2001R	Listed-not scheduled	Listed-not scheduled	Cerex Agri
039	Fenthion	1971	1995, 1997T(ARfD)	Listed-not scheduled	Listed-not scheduled	Not supported by manufacturer
049	Malathion	1965	1997T, 2003T(ARfD), 1999R	Listed-not scheduled	Listed-not scheduled	
056	2-phenylphenol	1969	1999	Listed-not scheduled	Listed-not scheduled	No manufacturer
059	Parathion-methyl	1965	1995T, 2000R	Listed-not scheduled	Listed-not scheduled	Chemnova
062	Piperonyl butoxide	1965	1995T, 2001T(ARfD), 2001R	Listed-not scheduled	Listed-not scheduled	Endura
074	Disulfoton	1973	1996T(ARfD)	Listed-not scheduled	Listed-not scheduled	Bayer CropScience
079	Amitrole	1974	1997T, 1998R	Listed-not scheduled	Listed-not scheduled	Nufarm
087	Dinocap	1969	1998T, 2000T(ARfD)	Listed-not scheduled	Listed-not scheduled	Not supported by manufacturer
093	Bioresmethrin	1975	1991T, none	Listed-not scheduled	Listed-not scheduled	Not supported by manufacturer
094	Methomyl	1975	2001	Listed-not scheduled	Listed-not scheduled	DuPont
102	Maleic hydrazide	1976	1996T, 1998R	Listed-not scheduled	Listed-not scheduled	Chemtura
115	Tecnazene	1974	1994T	Listed-not scheduled	Listed-not scheduled	Support unknown
144	Bitertanol	1983	1998T, 1999R	Listed-not scheduled	Listed-not scheduled	Bayer CropScience
197	Fenbuconazole	1997	None	Listed-not scheduled	Listed-not scheduled	Dow AgroSciences
200	Pyriproxyfen	1999	None	Listed-not scheduled	Listed-not scheduled	Sumitomo Chemical / Valent Canada Corporation
202	Fipronil	2000/2001	None	Listed-not scheduled	Listed-not scheduled	BASF
203	Spinosad	2001	None	Listed-not scheduled	Listed-not scheduled	Dow AgroSciences
206	Imidacloprid	2001	None	Listed-not scheduled	Listed-not scheduled	Bayer CropScience
204	Esfenvalerate	2002	None	Never scheduled	Never scheduled	Sumitomo Chemical
205	Flutolanil	2002	None	Never scheduled	Never scheduled	Nihon Nohyaku
207	Cyprodinil	2003	None	Never scheduled	Never scheduled	Syngenta
208	Famoxadone	2003	None	Never scheduled	Never scheduled	DuPont
209	Methoxyfenozide	2003	None	Never scheduled	Never scheduled	Dow AgroSciences

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
210	Pyraclostrobin	2003	None	Never scheduled	Never scheduled	BASF
211	Fludioxonil	2004	None	Never scheduled	Never scheduled	Syngenta
212	Metalaxyl-M	2002	None	Never scheduled	Never scheduled	Syngenta
213	Trifloxystrobin	2004	None	Never scheduled	Never scheduled	Bayer CropScience
214	Dimethenamid-P	2005	None	Never scheduled	Never scheduled	BASF
215	Fenhexamid	2005	None	Never scheduled	Never scheduled	Bayer CropScience
216	Indoxacarb	2005	None	Never scheduled	Never scheduled	DuPont
217	Novaluron	2005	None	Never scheduled	Never scheduled	Makhteshim-Agan
218	Sulfuryl fluoride	2005	None	Never scheduled	Never scheduled	Dow AgroSciences
219	Bifenazate	2006	None	Never scheduled	Never scheduled	Chemtura
220	Aminopyralid	2007	None	Never scheduled	Never scheduled	Dow AgroSciences
221	Boscalid	2006	None	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	DuPont
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	None	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	None	Never scheduled	Never scheduled	BASF
241	Etoxazole	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

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
247	Emamectin-benzoate	2011	None	Never scheduled	Never scheduled	Syngenta
248	Flutriafol	2011	None	Never scheduled	Never scheduled	Chemnova
249	Isopyrazam	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	2012 T (2018 R)	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
262	Bixafen	2013	None	Never scheduled	Never scheduled	Bayer CropScience
263	Cyantraniliprole	2013	None	Never scheduled	Never scheduled	DuPont
264	Fenamidone	2013/14	None	Never scheduled	Never scheduled	Bayer CropScience
265	Fluensulfone	2013/14	None	Never scheduled	Never scheduled	Makhteshim
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	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	None	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	None	Never scheduled	Never scheduled	Monsanto

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
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 (not in JMPR report)	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
999	Acibenzolar-S methyl	2016	None	Never scheduled	Never scheduled	Syngenta
999	Cyclaniliprole	2016	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
999	Imazethapyr	2016	None	Never scheduled	Never scheduled	BASF
999	Isofetamid	2016	None	Never scheduled	Never scheduled	Ishihara Sangyo Kaisha
999	Norflurazon	2018	None	Never scheduled	Never scheduled	Tessengerlo Kerley Inc.
999	Oxathiapiprolin	2016	None	Never scheduled	Never scheduled	DuPont
999	Pendimethalin	2016	None	Never scheduled	Never scheduled	BASF
999	Pinoxaden	2016	None	Never scheduled	Never scheduled	Syngenta
999	Spiromesifen	2016	None	Never scheduled	Never scheduled	Bayer CropScience
999	Bicyclopyrone	2017	none	Never scheduled	Never scheduled	Syngenta
999	Fenazaquin	2017	None	Never scheduled	Never scheduled	Gowan
999	Fenpyrazamine	2017	None	Never scheduled	Never scheduled	Sumitomo chemical
999	Isoprothiolane	2017	None	Never scheduled	Never scheduled	Nihon Nohyaku
999	Natamycin	2017	none	Never scheduled	Never scheduled	DSM Food Specialities
999	Phosphorous acid / fosetyl	2017	None	Never scheduled	Never scheduled	Nufarm / Bayer CropScience
999	Quinalophos	2017	None	Never scheduled	Never scheduled	na
999	Pydiflumetofen SYN545794	2018	None	Never scheduled	Never scheduled	Syngenta
999	Tricyclazole	2017	None	Never scheduled	Never scheduled	na
999	Triflumezopyrim	2017	None	Never scheduled	Never scheduled	DuPont
999	Pyrifluquinazon	2018	None	Never scheduled	Never scheduled	Nihon Nohyaku
999	Ethiprole	2018	None	Never scheduled	Never scheduled	Bayer CropScience
999	XDE-777	2018	none	Never scheduled	Never scheduled	Dow AgroSciences
999	Mandistrobilin	2018	None	Never scheduled	Never scheduled	Sumitomo Chemical
999	Metconazole	2018	None	Never scheduled	Never scheduled	Valent USA / Kureha

Code	Chemical	Initial JMPR evaluation	Periodic reviews	Scheduled (Tox)	Scheduled (Residues)	Notes
999	Fluazinam	2018	None	Never scheduled	Never scheduled	ISK Biosciences / Isihara Sangyo Kaisha
999	Pyriofenone	2018	None	Never scheduled	Never scheduled	ISK Biosciences / Isihara Sangyo Kaisha
999	Tioxazafen	2018	None	Never scheduled	Never scheduled	Monsanto
999	Broflalinide	2019	None	Never scheduled	Never scheduled	Landis Internaitonal / Mitsui Chemicals
999	BAS 750F	2019	None	Never scheduled	Never scheduled	BASF
999	Afidopyropen	2019	None	Never scheduled	Never scheduled	Meiji SeikaPharma / BASF

TABLE 4: CHEMICAL-COMMODITY COMBINATIONS FOR WHICH SPECIFIC GAP IS NO LONGER SUPPORTED

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)
162	Tolyfluanid	All commodities (EU GAP no longer supported)