

# codex alimentarius commission



FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD  
HEALTH  
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00153 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 10

CX/PR 09/41/8-Add.1  
March 2009

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON PESTICIDE RESIDUES

Forty-first Session

Beijing, China, 20-25 April 2009

#### ESTABLISHMENT OF CODEX PRIORITY LISTS OF PESTICIDES

(Prepared by Australia)

##### A. TENTATIVE SCHEDULE 2009-2014

1. The tentative schedule for evaluations and re-evaluations by the FAO/WHO JMPR is shown at Appendix 1. Information regarding the tentative schedule is provided below. Members and observers are invited to comment on the schedule and the associated issues noted for consideration (**in bold text**).

##### B. NEW COMPOUNDS

2. Eight new compounds have been nominated for inclusion on the tentative schedule (Appendix 1) for 2009 (1), 2010 (6) and 2011 (1).

##### 2009:

3. One new chemical fluopyram has been nominated by the United States for inclusion on the 2009 tentative schedule.

4. Fluopyram is a fungicide developed by Bayer CropScience AG for the control of fungal diseases. Codex MRLs are sought for root and tuber vegetables, bulb vegetables, leafy vegetables, brassica (cole) leafy vegetables, legume vegetables, fruiting vegetables, cucurbit vegetables, citrus fruits, pome fruits, stone fruits, small berries, grapes, strawberry, tree nuts, cereal grains (except rice), grasses (forage, fodder, hay), herbs and spices, artichoke, canola/rape, hops, peanuts, sunflower. The nomination form indicates that national registrations (US and Canada) will not be achieved until late 2009.

##### 5. Member countries, manufacturers and observers are asked to:

- **note and consider the nomination of fluopyram to the 2009 tentative schedule which does not fully meet the prioritisation criteria as there are no current fluopyram national registrations; and**

- **note that the 2009 schedule for follow-up evaluations and periodic re-evaluations has the normal number of entries and the workload is consistent with earlier CCPR decisions to balance the level of new evaluations and periodic re-evaluations.**

**2010:**

6. Six new chemicals have been nominated for inclusion on the 2010 tentative schedule. The chemicals (clothianidin, cyproconazole, thiamethoxam, emamectin-benzoate, flubendiamide and ethaboxam) are in addition to the four chemicals (dicamba, clopyralid, meptyldinocap and etoxazole) nominated prior to CCPR40. All six new compounds have registrations for use in a member country; are available for use as a commercial product; and give rise to residues in or on a food or feed commodity moving in international trade.

7. Japan has nominated clothianidin (systemic insecticide) for inclusion on the 2010 schedule. Codex MRLs are sought for corn, barley, wheat, rye, oilseed rape, lupin, sugar beet, sunflower, rice, cotton, sorghum, potato, poppy, mustard, carrot, cucumber, onion, lettuce, tomato, pepper, squash, cabbage, pome fruit, stone fruit, banana, grape, broccoli, eggplant, soybean, milk, egg, poultry meat.

8. Switzerland has nominated cyproconazole (a triazole fungicide) for inclusion on the 2010 schedule. Codex MRLs are sought for almond, apple, barely, bean, coffee, maize, oat, pea, peanut, rice, sugar beet, soybean, triticale and wheat.

9. Switzerland has nominated the insecticide thiamethoxam for inclusion on the 2010 schedule. Codex MRLs are sought for the following commodities of plant origin: aubergine, artichokes, asparagus, avocados, barley, banana, beans, beetroot, berries (blackberry, bush-berry, cranberries, currants, strawberries, others), brassicas (cabbage, broccoli, brussel sprouts, buckwheat, Chinese cabbage, others), carrots, citrus group (grapefruits, lemons, mandarins, oranges, others), cereals (barley, rye, wheat, others) celery, chicory, cocoa, coffee, cotton, cucurbits (cucumber, melon, watermelon, zucchini), fennel, garlic, ginkgo, ginseng, grapes, guava, hops, kaki, kiwifruit, lettuce, linseed, maize, mango, mushrooms, nuts (almonds, cashew, chestnuts, coconuts, hazelnuts, pistachio, others), onions, papaya, parsley, passion fruit, peanuts, peas, peppermint, peppers, pineapples, pome fruits (apples, pears, others), pomegranates, potatoes, radish, rice, root and tuber vegetables, safflower, salsify, sesame seeds, spinach, soybean, stone fruits (apricots, cherries, nectarines, peach, plums, others), sugar beets, sugarcane, sunflower, tea, tomatoes, watercress. Commodities of animal origin: cattle, (fat, kidney, liver, meat), goat, horse (meat), milk, pork (fat, kidney, liver, meat), poultry (meat, eggs), sheep (meat).

10. The United States has nominated the insecticide emamectin-benzoate for inclusion on the 2010 schedule. Codex MRLs are sought for Grapes, potatoes, pome & stone fruits, tomatoes, eggplants, cucurbits (cucumber, melon, watermelon), lettuce, spinach, pepper, beans & peas, brassicas.

11. Japan has nominated the insecticide flubendiamide for inclusion on the 2010 schedule. Codex MRLs are sought for Apples, pears, apricot, nectarine, peach, cherries, plum, prune, grape (table), raisin, wine (if MRL not included under table grape), almonds, pecans, walnuts, muskmelon, watermelon, cucumbers, summer squash, celery, head lettuce, leaf lettuce, spinach, broccoli, cauliflower, cabbage, mustard greens, tomatoes, peppers, sweet corn, corn, soybean, cotton seed, rice, tea, and corresponding animal commodity MRLs

12. The Republic of Korea has nominated the fungicide ethaboxam for inclusion on the 2010 schedule. A Codex MRL is sought for grapes

13. Sponsoring countries have indicated that relevant data packages are or will be available prior to the scheduled year of JMPR evaluation.

14. The presence of ten new chemicals on the 2010 tentative schedule for toxicological and residue evaluation presents a workload which appears beyond the resources of the JMPR. The results of consultation with nominating member countries and manufacturers during December 2008 indicated a preference to retain respective nominations on the 2010 schedule.

**15. Member countries, manufacturers and observers are asked to:**

- **note that the tentative placement of ten new chemicals on the 2010 tentative schedule is beyond the current capacity of the JMPR.**
- **consider options for modifying the tentative schedule for 2010, taking JMPR resources into account which could include considering additional prioritisation criteria to reduce the new chemical schedule to manageable numbers.**

**2011**

16. One new chemical MCPA has been nominated by the United States for inclusion on the 2011 tentative schedule. Codex MRLs are sought for wheat, barley and peas. MCPA has registrations for use in a member country; is available for use as a commercial product; and gives rise to residues in or on a food or feed commodity moving in international trade.

**C. FOLLOW-UP EVALUATIONS**

17. Requests were made for several follow-up evaluations largely for additional MRLs. Further details are provided in Appendix 1. The chemicals added to the evaluation schedule are:

2009: pyrimethanil (226) [EU] and buprofezin (173) [USA]

2010: bifentazate (219), chlorantraniliprole (230), boscalid (221), fludioxinil (211), novaluron (217) [all USA]

2011: spinosad (203) [USA]

**18. Member countries and observers are asked to consider the placement of additional follow-up evaluations to the tentative schedule.**

**D. PERIODIC RE-EVALUATIONS**

19. Following the annual review of the CCPR chemical list in terms of the fifteen year rule for periodic re-evaluations, nine chemicals [clethodim (187), fenpropimorph (188), teflubenzuron (190), ethephon (106), iprodione (111), tolclofos-methyl (191), phosalone (60), tebuconazole (189), chlormequat (15)] were listed on the tentative schedule for periodic re-evaluation (see Appendix 1).

20. Decisions on the scheduling of the nine chemicals, last reviewed in 1994, were based on member country / manufacturer preferences and the period of time elapsed since the last JMPR review.

21. The table in Appendix 2 has been further refined to enable use as a working document to keep track of the initial JMPR evaluation, most recent JMPR periodic evaluation and forthcoming scheduled periodic re-evaluation for toxicology and residues. From this table, four chemicals [fenthion (39), quintozone (64), fenarimol (192) and fenpyroximate (193)] which were last reviewed

in 1995 (and italicised in Appendix 2) will need to be considered for placement on the tentative schedule for periodic re-evaluation at CCPR42.

22. The following chemicals are no longer supported by the manufacturer: dicofol (26), procymidone (136) [scheduled for 2009], dichlofluanid (82), dinocap (87), bioresmethrin (93) and permethrin (120). These chemicals are highlighted (in bold) in Appendices 1 and 2, as are those chemicals for which support is as yet unknown.

23. **Member countries and observers are asked to:**

- **consider the placement of nine existing chemicals for periodic re-evaluation on the tentative schedule;**
- **note the listed chemicals for which there is no longer manufacturer support and consider whether or not to support these chemicals;**
- **give clear indications of support for procymidone, bioresmethrin, dinocap, permethrin and dichlofluanid with information on a new supporting manufacturer and relevant data packages;**
- **provide advice to the Chair of the Priorities Electronic Working Group in regard to support for those chemicals which are currently listed as ‘support unknown’; and**
- **consider the placement of chemicals on the tentative schedule following further alignment to allow toxicological and residue evaluations to be conducted in the same year, if possible.**

#### **E. ENHANCEMENTS TO THE TENTATIVE SCHEDULE FORMAT**

24. Following consultation with Secretariats, member countries, manufacturers and observers, the format of the tentative schedule has been expanded to include the manufacturer, the nominating country and the list of commodities for which Codex MRLs are sought.

25. The purpose of this additional information is to better inform member countries and observers and to encourage increased involvement. It is envisaged that the need for follow-up evaluations will be minimised if the original commodity listing provides member countries and observers advanced notice to include required additional commodities before the evaluation is conducted.

26. All chemicals scheduled for periodic re-evaluation, and for which manufacturer support has been withdrawn, are now highlighted with bold text **‘not supported by the manufacturer’**.

27. As soon as a chemical is scheduled for periodic re-evaluation, manufacturers are requested to indicate ongoing support and the relevant commodities. The purpose of this change is to alert all member countries and observers as early as practicable.

28. **Member countries and observers are asked to note the enhancements to the tentative schedule format and consider how the format may be further improved.**

#### **F: ALIGNMENT OF CCPR PRIORITISATION NOMINATIONS WITH JMPR CALL FOR DATA**

29. JMPR Secretariats have raised concerns in regard to the inclusion of additional evaluations on the CCPR Prioritisation Schedule, as part of the workings of the Electronic Working Group on Priorities, after the JMPR has finalised the list of substances scheduled for evaluation and published its ‘Call for Data’.

30. The JMPR 'Call for Data' document is released in October of each year and the deadline for Electronic Working Group on Priorities nominations is 30 November each year.

31. For 2009, the following changes were made to the CCPR Prioritisation Schedule after the JMPR 'Call for Data':

- the new chemical fluopyram was added;
- the new chemical ethaboxam was moved to 2010;
- procymidone will be deleted as it is no longer supported by the manufacturer;
- a follow up evaluation for pyrimethanil has been added; and
- a follow up evaluation for buprofezin has been added.

32. The solution is very simple and requires a minor administrative change to the procedures for the CCPR Electronic Working Group on Priorities. To explain: the JMPR schedule for 2009 should have been agreed at the 2008 CCPR meeting. If there are requests for late additions, the nominations must have been submitted by the latest 1 September 2008 and must have been presented to the Chair of the CCPR Electronic Working Group on Priorities and the JMPR Secretariat for consideration.

33. Therefore, the proposal for minor administrative change to the CCPR Electronic Working Group on Priorities is to agree that in future the JMPR schedule for a particular year must be finalised at the CCPR meeting of the previous year, ie. the 2010 JMPR schedule will be agreed at the 2009 CCPR meeting.

34. The Chair of the CCPR Electronic Working Group on Priorities will circulate a broadcast email to all members and observers in July of each year, as per usual, setting two (2) deadlines.

- The first deadline will be a 'last call' due by 1 September for late nominations to the JMPR schedule of the following year.
- The second deadline will be for all other nominations for any subsequent year's schedule. The deadline for these nominations will remain at 30 November of each year.

**35. Member countries and observers are asked to consider the proposed minor administrative changes and deadlines to the CCPR Electronic Working Group on Priorities to better align with the existing JMPR timetable for its 'Call for Data' document circulated in October of each year.**

2009 JMPR - TOXICOLOGICAL EVALUATIONS	2009 JMPR - RESIDUE EVALUATIONS
<b>NEW COMPOUNDS</b>	<b>NEW COMPOUNDS</b>
<b>fluopicolide</b> (Germany – Bayer CropScience)	<b>fluopicolide</b> [bell pepper, cucumber, grapes, lettuce, melons and tomato]
<b>spirodiclofen</b> (USA - Bayer CropScience)	<b>spirodiclofen</b> [citrus fruits, pome fruits, stone fruits, grapes, tree nuts, hops, tropical commodities]
<b>metaflumizone</b> (USA - BASF)	<b>metaflumizone</b> [tomato, pepper, eggplant, lettuce, spinach, broccoli, cabbage, orange, grapefruit, lemon, almond, walnut, pistachio, grape and potato]
<b>fluopyram</b> (USA – Bayer CropScience) – national registrations due in late 2009 [not listed in JMPR 2009 ‘call for data’]	<b>fluopyram</b> [Root and tuber vegetables, Bulb vegetables, Leafy vegetables, Brassica (cole) leafy vegetables, Legume vegetables, Fruiting vegetables, Cucurbit vegetables, Citrus fruits, Pome fruits, Stone fruits, Small berries, Grapes, Strawberry, Tree nuts, Cereal grains (except rice), Grasses (forage, fodder, hay), Herbs and spices, Artichoke, Canola/rape, Hops, Peanuts, Sunflower]
<b>Ethaboxam</b> –although listed in the 2009 JMPR ‘call for data’ was moved to 2010 on request of the manufacturer as data is not available in 2009.	
<b>PERIODIC RE-EVALUATIONS</b>	<b>PERIODIC RE-EVALUATIONS</b>
<b>chlorpyrifos-methyl (090)</b>	<b>chlorpyrifos-methyl (090)</b> [Dow AgroSciences] - citrus fruits, pome fruits, stone fruits, grapes, strawberry, kiwifruit, onion, tomato, peppers, beans, carrot, potato, sugar beet, artichoke globe, barley, maize, wheat, cotton seed, rape seed
<b>bifenthrin (178)</b>	<b>benalaxyl (155)</b> [cucurbits, grapes, lettuce, melon, onions, pepper, potato, tobacco, tomato, water melon]
<b>cadusafos (174)</b>	<b>haloxyfop (194)</b> [Dow AgroSciences] - [citrus fruits, pome fruits, grapes, banana, onion, beans, peas, soya bean, sugar beet, rice, cotton seed, rape seed, sunflower seed, alfalfa forage/fodder]
<b>chlorothalanil (081)</b>	<b>hexythiazox (176)</b> - Nippon Soda Ltd – [apple, cherries, citrus fruits, grapes, hops, peach, pear, plums, strawberry, almond, cranberry, corn, cotton, date]
<b>cycloxydim (179)</b>	<b>procymidone (136)</b> [not supported by the manufacturer – on 17/9/08, Sumitomo Chemical informed FAO that it will not support procymidone for JMPR evaluation]

EVALUATIONS	EVALUATIONS
<b>procymidone (136)</b> – review of ARfD (EC concern, based on new data) <b>[not supported by the manufacturer]</b>	<b>fenbuconazole (197)</b> [Dow AgroSciences] – re-evaluation of the pome fruits CXL; additional CXLs for almonds, blueberries, citrus, cranberries, peppers, plums and prunes
	<b>indoxacarb (216)</b> – additional MRLs for stone fruit (peach, plum, cherry, nectarine), vegetables cucurbits, cranberry, southern pea and mint.
	<b>methoxyfenozide (209)</b> [Dow AgroSciences] – additional CXLs for avocado, bean, blueberry, citrus, cranberry, cucurbits, papaya, pea, peanut, root commodities, soya bean, strawberry, sweet potato
	<b>paraquat (57)</b> – rice
	<b>phorate (112)</b> – acute intake for potatoes
	<b>prochloraz (142)</b> – acute intake for mushroom (alternative GAP)
	<b>spices</b> – additional MRLs
	<b>zoxamide (227)</b> – [Gowan Company] - cucurbits (based on new USA GAP)
	<b>fenthion (39)</b> – review of alternative GAPs (cherries, citrus fruit and olive)
	<b>triadimefon / triadimenol (133/168)</b> – alternative GAP (grapes)
	<b>carbofuran (096)</b> - additional residue and metabolism data, updated dietary risk assessment
	<b>pyrimethanil (226)</b> [Bayer CropScience] – stone fruit (peach, apricot, plum ..) <b>[not listed in JMPR 2009 ‘call for data’ and request to remove from schedule or deferred to a later year]</b>
	<b>buprofezin (173)</b> (USA) – almond, bean, fruiting vegetables, pome fruit, berry (low growing), avocado, guava, lychee, papaya, olive, grapes, pistachio, cucurbit vegetables, stone fruit, coffee <b>[not listed in JMPR 2009 ‘call for data’]</b>

2010 JMPR - TOXICOLOGICAL EVALUATIONS	2010 JMPR - RESIDUE EVALUATIONS
NEW COMPOUNDS	NEW COMPOUNDS
<b>dicamba</b> (USA – BASF)	<b>dicamba</b> [wheat, barley, corn, cottonseed, soybean, sugarcane molasses, asparagus, blueberry]
<b>clopyralid</b> (USA - Dow AgroSciences)	<b>clopyralid</b> [Hops, pome fruits, stone fruits, cranberry, strawberry, spinach, sugar beets, barley, corn, oats, sorghum, wheat, linseed, rape seed, grass forage]
<b>meptyldinocap</b> (UK – Dow AgroSciences)	<b>meptyldinocap</b> [Pome fruits, stone fruits, grapes, strawberries, cucurbits with edible and inedible peel]
<b>etoxazole</b> (USA – Sumitomo Chemical Co.)	<b>etoxazole</b> [grape, melons, cucumber, stone fruit, plum, hops, mint, tomato, coffee]
<b>clothianidin</b> (Japan - Sumitomo Chemical) - [dossier to be submitted late 2009]	<b>clothianidin</b> [corn, barley, wheat, rye, oilseed rape, lupin, sugar beet, sunflower, rice, cotton, sorghum, potato, poppy, mustard, carrot, cucumber, onion, lettuce, tomato, pepper, squash, cabbage, pome fruit, stone fruit, banana, grape, broccoli, eggplant, soybean, milk, egg, poultry meat]
<b>cyproconazole</b> (Switzerland – Syngenta) - [dossier to be submitted November 2009]	<b>cyproconazole</b> [Almond, apple, barely, bean, coffee, maize, oat, pea, peanut, rice, sugar beet, soybean, triticale and wheat.]
<b>thiamethoxam</b> (Switzerland – Syngenta)	<b>thiamethoxam</b> [ <u>Plant origin</u> : aubergine, artichokes, asparagus, avocados, barley, banana, beans, beetroot, berries (blackberry, bush-berry, cranberries, currants, strawberries, others), brassicas (cabbage, broccoli, brussel sprouts, buckwheat, Chinese cabbage, others), carrots, citrus group (grapefruits, lemons, mandarins, oranges, others), cereals (barley, rye, wheat, others) celery, chicory, cocoa, coffee, cotton, cucurbits (cucumber, melon, watermelon, zucchini), fennel, garlic, ginkgo, ginseng, grapes, guava, hops, kaki, kiwifruit, lettuce, linseed, maize, mango, mushrooms, nuts (almonds, cashew, chestnuts, coconuts, hazelnuts, pistachio, others), onions, papaya, parsley, passion fruit, peanuts, peas, peppermint, peppers, pineapples, pome fruits (apples, pears, others), pomegranates, potatoes, radish, rice, root and tuber vegetables, safflower, salsify, sesame seeds, spinach, soybean, stone fruits (apricots, cherries, nectarines, peach, plums, others), sugar beets, sugarcane, sunflower, tea, tomatoes, watercress. <u>Animal origin</u> : cattle, (fat, kidney, liver, meat), goat, horse (meat), milk, pork (fat, kidney, liver, meat), poultry (meat, eggs), sheep (meat).]
<b>emamectin-benzoate</b> ( USA -Syngenta) - [dossier to be submitted November 2009]	<b>emamectin-benzoate</b> [Grapes, potatoes, pome & stone fruits, tomatoes, eggplants, cucurbits (cucumber, melon, watermelon), lettuce, spinach, pepper, beans & peas, brassicas]
<b>flubendiamide</b> (Japan - Nihon Nohyaku) - [dossier to be submitted November 2009 and February 2010]	<b>flubendiamide</b> [Apples, pears, apricot, nectarine, peach, cherries, plum, prune, grape (table), raisin, wine (if MRL not included under table grape), almonds, pecans, walnuts, muskmelon, watermelon, cucumbers, summer squash, celery, head lettuce, leaf lettuce, spinach, broccoli, cauliflower, cabbage, mustard greens, tomatoes, peppers, sweet corn, corn, soybean, cotton seed, rice, tea, and corresponding animal commodity MRLs.
<b>ethaboxam</b> (Korea – LG Life Sciences Ltd.)	<b>ethaboxam</b> [grape]



PERIODIC RE-EVALUATIONS	PERIODIC RE-EVALUATIONS
<b>vinclozolin (159)</b> – support from USA	<b>vinclozolin (159)</b> – support from USA [commodities ???]
<b>dithianon (028)</b>	<b>amitraz (122)</b> – support unknown
<b>fenbutatin oxide (109)</b>	<b>azinphos-methyl (002)</b> – support unknown
<b>tebuconazole (189)</b>	<b>bifenthrin (178)</b> [FMC] - wheat, barley, corn, potato, hops, rye, sweet potato, brassica group, citrus group, lettuce, fruiting vegetables, cucurbit group, pear, berry group, grape, banana, cottonseed, rapeseed and tea.
	<b>cadusafos (174)</b> [FMC] - banana and potato
	<b>chlorothalanil (081)</b> [USA - Syngenta] [Barley, rice, triticale, wheat, lupin, soybean, lentil, sugar-beet, artichoke, asparagus, aubergine, bean, broccoli, brussel sprouts, cabbage, carrot, cauliflower, celery, cucumber, pumpkin, garlic, leek, lettuce, melon, onion, pea, peanut, peppers, shallot, spinach, tomato, watermelon, zucchini, sweet corn, potato, banana, blackberry, blueberry, citrus, cranberry, gooseberry, grape, mango, papaya, peach, plum, pome-fruit, apricot, cherry, nectarine, strawberry, cacao, coffee, hop, almond, pistachio, oil seed rape, animal commodities, ginseng, horseradish, okra, persimmon, rhubarb, yam]
	<b>cycloxydim (179)</b> [BASF] - Beans (green and dried), brassicae, carrot, grape, leek, lettuce (head and leafy), peas (fresh and dried), potato, rapeseed, strawberry, sugarbeet
EVALUATIONS	EVALUATIONS
	<b>fenpyroximate (193)</b> – re-evaluate data for grapes following JMPR recommended new ARfD, (USA – fruiting vegetables, okra, melons, cucumber, citrus fruits, pome fruit, tree nuts, pistachio, hops, mint)
	<b>difenoconazole (224)</b> - review of alternative GAP (banana – higher MRL (china); additional MRLs (green beans, passion fruit), (USA – tree nuts)
	<b>triazophos (143)</b> - residue evaluation in edible portion (soybean – immature seeds, Thailand); cereals incl. rice (China)
	<b>endosulfan (32)</b> - tea green / black (China)
	<b>bifenazate (219)</b> – [USA - Chemtura] - egg plant, tea, citrus fruits, melons, tropical fruits, caneberry, legume vegetables, soybean, peas and beans.

	<p><b>Chlorantraniliprole (230) (DuPont – USA] - brassica vegetables</b> (broccoli, cabbage (chinese, chinese mustard, green, head, napa, oxhead, pointed, red, savoy, white, yellow), mustard greens, cauliflower, broccoli (chinese), brussel sprouts, cavalo, broccoli, kailan and kohlrabi), <b>tree nuts</b> (almonds, beech nuts, brazil nuts, butternuts, cashews, chestnuts, chinquapins, filberts (hazelnuts), hickory nuts, japanese horse-chestnut, java almonds, macadamia nuts, pachira nuts, paradise nuts, pecans, pine nuts, pili nuts, pistachio nuts, sapucaia nuts, tropical almonds, and walnuts), <b>edible-podded beans</b> (bean (phaseolus spp.; includes runner bean, snap bean, wax bean); bean (vigna ssp., includes asparagus bean, chinese longbean, moth bean, yardlong bean); jackbean; soybean (immature seed); sword bean), <b>caneberries (cane fruits</b> - blackberry; loganberry; red and black raspberry; cultivars and/or hybrids of these), <b>strawberries, root and tuber vegetables</b> (arracacha; arrowroot; artichoke, chinese; artichoke, jerusalem; beet, garden; beet, sugar; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac; chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, spanish; skirret; sweet potato; tanier (cocoyam); turmeric; turnip; yam bean (jicama, manioc pea); yam, true), <b>sweet corn, maize/field corn, rice, mint, alfalfa seed, commodities of animal origin</b></p>
	<p><b>boscalid (221) (USA) – hops</b> (dried cones)</p>
	<p><b>fludioxonil (211) – USA – sweet potato, pomegranate</b> (post harvest)</p>
	<p><b>novaluron (217) – USA – turnips green, potato</b> (increase MRL), sweet potato, broccoli, cauliflower, collard greens, mustard greens, tomato (increase MRL), cherry ,p each, plum, blueberry, sugar cane.</p>

2011 JMPR - TOXICOLOGICAL EVALUATIONS	2011 JMPR - RESIDUE EVALUATIONS
<b>NEW COMPOUNDS</b>	<b>NEW COMPOUNDS</b>
MCPA (USA – Nufarm)	MCPA -Wheat grain, barley grain, peas
<b>PERIODIC RE-EVALUATIONS</b>	<b>PERIODIC RE-EVALUATIONS</b>
diquat (031) (Syngenta)	diquat (031) – Cereals (including barley, wheat, maize, oats, rice, sorghum), Oilseeds (including linseed, oilseed rape, soya bean, sunflower, cotton, poppy), Legume vegetable group (including peas, beans, lentils), Head brassica group (including cabbage), Flowering brassica group, Leafy brassica group, Fruiting vegetable group (including tomato, pepper), Root and tuber group (including carrot, radish, beetroot, sugarbeet, potato), Stem vegetable group (including asparagus, celery, leek), Cucurbits (edible and inedible peel), Bulb vegetables (including onion), Citrus fruit, Lettuce group, spinach, canary, lupine, mustard, apple, banana, chicory witloof, coffee, sweet corn, grape, herbs (including parsley and sage), hop, kohlrabi, lucerne, olive, peach, strawberry, clover, grass, alfalfa, sugarcane,
etofenprox (184) (Mitsui Chemicals Inc)	etofenprox (184) – commodities
dicofol (026) – no longer supported	dicofol (026) – not supported by the manufacturer (Dow AgroSciences)
dichlorvos (025) (AMVAC)	dithianon (028) [BASF] – pome fruit, cherry, grapes, hops, mandarin
fenpropathrin (185) maybe earlier pending data availability	fenbutatin oxide (109) [BASF] - Tree nuts, pome fruit, banana, cherry, citrus fruit, cucumber, grapes, raisins, stone fruit, strawberry, tomato, meat, milk, eggs
	tebuconazole (189) – [Bayer CropScience] - artichoke, banana, barley, brassica vegetables, broad bean, citrus, carrot, coffee beans, cucumber, elderberries, garlic, grapes, hops, leek, lettuce head, maize, mango, melons, oats, onion, papaya, peach, peanut, peppers sweet, plums, pome fruit, prunes, rape seed, rice, rye, soya bean, summer squash, sweet corn, tomato, watermelon, wheat.
<b>EVALUATIONS</b>	<b>EVALUATIONS</b>
	cyfluthrin (157) - soybean
	spinosad (203) – USA - cranberry, hops
2012 JMPR - TOXICOLOGICAL EVALUATIONS	2012 JMPR - RESIDUE EVALUATIONS
<b>NEW COMPOUNDS</b>	<b>NEW COMPOUNDS</b>

PERIODIC RE-EVALUATIONS	PERIODIC RE-EVALUATIONS
<b>bentazone (172) (BASF)</b>	<b>bentazone (172) [BASF]</b> - Beans (green and dried), peas (green and dried), cereals, maize, sorghum, onion, peanuts, potato, linseed, meat, milk, eggs.
<b>disulfoton (74)</b> – support from USA	<b>disulfoton (74)</b> – support from USA [commodities ?]
<b>fenvalerate (119)</b> – support from USA	<b>fenvalerate (119)</b> – support from USA [commodities ?]
<b>glufosinate-ammonium (175)</b> – (Bayer CropScience) supported	<b>glufosinate-ammonium (175)</b> – support from the manufacturer (Bayer CropScience) [commodities ?]
<b>tecnazene (115)</b> – support unknown	<b>tecnazene (115)</b> – support unknown
<b>aldicarb (117)</b> – support unknown	<b>fenpropathrin (185)</b> – support unknown
	<b>dichlorvos (025)</b> – AMVAC
EVALUATIONS	EVALUATIONS
2013 JMPR - TOXICOLOGICAL EVALUATIONS	2013 JMPR - RESIDUE EVALUATIONS
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC RE-EVALUATIONS	PERIODIC RE-EVALUATIONS
<b>bromide ion (47)</b> – support unknown	<b>bromide ion (47)</b> – support unknown
<b>dichlofluanid (82)</b> – no longer supported	<b>dichlofluanid (82)</b> – not supported by the manufacturer (Bayer CropScience)
<b>dinocap (87)</b> - no longer supported	<b>dinocap (87)</b> – not supported by the manufacturer (Dow AgroSciences)
<b>metalaxyl (138)</b> – support from USA	<b>metalaxyl (138)</b> – support from USA – supervised trials (Thailand)
<b>methidathion (51)</b> – support unknown	<b>methidathion (51)</b> – support unknown
<b>triforine (116) (Sumitomo Co.)</b>	<b>triforine (116)</b> – commodities
	<b>aldicarb (117)</b> – support unknown
EVALUATIONS	EVALUATIONS

2014 JMPR - TOXICOLOGICAL EVALUATIONS	2014 JMPR - RESIDUE EVALUATIONS
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC RE-EVALUATIONS	PERIODIC RE-EVALUATIONS
bromopropylate (70) – support unknown	bromopropylate (70) – support unknown
diazinon (22) – support unknown	diazinon (22) – support unknown
hydrogen phosphide (46) – support unknown	hydrogen phosphide (46) – support unknown
myclobutanil (181) (Dow AgroSciences)	myclobutanil (181) [Dow AgroSciences]- pome fruits, stone fruits, black currant, grapes, strawberry, banana, hops, tomato]
penconazole (182) (Syngenta)	penconazole (182) – Brassica Vegetables (Broccoli, Brussels sprouts, Cauliflower, Chinese cabbage), Pome Fruit, Fruiting Vegetables (Tomato, Pepper, Aubergine), Root and Tuber Vegetables (Carrot, Parsnip, Turnip), Cucurbit vegetables (Cucumber, Melon, Watermelon, Pumpkin, Zucchini), Berries (Blackberry, Blueberry, Blackcurrant, Gooseberry, Raspberry, Cranberry), Stone Fruit (Apricot, Cherry, Peach, Plum), Legume Vegetables (peas, beans), Nuts (Almond, Pecan, Cashew, Jujube, Pistachio, Hazelnut, Pine nut, Macadamia, Chestnut), Soya, Strawberry, Loganberry, Sugarbeet, Tobacco, Potato, Clementine, grapefruit, Nectarine, Cumquat, Mango, Gherkin, Loquat, Asparagus, Leek, Banana, Lambs Lettuce, Rocket, Chicory, Canola, Parsley, Mint, Papaya, Alfalfa, Barley, Rice, Wheat, Sweet Corn, Hops, Lentil, Persimmon, Avocado, Artichoke, Grapes, Onion, Fennel
phosalone (60) – support unknown	phosalone (60) – support unknown
EVALUATIONS	EVALUATIONS
2015 JMPR - TOXICOLOGICAL EVALUATIONS	2015 JMPR - RESIDUE EVALUATIONS
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC RE-EVALUATIONS	PERIODIC RE-EVALUATIONS
abamectin (177) (Syngenta)	abamectin (177) – Pome fruits, cucurbits (edible and inedible peel), grapes, citrus fruits, stone fruits, strawberries, hops, leafy vegetables (lettuce, spinach, endive, celery), potato, almond, walnut, bean, coffee, cotton, Fruiting vegetables (tomato, aubergine, pepper, sweet pepper), avocado, papaya, mango, avocado, onion

<b>chlormequat (15) (BASF)</b>	<b>chlormequat (15) [BASF]</b> - Cereals, cottonseed, maize, rapeseed, maize fodder, cereals fodder/straw, meat, milk, eggs
<b>clethodim (187)</b>	<b>clethodim (187) (USA)</b> bean, broccoli, cabbage, carrot, cranberry, cucurbits, hops, lettuce, pea, strawberry
<b>ethephon (106) – support unknown</b>	<b>ethephon (106) – support unknown</b>
<b>fenpropimorph (188) –(BASF)</b>	<b>fenpropimorph (188) [BASF]</b> banana, cereals, sugar beet, cereals fodder/straw, meat, milk, eggs
<b>teflubenzuron (190) – support unknown</b>	<b>teflubenzuron (190) – support unknown</b>
<b>EVALUATIONS</b>	<b>EVALUATIONS</b>
<b>2016 JMPR - TOXICOLOGICAL EVALUATIONS</b>	<b>2016 JMPR - RESIDUE EVALUATIONS</b>
<b>NEW COMPOUNDS</b>	<b>NEW COMPOUNDS</b>
<b>PERIODIC RE-EVALUATIONS</b>	<b>PERIODIC RE-EVALUATIONS</b>
<b>bioresmethrin (93) – not supported by manufacturer</b>	<b>bioresmethrin (93) – not supported by the manufacturer</b>
<b>iprodione (111) (BASF)</b>	<b>iprodione (111) – [BASF]</b> – 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.
<b>permethrin (120) - not supported by manufacturer</b>	<b>permethrin (120) - not supported by the manufacturer</b>
<b>tolclofos-methyl (191) – support unknown</b>	<b>tolclofos-methyl (191) – support unknown</b>
<b>EVALUATIONS</b>	<b>EVALUATIONS</b>

## Appendix 2: Periodic Re-evaluations

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
7	captan	1963	1995T, 2004T(ARfD), 2000R			
8	carbaryl	1965	2001T(ADI, ARfD), 2002R			
27	dimethoate	1965	1996T, 2003T(ARfD), 1998R			
32	endosulfan	1965	1998T, 2006R			
48	lindane	1965	2002T, 2003R			
49	malathion	1965	1997T, 2003T(ARfD), 1999R			
53	mevinphos	1965	1996T, 1997T(Environmental), 1997R			
59	parathion-methyl	1965	1995T, 2000R			
62	piperonyl butoxide	1965	1995T, 2001T(ARfD), 2001R			
63	pyrethrins	1965	2003T, 2000R			
105	dithiocarbamates	1965	1996T, 1993R, 2004 propineb			Individual dithiocarbamates are evaluated, propineb in 2004, ferbam/ziram (1996)
30	diphenylamine	1969	1998T, 2001R			
35	ethoxyquin	1969	2005T, 1999R			
37	fenitrothion	1969	2000T, 2007T(ADI, ARfD), 2003R			
41	folpet	1969	1995T, 2007T(ARfD), 1998R			
56	2-phenylphenol	1969	1999			
64	quintozene	1969	1995			
20	2,4-D	1970	1996T, 2001T(ARfD), 1998R			
57	paraquat	1970	2003T, 2004R			
65	thiabendazole	1970	1997T(JECFA), 2006T(ARfD), 1997R			
67	cyhexatin	1970	2005T, 2005R			

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
39	<i>fenthion</i>	1971	1995, 1997T(ARfD)			
17	chlorpyrifos	1972	1999T, 2000R			
72	carbendazim	1973	1995T, 2005T(ARfD), 1998R			
79	amitrole	1974	1997T, 1998R			
83	dicloran	1974	1998			
84	dodine	1974	2000T, 2003R			
85	fenamiphos	1974	1997T, 2002T(ARfD), 1999R			
86	pirimiphos-methyl	1974	1992T, 2006T(ARfD), 2003R			
94	methomyl	1975	2001			
95	acephate	1976	2005T, 2003R			
96	carbofuran	1976	1996T, 2008T(ARfD), 1997R			
100	methamidophos	1976	2002T, 2003R			
101	pirimicarb	1976	2004			
102	maleic hydrazide	1976	1996T, 1998R			
103	phosmet	1976	1994T, 2003T(ARfD), 1997R			
110	imazalil	1977	2000T, 2005T(ARfD)			
112	phorate	1977	2004T, 2005R			
113	propargite	1977	1999T, 2002R			
133/168	triadimefon / triadimenol	1979	2004T, 2007R			
118	cypermethrin	1979	2006T, 2008R			
129	azocyclotin	1979	2005T, 2005R			
126	oxamyl	1980	2002			
135	deltamethrin	1980	2000T, 2002R			
130	diflubenzuron	1981	2001T, 2002R			
132	methiocarb	1981	1998T, 1999R			
143	triazophos	1982	2002T, 2007R			
142	prochloraz	1983	2001T, 2004R			
144	bitertanol	1983	1998T, 1999R			
149	ethoprophos	1983	1999T, 2004R			
145	carbosulfan	1984	2003T, 1997R			
146	lambda-cyhalothrin		2007T, 2008R			



Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
	cyhalothrin	1984	2004(JECFA)			
147	methoprene	1984	2001T 2005R			
148	propamocarb	1984	2005T, 2006R			
151	dimethipin	1985	1999T, 2004T( <i>ARfD</i> ), 2001R			
156	clofentezine	1986	2005T, 2007R			
157	cyfluthrin	1986	2006T, 2007R			
158	glyphosate	1986	2004			
160	propiconazole	1987	2004T, 2007R			
162	tolyfluanid	1988	2002			
165	flusilazole	1989	2007			
166	oxydemeton-methyl	1989	2002T, 1998R			
167	terbufos	1989	2003T			
169	cyromazine	1990	2006T, 2007R			
171	profenofos	1990	2007T, 2008R			
173	buprofezin	1991	2008			
192	<i>fenarimol</i>	1995	<i>none</i>			
193	<i>fenpyroximate</i>	1995	2007T( <i>ARfD</i> )			
195	flumethrin	1996	<i>none</i>			
196	tebufenozide	1996	2003T( <i>ARfD</i> )			
105	ferbam	1965	1996T			Dithiocarbamates
105	ziram	1965	1996T			Dithiocarbamates
197	fenbuconazole	1997	<i>none</i>			
199	kresoxim-methyl	1998	<i>none</i>			
200	pyriproxyfen	1999	<i>none</i>			
201	chlorpropham	2000	2005T(ADI, <i>ARfD</i> )			
202	fipronil	1997	2000T,			
203	spinosad	2001	<i>none</i>			
204	esfenvalerate	2002	<i>none</i>			
205	flutolanil	2002	<i>none</i>			
206	imidacloprid	2001	<i>none</i>			
207	cyprodinil	2003	<i>none</i>			
208	famoxadone	2003	<i>none</i>			
209	methoxyfenozide	2003	<i>none</i>			
210	pyraclostrobin	2003	<i>none</i>			
211	fludioxonil	2004	<i>none</i>			

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
212	metalaxyl-M	2002	none			
213	trifloxystrobin	2004	none			
105	propineb	1997	2004T			Dithiocarbamates
214	dimethenamid-P	2005	none			
215	fenhexamid	2005	none			
216	indoxacarb	2005	none			
217	novaluron	2005	none			
218	sulfuryl fluoride	2005	none			
219	bifenazate	2006	none			
221	boscalid	2006	none			
222	quinoxifen	2006	none			
223	thiacloprid	2006	none			
220	aminopyralid	2007	none			
224	difenoconazole	2007	none			
225	dimethomorph	2007	none			
226	pyrimethanil	2007	none			
227	zoxamide	2007	none			
229	azoxystrobin	2008	none			
230	chlorantraniliprole	2008	none			
231	mandipropamid	2008	none			
232	prothioconazole	2008	none			
233	spinetoram	2008	none			
234	spirotetramat	2008	none			
136	procymidone	1981	2007T		2009	<b>Not supported by manufacturer</b>
155	benalaxyl	1986	2005T		2009	support
176	hexythiazox	1991	2008T		2009	support from Nippon Soda
194	haloxyfop	1995	2006T		2009	support from Dow AgroSciences
2	azinphos-methyl	1965	2007T		2010	<b>support unknown</b>
122	amitraz	1980	1998T		2010	<b>support unknown</b>
90	chlorpyrifos-methyl	1975	2001T	2009	2009	support from Dow AgroSciences
81	chlorothalonil	1974	1992T, 1993R	2009	2010	support from USA - Syngenta
174	cadusafos	1991	none	2009	2010	support from FMC
178	bifenthrin	1992	none	2009	2010	support from FMC
179	cycloxydim	1992	none	2009	2010	support from BASF
159	vinclozolin	1992	1995	2010	2010	support from USA

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
109	fenbutatin oxide	1977	1992T, 1993R	2010	2011	support from BASF
180	dithianon	1992	none	2010	2011	support from BASF
189	tebuconazole	1994	none	2010	2011	support from Bayer CropScience
26	dicofol	1968	1992	2011	2011	<b>Not supported by manufacturer</b>
31	diquat	1970	1993T, 1994R	2011	2011	Syngenta
184	etofenprox	1993	none	2011	2011	Mitsui Chemical Inc
25	dichlorvos	1965	1993	2011	2012	AMVAC
185	fenpropathrin	1993	none	2011	2012	<b>support unknown</b>
74	disulfoton	1973	1996T(ARfD)	2012	2012	support from USA
115	tecnazene	1974	1994T	2012	2012	<b>support unknown</b>
119	fenvalerate	1979	1986T	2012	2012	support from USA
172	bentazone	1991	1998T, 2004T(ARfD)	2012	2012	support from BASF
175	glufosinate-ammonium	1991	1999T	2012	2012	support from Bayer CropScience
117	aldicarb	1979	1992T, 1995T(ARfD), 1994R	2012	2013	<b>support unknown</b>
47	bromide ion	1968	1988T	2013	2013	<b>support unknown</b>
82	dichlofluanid	1969	1983T	2013	2013	<b>Not supported by manufacturer</b>
87	dinocap	1969	1998T, 2000T(ARfD)	2013	2013	<b>Not supported by manufacturer</b>
51	methidathion	1972	1997T, 1992	2013	2013	<b>support unknown</b>
116	triforine	1977	1997T	2013	2013	support from Sumitomo Co.
138	metalaxyl	1982	2002T	2013	2013	Review in 2004 for residues was for evaluation of metalaxyl-M Support from USA - Supervised trials by Thailand
22	diazinon	1965	2006T, 1993	2014	2014	<b>support unknown</b>
46	hydrogen phosphide	1965	1966T	2014	2014	<b>support unknown</b>
60	phosalone	1972	1997T, 2001T(ARfD), 1994R	2014	2014	<b>support unknown</b>
70	bromopropylate	1973	1993	2014	2014	<b>support unknown</b>
181	myclobutanil	1992	none	2014	2014	support from Dow AgroSciences
182	penconazole	1992	none	2014	2014	Syngenta
15	chlormequat	1970	1997T, 1999T(ARfD) 1994	2015	2015	support from BASF
106	ethephon	1977	1997T, 2002T(ARfD), 1994R	2015	2015	<b>support unknown</b>
177	abamectin	1992	1997T	2015	2015	Syngenta

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation most recent	Scheduled (Toxicological)	Scheduled (Residues)	notes
187	clethodim	1994	1999T(ARfD)	2015	2015	support from USA
188	fenpropimorph	1994	2004T(ARfD)	2015	2015	support from BASF
190	teflubenzuron	1994	none	2015	2015	<b>support unknown</b>
93	bioresmethrin	1975	1991T, none	2016	2016	<b>not supported by manufacturer</b>
111	iprodione	1977	1995T, 1994R	2016	2016	support from BASF
120	permethrin	1979	1999T	2016	2016	<b>not supported by manufacturer</b>
191	tolclofos-methyl	1994	none	2016	2016	<b>support unknown</b>

**Chemicals with extraneous MRLs and recent deletions (Source: CX/PR 07/39/3)**

Code	Chemical	Last toxicological evaluation	Last residue evaluation		comment
33	endrin	1994 (PTDI)	1970	EMRL	
1	aldrin and dieldrin	1994(PTDI)	1977	EMRL	
12	chlordane	1994(PTDI)	1986	EMRL	
43	heptachlor	1994(PTDI)	1991	EMRL	
21	DDT	2000(PTDI)	2000	EMRL	
52	methyl bromide	1992	1968	PART A3	
114	guazatine	1997	1978	PART A3	
40	fentin	1991	1991	none	Not supported - Removed 2007