

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

E

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4363 - E-mail: [codex@fao.org](mailto:codex@fao.org) - [www.codexalimentarius.org](http://www.codexalimentarius.org)

REP12/PR

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

35<sup>th</sup> Session

Geneva, Switzerland, 2 – 7 July 2012

REPORT OF THE 44<sup>th</sup> SESSION OF THE

CODEX COMMITTEE ON PESTICIDE RESIDUES

Shanghai, China, 23 - 28 April 2012

Note: This report includes Codex Circular Letter CL 2012/10-PR.

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

E

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4593 - E-mail: [codex@fao.org](mailto:codex@fao.org) - [www.codexalimentarius.org](http://www.codexalimentarius.org)

CX 4/40.2

CL 2012/10-PR  
May 2012

To: - Codex Contact Points  
- Interested International Organizations

From: Secretariat,  
Codex Alimentarius Commission,  
Joint FAO/WHO Food Standards Programme,  
E-mail: [codex@fao.org](mailto:codex@fao.org),  
Fax: +39 06 57054593)  
Viale delle Terme di Caracalla,  
00153 Rome, Italy

**SUBJECT: DISTRIBUTION OF THE REPORT OF THE 44<sup>TH</sup> SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES (REP11/PR)**

The report of the 44<sup>th</sup> Session of the Codex Committee on Pesticide Residues will be considered by the 35<sup>th</sup> Session of the Codex Alimentarius Commission (Rome, Italy, 2 – 7 July 2012).

**PART A: MATTERS FOR ADOPTION BY THE 35<sup>TH</sup> SESSION OF THE CODEX ALIMENTARIUS COMMISSION:**

1. **Draft Maximum Residue Limits for Pesticides at Step 8** (paras. 28 - 85 and Appendix II);
2. **Draft Revision to the Codex Classification of Food and Animal Feed (fruit commodity groups) at Step 8** (para. 107 and Appendix VIII);
3. **Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups (including Table 1: Examples of the selection of representative commodities - fruit commodity groups) at Step 8** (para. 127 and Appendix XI); and
4. **Proposed Draft Maximum Residue Limits for Pesticides at Step 5/8 (with omission of Steps 6/7)** (paras. 28 - 85 and Appendix III).

Governments and international organizations wishing to submit comments on the above draft and proposed draft MRLs, should do so in writing, in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (Part 3 – Uniform Procedure for the Elaboration of Codex Standards and Related Texts, Procedural Manual of the Codex Alimentarius Commission), **preferably by email**, to the above address **before 15 June 2012**.

5. **Proposed Draft Maximum Residue Limits for Pesticides at Step 5** (paras. 28 – 85 and Appendix IV); and
6. **Proposed Draft Revision to the Codex Classification of Food and Animal Feed at Step 5 – selected vegetable commodity groups** (para. 117 and Appendix IX).

Governments and international organizations wishing to submit comments on the above matters, should do so in writing, in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (Part 3 – Uniform Procedure for the Elaboration of Codex Standards and Related Texts, Procedural Manual of the Codex Alimentarius Commission), **preferably by email**, to the above address **before 15 June 2012**.

**PART B: OTHER MATTERS FOR ACTION BY THE 35<sup>TH</sup> SESSION OF THE CODEX ALIMENTARIUS COMMISSION**

7. **Codex Maximum Residue Limits for Pesticides recommended for Revocation** (paras. 28 - 85 and Appendix V); and
8. **Analysis of Pesticides Residues: Recommended Methods (CODEX STAN 229-1993)** (para. 183).

Governments and international organizations wishing to submit comments on the proposed revocations on Codex MRLs and other related texts should do so in writing, **preferably by email**, to the above address **before 15 June 2012**.

**PART C: REQUEST FOR COMMENTS AND INFORMATION ON:**

9. Proposed draft Table 2: Examples of the selection of representative commodities - selected vegetable commodity groups - *Brassica (cole or cabbage) vegetables, Head cabbages and Flowerhead cabbages; Leafy vegetables (including brassica leafy vegetables); and Stalk and stem vegetables* (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups) (para. 128 and Appendix XII)

Governments and international organizations wishing to submit comments on the proposed revocations on Codex MRLs and other related texts should do so in writing, preferably by email, to the above address **before 15 August 2012**.

10. Matters related to the 2012 JMPR including Concern Forms (paras. 28 - 85)

Those countries and observers specified under individual compounds concerning matters related to the 2012 JMPR (e.g. GAP, residue evaluation, intake assessment, etc.) on specific pesticide/commodity(ies) to be considered by 2012 JMPR, including submission of concern forms together with necessary data, are invited to send information or data to: **1)** Ms Yong Zhen YANG, Agricultural Officer and JMPR Secretary, Viale delle Terme di Caracalla, Rome 00153, Italy, Fax: +39 06 57053224, E-mail: [YoungZhen.Yang@fao.org](mailto:YoungZhen.Yang@fao.org); **2)** Dr Philippe VERGER, WHO JMPR Secretary, Appia Avenue 20, 1211 Geneva 27, Switzerland, Fax: +41 22 791 4807, E-mail: [vergerp@who.int](mailto:vergerp@who.int); **3)** Dr Xiongwu QIAO, Shanxi Academy of Agricultural Sciences, 2 Changfeng Street, Taiyuan, Shanxi Province, 030006, P.R. China, Fax: +86 351 7126215, E-mail: [ccpr\\_qiao@agri.gov.cn](mailto:ccpr_qiao@agri.gov.cn), [ccpr@agri.gov.cn](mailto:ccpr@agri.gov.cn); and **4)** Secretariat, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00153 Rome, Italy, Fax: +39 06 57054593; E-mail: [codex@fao.org](mailto:codex@fao.org) **before 15 June 2012**.

Those countries and observers specified under individual compounds in REP12/PR, Appendix XIII concerning matters related to the future JMPR meetings (GAPs, residue evaluation, intake assessment, etc.) on specific pesticide/commodity(ies) to be considered at subsequent years by JMPR, are invited to send information or data **one year before** JMPR considers these compounds at the addresses indicated above.

## SUMMARY AND CONCLUSIONS

### MATTERS FOR ADOPTION BY THE 34<sup>TH</sup> SESSION OF THE COMMISSION

#### Draft and proposed draft MRLs for pesticides and other related texts

- Draft and proposed draft MRLs for pesticide at Steps 8 and 5/8 with omission of Steps 6/7 (paras. 28 - 85 and Appendices II and III);
- Draft Revision to the Codex Classification of Food and Animal Feed (fruit commodity groups) at Step 8 (para. 107 and Appendix VIII) ;
- Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups (including Table 1: Examples of the selection of representative commodities - fruit commodity groups) at Step 8 (para. 127 and Appendix XI);
- Proposed Draft MRLs for pesticides at Step 5 (paras. 28 - 85 and Appendix IV); and
- Proposed Draft Revision to the Codex Classification of Food and Animal Feed at Step 5 – selected vegetable commodity groups (para. 117 and Appendix IX).

#### Revocation of MRLs for pesticides and other related texts

- Revocation of Codex MRLs for pesticides (paras 29 - 85 and Appendix V);
- Revocation of CODEX STAN 229-1993 - Analysis of Pesticide Residues: Recommended Methods (para. 183); and
- Revocation of fruit commodity groups in the Codex Classification of Food and Animal Feed (CAC/MISC 4-1993) (to be replaced by corresponding provisions of the revised fruit commodity groups in Appendix VIII of REP12/PR as part of the ongoing revision of the Classification) (para. 107).

#### Approval of new work

- Priority List for the Establishment of MRLs for Pesticides (para. 169 and Appendix XIII).

### MATTERS OF INTEREST TO THE COMMISSION

The Committee:

- considered how to address methods of analysis for pesticide residues in relation to the request of the 34<sup>th</sup> Session of the Commission to develop criteria as opposed to a list of methods of analysis and reasserted its previous decision to recommend revocation of the Standard of Analysis of Pesticide Residues: Recommended Methods (CODEX STAN 229-1993) by the Commission and agreed to develop performance criteria for suitability assessment of methods of analysis (para. 185);
- noted matters arising from the 2012 JMPR including replies to specific concerns raised by the last session of the Committee (paras. 17 - 27);
- agreed to retain several draft and proposed draft MRLs for pesticides at Steps 7 and 4 awaiting for JMPR evaluations (paras. 28 – 85 and Appendices VI and VII);
- agreed that the 2012 JMPR should continue to elaborate MRLs proposals with and without making use of the concept of proportionality so that the result could be compared and agreed to consider principles and guidance for the use of the concept of proportionality to estimate MRLs (paras. 89 - 90);
- agreed to retain at Step 4 all proposed draft MRLs for the new chemical sulfoxaflor evaluated by the 2011 JMPR awaiting the outcome of the pilot project for JMPR recommendation of MRLs before national governments or other regional registration authorities for a global joint review chemical (para. 94 and Appendix VII);
- agreed to hold the commodity group on “edible flowers” at Step 7 pending finalization of the revision of the Classification of Food and Animal Feed in relation to the herbs group (para. 108 and Appendix X);
- agreed to continue to work on the revision of the Classification of Food and Animal Feed through the identification of other commodity groups including the need for revision of group MRLs in relation to the revised Classification for the fruit commodity groups (para. 126);
- agreed to continue to work on examples of selection of representative commodities for vegetable and other commodity groups (Table 2 of the draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups) (para. 128 and Appendix XII);

- continue the revision of the Risk Analysis Principles applied by the Codex Committee on Pesticide Residues with focus on the Periodic Review Procedure and the concern form / other forms (para. 163 and Appendix XIV);
- agreed on the criteria for use by CCPR and JMPR to determine the minimum number of field trials necessary to support the establishment of MRLs for minor crops / specialty crops in order to facilitate data submission to JMPR and to further develop these criteria including other related matters (paras. 132 and 138);
- encourage countries for financial and expertise support to the JMPR work and agreed that the issue of JMPR resources for the provision of scientific advice to CCPR should be raised at the governing bodies of FAO and WHO (para. 173);

Summary and Conclusions .....	iii
Report of the 44 <sup>th</sup> Session of the Codex Committee on Pesticide Residues .....	1
Status of work .....	17

## TABLE OF CONTENTS

	Paragraphs
INTRODUCTION .....	1
OPENING OF THE SESSION .....	2 - 4
DIVISION OF COMPETENCE .....	5
ADOPTION OF THE AGENDA (AGENDA ITEM 1) .....	6 - 9
APPOINTMENT OF RAPPORTEURS (AGENDA ITEM 2) .....	10
MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND CODEX COMMITTEES (AGENDA ITEM 3) .....	11 - 12
MATTERS OF INTEREST ARISING FROM FAO AND WHO (AGENDA ITEM 4A) .....	13 - 15
MATTERS OF INTEREST ARISING FROM OTHER INTERNATIONAL ORGANIZATIONS (AGENDA ITEM 4B) .....	16
REPORT ON ITEMS OF GENERAL CONSIDERATION BY THE 2011 JOINT FAO/WHO MEETINGS ON PESTICIDE RESIDUES (JMPR) (AGENDA ITEM 5A) .....	17 - 25
REPORT ON 2011 JMPR RESPONSES TO SPECIFIC CONCERNS RAISED BY CCPR (AGENDA ITEM 5B) .....	26 - 27
DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES IN FOOD AND FEED AT STEPS 7 AND 4 (AGENDA ITEM 6A) .....	25 - 89
GENERAL REMARKS .....	28
Dichlorvos (025) .....	29 - 30
Dicofol (026) .....	31
Acephate (095) .....	32
Methamidophos (100) .....	33
Cypermethrins (including alpha- and zeta- cypermethrin) (118) .....	34
Diflubenzuron (130) .....	35 - 36
Glyphosate (158) .....	37
Tolyfluanid (162) .....	38
Profenofos (171) .....	39
Hexythiazox (176) .....	40 - 41
Bifenthrin (178) .....	42 - 44
Etofenprox (184) .....	45 - 46
Tebuconazole (189) .....	47 - 51
Spinosad (203) .....	52
Esfenvalerate (204) .....	53
Pyraclostrobin (210) .....	54 - 56
Indoxacarb (216) .....	57
Difenoconazole (224) .....	58

Azoxystrobin (229) .....	59 - 60
Spirotetramate (234) .....	61 - 62
Clothianidin (238) .....	63 - 65
Dicamba (240) .....	66 - 68
Etoazole (241) .....	69
Acetamiprid (246) .....	70 - 73
Emamectin Benzoate (247) .....	74
Flutriafol (248) .....	75 - 76
Isopyrazam (249) .....	77
Propylene Oxide (250) .....	78
Saflufenacil (251) .....	79 - 80
Spices .....	81 - 85
GENERAL CONSIDERATION ON THE APPLICATION OF THE PROPORTIONALITY APPROACH .....	86 - 91
PILOT PROJECT FOR JMPR RECOMMENDATION OF MRLS BEFORE NATIONAL GOVERNMENTS OR OTHER REGIONAL REGISTRATION AUTHORITIES FOR A GLOBAL JOINT REVIEW CHEMICAL: Proposed Draft MRLs for sulfoxaflor in different commodities at Step 4 (AGENDA ITEM 6B)	
UPDATE ON THE PILOT PROJECT AND THE PROGRESS OF THE NATIONAL GLOBAL JOINT REVIEW (AGENDA ITEM 6C) .....	92 - 94
DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 7: FRUIT COMMODITY GROUPS (EXCLUDING EDIBLE FLOWERS AND ASSORTED TROPICAL AND SUBTROPICAL FRUITS: EDIBLE AND INEDIBLE PEEL) (AGENDA ITEM 7A)	
DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 7: EDIBLE FLOWERS AND ASSORTED TROPICAL AND SUBTROPICAL FRUITS: EDIBLE AND INEDIBLE PEEL (AGENDA ITEM 7B) .....	95 - 108
PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 4: SELECTED VEGETABLE COMMODITY GROUPS (AGENDA ITEM 7C) .....	109 - 117
DRAFT PRINCIPLES AND GUIDANCE FOR THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS (including Table 1: Examples of the selection of representative commodities - fruit commodity groups) AT STEP 7 (AGENDA ITEM 8A)	
PROPOSED DRAFT TABLE 2: EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES - SELECTED VEGETABLE COMMODITY GROUPS (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups) AT STEP 4 (AGENDA ITEM 8B) .....	118 - 128
DISCUSSION PAPER ON THE GUIDANCE TO FACILITATE THE ESTABLISHMENT OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES FOR MINOR CROPS AND SPECIALTY CROPS (AGENDA ITEM 9) .....	129 - 139
REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES (AGENDA ITEM 10) .....	140 - 163
ESTABLISHMENT OF CODEX PRIORITY LISTS OF PESTICIDES (AGENDA ITEM 11) .....	164 - 169
OTHER BUSINESS AND FUTURE WORK (AGENDA ITEM 12)	
Discussion paper on JMPR resource issues in the provision of scientific advice to CCPR (Agenda Item 12a) .....	170 - 173
Assessment of MRLs for pesticides in tea (Agenda Item 12b) .....	174 - 178
Methods of analysis for the determination of pesticide residues in food and feed (Agenda Item 12c) .....	179 - 185
DATE AND PLACE OF THE NEXT SESSION (AGENDA ITEM 13) .....	186

## LIST OF APPENDICES

	Pages
APPENDIX I	LIST OF PARTICIPANTS ..... 19
APPENDIX II	DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (AT STEP 8) ..... 37
APPENDIX III	PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (AT STEP 5/8) ..... 38
APPENDIX IV	PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (AT STEP 5) ..... 46
APPENDIX V	CODEX MAXIMUM RESIDUE LIMITS FOR PESTICIDES RECOMMENDED FOR REVOCATION ..... 47
APPENDIX VI	DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (AT STEP 7) ..... 49
APPENDIX VII	PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (AT STEP 4) ..... 51
APPENDIX VIII	DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED: Fruit Commodity Groups (AT STEP 8) ..... 53
APPENDIX IX	PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED: Selected Vegetable Commodity Groups (AT STEP 5) ..... 79
APPENDIX X	DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED: Edible Flowers (AT STEP 7) ..... 92
APPENDIX XI	DRAFT PRINCIPLES AND GUIDANCE FOR THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS (including Table 1: Examples of the selection of representative commodities - fruit commodity groups) (AT STEP 8) ..... 93
APPENDIX XII	PROPOSED DRAFT TABLE 2: EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES - SELECTED VEGETABLE COMMODITY GROUPS (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups) (AT STEP 3) ..... 99
APPENDIX XIII	PRIORITY LIST OF CHEMICALS SCHEDULED FOR EVALUATION AND RE-EVALUATION BY JMPR ..... 103
APPENDIX XIV	REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES ..... 136



**LIST OF ABBREVIATIONS**

(Used in this Report)

ADI	Acceptable Daily Intake
ALARA	As low as reasonably possible
ARfD	Acute Reference Dose
CAC	Codex Alimentarius Commission
CCPR	Codex Committee on Pesticide Residues
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
CLI	CropLife International
CRD	Conference Room Document
CXL	Codex Maximum Residue Limit for Pesticide
DIE	Daily Intake Estimate
EFSA	European Food Safety Authority
EMRL	Extraneous Maximum Residue Limit
EU	European Union
EWG	Electronic Working Group
FAO	Food and Agricultural Organization of the United Nations
GAP	Good Agricultural Practice in the Use of Pesticides
GEMS/Food	Global Environment Monitoring System - Food Contamination Monitoring and Assessment Programme
GMUS-2	Second Global Minor Use Summit
HR	Highest residue in edible portion of a commodity found in trials used to estimate a maximum residue level in the commodity
IAEA	International Atomic Energy Agency
ICGCC	International Crop Grouping Consulting Committee
IESTI	International Estimated of Short-Term Intake
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meetings on Pesticide Residues
MRL	Maximum Residue Limit
OECD	Organization for Economic Co-operation and Development
PWG	Physical Working Group
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
USA	United States of America
WHO	World Health Organization
WTO	World Trade Organization

## INTRODUCTION

1. The Codex Committee on Pesticide Residues (CCPR) held its 44<sup>th</sup> Session in Shanghai, China, from 23 to 28 April 2012 at the kind invitation of the Government of China. Professor Xiongwu Qiao, Vice-Director of the Shanxi Academy of Agricultural Sciences chaired the Session, assisted by Dr Weili Shan, Director of Residue Division of Institute for Control of Agrochemicals, Ministry of Agriculture. The Session was attended by 253 delegates representing 68 Member Countries, 1 Member Organization and Observers from 6 international organizations. The list of participants is attached as Appendix I.

## OPENING OF THE SESSION

2. The Session was opened by Mr Chen Xiaohua, Vice Minister of Agriculture of the People's Republic of China. The Vice-Minister welcomed the participants and introduced the recent activities, such as studies, training and establishment of an agency and system in China to ensure food safety and food security, which were the issues of priority in China as well as in other countries. He also emphasized the contribution of China in this field to the international society, including hosting the Committee for the past six years.

3. Dr. Percy Wachata Misika, Representative of FAO in China recalled the mission of FAO to ensure food security and to preserve natural resources. He welcomed the participants and highlighted the importance of the work of Codex, especially setting MRLs, to protect consumers' health and to ensure fair trade. He also emphasized the importance of implementation of Codex standards in countries.

4. Mr. Jiang Pin, Vice Mayor of Shanghai, welcomed the participants and emphasized the effort for improving food safety and maintaining the overall food quality, which was essential to protect consumers' health. He also highlighted the importance of the work of the Committee, especially on setting MRLs and establishing risk analysis principles.

## Division of Competence<sup>1</sup>

5. The Committee noted the division of competence between the European Union (EU) and its Member States, according to paragraph 5, Rule II of the Procedure of the Codex Alimentarius Commission, as presented in CRD 2.

## ADOPTION OF THE AGENDA (Agenda Item 1)<sup>2</sup>

6. The Committee agreed to consider Agenda Item 12a *Discussion Paper on JMPR Resource Issues in the Provision of Scientific Advice to CCPR* before Agenda Item 11 *Establishment of Codex Priority Lists of Pesticides* as the outcome of the discussion on this matter might impact the consideration of the priority lists. The Committee also agreed to consider the issue of *assessment of MRLs for pesticides in tea* under Agenda Item 12 *Other Business and Future Work*.

7. The Committee adopted the Provisional Agenda with the above amendments as the Agenda for the Session.

8. The Delegation of Brazil indicated that it was important that working documents in the three working languages of the Committee be available before the session so that Codex members and observers had enough time to read and prepare for discussions in plenary.

## In-session working groups

9. The Committee agreed to establish in-session Working Groups on Methods of Analysis and Sampling, chaired by Australia with the assistance of China (Agenda Item 3) and Risk Analysis Principles applied by the CCPR chaired by Brazil (Agenda Item 10).

## APPOINTMENT OF RAPORTEURS (Agenda Item 2)

10. The Committee appointed Mr David Lunn (New Zealand) and Mr Kevin Bodnaruk (Australia) to act as rapporteurs.

## MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND OTHER CODEX COMMITTEES (Agenda Item 3)<sup>3</sup>

11. The Commission noted the matters for information and focused its discussion on the revocation of CODEX STAN 229-1993 – Analysis of Pesticides: Recommended Methods. In this regard, the Committee recalled that the 34<sup>th</sup> Session of the Codex Alimentarius Commission agreed to retain CODEX STAN 229-1993 however, in view of the difficulties that might arise in practice for the regular updating of analytical methods, the Commission agreed to request the Committee to look into the possibility to develop criteria that should be met by methods suitable to support the determination of maximum residue limits for pesticides in food and feed that would enable countries to choose their own validated methods based on criteria developed within the Codex framework.

12. The Committee agreed that the in-session Working Group on Methods of Analysis and Sampling should focus its discussion on the following matters with a view to make recommendations to the Committee on how to proceed further with methods of analysis for the determination of MRLs for pesticides:

---

<sup>1</sup> CRD 2.

<sup>2</sup> CX/PR 12/44/1 (Rev).

<sup>3</sup> CX/PR 12/44/2 and CRD 17 (Comments of China).

- The feasibility that CCPR develop criteria as recommended by the Commission and if so whether the criteria in CODEX STAN 229-1993 and/or the general Criteria for the Selection of Methods of Analysis as set out in the Procedural Manual are sufficient to this purpose therefore no further work on development of criteria specific for the identification of analytical methods for the determination of MRLs for pesticides are needed.
- The feasibility that CCPR identify and update a list of Codex methods for the determination of MRLs for pesticides in food and feed for regulatory and/or information purposes by applying the criteria approach and if so whether such a list(s) should be kept in CODEX STAN 229-1993 or should be maintained on a web-based method database (e.g. IAEA website). If the later would be the preferable option, the Committee may wish to consider revocation of CODEX STAN 229-1993.
- The feasibility that Codex members and observers identify and update a list of methods for the determination of MRLs for pesticides in food and feed for information purposes by applying the criteria approach and that such a list would be kept on a web-based method database (e.g. IAEA website). The methods listed using the criteria approach could then be used by countries as a resource list for selecting suitable validated methods of analysis for enforcement purposes at national level.
- The feasibility to combine any of the above approaches.
- Any other approach that the Working Group may find appropriate for consideration by the Committee.

The outcome of the considerations of the Working Group would be considered under Other Business and Future Work (Agenda Item 12).

#### **MATTERS OF INTEREST ARISING FROM FAO AND WHO (Agenda Item 4a)<sup>4</sup>**

13. The WHO Representative informed the Committee about the ongoing update of the GEMS/Food cluster diets. The cluster diets currently in use by JMPR for chronic dietary exposure assessment were elaborated in 1997 with an update based on data from 1997 to 2001. The new clustering would be presented to the 2012 JMPR based on data from 2002 to 2007. The cluster diets were elaborated from food supply data submitted by Member States to FAO. The Representative emphasized the importance of submitting these national data and checking for their quality.

14. The FAO Representative informed the Committee on FAO activities relevant to the work of CCPR as follows:

- The Second Global Minor Use Summit (GMUS-2) was held in Rome, Italy in February of 2012 and was co-organized by FAO, USDA, USEPA and IR-4. The Summit was attended by approximately 230 delegates representing over 50 industrialized and developing countries. The delegates showed great interest and enthusiasm to provide support in efforts to resolve minor use issues. The Summit identified 5 main themes including coordination & collaboration, communication, incentives, capacity development, and registration of Minor Uses and MRL setting. Valuable recommendations and suggestions were made by the GMUS-2. The details of the outcomes of the Summit would be available at the FAO website.
- In order to enhance developing countries participation in the process of setting Codex MRL and to strengthen the capabilities of scientists from developing countries, FAO revised its trial edition of the FAO Training Manual on Evaluation of Pesticide Residues for Estimation of MRL. The updated Training Manual was formally published and was available at the FAO website: <http://www.fao.org/agriculture/crops/core-themes/theme/pests/pm/jmpr/jmpr-docs/en/>
- In addition, FAO partnered with the USDA, conducted three regional workshops in 2011 in Latin America, Africa and Asia.

15. The above FAO activities were fully recognized by member countries.

#### **MATTERS OF INTEREST ARISING FROM OTHER INTERNATIONAL ORGANIZATIONS: INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) (Agenda Item 4b)<sup>5</sup>**

16. The Committee noted activities of IAEA relevant to the CCPR's work and agreed that information on the IAEA website for pesticides should be referred to the in-session Working Group on Methods of Analysis and Sampling for consideration (see Agenda Items 1, 3 and 12).

#### **REPORT ON ITEMS OF GENERAL CONSIDERATION BY THE 2011 JOINT FAO/WHO MEETINGS ON PESTICIDE RESIDUES (JMPR) (Agenda Item 5a)<sup>6</sup>**

##### **2.1 General discussions related to the toxicological evaluation of compounds**

17. The WHO Secretariat of the JMPR informed the Committee that general considerations related to the toxicological evaluation of compounds were detailed in paragraph 2.1 of the 2011 JMPR report. The ongoing update of the guidance for monographers was raised as well as the preparation of a guidance document for submission of toxicological dossiers.

<sup>4</sup> CX/PR 12/44/3 (Not issued) and CRD 22 (Comments of WHO).

<sup>5</sup> CX/PR 12/44/4 and CRD 17 (Comments of China).

<sup>6</sup> Section 2 of the 2011 JMPR Report ([http://www.fao.org/fileadmin/templates/agphome/documents/Pests\\_Pesticides/JMPR/Report11/JMPR\\_2011\\_Report.pdf](http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Report11/JMPR_2011_Report.pdf)); CRD 17 (Comments of China); CRD 22 (Comments of WHO); CRD 34 (Comments of the EU) and CRD 36 (Comments of Cameroun).

## 2.2 Update of the automated spreadsheet applications for the calculation of dietary intake: New large portion data

18. The Committee was informed that a revised IESTI had been used for acute dietary risk assessment exposure in the 2011 JMPR based on the updated WHO/GEMS/Food. The IESTI spreadsheet calculations were now based on the highest large portion (based on g/kg bw/d), for each commodity, chosen from all population groups. Large portion data for individual raw and individual processed commodities were listed separately from aggregate large portion data in the spreadsheet. The data were accepted as received, i.e., no quality checking was done as the responsibility for the data lied with the respective national governments. The spreadsheet applications would be available on the WHO website. [http://www.who.int/foodsafety/chem/acute\\_data/en/index1.html](http://www.who.int/foodsafety/chem/acute_data/en/index1.html). The call for data was still open and the spreadsheet would be updated when new data become available.

## 2.3 Maximum residue level estimation using the proportionality approach

19. The Committee was informed that the 2011 JMPR made use of the proportionality approach to estimate maximum residue levels for 5 compounds in 5 commodities as agreed by the 43<sup>rd</sup> Session of CCPR for comparison of the results of recommendation for maximum residue levels with and without use of the proportionality approach. A table of the results with and without scaling of residue data was provided for consideration by the CCPR.

20. The Delegation of the USA, followed by some other countries, supported the JMPR's use of the proportionality approach and encouraged the JMPR to continue to use this tool to recommend MRLs.

21. The Delegation of the EU generally supported the proportionality approach, but indicated that principles and guidelines as to when and how the proportionality was to be applied should be developed.

## 2.4 Geographical zones and estimation of maximum residue levels

22. The Committee was advised that geographical location should not be a barrier in selecting trials for estimation of maximum residue levels. However, the JMPR noted that there would be cases where regional differences in cultural practices would need to be considered.

23. In this regard, sulfoxaflor data were used to illustrate MRLs estimates obtained using geographical zones (Current JMPR Practice) and assuming residues did not primarily depend on zones (Global Dataset Method). A table was provided for comparison of the results of recommendation for maximum residue levels with and without use of the global dataset method.

24. The Delegation of the USA, supported by some other countries, expressed their support to the use of Global Dataset Method in estimation of maximum residue levels.

25. The Delegation of the EU also supported the concept of combination of data from different geographical zones, however clear guidance and criteria should be provided on identifying and combining comparable data sets from different geographical regions.

## REPORT ON 2011 JMPR RESPONSES TO SPECIFIC CONCERNS RAISED BY CCPR (Agenda Item 5b)<sup>7</sup>

26. The Committee noted that specific concerns raised by CCPR at its last meeting would be considered when discussing the relevant chemicals under Agenda Item 6.

27. The Committee expressed its appreciation to JMPR for their work and pointed out that the work of JMPR was essential for CCPR.

## DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES IN FOOD AND FEED AT STEPS 7 AND 4 (Agenda Item 6a)<sup>8</sup>

### GENERAL REMARKS

28. The Committee noted the concerns from the Delegation of the EU regarding the proposed draft MRLs that had been derived by applying the proportionality approach because, in its view, it was agreed to apply the approach only to minor crops and considered that situations where proportionality could and could not be used had not yet been discussed and agreed by the Committee. The Committee agreed to consider the EU concerns when discussing the compound MRLs where JMPR had applied the proportionality approach.

### DICHLORVOS (025)

29. The Committee was informed by the Delegation of the EU on that ADI and ARfD recommended by 2011 JMPR differed from those established within the EU because of the policy on how to consider human studies to derive health based guidance values for pesticide residues.

<sup>7</sup> Section 3 of the 2011 JMPR Report ([http://www.fao.org/fileadmin/templates/agphome/documents/Pests\\_Pesticides/JMPR/Report11/JMPR\\_2011\\_Report.pdf](http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Report11/JMPR_2011_Report.pdf)); CRD 17 (Comments of China); CRD 21 (Comments of Chile); CRD 22 (Comments of WHO); and CRD 34 (Comments of the EU).

<sup>8</sup> CX/PR 12/44/5; CX/PR 12/44/5-Corrigendum; CX/PR 12/44/5-Add.1 (Comments of Australia, Brazil, Canada, China, Costa Rica, EU, USA and CropLife International); CRD 9 (Comments of Ghana); CRD 11 (Comments of Thailand); CRD 16 (Comments of the EU); CRD 17 (Comments of China); CRD 21 (Comments of Chile); CRD 26 (Comments of Indonesia); CRD 27 (Comments of Honduras); CRD 33 (Comments of India); CRD 36 (Comments of Cameroun); and CRD 49 (Mandate of the electronic Working Group on Proportionality).

30. The WHO JMPR Secretariat noted that this reservation about human studies was not related to scientific evidence and that therefore it should not be addressed to the JMPR.

#### **DICOFOL (026)**

31. The Committee was informed that for tea, the Delegation of India had submitted data to JMPR and that the Delegation of Morocco would also be providing data for the 2012 JMPR.

#### **ACEPHATE (095)**

32. The Committee decided to advance the proposed draft MRLs for rice straw and fodder, dry; and rice, husked for adoption at Step 5/8, noting the reservation of the Delegation of the EU regarding the ADI and ARfD recommended by the 2011 JMPR because of the EU policy on the use of human studies.

#### **METHAMIDOPHOS (100)**

33. The Committee agreed to advance the proposed draft MRLs for rice straw and fodder, dry; and rice, husked for adoption at Step 5/8, in line with the recommendations for Acephate (095), and noted the reservation of the Delegation of the EU regarding the ADI and ARfD recommended by the 2011 JMPR because of the EU policy on the use of human studies.

#### **CYPERMETHRINS (118)**

34. The Committee agreed to advance all the proposed draft MRLs for asparagus; citrus fruits; eggs; poultry fats; poultry meat; poultry, edible offal of; shaddocks or pomelos; tea, green, black (black, fermented and dried) and tree nuts to Step 5/8, with the subsequent revocation of the associated CXLs and withdrawals of draft MRLs.

#### **DIFLUBENZURON (130)**

35. The Committee decided to advance all the proposed draft MRLs to Step 5, noting that the Delegation of the EU would submit a concern form regarding the potential carcinogenicity and genotoxicity of certain metabolites, and insufficient data sets for peach, plum and peppers.

36. The Committee agreed to recommend a lower proposed draft MRL of 0.1 mg/kg for peanuts, based on advice from the Delegation of the EU that this value more closely reflected the estimate derived from the OECD calculator.

#### **GLYPHOSATE (158)**

37. The Committee decided to advance the proposed draft MRLs for lentil, dry; sugar beet; and sweet corn (corn-on-the-cob) for adoption to Step 5/8.

#### **TOLYFLUANID (162)**

38. The Delegation of the EU informed the Committee that the uses of Tolyfluanid on which the CXLs had been based, were withdrawn in the EU. The Chair of the EWG on Priorities informed the Committee that this compound would be listed in Appendix IV (Chemical – commodity combinations for which specific GAP is no longer supported) of the Priority Lists.

#### **PROFENOFOS (171)**

39. The Committee decided to advance the proposed draft MRLs for pepper, chilli; and peppers, chilli, dried for adoption to Step 5/8, with the subsequent revocation of the associated CXLs. The Committee agreed to replace the commodity name "mangostan" with "mangosteen" in the database for correction.

#### **HEXYTHIAZOX (176)**

40. The Committee decided to advance the proposed draft MRL for hops, dry and tea, green, black (black, fermented and dried) for adoption to Step 5/8, with the subsequent revocation of the associated CXL for hops, dry, noting the reservation of the Delegation of the EU regarding the toxicology of metabolites produced during the processing.

41. The Committee agreed to advance the proposed draft MRL for strawberries to Step 5, noting the concern of the Delegation of the EU as principles and guidance for use of the concept of proportionality had not yet been agreed by the Committee.

#### **BIFENTHRIN (178)**

42. The Committee decided to retain the draft MRLs for mango; okra and papaya at Step 7, awaiting information on authorized GAP to be submitted by Kenya before 2015.

43. The Committee decided to retain the CXLs for barley; and barley straw and fodder, dry, awaiting supporting data from the manufacturer by 2015.

44. The Committee decided to withdraw the draft MRL for strawberry and to consider revocation of the CXL for strawberry at the next meeting as no alternative GAP was available and this use was no longer supported by the manufacturer.

**ETOXENPROX (184)**

45. The Committee decided to advance the proposed draft MRLs for apple; beans (dry); dried grapes (=currants, raisins and sultanas); edible offal (mammalian); eggs; maize; meat (from mammals other than marine mammals); milks; nectarine; peach; pear; poultry meat; poultry, edible offal of; rape seed; rice; and rice straw and fodder, dry for adoption to Step 5/8, and to delete the CXLs for pome fruits; and potato as recommended by the 2011 JMPR.

46. The Committee decided to advance the proposed draft MRL for grapes to Step 5, noting the concern of the Delegation of the EU as principles and guidance for use of the concept of proportionality had not yet been agreed by the Committee.

**TEBUCONAZOLE (189)**

47. The delegation of the EU submitted a concern form to JMPR on the proposed draft MRLs for apple; apricot; cherries; dried grapes (=currant, raisins and sultanas); grapes; nectarines; peach; pear; peppers, sweet (including pimento or pimienta) because the ARfD established by JMPR differed from the one established by the EU. As clarification was provided by the JMPR Secretariat, the Committee agreed to forward these MRLs to Step 5/8, noting the reservation of the EU.

48. The Committee decided to advance the proposed draft MRLs for artichoke, globe; banana; barley; barley straw and fodder, dry; beans (dry); broccoli; Brussels sprouts; cabbage head; carrot; cauliflower; coffee beans; cotton seed; cucumber; edible offal (mammalian); egg plant; eggs; elderberries; garlic; hops, dry; leek; lettuce head; mango; meat (from mammals other than marine mammals); melons, except watermelon; milks; oats; olives; onion, bulb; papaya; passion fruit; peanut; peanut fodder; peppers chilli, dried; plums (including prunes); poultry meat; poultry, edible offal of; prunes; rape seed; rice; rye; rye straw and fodder, dry; soya bean (dry); squash summer; sweet corn (corn-on-the-cob); tomato; tree nuts; triticale; wheat; wheat straw and fodder, dry to Step 5/8, with the subsequent revocation of the associated CXLs and withdrawal of the associated draft MRLs. The Committee also agreed to forward the draft MRL for lettuce, head to Step 8, noting the reservation of the Delegation of the EU.

49. The Committee noted that the Delegation of China would submit residue data for banana and cucumber for JMPR evaluation in 2015.

50. The Committee decided to delete the CXL for cattle, edible offal of, and coffee beans, roasted to withdraw the draft MRL for maize; maize fodder (dry) and watermelon as recommended by 2011 JMPR.

51. The Committee decided to retain the draft MRL for common bean (pod and/or immature seeds) at Step 7, awaiting data to be submitted by Kenya before 2015.

**SPINOSAD (203)**

52. The Committee decided to advance all the proposed draft MRLs for blackberries; blueberries; cranberry; dewberries (including boysenberry and loganberry); onion, bulb; passion fruit; raspberries, red, black; spring onion; tree nuts to Step 5/8 and to recommend the withdrawal of the CXLs for almond hulls and almonds as recommended by the 2011 JMPR as they would be covered by the MRL for tree nuts.

**ESFENVALERATE (204)**

53. The Committee was informed that Thailand submitted mango and kale residue data and the United States of America had submitted toxicology data for fenvalerate (199) to JMPR. The Committee agreed to hold the draft MRLs for cottonseed, tomato and wheat at Step 7, awaiting the outcome of the periodic re-evaluation of fenvalerate in 2012.

**PYRACLOSTROBIN (210)**

54. The Committee agreed to advance all the proposed draft MRLs for adoption at Step 5/8, with the subsequent revocation of the existing CXLs, noting the reservation of the Delegation of the EU for oilseed, except peanut; and citrus fruits because of the procedure used by JMPR to propose these group MRLs, and their reservation on the papaya MRL where they considered that the data supported a lower MRL.

55. The Committee decided to recommend the revocation of the CXLs for almonds; pecan; squash, summer; and sunflower seeds as they would be replaced by commodity group MRLs, for stone fruits as the cherries, peach and plum were recommended separately, and for almond hull as this commodity was not traded.

56. The Committee agreed to request JMPR to re-evaluate the orange processing studies to see if the data support an MRL for citrus oil. In this regard, the Committee also agreed to allocate a new code OR 0004 to orange oil, edible.

**INDOXACARB (216)**

57. The Committee was informed by the Delegation of Spain that the data to support an alternative GAP for lettuce would be submitted for consideration by the 2012 JMPR.

**DIFENOCONAZOLE (224)**

58. The Committee agreed to include ginseng (Republic of Korea) into the 2013 follow-up evaluation of difenoconazole. The Committee agreed to retain the draft MRL for papaya at Step 7, awaiting information on authorized GAP to be submitted by Kenya for the 2015 follow-up evaluation.

**AZOXYSTROBIN (229)**

59. The Committee decided to advance the proposed draft MRLs for coffee beans; ginseng; and ginseng, dried, including red ginseng (0.5 mg/kg) for adoption at Step 5/8. The Committee agreed to retain the proposed draft MRL for ginseng, extracts (0.5 mg/kg) at Step 4, and to request JMPR to re-evaluate the processing studies for ginseng processed products to the estimation of MRLs for ginseng extracts.

60. The Committee also decided to allocate new commodity codes: DV 0604 for ginseng, dried including red ginseng and DM 0604 for ginseng, extracts.

**SPIROTETRAMATE (234)**

61. The Committee agreed to advance the proposed draft MRL for milks to Step 5, pending clarification of this MRL from the 2012 JMPR.

62. The Committee decided to advance the remaining proposed draft MRL for adoption at Step 5/8, with the subsequent revocation of the associated CXLs. The Delegation of the EU expressed its reservation on the proposed draft MRL for edible offal, mammalian.

**CLOTHIANIDIN (238)**

63. The Committee decided to advance the draft MRLs for banana; dried grapes (=currants, raisins and sultanas); edible offal (mammalian), except liver; eggs; grapes; mammalian fats (except milk fats); meat (from mammals other than marine mammals); milks; pome fruits; poultry fats; poultry meat; rice; sorghum; sorghum straw and fodder, dry; stalk and stem vegetables; sugar cane; sweet corn (corn-on-the-cob) for adoption at Step 8.

64. The Committee decided to advance the proposed draft MRL for grape juice for adoption at Step 5/8.

65. The Committee agreed to retain the proposed draft MRL for root and tuber vegetables at Step 7, noting the concern from the Delegation of the EU regarding the procedure used by JMPR to propose this group MRL. The Committee was informed that the EU would submit a concern form on this issue for JMPR consideration.

**DICAMBA (240)**

66. The Committee noted that the Delegation of the EU opposed the advancement of the soya bean (dry) draft MRL to Step 5/8 as principles and guidance for use of the concept of proportionality had not yet been agreed by the Committee.

67. Because of this opposition, and in line with current CCPR policy not to advance MRLs using the "fast track" approach (omission of steps) in such cases, the Committee advanced the soya bean (dry) draft MRL to Step 5. The Delegation of the EU would seek clarification, by means of a concern form, from JMPR on the science issue raised by the EU in this regard.

68. The Delegations of Australia, Brazil, Canada, Ecuador, Honduras, New Zealand, Uganda, and the USA considered the data to be sufficient to support a CXL and did not support advancing the proposed draft MRL only to Step 5.

**ETOXAZOLE (241)**

69. The Committee decided to advance the proposed draft MRL for pome fruits to Step 5/8.

**ACETAMIPRID (246)**

70. The Committee decided to advance the proposed draft MRLs for fruiting vegetables other than cucurbits and fruiting vegetables, cucurbits to Step 5/8, noting that the Delegation of China would submit residue data and GAP information for tomato and cucumber for JMPR follow-up evaluation in 2015.

71. The Committee decided to advance the proposed draft MRL for leafy vegetables (except spinach) to Step 5, noting the reservation of the Delegation of the EU due to acute intake concerns for escarole and return the draft MRL for spinach to Step 4 awaiting clarification on the spinach consumption data. The Delegation of the EU informed the Committee that they would submit a concern form on escarole and that the member states would be asked to submit food consumption data to JMPR as soon as possible.

72. The Committee decided to advance the proposed draft MRLs for plums (including prunes) with a note to exclude prunes (DM 0014) and spring onions to Step 5/8, noting the reservation of the Delegation of the EU due to insufficient number of trials.

73. The Committee decided to advance the proposed draft MRLs for beans, except broad bean and soya bean; beans, shelled; berries and other small fruits; cabbages, head; celery; cherries; citrus fruits; cotton seed; edible offal (mammalian); eggs; flowerhead brassica (includes broccoli: broccoli, Chinese and cauliflower); garlic; grapes; mammalian fats (except milk fats); meat (from mammals other than marine mammals); milks; nectarine; onion, bulb; peach; peas, shelled (succulent seeds); peppers chilli, dried; pome fruits; poultry meat; poultry, edible offal of; strawberry; tree nuts to Step 5/8.

**EMAMECTIN BENZOATE (247)**

74. The Committee decided to advance all the proposed draft MRLs for adoption at Step 5/8.

**FLUTRIAFOL (248)**

75. The Committee decided to advance all the proposed draft MRLs except dried grapes (=currants, raisins and sultanas) and grapes for adoption at Step 5/8.

76. The Committee agreed to advance the proposed draft MRLs for dried grapes (=currants, raisins and sultanas) and grapes to Step 5, noting the concern of the Delegation of the EU that the proposed draft MRL for grapes had been derived using the proportionality approach as principles and guidance for use of the concept of proportionality had not yet been agreed by the Committee. The delegations of Australia, Brazil, Canada, New Zealand and the USA considered the data to be sufficient to advance them to Step 8 and did not support advancing the proposed draft MRL only to Step 5.

**ISOPYRAZAM (249)**

77. The Committee decided to advance all the proposed draft MRLs for adoption at Step 5/8, noting the concern from the EU over the differing interpretations of the toxicological studies and the higher ADI and ARfD established by JMPR.

**PROPYLENE OXIDE (250)**

78. The Delegation of the EU expressed reservation and would submit a concern form relating to robustness/assessment of the toxicology data and the Delegation of the USA would submit residue data for tree nuts for JMPR evaluation in 2014.

**SAFLUFENACIL (251)**

79. The Committee decided to advance all the proposed draft MRLs to Step 5/8.

80. The Committee noted the request from the manufacturer for JMPR to consider extrapolation for lentils (dry) from peas (dry) noting that in NAFTA peas (dry) and beans (dry) were representative crops for pulses.

**SPICES**

81. The Committee decided to advance the draft MRLs for omethoate on spices to Step 8 (despite omethoate having been previously deleted from the substance list) because residues were at or about the limit of quantification and there were no intake concerns.

82. The Committee also noted that residues of omethoate could result from the use of dimethoate and agreed to insert a note to the MRL to clarify that residues of omethoate resulted from the use of dimethoate.

83. The Committee agreed to retain the CXL for vinclozolin on spices (despite vinclozolin having recently been deleted from the substance list) because residues were at or about the limit of quantification and there were no intake concern.

84. With respect to future cases where monitoring data on spices become available for compounds that had been withdrawn from the Codex list, the Committee agreed to consider elaborating MRLs on a case-by-case basis where no intake concerns were expected.

85. The Committee agreed that MRLs for spices should be incorporated into the database for MRLs with the codes as proposed in CX/PR 12/44/5 and noted that the code for the entire group of spices should be HS 0093.

**General considerations on the application of the proportionality approach**

86. The Committee had an exchange of views on the acceptability of using the proportionality approach at this point. Several delegations did not favor the application of this concept until criteria on how and when to apply (or not to apply) proportionality had been finalized by the Committee. Other delegations supported the application of this concept by JMPR based on the robustness of data sets, as it would allow the establishment of MRLs for pesticide/commodity combinations for which otherwise it would be not possible to have MRLs hence increasing the availability of Codex MRLs for international trade especially for minor crops.

87. Those delegations not favoring the advancement of certain MRLs recommended by the 2011 JMPR where proportionality was applied indicated that they supported the application of this concept in general and recognized the advantages of this approach in improving the availability of Codex MRLs especially for minor crops. However, they emphasized that clear guidance on situations where it could be applied (or not applied) should be agreed by the Committee before proceeding further with the application of this concept in JMPR.

88. Other delegations indicated that there were enough robust data to proceed with the derivation of MRLs recommended by the 2011 JMPR using proportionality and that application of this approach should continued to be explored and documented in order to provide the basis for the future development of when proportionality should not be used.

89. Based on the above considerations, the Committee agreed to establish an electronic Working Group, chaired by Australia and co-chaired by Germany and working in English, to develop principles and guidance for use of the concept of proportionality to estimate maximum residue levels.

90. The Committee also agreed to advise the 2012 JMPR regarding the use of proportionality to estimate maximum residue levels:

- To request that the 2012 JMPR continue to provide examples using the concept of proportionality.



- To request that the 2012 JMPR develop a number of examples from compounds evaluated in 2012, where a maximum residue level comparison can be made with and without use of the proportionality concept. That is, for the same compound-commodity combination, recommendations be provided from datasets that match GAP and so the concept is not used, to compare against recommendations made from data that do not match GAP and where the concept is used (ref para.86 REP11/PR 2011 ALINORM).

91. The Committee noted that the second point would allow members at the next session of the CCPR to see whether the outcomes from application of the concept were comparable.

**PILOT PROJECT FOR JMPR RECOMMENDATION OF MRLS BEFORE NATIONAL GOVERNMENTS OR OTHER REGIONAL REGISTRATION AUTHORITIES FOR A GLOBAL JOINT REVIEW CHEMICAL – Proposed Draft MRLs for Sulfoxaflor in different commodities at Step 4 (Agenda Item 6b)<sup>9</sup>**

**UPDATE ON THE PILOT PROJECT AND THE PROGRESS OF THE NATIONAL GLOBAL JOINT REVIEW (Agenda Item 6c)<sup>10</sup>**

92. The Committee recalled that the 33<sup>rd</sup> Session of the Commission (2010) approved the pilot project for JMPR recommendation of MRLs before national governments or other regional registration authorities for a global joint review chemical in order to facilitate global harmonization with Codex MRLs and that following this decision, the JMPR conducted in 2011 a parallel evaluation of a new chemical, i.e. sulfoxaflor, for consideration by the 44<sup>th</sup> Session of the Committee.

93. The Committee was informed on the progress of the national global joint review and noted that, as it was not yet completed, countries involved in the project were not in the position to fully evaluate the pilot project at this session. The Committee noted that there was general support for the pilot project and that, depending on outcome of the evaluation on the advantages and disadvantages associated with the implementation of this project, there might be room for evaluation of another upcoming new chemical using this process. A Delegation also noted that the impact of the pilot project on the revision of the Criteria for Prioritization Process of Compounds for evaluation by JMPR should be considered, if the proposed process was to be included in the CCPR procedure for the establishment of MRLs for pesticides.

**Conclusion**

94. The Committee agreed to consider the status of sulfoxaflor at its 45<sup>th</sup> session based on the outcome of the national global joint review and meanwhile agreed to retain all MRLs for this compound at Step 4, until authorized national GAPs were available for consideration by JMPR (Appendix VII).

**DRAFT REVISION OF CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 7: FRUIT COMMODITY GROUPS (EXCLUDING EDIBLE FLOWERS AND ASSORTED TROPICAL AND SUB-TROPICAL FRUITS – EDIBLE AND INEDIBLE PEEL) (Agenda Item 7a)<sup>11</sup>**

**DRAFT REVISION OF CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 7: EDIBLE FLOWERS AND ASSORTED TROPICAL AND SUBTROPICAL FRUITS – EDIBLE AND INEDIBLE PEEL (Agenda Item 7b)<sup>12</sup>**

95. The Committee recalled that the 42<sup>nd</sup> Session of the CCPR (April 2010) agreed to retain the following fruit commodity groups: Citrus fruits, pome fruits, stone fruits, and berries and small fruits; at Step 7 awaiting finalization of the revision of the Classification of Food and Animal Feed in compliance with its previous decision that the revised individual commodity groups should not be adopted until all the revision had been completed in order to avoid problems, especially with the transfer of commodities from one group to the other.

96. In this regard, the Committee further recalled that, in particular for the fruit types, if all of the fruit groups were completed by 2012, consideration would be given to advancing them to Step 8 for inclusion in the Classification.

97. The Committee noted that, in addition to the above fruit commodity groups, the 34<sup>th</sup> Session of the Commission had adopted the proposed draft assorted tropical and sub-tropical fruits, edible and inedible peel at Step 5 and had advanced them for comments at Step 6 and consideration by the 44<sup>th</sup> Committee at Step 7.

<sup>9</sup> CX/PR 12/44/6; CX/PR 12/44/6-Corrigendum; CX/PR 12/44/6-Add.1 (Comments of Australia, EU, Iran, Kenya and the USA), CRD 20 (Comments of Mali); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 27 (Comments of Honduras); and CRD 36 (Comments of Cameroun).

<sup>10</sup> CX/PR 12/44/7; CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); and CRD 36 (Comments of Cameroun).

<sup>11</sup> CX/PR 12/44/8; CRD 3 (Comments of Canada); CRD 4 (Comments of Kenya); CRD 5 (Comments of Costa Rica); CRD 6 (Comments of Japan); CRD 8 (Comments of Brazil); CRD 9 (Comments of Ghana); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 25 (Comments of Thailand); CRD 27 (Comments of Honduras); CRD 36 (Comments of Cameroun); CRD 37 (revised draft Classification); and CRD 39 (Comments of Republic of Korea).

<sup>12</sup> CX/PR 12/44/9; CX/PR 12/44/9-Add.1 (Comments of Brazil, Canada, Costa Rica, EU, Iran, Japan, Kenya and Senegal); CRD 9 (Comments of Ghana); CRD 13 (Comments of Australia); CRD 17 (Comments of China); CRD 20 (Comments of Mali); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 25 (Comments of Thailand); CRD 27 (Comments of Honduras); CRD 30 (Comments of Brazil); CRD 36 (Comments of Cameroun); CRD 37 (revised draft Classification); CRD 39 (Comments of Republic of Korea); and CRD 44 (Comments of Malaysia).

98. The Delegation of the Netherlands, as Chair of the electronic Working Group on the Revision of the Classification, introduced CRD 37 that included written comments submitted at this session on the various fruit commodity groups for finalization by the Committee.

99. The Committee considered the document and agreed with the following changes in addition to the editorial amendments.

#### **Group 001 Citrus Fruits**

100. The Committee agreed that "Kumquats" and "Limequats" should belong to *Subgroup 001A Lemons and Limes* for botanical reasons.

101. The Committee agreed that the name of the commodity with code FC 2212 should be "Yuzu" as the most common name in international trade and scientific / technical literature and to include "Yuja" as a synonym of this fruit.

#### **Group 003 Stone fruits**

102. A Delegation proposed to move "Apricot" and/or "Apricot, Japanese" from Subgroup 003C Peaches to Subgroup 003B Plums as the sizes of these fruits were similar and significantly smaller than those of peach and nectarine which might give rise to different residues levels in the fruits. However, the Committee did not agree with the proposal as the surface of these fruits was more similar to peaches than to plums.

#### **Group 005 Assorted Tropical and Subtropical Fruits – Edible Peel**

103. The Committee agreed to transfer "Jujube, Chinese" from Subgroup 005A - Assorted tropical and subtropical fruits, edible peel, small to Subgroup 003B Plums due to similar growing conditions and pesticide residue patterns. The Committee further noted that the description of Group 003 needed amendment to stone fruit-like fruits from temperate climate, such as Jujube, Chinese.

104. The Committee agreed to transfer "Persimmon, Japanese" to Group 002 Pome Fruits as the fruit was similar to pome fruits in relation to water content, percentage of sugar and similar use pattern for pesticide, residue behaviour and portion to the commodity to which the MRL apply. The Committee further noted that the description of Group 002 needed amendment to pome fruit-like fruits from temperate climate, such as Persimmon, Japanese.

#### **Group 006 Assorted Tropical and Subtropical Fruits – Inedible Peel**

105. The Committee agreed to replace "Cocoa" with "Cacao (pulp)" as more appropriate.

#### **Edible Flowers**

106. The Committee recalled that at its 43<sup>rd</sup> Session, it decided to return the entry for "Edible, Flowers" under "Herbs" to Step 6 for comments and further consideration by the 44<sup>th</sup> Session of the Committee at Step 7. The Committee agreed with the changes as proposed in CRD 37.

#### **STATUS OF THE DRAFT REVISION OF THE CLASSIFICATION OF FOOD AND ANIMAL FEED: FRUIT COMMODITY GROUPS AND EDIBLE FLOWERS**

107. The Committee agreed to forward the draft revision of the Classification for the fruit commodity groups: Citrus fruits, Pome fruits, Stone fruits, Berries and small fruits, and Assorted tropical and subtropical fruits, edible and inedible peel to the Commission for adoption at Step 8 (Appendix VIII). In taking this decision, the Committee agreed to recommend revocation of the corresponding provisions in the Classification in force (CAC/MISC 4-1993).

108. The Committee agreed to hold the draft revision of the Classification for Edible Flowers at Step 7 pending finalization of the revision of the Classification as per the Group on Herbs (Appendix X).

#### **PROPOSED DRAFT REVISION OF CODEX CLASSIFICATION OF FOOD AND ANIMAL FEED AT STEP 4: SELECTED VEGETABLE COMMODITY GROUPS - Brassica (cole or cabbage) vegetables, Head cabbages and Flowerhead cabbages; Leafy vegetables (including brassica leafy vegetables); and Stalk and stem vegetables (Agenda Item 7c)<sup>13</sup>**

109. The Committee recalled that at its 43<sup>rd</sup> Session, it had agreed to prepare new draft proposals for selected vegetable commodity groups for consideration by the present session.<sup>14</sup>

110. The Delegation of the Netherlands, as Chair of the electronic Working Group on the revision of the Classification, introduced CRD 40 that included written comments submitted at this session. The Committee considered the document and agreed with the proposals in CRD 40 with the following changes in addition to the editorial amendments.

#### **Group 010 Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas**

111. The Committee agreed to put "Flowering Chinese cabbage" in square brackets for consideration at the next session, awaiting detailed information from countries concerned.

<sup>13</sup> CX/PR 12/44/10; CX/PR 12/44/10-Add.1 (Comments of Brazil, Canada, Japan, Republic of Korea and the EU); CRD 14 (Comments of Australia); CRD 17 (Comments of China); CRD 20 (Comments of Mali); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 25 (Comments of Thailand); CRD 27 (Comments of Honduras); CRD 36 (Comments of Cameroun); CRD 39 (Comments of Republic of Korea); and CRD 40 (revised proposed draft Classification).

<sup>14</sup> REP11/PR, para. 101.

### Group 013 Leafy Vegetables

112. With regard to the portion of the commodity to which the MRL applies and which is analyzed, the Committee agreed that the description was appropriate because the commodity was generally analyzed with wrapper leaves and provided for flexibility to remove the leaves if decomposed or withered.

113. The Committee agreed to keep "Chervil" under the leafy vegetable group.

114. The Committee agreed to put the following commodities in square brackets for further consideration at its next session as per their right allocation in the Classification: "San-ma-nuel leaves", "Bambara groundnut leaves", "Peanut leaves", "Wasabi leaves" and "Watercress". The Committee noted that watercress was not only cultivated in water but also in the field although heavily irrigated.

115. The Committee also agreed to put the following subgroups "013F Witloof" and "013G Leaves of cucurbitaceae" in square brackets for further consideration at its next session.

### General consideration

116. The Committee noted that when a commodity was transferred from one group to another, due consideration should be given to the availability of / possibility for setting MRLs for the given commodity.

### STATUS OF THE PROPOSED DRAFT REVISION OF THE CLASSIFICATION OF FOOD AND ANIMAL FEED: Selected Vegetable Commodity Groups - Brassica (cole or cabbage) vegetables, Head cabbages and Flowerhead cabbages; Leafy vegetables (including brassica leafy vegetables); and Stalk and stem vegetables

117. The Committee agreed to forward the draft revision of the Classification for above-mentioned vegetable groups to the Commission for adoption at Step 5 (Appendix IX).

### DRAFT PRINCIPLES AND GUIDANCE FOR THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS (Agenda Item 8a)<sup>15</sup>

### PROPOSED DRAFT TABLE 2: EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES – SELECTED VEGETABLE GROUPS: Brassica (cole or cabbage) vegetables, Head cabbages and Flowerhead cabbages; Leafy vegetables (including brassica leafy vegetables); and Stalk and stem vegetables (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups) (Agenda Item 8b)<sup>16</sup>

118. The Committee recalled that at its 43<sup>rd</sup> session it had finalized the Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups including Table 1 on examples of the selection of representative commodities for fruit commodity groups and had retained the document at Step 7 waiting for the finalization of the Classification in relation to the fruit commodity groups (see Agenda Items 7 a and b).

119. The Committee also recalled that at its 43<sup>rd</sup> session it had agreed to continue revising the Classification in relation to selected vegetable commodity groups and therefore Table 2 was follow-up work on the selection and examples of representative commodities for those selected vegetable groups i.e. brassica (cole or cabbage) vegetables, head cabbages and flowerhead cabbages and leafy vegetables (including brassica leafy vegetables) including some initial references to other vegetable groups that would further be developed by the Committee as part of the overall revision of the Classification.

120. As regards the Principles and Guidance, the Committee agreed to replace the sections on definition of similar residues and use and combination of data sets with a text provided in CRD 15, i.e. selection of representative commodities, to take into account similar residue behaviour and use of the ALARA Principle to better reflect the likely outcomes of short-term dietary risk assessments, which also play a role in whether a group MRL or alternatively individual MRLs were established.

121. In this regard, the Committee noted that the proposal in CRD 15 to consider a factor or a range of acceptable residue levels that would be acceptable to establish crop grouping MRLs could be considered by countries for future discussions in CCPR. The Delegation of the EU opposed the use of default factors, because the FAO Manual contained sufficient guidance on how to test the similarity of residue data sets.

122. The FAO JMPR Secretariat sought clarification on whether JMPR should not proceed with a crop grouping MRL if data submitted did not meet the criteria established in the Principles and Guidance. The Committee clarified that the Principles and Guidance provided enough flexibility in the application of the criteria by allowing the use of scientific judgement and wider extrapolation on a case by case basis.

<sup>15</sup> REP11/PR, Appendix IX.; CRD 15 (Comments of Australia); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 25 (Comments of Thailand); CRD 27 (Comments of Honduras); CRD 36 (Comments of Cameroun); and CRD 47 (revised Tables 1 and 2 of the draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of MRLs for Pesticides for Commodity Groups).

<sup>16</sup> CX/PR 12/44/11; CX/PR 12/44/11-Add.1 (Comments of Brazil, Canada, Costa Rica, EU, Japan and Republic of Korea); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 25 (Comments of Thailand); CRD 36 (Comments of Cameroun); and CRD 47 (revised Tables 1 and 2 of the draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of MRLs for Pesticides for Commodity Groups).

123. As regards Tables 1 and 2, the Committee considered CRD 47 containing consequential changes introduced as a result of the revision of the Classification in relation to the fruit commodity groups (see Agenda Items 7a/b) including other relevant comments submitted in writing (Table 1) as well as comments submitted in writing for the vegetable commodity groups (Table 2).

124. As regards Table 1, the Committee agreed with the consequential changes introduced as a result of the revision of the Classification in relation to the fruit commodity groups and additional comments as presented in CRD 47. The Committee also agreed with the inclusion of apricot and longans as representative commodities for the whole groups 003 Stone Fruits and 006 Assorted Tropical and Subtropical Fruits (inedible peel) and in particular for the subgroups 006 Peaches and 006A Assorted tropical and subtropical fruits (inedible peel, small) respectively in addition to some editorial amendments.

125. As regards Table 2, the Committee agreed with the changes as proposed in CRD 47.

126. In relation to future work on the revision of the Classification, the Committee agreed to re-establish the Electronic Working Group on the revision of the Codex Classification of Food and Animal Feed in order to identify other commodity groups for consideration by the next session of the Committee and the consequential updating of Table 2 in parallel with the progress made at the International Crop Grouping Consulting Committee (ICGCC). In addition, the Committee agreed to task the EWG with the review of the commodity groups in the Codex Database for MRLs for Pesticides vis-à-vis the revised Classification for the fruit commodity groups to determine the need for revision of relevant group Codex MRLs.

**STATUS OF THE DRAFT PRINCIPLES AND GUIDANCE ON THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS (INCLUDING TABLE 1: EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES - fruit commodity groups)**

127. The Committee agreed to forward the draft Principles and Guidance on the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups including Table 1: Examples of the Selection of Representative Commodities (fruit commodity groups) to the Commission for adoption at Step 8 (Appendix XI).

**STATUS OF THE PROPOSED DRAFT TABLE 2: EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES - SELECTED VEGETABLE COMMODITY GROUPS - Brassica (cole or cabbage) vegetables, Head cabbages and Flowerhead cabbages; Leafy vegetables (including brassica leafy vegetables); and Stalk and stem vegetables (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups)**

128. The Committee also agreed to request comments at Step 3 on Table 2 – Examples of the Selection of Representative Commodities (selected vegetable commodity groups) for consideration by the electronic Working Group on the Revision of the Classification in order to provide a revised version for consideration at the next session of the Committee (Appendix XII).

**DISCUSSION PAPER ON THE GUIDANCE TO FACILITATE THE ESTABLISHMENT OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES FOR MINOR CROPS AND SPECIALTY CROPS (Agenda Item 9)<sup>17</sup>**

129. The Committee recalled that its 43<sup>rd</sup> session had agreed to establish an electronic Working Group on Minor Uses and Specialty Crops, which should focus on developing criteria for use by CCPR and JMPR to determine the minimum number of field trials necessary to support the establishment of MRLs for minor crops/specialty crops in order to facilitate data submission to JMPR. It had also been agreed to hold a physical Working Group prior to the 44<sup>th</sup> session. Both working groups were chaired by the United States of America and co-chaired by Kenya and Thailand.

130. The Delegation of Thailand informed the Committee that the physical Working Group had discussed a new approach incorporating global diet data (FAOSTAT Food Supply Quantity (g/capita/day)) and a fixed percentage (0.5%) at the first tier and GEMS/Foods 13 Cluster Diets data to further refine the criteria at the second tier. The Working Group considered 4 categories using these criteria to determine the appropriate number of residue field trials:

- Category 1 - No data in FAO Stat and No GEMS Food Cluster data = 3 trials
- Category 2 - < 0.5% worldwide and < 0.5% in all of the clusters = 4 trials
- Category 3 - < 0.5% worldwide and > 0.5% in one to two clusters = 5 trials
- Category 4 - < 0.5% worldwide and > 0.5% in three or more clusters = 6 trials.

131. The Working Group considered several unresolved issues: whether 0.5% was suitable as the initial tier before moving to the second tier; how to account for food waste and inedible portions; and how to address crops for processing or crops that were borderline "minor". The Working Group generally agreed with the 0.5% diet criteria and that the edible portion factors from GEMS/Food database could be utilized.

132. The Committee considered the various options put forward by the Working Group to use the above categories and agreed to use categories 1 and 2 and that categories 3 and 4 should be combined into one category (0.5% consumption worldwide and  $\geq$  0.5% in one or more cluster diets = 5 trials).

<sup>17</sup> CX/PR 12/44/12; CRD 4 (comments of Kenya); CRD 7 (Comments of CropLife International); CRD 9 (comments of Ghana); CRD 20 (Comments of Mali); CRD 21 (comments of Chile); CRD 23 (comments of Peru); CRD 27 (comments of Honduras); CRD 36 (comments of Cameroun); CRD 41 (comments of the EU); and CRD 45 (Report of the physical Working Group on Minor Crops).

133. The Representative of WHO recalled that WHO GEMS/Foods Clusters were developed through statistical analysis and data grouping based on the statistics provided in the FAOSTAT Food Balance Sheets, and that if commodities were not listed in the FAOSTAT this might be because countries did not provide information or because the crop concerned was not a major crop.

134. Some delegations pointed out that establishing MRLs for minor crops was very important especially for developing countries as the lack of MRLs for exported products could create barriers to trade.

135. The Delegation of the EU noted that the Classification should be based on consumption data, although such data were not always sufficient, and pointed out that there were uncertainties in the Classification based on a single criterion as there were many borderline cases, that an exhaustive list should be established and that the following criteria should be added: seasonal crops that are major during part of the year; large portion instead of average consumption; crops which are important in certain clusters; and crops from which extrapolation is made to a wide group.

136. Several delegations supported the development of a comprehensive list of major and minor crops with the respective number of field trials required. Some delegations noted that this list could not be based on the Classification as the criteria should apply to individual crops and not to groups in order to determine whether they were minor crops.

137. The Committee also agreed to consider further the proposal of the Working Group to develop a database of data needs for minor crops/specific chemicals and to develop guidance to stakeholders to facilitate the submission of data by more than one country.

### Conclusion

138. The Committee agreed to establish an electronic Working Group chaired by France and co-chaired by Kenya and Thailand, working in English, to continue its work on the development of criteria for use by CCPR and JMPR to determine the minimum number of field trials necessary to support the establishment of MRLs for minor crops/specialty crops in order to facilitate data submission to JMPR. The Working Group would have the following mandate:

- Providing further consideration to unresolved issues related to the development of criteria for clarifying commodities according to consumption.
- Refining current Annex 2 (CX/PR 12/44/12) to establish a list of commodities and number of residue trials.
- Exploring development of a simple database to identify residue data needs for minor crops for specific chemicals which are on the priority list for JMPR.
- Considering additional proposal for work by the EWG. This could include recommendations/case studies for stakeholders to facilitate data submission by more than one country.

139. Some delegations pointed out that similar issues would be discussed in the Working Group on the use of proportionality and that there should be no duplication and the Committee agreed that the terms of reference of both working groups should ensure that the tasks were clearly defined.

### **REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES (Agenda Item 10)<sup>18</sup>**

140. The Committee recalled that its last session had considered the revision of the Risk Analysis Principles and agreed that an electronic Working Group chaired by Argentina and Brazil would develop proposals for the revision of the periodic review as a priority and, if feasible, to review the entire text for consideration at the next session, and had also agreed to hold a physical Working Group prior to the session.

141. The Delegation of Brazil presented the results of the electronic and physical working groups, as well as the in-session Working Group held during the current session. Sections 1 to 8 of Part II of the document (Risk Analysis Principles excepting the periodic review) had been considered in detail and revised as presented in CRD 42. The Delegation proposed to agree on this revised text and to ask the Working Group to proceed with consideration of all pending issues. As regards Part I of the document (Periodic Review), further discussion was necessary in order to reach consensus.

142. The Committee expressed its thanks to Argentina, Brazil and the working groups for their extensive work on complex issues to facilitate the discussion in the plenary session.

143. Several delegations supported the revised sections in Part II as they resulted from extensive discussions in the Working Group. Other delegations expressed the view that although there could be agreement at the present session, this part might need further review or consequential amendments when the remaining sections were finalized, especially the periodic review.

---

<sup>18</sup> CX/PR 12/44/13 (Rev.); CX/PR 12/44/13-Add.1 (Comments of Argentina, Brazil, Chile, Costa Rica and the USA); CRD 9 (comments of Ghana); CRD 17 (comments of China); CRD 19 (comment of the EU); CRD 21 (comments of Chile); CRD 23 (comments of Peru); CRD 24 (comments of Japan); CRD 27 (comments of Honduras); CRD 31 (comments of the Chair of the electronic Working Group on Risk Analysis Principles applied by the CCPR); CRD 36 (comments of Cameroun); CRD 38 (comments of Argentina); CRD 42 (report of the physical Working Group on Risk Analysis Principles applied by the CCPR); CRD 43 (comments of Australia, New Zealand, Switzerland and CropLife); CRD 48 (comments of Australia and Germany).

144. The Committee considered sections 1 to 8 as amended by the Working Group (CRD 42) and made some amendments and comments, in addition to editorial changes.

## Section 2. General Aspects

145. The Committee agreed with the proposal of the Working Group to reword the second paragraph to clarify the roles of CCPR and JMPR at the beginning of the MRL-setting process.

## Section 3. Risk Assessment Policy

146. As regards the list of references to be considered when preparing the priority list of compounds for JMPR evaluation, the Committee discussed a proposal to retain only the three first indents and to replace the other criteria with a single indent "Criteria for nomination, prioritization and scheduling of compounds". The Committee agreed to place this proposal in square brackets as an alternative to the current text for further consideration.

### 3.1 MRLs for Specific Commodities group

147. In section 3.1.1 MRLs for commodities of animal origin, the Committee discussed the recommendation that, when MRLs for commodities of animal origin resulting from direct treatment of the animal and from residues in animal feed are different, "the higher recommendation will prevail".

148. The Representative of WHO noted that unless one of the MRLs was clearly outdated, it should not be automatically replaced by an MRL established for a different application. One delegation pointed out that MRLs resulting from different applications (as veterinary drugs or as pesticides) could be different but that in trade only one MRL would be used in practice. The Committee agreed to consider this question further at its next session and retained the text in square brackets.

149. The Committee also agreed to reconsider the intent of the word "concerned" (found in 2 places in paragraph 2 of Section 3.1.1) and therefore placed these words in square brackets.

150. The Committee agreed with the updates proposed by the Working Group in section 3.1.3 MRLs for fat soluble pesticides in milk and milk products.

151. In section 3.1.5 Establishment of EMRLs, the term "legally permitted" was deleted to avoid any confusion on the status of Codex recommendations.

## Section 4. Risk Assessment

### 4.1 Role of JMPR

152. The JMPR Secretariat clarified that JMPR recommends "maximum residue levels" in the framework of risk assessment as the establishment of "maximum residue limits" was the responsibility of the CCPR and it was agreed that the terminology should be consistent throughout the text.

153. The Committee agreed to delete "and to provide safety assessments" in the fourth paragraph of section 4.1 Role of JMPR as the text should refer consistently to risk assessment.

## Section 5. Risk management

### 5.1 Role of CCPR

154. The Codex Secretariat noted that due to the ongoing discussion on the availability of methods of analysis the requirement that "if no validated methods of analysis are available for enforcing MRLs for a specific compound, no MRLs would be established by CCPR" might not be applicable in practice and the Committee agreed to retain this text in square brackets for further consideration.

155. The Committee noted that sections 5.2 to 5.4.3 were included in Part I-Periodic review and that there had been no consensus so far in the Working Group on these sections.

156. The Delegation of Australia proposed to discuss the revised text of sections 5.2 Selection of compounds for JMPR evaluation as proposed in CRD 43 as this question had been discussed in the Working Group and should be considered in the plenary in order to give some guidance to the Working Group. Other delegations considered that there was not enough time to consider these proposals at this stage and that all unsolved issues should be considered in the electronic Working Group.

157. The Committee had some discussion on the requirements for data submission to JMPR in case a substance is not supported by the manufacturer (case B), to be considered under section 5.4.

158. Some delegations supported the periodical review in order to ensure that MRLs were set on a scientific basis and asked for guidance of JMPR as to the data requirements in case B, in order to proceed further with the revision of the periodic review. A delegation noted that the inclusion of a screening process such as completeness check of data to be submitted to JMPR might be considered in the priority lists development, in order to make the best use of the limited JMPR resources.

159. The WHO JMPR Secretariat indicated that if national toxicological monographs were submitted to JMPR, they should fulfil the same criteria as data provided by the manufacturer in order to be assessed by JMPR. The Committee was informed that this issue would be discussed in the next JMPR and the outcome would be reported to the next session of CCPR. The FAO JMPR Secretary recalled that residue data requirements were specified in the FAO Manual.

#### Section 6. Elaboration Procedure

160. The Committee agreed with this section but noted that it might need further review upon completion of the sections which were still under development, such as the provisions on concern forms.

161. The Committee noted that Section 7. Procedure for Submitting Concern was for further consideration and it was not discussed at the present session.

162. Sections 1 to 5.1, 6 and 8, as amended at the present session, are attached in Appendix XIV.

#### Further work

163. The Committee noted that, as indicated in CRD 38, Argentina could not participate in the present session but agreed to chair the Working Group if it was re-established. The Committee therefore agreed to establish an electronic Working Group chaired by Argentina, co-chaired by Costa Rica, working in English and Spanish, with the following mandate: to take into account the clarification to be provided by JMPR concerning the toxicological and residue data to be submitted when the chemical is not supported by the manufacturers, regarding Case B of CX/PR 12/44/13 (Rev.); to consider the examples of chemicals (dicofol, fenvalerate) that JMPR has evaluated and that were not supported by the manufacturer; and to clarify issues related to national monographs and equivalence. The work of the EWG should focus on part I of CX/PR 12/44/13 (Periodic Review/ Criteria for Prioritization) and section 7 of part II (Concern Form and other forms), taking into consideration CRDs 19, 24, 42, 43 and 48, in order to prepare a revised version of these sections for consideration at the next session.

#### ESTABLISHMENT OF THE CODEX PRIORITY LISTS OF PESTICIDES (Agenda Item 11)<sup>19</sup>

164. The Delegation of Australia, as Chair of the electronic Working Group on Priorities, introduced the report of the Working Group on Priorities. The Chair thanked members, manufacturers and observers for their assistance, as members of the electronic Working Group on Priorities, in preparing the Tentative Schedule and maintaining the Priority List.

#### Scheduling of chemicals

165. The Chair of the Working Group indicated there were nine new compounds (bixafen, cyantraniliprole, imazpic, imazapyr, isoxaflutole, tolfenpyrad, triflumizole, trinexapac and benzovindiflupyr) and 4 existing compounds (bentazone, diquat, dithianon and fenpropathrin) scheduled in 2013 for evaluation and re-evaluation respectively. In addition, there were 18 follow-up and other evaluations scheduled in 2013. On the request of the member, fenpropathrin was moved to 2014 priority list. The WHO JMPR Secretariat indicated that the toxicological re-evaluations scheduled for 2013 could be undertaken along with eight of the nine new compounds. The Committee agreed that all nine new compounds could be scheduled but benzovindiflupyr would be given reserve status. The Committee confirmed the 2013 Schedule of evaluations.

166. The Chair of the Working Group highlighted several compounds in Appendix 2b (Listed but not yet Scheduled) for which support was either unknown (aldicarb [117], dichlofluanid [82], dinocap [87], methidathion [51], bromopropylate [70], bioresmethrin [93], permethrin [120], fenbutatin oxide [109] and fenarimol [192]) or not provided by a manufacturer (azinphos methyl [02], bromide ion [47], hydrogen phosphide [46] and tecnazene [115]). The Chair indicated that given the current status of the Priority List, members had at least 5 years advance warning of this matter before the likelihood of scheduling of these unsupported compounds.

167. Following an intervention in regard to the draft concern form for public health concerns, the Chair of the Working Group advised that the use of the form was not obligatory and should a member wish to nominate an existing chemical for periodic evaluation on the basis of public health concerns, an email with attached scientific evidence would suffice.

168. The Chair of the Working Group indicated that the work of the EWG Priorities for 2013 would commence in August with the broadcast email to all member countries and observers. In that correspondence, the Chair of the Working Group would, along with inviting nomination to the Priority List, highlight chemicals for which there was no manufacturer support and chemicals for which commodity listings were required. The Chair invited all members and observers to participate in the EWG priorities which would work in English only.

169. After some discussions and adjustments, the Committee agreed on the Priority List for 2013 provided as Appendix XIII.

<sup>19</sup> CX/PR 12/44/14; CX/PR 12/44/14-Add.1; CRD 1 (revised Priority List); CRD 12 (Comments of Costa Rica); CRD 18 (Comments of Argentina and Brazil); CRD 21 (Comments of Chile); CRD 23 (Comments of Peru); CRD 26 (Comments of Indonesia); CRD 28 (Comments of Argentina); CRD 32 (Comments of Brazil); CRD 35 (Comments of Argentina); and CRD 36 (Comments of Cameroon).

## **OTHER BUSINESS AND FUTURE WORK (Agenda Item 12)**

### **DISCUSSION PAPER ON JMPR RESOURCE ISSUES IN THE PROVISION OF SCIENTIFIC ADVICE TO CCPR (Agenda Item 12a)<sup>20</sup>**

170. The delegation of the United States of America recalled that the issue of resources for JMPR had been discussed in earlier sessions and that the need for adequate resources for scientific advice had been considered at the 34<sup>th</sup> Session of the Commission. The Delegation presented an update of the issue of JMPR resources together with the need to increase JMPR capacity in the next coming years due to the increasing requests for international MRLs.

171. The JMPR Secretariats welcomed the presentation and confirmed the feasibility of the proposed options to increase JMPR capacity namely: extending the September meeting by 1 or 2 days; performing a significant percentage of the FAO/WHO work in advance of the meeting, including fully utilizing electronic media and teleconferences among subgroups to resolve routine matters prior to the JMPR meeting; developing clear guidance/requirements on how industry submits data package to ensure consistency and facilitate the preparation of the monograph/report; screening early in the process to identify those compounds that are anticipated to have little exposure (and perhaps lower toxicity) to determine the need to evaluate the full dossier; and resolving issues with the industry prior to the JMPR meeting.

172. The Committee was informed by the JMPR Secretariats that funding was currently not available to organize the JMPR in 2013. Moreover, the JMPR Secretariats emphasized the fact that due to new rules in UN organizations it would not be possible to organize the JMPR meeting in September 2013 if the funding was not secured by January 2013.

### **Conclusion**

173. The Committee encouraged the delegates to report back to their governments for financial and expertise support to the JMPR work and that the issue should be raised at the governing bodies of the two parent organizations.

### **ASSESSMENT OF MRLS FOR PESTICIDES IN TEA (Agenda Item 12b)<sup>21</sup>**

174. The Delegation of China, introducing CRDs 10 and 29, emphasized that tea was a particular commodity whereas the tea infusion as opposed to the leaves was the final product consumed and that pesticide residues in tea infusion were closely related to water solubility of the agrochemicals. Therefore, all standard setting bodies including JMPR, Codex and national regulatory agencies should consider the residue in tea brew or both, in brew and tea leaves, when setting MRLs. In addition, pesticide producers should submit the information on brewing factors of pesticides in tea infusion to JMPR for risk assessment in order to minimize the pesticide residue in the tea infusion and rationalize the application of pesticides in the tea industry.

175. Some delegations questioned whether the current approach to establish MRLs for commodities as they entered in international trade would change for the particular case of tea where the commodity traded were the dried leaves but the MRLs would be based on the tea brew. It was clarified that MRLs for pesticides in tea would be set on the dried tea but the residues in the tea brew should be considered in the establishment of MRLs on dried tea and to that purposes brewing factors for the different pesticides should be taken into account in the dietary risk assessment.

176. The FAO JMPR Secretariat informed the Committee that JMPR had taken into account pesticide residue in tea infusion when brewing factors were provided by countries in the estimation of MRLs for dried tea.

177. Many delegations supported the procedure taken by JMPR in the establishment of MRLs for pesticides in tea. A Delegation proposed that a standard test on how brewing tea was necessary for further consideration by JMPR to better understand the development of brewing factors. In this regard, the Committee was informed that this and other relevant data/information would be provided to JMPR when evaluating MRLs for pesticides in tea.

### **Conclusion**

178. The Committee supported the current procedure of JMPR in the establishment of MRLs for pesticides in tea and encouraged countries to submit relevant data/information on brewing factors and standard methods to JMPR for consideration in estimation of MRLs for pesticides in tea.

### **METHODS OF ANALYSIS FOR PESTICIDES (Agenda Item 12c)<sup>22</sup>**

179. The Delegation of Australia, as the Chair of the in-session Working Group on Methods of Analysis and Sampling, introduced the report of the Working Group (CRD 46).

---

<sup>20</sup> CX/PR 12/44/15; CRD (Comments of WHO); and CRD 23 (Comments of Peru).

<sup>21</sup> CRD 10 (Comments of China); CRD 29 (Comments of India).

<sup>22</sup> CRD 46 (Report of the in-session Working Group on Methods of Analysis and Sampling).



### **Methods of Analysis for the Determination of Pesticide Residues in Food and Feed**

180. The Delegation summarized the discussion of the Working Group in relation to the maintenance or revocation of CODEX STAN 229-1993 as follows: The last session proposed to revoke CODEX STAN 229-1993 and that the IAEA database should be and remain the primary repository of suitable analytical methods for the determination of pesticide residues. The Standard included many dated methods employing superseded technologies, some hazardous and banned solvents for sample clean-up as well as some procedures for organic residues apparently no longer in use and semi-quantitative methods such as TLC and colorimetry that were considered to have minimal application in current compliance testing. The Standard as currently titled did not include any reference to current analytical methods of choice for many residue monitoring laboratories. The Standard could incorrectly be represented or interpreted as a manual of official, reference or CODEX-endorsed methods rather than a compilation of methods deemed suitable for MRL compliance testing. In addition, there was little ready information available on the criteria which had been applied to the referenced list of more than 200 methods and publications.

181. In view of the above, the Working Group concluded that the current value of the Standard was judged as historical only and that considerable resources and technical input would be required to bring the Standard to a current and useful resource. It was also concluded that any review work was currently beyond the immediate capacity of the Working Group, so consideration might be given to the engagement of an appropriately qualified consultant to undertake such work. The Working Group therefore recommended that CODEX STAN 229-1993 be archived as an uncontrolled document as defined under ISO quality systems or as an information document only.

182. The Committee noted that the status "archived" for a Codex standard was not available in the Codex system and that a standard remained in force unless it was revoked by the Commission.

#### **Conclusion**

183. Based on the above considerations, the Committee agreed to recommend to the Commission to revoke the Standard of Analysis of Pesticide Residues: Recommended Methods (CODEX STAN 229-1993).

### **Criteria for the Identification of Methods of Analysis for the Determination of Pesticide Residues**

184. The Delegation of Australia informed the Committee as an alternative to CODEX STAN 229-1993 and in consideration of the request of the Commission to develop criteria as opposed to a list of methods of analysis (see Agenda Item 3), the Working Group recommended the development of performance criteria for suitability assessment of methods of analysis for pesticide residues.

#### **Conclusion**

185. The Committee agreed to establish an electronic Working Group, chaired by Australia and co-chaired by China, working in English, to prepare a discussion paper on the development of performance criteria for suitability assessment of methods of analysis with consideration given to the working document CX/RVDF 12/20/10 (Appendix to CAC/GL 71-2009 – Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programme Associated with the Use of Veterinary Drugs in Food Producing Animals) and associated Codex and other relevant documents to meet CCPR method needs.

### **DATE AND PLACE OF THE NEXT SESSION (Agenda Item 13)**

186. The Committee was informed that its 45<sup>th</sup> session was tentatively scheduled to be held in China, from 6 - 13 May 2013, the final arrangements being subject to confirmation by the Host Country and the Codex Secretariats.

## SUMMARY STATUS OF WORK

Subject	Step	Action by	Reference REP11/PR
Draft MRLs for pesticides	8	Governments 35 <sup>th</sup> CAC	Paras. 28 - 85 and Appendix II
Proposed Draft MRLs for pesticides	5/8	Governments 35 <sup>th</sup> CAC	Paras. 28 – 85 and Appendix III
Draft Revision of the Classification of Food and Animal Feed: Fruit Commodity Groups	8	Governments 35 <sup>th</sup> CAC	Para. 107 and Appendix VIII
Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups (including Table 1: Examples of the Selection of Representative Commodities – fruit commodity groups)	8	Governments 35 <sup>th</sup> CAC	Para. 127 and Appendix XI
Draft MRLs for pesticides	7	45 <sup>th</sup> CCPR	Paras. 28 – 85 and Appendix VI
Draft Revision of the Classification of Food and Animal Feed: Herbs - Edible Flowers	7	45 <sup>th</sup> CCPR [awaiting the finalization of the revision of the Classification of Food and Animal Feed – vegetable commodity groups]	Para. 108 and Appendix X
Proposed Draft Revision of the Classification of Food and Animal Feed: Selected Vegetable Commodity Groups	5	Governments 35 <sup>th</sup> CAC 45 <sup>th</sup> CCPR	Para. 117 and Appendix IX
Proposed Draft MRLs for pesticides	5	Governments 35 <sup>th</sup> CAC 45 <sup>th</sup> CCPR	Paras. 28 – 85 and Appendix IV
Proposed draft MRLs for pesticides	4	45 <sup>th</sup> CCPR	Paras. 28 – 85 and Appendix VII
Proposed draft MRLs for pesticides: Pilot project for JMPR recommendation of MRLs before national governments or other regional registration authorities for a global joint review chemical	4	45 <sup>th</sup> CCPR	Para.94 and Appendix VII
Proposed Draft Revision of the Classification of Food and Animal Feed: Other commodity groups	2/3	EWG (The Netherlands and the United States of America) Governments 45 <sup>th</sup> CCPR	Para. 126
Proposed Draft Table 2: Examples of the Selection of Representative Commodities - Selected Vegetable Groups (Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups)	2/3	EWG (The Netherlands and the United States of America) Governments 45 <sup>th</sup> CCPR	Para. 128 and Appendix XII
Establishment of Codex Priority Lists of Pesticides (Evaluation of New Pesticides and Pesticides under the Periodic Re-evaluation)	1/2/3	35 <sup>th</sup> CAC Governments EWG on Priorities (Australia) 45 <sup>th</sup> CCPR	Para. 171 and Appendix XIII

Subject	Step	Action by	Reference REP11/PR
Codex Maximum Residue Limits for pesticides Recommended for Revocation	Revocation	Governments 35 <sup>th</sup> CAC	Paras. 29 – 85 and Appendix V
Analysis of Pesticide Residues: Recommended Methods (CODEX STAN 229-1993) Recommended for Revocation	-----	Governments 35 <sup>th</sup> CAC	Para. 185
Application of proportionality in selecting data for MRL estimation	-----	2012 JMPR EWG (Australia and Germany) 45 <sup>th</sup> CCPR	Paras. 89-90
Revision of the Risk Analysis Principles applied by the Codex Committee on Pesticide Residues	-----	EWG (Argentina and Costa Rica) Governments 45 <sup>th</sup> CCPR	Para. 165 and Appendix XIV
Discussion paper on further development of the criteria to facilitate the establishment of maximum residue limits for pesticides for minor crops / specialty crops including other related matters	-----	EWG (France with the assistance of Kenya and Thailand) 45 <sup>th</sup> CCPR	Para. 139
Discussion Paper on discussion paper on the development of performance criteria for suitability assessment of methods of analysis for pesticide residues	-----	EWG (Australia and China) 45 <sup>th</sup> CCPR	Para. 187
JMPR resource issues in the provision of scientific advice to CCPR	-----	Governments FAO and WHO	Para. 175
Assessment of MRLs for Pesticides in Tea	-----	Governments JMPR	Paras. 180

LIST OF PARTICIPANTS  
LISTE DES PARTICIPANTS  
LISTA DE PARTICIPANTES

Chairperson  
Président  
Presidente  
Dr QIAO Xiongwu

Shanxi Academy of Agricultural Sciences  
2 Changfeng Street Taiyuan  
Shanxi Province, 030006,  
P.R. China  
Phone: +86 351 7581865  
Fax: +86 351 7040092  
Email: [ccpr\\_qiao@agri.gov.cn](mailto:ccpr_qiao@agri.gov.cn)

**ALGERIA/ALGÉRIE/ARGELIA**

Mrs. Wahiba HARRAT  
Ingenieur Agronome  
12 Boulevard colonel Amirouche Alger  
Algérie  
Phone: +312 21 42 93 49  
Fax: +312 21 42 93 49  
E-mail: [w.harrat@yahoo.fr](mailto:w.harrat@yahoo.fr)

**AUSTRALIA/AUSTRALIE/AUSTRALIA**

Mr. Ian REICHSTEIN  
Director – National Residue Survey  
Department of Agriculture Fisheries and Forestry  
PO Box 858, Canberra ACT 2601,  
Phone: +61 2 6272 5668  
Fax: +61 2 6272 4023  
E-mail: [ian.reichstein@daff.gov.au](mailto:ian.reichstein@daff.gov.au)

Dr. Rajumati BHULA  
Program Manager Pesticides  
Australian Pesticide and Veterinary Medicines Authority  
18 Wormald Street Symonston  
ACT 2604 AUSTRALIA  
Phone: +61 2 6210 4826  
Fax: +61 2 6210 4776  
E-mail: [raj.bhula@apvma.gov.au](mailto:raj.bhula@apvma.gov.au)

Mr. Kevin BODNARUK  
26/12 Philip Mall, West Pymble NSW  
2073 Australia  
Phone: +61 2 94993833  
Fax: +61 2 94996055  
E-mail: [akc\\_con@zip.com.au](mailto:akc_con@zip.com.au)

Dr. Jason LUTZE  
Manager, Pesticide Residues  
Australian Pesticide and Veterinary Medicines Authority  
PO Box 6182 Kingston ACT 2604 Australia  
Phone: 61 2 6210 4935  
Fax: 61 2 6210 4840  
E-mail: [jason.lutze@apvma.gov.au](mailto:jason.lutze@apvma.gov.au)

Mr. William MURRAY  
GRDC Grains  
22 Thornley Close, Ferntree Gully, Victoria 3156 Australia  
Phone: +61 3 97638396  
E-mail: [wjmurray@bigpond.net.au](mailto:wjmurray@bigpond.net.au)

Mr. Graham ROBERTS  
4 Allipol Court, Briar Hill,  
Victoria 3088, Australia  
Phone: 61 3 94350863  
E-mail: [grarob@bigpond.net.au](mailto:grarob@bigpond.net.au)

Dr. Pieter SCHEELINGS  
Principal Scientist  
Queensland Health Forensic and Scientific Services  
39 Kessels Road, Coopers Plains,  
4108, Queensland, Australia  
Phone: +617 3274 9095  
Fax: +617 3274 9186  
E-mail: [Pieter.Scheelings@health.qld.gov.au](mailto:Pieter.Scheelings@health.qld.gov.au)

**BELGIUM/BELGIQUE/ BÉLGICA**

Mr. Gilles ROUSSEAU  
Study Director in residues under BPL  
Wallon Agricultural Research Centre  
(CRA-W), Agriculture and Natural  
Environment Department, Plant Protection Products and Biocides  
Physico-Chemistry and Residues Unit, Rue du Bordia, 11, B-5030  
Gembloux, Belgium  
Phone: +32(0)81625260  
Fax: +32(0)81625272  
E-mail: [g.rousseau@cra.wallonie.be](mailto:g.rousseau@cra.wallonie.be)

**BENIN/BÉNIN/BENIN**

Mr. Chabi Gani SARE  
Directeur de l'Agriculture  
01 BP 58 Porto – Novo Bénin  
Phone: (00 229) 97 44 08 71 ou 95 06 99 86  
Fax: (00 229) 20 21 44 13  
E-mail: [cgsare@yahoo.fr](mailto:cgsare@yahoo.fr)

**BRAZIL/BRÉSIL/BRASIL**

Ana Carolina Miranda LAMY  
Federal Inspector  
Ministry of Agricultura, Livestock and Food Supply  
Esplanada dos Ministérios, Bloco D,  
Edifício Anexo, Sala 327 – Anexo A  
Cep: 70.043-900 - Brasília/DF- Brasil  
Phone: + 55 61 3218-2808  
Fax: + 55 61 3225-5341  
E-mail: [ana.lamy@agricultura.gov.br](mailto:ana.lamy@agricultura.gov.br)

Carlos Alexandre Oliveira GOMES  
Federal Surveillance Agent  
ANVISA  
Sia Trecho 5, Area Especial 57, Lote 200  
Cep: 71205-050 - Brasília/DF – Brasil  
Phone: +55 61 34626508  
Fax: + 55 61 3462 5726  
E-mail: [carlos.gomes@anvisa.gov.br](mailto:carlos.gomes@anvisa.gov.br)

**Lidia Nunes GONCALVES**

Federal Surveillance Agent  
ANVISA  
Sia Trecho 5, Area Especial 57, Lote 200  
Cep: 71205-050 - Brasília/DF – Brasil  
Phone: + 55 61 34626508  
Fax: + 55 61 3462 5726  
E-mail: [lidia.nunes@anvisa.gov.br](mailto:lidia.nunes@anvisa.gov.br)

**Cleide OLIVEIRA**

RegulatoryAffairConsultant  
Rua Breves, 363  
Cep: 04645000 - São Paulo/SP – Brasil  
Phone: +55 11 3124 4455  
Fax: +55 11 3124 4455  
E-mail: [cleide@vignabrasil.com.br](mailto:cleide@vignabrasil.com.br) or [ocleide@uol.com.br](mailto:ocleide@uol.com.br)

**Rogério PEREIRA DA SILVA**

Coordinator for Codex Alimentarius Matters  
Ministry of Agricultura, Livestock and Food Supply  
Esplanada dos Ministérios, Bloco D  
Edifício Sede, Sala 349  
Cep: 70.043-900 - Brasília/DF – Brasil  
Phone: +55 61 3218 2416  
E-mail: [rogerio.silva@agricultura.gov.br](mailto:rogerio.silva@agricultura.gov.br)

**Heloisa H.B. TOLEDO**

Health Regulatory Expert  
Rua Carlos Gomes, 539  
Cep: 14.800-270 - Araraquara/SP – Brasil  
Phone: +55 16 33224360  
Fax: +55 61 3462 5315  
E-mail: [he.toledo@hotmail.com](mailto:he.toledo@hotmail.com)

**Carlos Ramos VENANCIO**

Federal Inspector  
Ministry of Agricultura, Livestock and FoodSupply  
Esplanada dos Ministérios - Bloco D  
Edifício Anexo – Sala 326 – Ala A  
Cep: 70.043-900 - Brasília/DF– Brasil  
Phone: +55 61 3218 2668  
Fax: + 55 61 3225 5341  
E-mail: [carlos.venancio@agricultura.gov.br](mailto:carlos.venancio@agricultura.gov.br)

**BRUNEI DARUSSALAM/BRUNEI DARUSSALAM/BRUNEI DARUSSALAM****Mr. Noor Azri HAJI MOHAMAD NOOR**

Agriculture Officer  
Crop Protection Unit, Barc Kilanas,  
Doaa, Bf 2920, Brunei Darussalam  
Phone: 673-2663383  
Fax: 673-2661354  
E-mail: [plantpatho@gmail.com](mailto:plantpatho@gmail.com)

**Muhamad Hilmi MD TAIB**

Agriculture Chemist  
Agrochemical Analysis Laboratory Unit,  
Department of Agricultura & Agrifood, Brunei Darussalam  
Phone: 6738838785  
Fax: 6732393841  
E-mail: [hilmitaib@gmail.com](mailto:hilmitaib@gmail.com)

**BURKINA FASO/ BURKINA FASO/ BURKINA FASO****Moussa OUATTARA**

Ministere of Agricultura, Plants Protection Direction  
Codex Contact Point BP; 5362 Ouagadougou  
Phone: +226 50361915/ +226 71353315  
E-mail: [ouattmouss@yahoo.fr](mailto:ouattmouss@yahoo.fr)

**CAMEROON/CAMEROUN/CAMERÚN**

Mr. Paul Dieudonné BAPAH  
Inspecteur de l'Eau  
Ministre De L'Eau Et De L'Energie  
Direction de l'Hydraulique et de l'Hydrologie(DHH)/Yaoundé  
Phone: (237)22 67 64 15-77 41 75 95  
E-mail: [bapahp@yahoo.fr](mailto:bapahp@yahoo.fr)

**Mr. Stephen EBAI TAKANG**

Sub-Director  
DRCQ, Ministry of Agriculture, Yaounde  
Phone: (237)77482112  
E-mail: [ebaits@yahoo.co.uk](mailto:ebaits@yahoo.co.uk)

**CANADA/CANADA/CANADÁ****Dr. Peter CHAN**

Director General, Health Evaluation  
Directorate, Pest Management Regulatory  
Agency, Health Canada  
2720 Riverside DR, Ottawa, Ontario,  
Canada K1A 0K9  
Phone: 613-736-3510  
Fax: 613-736-3909  
E-mail: [peter.chan@hc-sc.gc.ca](mailto:peter.chan@hc-sc.gc.ca)

**Mr. Mark GOODWIN**

Pest Mgmt Coordinator – Pulse Canada  
6 Stonehaven Close Winnipeg Mb R3r3g3  
Phone: 204 782 2083  
E-mail: [MGCONSULTING@SHAW.CA](mailto:MGCONSULTING@SHAW.CA)

**Mrs. Donna GRANT**

Senior Chemist, Pesticide Residues  
3650-36 Street, NW, Calgary, Alberta,  
Canada T2L 2L1  
Phone: 403-299-7636  
Fax: 403-221-3293  
E-mail: [donna.grant@inspection.gc.ca](mailto:donna.grant@inspection.gc.ca)

**CAPE VERDE/CAP-VERT/CABO VERDE****Mr. Celestino GOMES MENDES**

Tavares  
BP.278 Praia - CAP-VERT  
Phone: 002382647227  
Fax: 002382647227  
E-mail: [Celestino.tavares@mdr.gov.cv](mailto:Celestino.tavares@mdr.gov.cv)

**CENTRAL AFRICAN REPUBLIC/RÉPUBLIQUE CENTRAFRICAINE/REPÚBLICA CENTROAFRICANA****Mr. Aimé Pascal NGOUMBANGO NZABE**

Directeur De La Protection  
Vegetale  
BP 55 BANGUI  
Phone: +236 75 50 23 24/ +236 77 364246  
Fax: +236 21 613561  
E-mail: [ngounze@yahoo.fr](mailto:ngounze@yahoo.fr)

**CHAD/TCHAD/CHAD****Mr. Samuel DJEKADOM RIABE**

Phone: +235 99780968  
E-mail: [samuelliabe@yahoo.fr](mailto:samuelliabe@yahoo.fr)

**Mr. PALOUMA ABOU**

Phone: +235 66383756

**CHILE/CHILI/CHILE**

Miss. Sylvia Soledad FERRADA CHAMORRO  
 Servicio Agrícola Y Ganadero  
 Division Asuntos Internacionales  
 Jefa Subdepartamento  
 Negociaciones Internacionales  
 Bulnes 140 Piso 5  
 Phone: 56-2 3451224  
 E-mail: [soledad.ferrada@sag.gob.cl](mailto:soledad.ferrada@sag.gob.cl)

Mr. Eduardo AYLWIN HERMAN  
 Asesor de La Agencia Chilena de Inocuidad  
 Alimentaria  
 Teatinos 40 Piso 5, Santiago Chile  
 Phone: 3935170  
 E-mail: [eduardo.aylwin@achipia.gob.cl](mailto:eduardo.aylwin@achipia.gob.cl)

Mrs. Paulina Alejandra CHÁVEZ DEL DESPÓSITO  
 Asesor Departamento De  
 Alimentos Y Nutrición  
 Mac Iver 459, Octavo Piso,  
 Santiago, Chile  
 Phone: 56-2-5740619  
 E-mail: [pchavez@minsal.cl](mailto:pchavez@minsal.cl)

Ms. MARÍA ELVIRA LERMANDA FUCHSLOCHER  
 INGENIERO AGRONOMO AFIPA A.G.  
 FELIX DE AMESTI 124 OF 31 LAS  
 CONDES SANTIAGO CHILE  
 Phone: 56-2-2066792  
 Fax: 56-2-2079286  
 E-mail: [info@afipa.cl](mailto:info@afipa.cl)

**CHINA/CHINE/CHINA**

Mr. SUI Pengfei  
 Director General  
 Institute for the Control of Agrochemicals, Ministry of Agriculture  
 No.22 Maizidian Street, Chaoyang District  
 Beijing, 100125, P.R.China  
 Phone: + 86-10-5919 4395  
 Fax: + 86-10-6593 7003  
 E-mail: [spf2325@yahoo.com.cn](mailto:spf2325@yahoo.com.cn)

Mr. LI Wenxing  
 Director  
 Pesticide Administration Division  
 Department of Crop Production, Ministry of Agriculture  
 No.11 Nongzhannanli, Chaoyang District  
 Beijing, 100125, P. R. China  
 Phone: +86-10-59192847  
 Fax: +86-10-59191875  
 E-mail: [liwenxing@agri.gov.cn](mailto:liwenxing@agri.gov.cn)

Ms. WANG Weiqin  
 Director  
 International Division  
 Department of International Cooperation, Ministry of Agriculture  
 No.11 Nongzhannanli, Chaoyang District  
 Beijing, 100125 P. R. China  
 Phone: +86-10-59192429  
 Fax: +86-10-65003621  
 E-mail: [weiqinw@agri.gov.cn](mailto:weiqinw@agri.gov.cn)

Ms. Fang Xiaohua  
 Deputy Director  
 Bureau of Quality and Safety Supervision of Agricultural Products,  
 Ministry of Agriculture  
 No.11 Nongzhannanli, Chaoyang District  
 Beijing, 100125, P. R. China  
 Phone: +86-10-59192313  
 Fax: +86-10-59193315  
 E-mail: [fangxiaohua@agri.gov.cn](mailto:fangxiaohua@agri.gov.cn)

**WANG Yan**

Deputy Director  
 Development Center for Science and Technology,  
 Ministry of Agriculture  
 No. 96 Dongsanhuan Nanlu, Chaoyang District  
 Beijing, 100122, P. R. China  
 Phone: +86-10-59199375  
 Fax: +86-10-59199377  
 E-mail: [wy5082@126.com](mailto:wy5082@126.com)

Ms. JI Ying  
 Director  
 Registration and Regulation Division,  
 Institute for the Control of Agrochemicals  
 Ministry of Agriculture  
 No. 22 Maizidian St, Chaoyang District  
 Beijing, 100125, P.R. China  
 Phone: +86-10-59194106  
 Fax: +86-10-59194063  
 E-mail: [jying@agri.gov.cn](mailto:jying@agri.gov.cn)

Prof. LIU Guangxue  
 Professor  
 Residue Division  
 Institute for the Control of Agrochemicals  
 Ministry of Agriculture  
 No.22 Maizidian St. Chaoyang District  
 Beijing, 100125, P.R.China  
 Phone: +86-10-589194105  
 Fax: +86-10-59194107  
 E-mail: [liuguangxue@agri.gov.cn](mailto:liuguangxue@agri.gov.cn)

Mr. TAO Chuanjiang  
 Director  
 Health Effects Division  
 Institute for the Control of Agrochemicals  
 Ministry of Agriculture  
 No. 22 Maizidian Street, Chaoyang District,  
 Beijing, 100125, P.R. China  
 Phone: + 86 10 5919 4084  
 Fax: +86 10 5919 4244  
 E-mail: [taochuanjiang@agri.gov.cn](mailto:taochuanjiang@agri.gov.cn)

Dr. LIU Fengmao  
 Professor  
 Department of Applied Chemistry, China Agricultural University  
 Yuanmingyuan Rd, Haidian District  
 Beijing 100193, P.R.China  
 Phone: 008610-62731978  
 Fax: 008610-62733620  
 E-mail: [lfm2000@cau.edu.cn](mailto:lfm2000@cau.edu.cn)

Dr. PAN Canping  
 Professor  
 Department of Applied Chemistry, China Agricultural University  
 Yuanmingyuan Rd, Haidian District  
 Beijing 100193, P.R.China  
 Phone: +86-10-62731978  
 Fax: +86-10-62733620  
 E-mail: [panc@cau.edu.cn](mailto:panc@cau.edu.cn)

Ms. MIAO Hong  
 Department of Monitoring and Control for Contaminants and  
 Residues  
 China National Center for Food Safety Risk Assessment  
 No.7 Panjiayuan Nanli, Chaoyang District  
 Beijing 100021 P.R.China  
 Phone: +86-10-67776790  
 Fax: +86-10-67776790  
 E-mail: [Miaohong0827@163.com](mailto:Miaohong0827@163.com)

Ms. PANG Jiongqian  
Bureau of Food Safety Integrated Coordination and Health  
Supervision, Ministry Of Health  
No.1 Xizhimenwai Nanlu, Xicheng District  
Beijing 100044 P.R.China  
Phone: +86-10-6879 2403  
Fax: +86-10-6879 2408  
E-mail: [P.jqian@gmail.com](mailto:P.jqian@gmail.com)

LI Kunwei  
China National Institute of Standard  
No.4 Road Zhichun, Haidian District,  
Beijing 100088 P.R.China  
Phone: +86-10-58811135  
Fax: +86-10-58811135  
E-mail: [likw@cnis.gov.cn](mailto:likw@cnis.gov.cn)

Dr. WANG Jianhua  
Senior Chemist  
Shandong Exit & Entry Inspection and Quarantine Bureau,AQSIQ  
P.R.China  
Room 714,No.70 Qutanxia Rd,Shinan District  
Qingdao 266002 P.R.China  
Phone:13954215719  
Fax: +86-532-80885761  
E-mail: [whywrs@yahoo.com.cn](mailto:whywrs@yahoo.com.cn)

Ms. LIU Yu  
Official  
Department of WTO Affairs, Ministry of Commerce  
No.2 Dong Chang An Street, Beijing, P.R.China  
Phone: +86-10-65197383  
Fax: +86-10-65197061  
E-mail: [liuyu\\_wto@mofcom.gov.cn](mailto:liuyu_wto@mofcom.gov.cn)

Mr. FAN Xuhui  
Deputy Director  
State Food and Drug Administration  
No.26 Xuanwumen West Street, Beijing, P.R.China  
Phone: +86-10-88330707  
Fax: +86-10-88372194  
E-mail: [fanxh@sfd.gov.cn](mailto:fanxh@sfd.gov.cn)

Mr. LI Bo  
Food Safety Supervision  
State Food and Drug Administration  
No.26 Xuanwumen West Street, Beijing, P.R.China  
Phone: +86-10-88330730  
Fax: +86-10-88370947  
E-mail: [mailboli@yahoo.com.cn](mailto:mailboli@yahoo.com.cn)

Dr. MA Shuangcheng  
Professor and Director  
Institute for Reference Standards and Standardization (IRSS)  
National Institutes for Food and Drug Control  
No. 2 Tiantanxili, Dongcheng District  
Beijing, 100050, P.R.China  
Phone: +86-10-67095272  
Fax: +86-10-67095887  
E-mail: [masc@nifdc.org.cn](mailto:masc@nifdc.org.cn)

SUN Lei  
TCM  
National Institutes for Food and Drug Control  
No.2 Tiantanxili, Dongcheng District  
Beijing, 100050, P.R.China  
Phone: +86-10-67095424  
Fax: +86-10-67023650  
E-mail: [dasunlei@sian.com](mailto:dasunlei@sian.com)

Prof. ZHU Zhiguang  
Director  
Standards and quality center of SAG  
No. 11 Bai Wan Zhuang Street Beijing, 100037, P.R.China  
Phone: +86-10-58523389  
Fax: +86-10-58523408  
E-mail: [lybzzzq@163.com](mailto:lybzzzq@163.com)

WANG Songxue  
Deputy Dean  
Academy of State Administration of Grain  
No. 11 Baiwangzhuang St, Xicheng District  
Beijing, 100037, P.R.China  
Phone: +861058523708  
Fax: +861058523599  
E-mail: [wsx@chinagrains.org](mailto:wsx@chinagrains.org)

Mr. LU Xiaolei  
Engineer  
Hangzhou Tea Research Institute,China CO-OP  
NO.41 Caihe Road, Hangzhou, Zhejiang 310016  
P.R.China  
Phone: 0571-86043882/18668198455  
E-mail: [zjuxl@gmail.com](mailto:zjuxl@gmail.com)

Mr. LIU Zhenyu  
Engineer  
China General Chamber of Commerce  
No.25 Yuetanbei Street, Xicheng District, Beijing, P.R.China  
Phone: +86-10-68391837  
Fax: +86-10-68391837  
E-mail: [zhenyuliu808@163.com](mailto:zhenyuliu808@163.com)

Ms. Chiu Wan Yuen Alice  
Agricultural Officer  
Agriculture, Fisheries and Conservation Department  
5/F, Cheung Sha Wan Government Offices, 303 Cheung, Sha  
Wan Road, Kowloon, Hong Kong  
Phone: (852)21507166  
Fax: (852)27369904  
E-mail: [alice\\_wy\\_chiu@afcd.gov.hk](mailto:alice_wy_chiu@afcd.gov.hk)

Ms. Joan YAU  
Scientific Officer  
Center for Food Safety, Food and Environmental Hygiene  
Department, HKSAR  
43/F, Queensway Government Offices,  
66 Queensway,  
Hong Kong  
Phone: (852)28675608  
Fax: (852)28933547  
E-mail: [jcwyau@fehd.gov.hk](mailto:jcwyau@fehd.gov.hk)

Dr. Choi Sik Man  
Senior Chemist  
Center for Food Safety, Food and Environmental Hygiene  
Department  
43/F, Queensway Government Offices  
Food and Environmental Hygiene Department  
66 Queensway, Hong Kong  
Phone:(852)28675022  
Fax: (852)28922547  
E-mail: [smchoi@fehd.gov.hk](mailto:smchoi@fehd.gov.hk)

#### COMOROS/COMORES/COMORAS

Mr. Mohamed Assoumani ISSIMAILA  
chef de service de la protection des végétomx  
BP 289 Moroni Comores  
Phone: +2693331102  
E-mail: [issimaila2002@yahoo.fr](mailto:issimaila2002@yahoo.fr)

## COSTA RICA/COSTA RICA/COSTA RICA

Mr. German CARRANZA CASTILLO  
 Jefe Departamento De Laboratorios  
 Servicio Fitosanitario Del  
 Estado, san jose, sabana sur  
 Phone: (506) 2549-3458  
 Fax: (506) 2549-3431  
 E-mail: [gcarranza@sfe.go.cr](mailto:gcarranza@sfe.go.cr)

## CUBA/CUBA/CUBA

Mrs. Mayra Martí Pérez  
 Jefa Nacional. Departamento de Higiene  
 de los Alimentos y Nutrición. Ministerio  
 Salud Pública de la República de Cuba  
 Calle 23 entre N y O. Edificio Soto.  
 Vedado. La Habana 10400  
 Phone: (537) 8330276  
 E-mail: [mayra.marti@infomed.sld.cu](mailto:mayra.marti@infomed.sld.cu) or [cnc@ncnorma.cu](mailto:cnc@ncnorma.cu)

## CÔTE D'IVOIRE/CÔTE D'IVOIRE/CÔTE D'IVOIRE

Mr. Stanislas Dewinther TAPE  
 Delegate  
 BP V 174 Abidjan  
 Phone: + 225 05701783  
 Fax: + 225 20223451  
 E-mail: [sttape@aol.fr](mailto:sttape@aol.fr)

## DENMARK/DANEMARK/DINAMARCA

Mrs. Gudrun HILBERT  
 Senior Scientific Adviser  
 Mørkhøj Bygade 19, DK-2860 Søborg  
 Phone: +45 72276631  
 E-mail: [guh@fvst.dk](mailto:guh@fvst.dk)

Mrs. Annette GROSSMANN  
 Mørkhøj Bygade 19, DK-2860 Søborg  
 Phone: +45 72276622  
 E-mail: [ang@fvst.dk](mailto:ang@fvst.dk)

Mrs. Bodil Hamborg JENSEN  
 Senior Adviser  
 Mørkhøj Bygade 19, 2860 Søborg  
 Phone: + 45 2490 4562  
 E-mail: [bhje@food.dtu.dk](mailto:bhje@food.dtu.dk)

## ECUADOR/ÉQUATEUR/ ECUADOR

Mr. Rommel BETANCOURT  
 Head of Delegation  
 Av. Eloy Alfaro y Av. Amazonas, Ed. MAGAP  
 Phone: +593 2 254 87 51  
 Fax: +593 2 254 87 51  
 E-mail: [rommel.betancourt@agrocalidad.gob.ec](mailto:rommel.betancourt@agrocalidad.gob.ec)

Mrs. Magoth NOGALES  
 Delegate  
 Av. Eloy Alfaro y Av. Amazonas, Ed. MAGAP  
 Phone: +593 2 254 87 51  
 Fax: +593 2 254 87 51  
 E-mail: [hijatia.nogales@agrocalidad.gob.ec](mailto:hijatia.nogales@agrocalidad.gob.ec)

Mrs. Jessica ZAVALA  
 Agrocalidad  
 Av Joau Tauea Maxeugo 101  
 Phone: +(5939) 229 09 42  
 E-mail: [jessica.zavala@agrocalidad.gob.ec](mailto:jessica.zavala@agrocalidad.gob.ec)

## EGYPT/ÉGYPTE/ EGIPTO

Dr. Ashraf Mahmoud El Marsafy  
 Lab Director  
 Central Laboratory of Residue Analysis of Heavy Metals  
 &Pesticides in Food  
 7 Nadi El-Said St., Dokki, Giza, Egypt  
 Phone: (+202) 37611282-37601395  
 Fax: (+202) 37611216-37611106  
 E-mail: [ashraf.elmarsafy@qcap-egypt.com](mailto:ashraf.elmarsafy@qcap-egypt.com) or [ashnour@live.com](mailto:ashnour@live.com)

## ESTONIA/ESTONIE/ESTONIA

Mrs. Külli RAE  
 Head of the Food Surveillance Bureau  
 Lai tn 39 // Lai tn 41, 15056 Tallinn,  
 Phone: +372 625 6211  
 Fax: +372 625 6210  
 E-mail: [kylli.rae@agri.ee](mailto:kylli.rae@agri.ee)

## EUROPEAN UNION/UNION EUROPÉENNE/UNIÓN EUROPEA

Dr. Eva ZAMORA ESCRIBANO  
 Administrator responsable for Codex issues  
 European Commission, Directorate  
 General for Health and Consumers,  
 Rue Froissart 101, B1049 Brussels  
 Phone: +322 2998682  
 Fax: + 322 2998566  
 E-mail: [eva-maria.zamora-escribano@ec.europa.eu](mailto:eva-maria.zamora-escribano@ec.europa.eu)

Mr. Stephane BRION  
 EU Official  
 Council of the European Union,  
 Rue De La Loi 175, 1040 Brussels, Belgium  
 Phone: +32 2 28 121 42  
 E-mail: [stephane.brion@consilium.europa.eu](mailto:stephane.brion@consilium.europa.eu)

Dr. Bastiaan DRUKKER  
 Administrator responsable for Legislation on Pesticide residues  
 European Commission, Directorate General for Health and  
 Consumers,  
 Rue Froissart 101, B1049 Brussels  
 Phone: +322 2965779  
 E-mail: [Bas.Drukker@ec.europa.eu](mailto:Bas.Drukker@ec.europa.eu)

Mrs. Hermine REICH  
 Senior Scientific Officer  
 European Food Safety Authority (EFSA)  
 Via Carlo Magno 1A 43126 Parma, Italy  
 Phone: +39 0521 036 662  
 Fax: +39 0521 036 0662  
 E-mail: [hermine.reich@efsa.europa.eu](mailto:hermine.reich@efsa.europa.eu)

## FINLAND/FINLANDE/FINLANDIA

Mrs. Tiia Mäkinen-Töykkä  
 Senior Officer  
 Finnish Food Safety Authority  
 Mustialankatu 3, FI-00790 Helsinki,  
 Phone: +358 40 5521 859  
 E-mail: [tiia.makinen@evira.fi](mailto:tiia.makinen@evira.fi)

## FRANCE/FRANCE/FRANCIA

Mrs. Florence GERAULT  
 expert référent national pour les résidus de  
 pesticides  
 Sral Pays le Loire 44 Rue Le  
 Notre 49044 Angers Cedex  
 Phone: 02 41 72 32 34  
 Fax: 02 41 36 00 35  
 E-mail: [florence.gerault@agriculture.gouv.fr](mailto:florence.gerault@agriculture.gouv.fr)



**Dr. Xavier G SARDA**  
Senior Scientific Officer on Pesticide Residues  
Anses (French agency for food, environmental and occupational health safety)  
Direction Produits Réglementés 253 avenue du Général Leclerc  
94701 Maisons-Alfort cedex France  
Phone: 33 1 49 77 21 66  
Fax: 33 1 49 77 21 60  
E-mail: [xavier.sarda@anses.fr](mailto:xavier.sarda@anses.fr)

**GABON/ GABON/ GABÓN**  
**Dr. Mesmin NDONG BIYOO**  
President of National Comettee of Codex  
Bp 2246 Libreville-GABON  
Phone: +241 25 27 51

**GERMANY/ALLEMAGNE/ALEMANIA**

**Mrs. Monika SCHUMACHER**  
Regierungsdirektorin  
Rochusstrasse 1, D-53123 Bonn  
Phone: +49 228 99 529 4662  
Fax: +49 228 99 529 4943  
E-mail: [monika.schumacher@bmelv.bund.de](mailto:monika.schumacher@bmelv.bund.de)

**Dr. Karsten HOHGARDT**  
Scientific director  
Messeweg 11/12, 38104 Braunschweig  
Germany  
Phone: 49-(0)531-299 3503  
Fax: 49-(0)531-299 3002  
E-mail: [karsten.hohgardt@bvl.bund.de](mailto:karsten.hohgardt@bvl.bund.de)

**Dr. Hans-Dieter JUNGBLUT**  
Advisor  
BASF SE,Speyerer Str.2, 67117  
Limburgerhof/Germany  
Phone: +49 621 60 27774  
Fax: +49 621 60 27092  
E-mail: [hans-dieter.jungblut@basf.com](mailto:hans-dieter.jungblut@basf.com)

**Dr. Otto KLEIN**  
Dietary Safety Expert  
Bayer CropScience AG,  
Landwirtschaftszentrum, Building 6610  
Alfred-Nobel-Str. 50, 40789 Monheim,  
Germany  
Phone: +49-2173-383463  
Fax: +49-2173-385866  
E-mail: [otto.klein@bayer.com](mailto:otto.klein@bayer.com)

**Dr. Juergen-Alfred LUX**  
Vice President  
BASF SE,Speyerer Str.2, 67117  
Limburgerhof/Germany  
Phone: +49 621 60 28488  
Fax: +49 621 60 6628488  
E-mail: [juergen-alfred.lux@basf.com](mailto:juergen-alfred.lux@basf.com)

**Dr. Eberhard SCHUELE**  
Head of laboratory / Senior Chemist  
CVUA Stuttgart; Schaafandstrasse 3/2, D-  
70736 Fellbach  
Phone: 0049-71134261126  
Fax: 0049-711588176  
E-mail: [eberhard.schuele@cvuas.bwl.de](mailto:eberhard.schuele@cvuas.bwl.de)

**GHANA/GHANA/GHANA**  
**Dr. Anthony Richmond CUDJOE**  
Entomology Division  
Cocoa Research Institute of Ghana,  
P.O.Box 8, New Tafo, Akim, Ghana  
Phone: 233 244 256 239  
Fax: 233 277 900 029  
E-mail: [tonycudjoe@yahoo.co.uk](mailto:tonycudjoe@yahoo.co.uk)

**Dr. Sam ADU – KUMI**  
Deputy Director, Environmental Protection Agency  
P. O. Box Mb 326, Ministries,  
Accra, Ghana  
Phone: +233 244 635 213  
Fax: +233 302 662 690  
E-mail: [adukumisam@yahoo.com](mailto:adukumisam@yahoo.com)

**Mrs. Felicia ANSAH -AMPROFI**  
Deputy Director  
Plant Protection And Regulatory Services Directorate  
P.O.Box M37, Accra.  
Phone: 0244951912  
E-mail: [fampronge@yahoo.com](mailto:fampronge@yahoo.com)

**Ms. Gloria Anowa BROWN**  
Regulatory Officer, Food and Drugs Board  
P. O. Box Ct 2783, Cantoment-  
Accra, Ghana  
Phone: +233 244 884 133  
Fax: +233 302 229 794  
E-mail: [anowabrown@gmail.com](mailto:anowabrown@gmail.com) or  
[ganowabrown@fdbghana.gov.gh](mailto:ganowabrown@fdbghana.gov.gh)

**Mr. Samuel Kofi FRIMPONG**  
Standards Officer/Deputy Technical Manager  
Pesticide Residue Laboratory  
Ghana Standards Authority  
P.O. Box Mb 245, Accra - Ghana  
Phone: (00233) 20 8463973  
Fax: (00233) 302 500092  
E-mail: [samuelki@yahoo.com](mailto:samuelki@yahoo.com)

**Ms. Jocelyn Adeline Naa Koshie LAMPTEY**  
Senior Regulatory Officer, Food and Drugs Board  
P. O. Box Ct 2783, Cantoment-  
Accra, Ghana  
Phone:+233 244 563 764  
Fax: +233 302 229 794  
E-mail: [nakoshie@yahoo.com](mailto:nakoshie@yahoo.com) or [jlamptey@fdbghana.gov.gh](mailto:jlamptey@fdbghana.gov.gh)

**Dr. Samuel Tetteh LOWOR**  
Chemist  
Cocoa Research Institute of Ghana,  
P.O.Box 8 New Tafo, Akim, Ghana  
Phone:233 243 889 880  
Fax: 233 277 900 029  
E-mail: [slowor2@yahoo.co.uk](mailto:slowor2@yahoo.co.uk)

**GUINEA/GUINÉE/GUINEA**

**Mr. Jean-Luc Faber**  
Chef De La Division Gestion Des  
Pesticides Et Des Agrements  
Professionnels, Point Focal Sps –  
Guinée, President Du Comité  
National Du Codex  
Alimentarius De Guinée  
Boîte Postale: 576 Conakry,  
République De Guinée  
Phone: (+224) 63 46 61 61 / 62 51 32 80  
E-mail: [elsabang@yahoo.fr](mailto:elsabang@yahoo.fr)

**HONDURAS/HONDURAS/HONDURAS**

Mrs. Karen Melissa ARAUJO HANDAL  
 Oficial de Registro de Plaguicidas para  
 Análisis de la Parte Química  
 Residencial Vista Hermosa calle unica Casa # 3407, Tegucigalpa,  
 Honduras  
 Phone: 00(504)99674142  
 E-mail: [karaujo@senasa-sag.gob.hn](mailto:karaujo@senasa-sag.gob.hn) or [karen\\_araujo@hotmail.com](mailto:karen_araujo@hotmail.com)

**INDIA/INDE/INDIA**

Dr. Bijender Singh PHOGAT  
 Secretary (CIB&RC)  
 Secretariat of CIB&RC, Directorate of Plant Protection, Quarantine  
 & Storage,  
 Ministry of Agriculture, Govt & India, NH-IV, Faridabad –121001,  
 Haryana (India)  
 Phone: +91-0129-2413002  
 Fax: +91-0129-2412125  
 E-mail: [cibsecy@nic.in](mailto:cibsecy@nic.in) or [bspogot@yahoo.co.in](mailto:bspogot@yahoo.co.in)

**Mr. Thakur Chand CHAUDHURI**

Secretary  
 National Tea Research Foundation  
 Ntrf C/O Tea Board, 14 Btm  
 Sarani, Kolkata 700 001, India  
 Phone: + 91 33 22341687  
 Fax: 91 33 22341687  
 E-mail: [tcc300@gmail.com](mailto:tcc300@gmail.com)

**Krishan SHARMA**

Network Co-Ordinator  
 Room No. 203, Lbs Building, Pusa  
 Campus, New Delhi – 110 012, India  
 Phone: 091-11-25846396  
 Fax: 091-11-25846396  
 E-mail: [kksaicrp@yahoo.co.in](mailto:kksaicrp@yahoo.co.in)

**INDONESIA/INDONÉSIE/INDONESIA**

Dr. Gardjita BUDI  
 Director of Quality and  
 Standardization, Ministry of Agriculture  
 Jl. Harsono Rm. No. 3 Ragunan,  
 Jakarta Selatan  
 Phone: (62-21) 7815881  
 Fax: (62-21) 7811468  
 E-mail: [gbudi.jkt@gmail.com](mailto:gbudi.jkt@gmail.com)

**Mr. Zainul ABIDIN**

Center for Plant Variety  
 Protection and Agriculture Permit  
 Jl. Harsono Rm. No. 3 Ragunan,  
 Jakarta Selatan  
 Phone: (62-21) 78839619  
 Fax: (62-21) 78836171

**Mr. Azril BAHRI**

Director of Quality and Standardization,  
 Ministry of Agriculture  
 Jl. Harsono Rm. No. 3 Ragunan,  
 Jakarta Selatan  
 Phone: (62-21) 7815881  
 Fax: (62-21) 7811468  
 E-mail: [azrilbahri@yahoo.com](mailto:azrilbahri@yahoo.com)

**Mrs. Kristrisasi HELENANDARI**

Pesticide Residues Laboratory of the Jakarta Province  
 Jl. Jambore Raya No 1 Jakarta  
 Timur. Indonesia  
 Phone: (62-21) 87752692  
 Fax: (62-21) 87752692  
 E-mail: [sesisuwadji@yahoo.com](mailto:sesisuwadji@yahoo.com)

**Mr. Yusdar HILMAN**

Head of Indonesian Center for  
 Horticultural Research and Development, Ministry of Agriculture  
 Jl. Ragunan 29 Jakarta  
 Phone: (62-21) 7890990  
 Fax: (62-21) 7805135  
 E-mail: [yhilman@indo.net.id](mailto:yhilman@indo.net.id)

**Mr. Rachmat Bagus SUHARYO**

Head of Multilateral  
 Sub Division(International Cooperation)  
 Ministry of Agriculture  
 Jl.Harsono Rm. No. 3 Ragunan,  
 Jakarta Selatan  
 Phone: (62-21) 7815380 ext. 2619  
 Fax: (62-21) 7804350  
 E-mail: [multilateral@yahoo.co.id](mailto:multilateral@yahoo.co.id) or [bagusmania@yahoo.com](mailto:bagusmania@yahoo.com)

**IRAN (ISLAMIC REPUBLIC OF)/IRAN (RÉPUBLIQUE ISLAMIQUE D')/IRAN (REPÚBLICA ISLÁMICA DEL)****Dr. Hasan ASKARY**

Head of Iranian National Codex Committee on Pesticide Residue  
 (INCCPR)  
 No 1,2 Yaman St. Chamran Free Way,  
 Tehran, Iran, P.O.Box: 19395-1454  
 Phone: +98(21)22402839  
 Fax: +98(21)22402839  
 E-mail: [askary@iripp.ir](mailto:askary@iripp.ir)

**IRELAND/IRLANDE/IRLANDA****Mr. Dermot SHERIDAN**

Department of Agriculture, Food & the  
 Marine Laboratory Complex, Backweston, Celbridge, Co. Kildare,  
 Ireland  
 Phone:+353 1615 7616  
 Fax: +353 1615 7575  
 E-mail: [dermot.sheridan@agriculture.gov.ie](mailto:dermot.sheridan@agriculture.gov.ie)

**ITALY/ITALIE/ITALIA****Mr. Orazio SUMMO**

Delegate  
 Via XX Settembre, 20 - 00187 Roma  
 Phone: +390646656147  
 Fax: +39064880273  
 E-mail: [o.summo@mpaaf.gov.it](mailto:o.summo@mpaaf.gov.it)

**JAPAN/JAPON/JAPÓN****Mr. Masahiro SEGAWA**

Director, Agricultural Chemical Office,  
 Ministry of Agriculture, Forestry and Fisheries  
 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo  
 100-8950, Japan  
 Phone: +81-3-3502-5969  
 Fax: +81-3-3501-3774  
 E-mail: [masahiro\\_segawa@nm.maff.go.jp](mailto:masahiro_segawa@nm.maff.go.jp)

**Mr. Makoto IRIE**

Deputy Director, Agricultural Chemicals Office, Ministry of  
 Agriculture, Forestry and Fisheries  
 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo  
 100-8950, Japan  
 Phone: +81-3-3502-5969  
 Fax: +81-3-3501-3774  
 E-mail: [makoto\\_irie@nm.maff.go.jp](mailto:makoto_irie@nm.maff.go.jp)

**Dr. Satoru NEMOTO**

Section Chief, Division of Foods, National Institute of Health Sciences

Kamiyoga 1-18-1, Setagaya-ku Tokyo,  
158-8501, Japan  
Phone: +81-3-3700-1141 (ex. 259)  
Fax: +81-3-3707-6950  
E-mail: [nemoto@nihs.go.jp](mailto:nemoto@nihs.go.jp)

**Mr. Hiraku OHTA**

Officer, Pesticide Section, Risk Assessment Division, Food Safety Commission Secretariat, Cabinet Office  
22nd Fl. Akasaka Park Bld., 5-2-20  
Akasaka, Minato-ku, Tokyo 107-6122,  
Phone: +81-3-6234-1093  
Fax: +81-3-3584-7391  
E-mail: [hiraku.ota@cao.go.jp](mailto:hiraku.ota@cao.go.jp)

**Dr. Katsushiro SHIGENO**

Deputy Director, Standard and Evaluation Division, Department of Food Safety, Pharmaceutical and Food  
2-2-1 Chome Kasumigaseki Chiyoda-ku  
Safety Bureau, Ministry of Health, Labour and Welfare  
Tokyo Japan  
Phone: +81-3-3595-2341  
Fax: +81-3-3501-4868  
E-mail: [shigeno-katsushiro@mhlw.go.jp](mailto:shigeno-katsushiro@mhlw.go.jp)

**Mr. Yoshiyuki TAKAGISHI**

Section Chief, Agricultural Chemicals Office, Ministry of Agriculture, Forestry and Fisheries  
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo  
100-8950, Japan  
Phone: +81-3-3502-5969  
Fax: +81-3-3501-3774  
E-mail: [yoshiyuki\\_takagishi@nm.maff.go.jp](mailto:yoshiyuki_takagishi@nm.maff.go.jp)

**KENYA/KENYA/KENYA****Miss. Lucy Muthoni NAMU**

Technical Personal Assistant to the  
Managing Director  
Kenya Plant Health Inspectorate Services  
P.O.Box 49592, 00100 GPO, Oloolua  
Ridge, OFF Ngong Road, Nairobi, Kenya  
Phone: +254-020-3536171  
Fax: +254-0203536175  
E-mail: [lnamu@kephis.org](mailto:lnamu@kephis.org)

**Ms. Grace MUCHEMI**

Pest Control Products Board  
13794-00800 Nairobi, Kenya  
Phone: 254723809619  
Fax: 254208021865  
E-mail: [muchemi.grace@gmail.com](mailto:muchemi.grace@gmail.com)

**LEBANON / LIBAN / LÍBANO****Dr. Salem HAYAR**

Associate Professor  
Beirut, Lebanon  
Phone: +009613416364  
Fax: +009615430701  
E-mail: [shayar@cyberia.net.lb](mailto:shayar@cyberia.net.lb)

**MADAGASCAR/MADAGASCAR/MADAGASCAR****Mr. Hervé Francis RAKOTONDRAVONY**

Chimiste, Président du Comité National  
du Codex Alimentarius  
Phone: 261 32 02 588 86  
E-mail: [spcplabo@moov.mg](mailto:spcplabo@moov.mg)

**MALAYSIA/MALAISIE/MALASIA****Ms. NURSIAH BINTI MOHAMAD TAJOL AROS**

Director  
Pesticide Control Division, Department of  
Agriculture, 4-6 flr, Wisma Tani, Jalan  
Sultan Salahuddin, 50632 Kuala Lumpur,  
Malaysia  
Phone: +603 20301472  
Fax: +603 26917551  
E-mail: [nursiah@doa.gov.my](mailto:nursiah@doa.gov.my)

**Miss. BINTI MOHAMED KHAIRATUL AZMAH**

Senior Research Officer Pesticide Laboratory, Strategic Resources  
Research Centre,  
Malaysian Agricultural  
Research and Development  
Institute (Mardi), P.O. Box 12301,  
50774, Kuala Lumpur, Malaysia  
Phone: +60389437914  
Fax: +60389487639  
E-mail: [atul@mardi.gov.my](mailto:atul@mardi.gov.my)

**Anggat ULAH**

Principal Assistant Director  
Pesticide Control Division, DOA, Department of Agriculture  
4-6flr, Wisma Tani, Jalau SuHau  
Salahuddin, 50632 Kuala Lumpur  
Phone: + 0192449349  
Fax: +60326917551  
E-mail: [ulahanggat@rocketmail.com](mailto:ulahanggat@rocketmail.com)

**MALDIVES/MALDIVES/MALDIVAS****Mr. Ibrahim SHABAU**

National Codex Committee Member & Director  
Ministry of Fisheries & Agriculture, Maldives  
Phone: 960 333 9245  
Fax: 960 332 6558  
E-mail: [shabau@gmail.com](mailto:shabau@gmail.com)

**MALI/MALI/MALÍ****Mr. Sékouba KEITA**

Chef Division appui Scientifique et technique  
à l'élaboration de la réglementation /documentation  
Centre commercial, Rue 305 quartier du  
fleuve BPE:2362 Bamako/Mali  
Phone: +22379156031  
Fax: +22320220747  
E-mail: [sekokake@yahoo.fr](mailto:sekokake@yahoo.fr) or [scodexmali@yahoo.fr](mailto:scodexmali@yahoo.fr)

**MOROCCO/MAROC/MARRUECOS****Mr. Ahmed JAAFARI**

Ingenieur D'Etat Principal  
National Food Safety Office (O.N.S.S.A)  
Avenue Hadj Ahmed Cherkaoui,  
Agdal, Rabat, Maroc  
Phone: +212 5 37 67 66 11  
Fax: +212 5 37 68 20 49  
E-mail: [ahmedjaafari@yahoo.fr](mailto:ahmedjaafari@yahoo.fr)

**Mr. Mohamed KHALLAF**

Ingénieur en Chef  
Direction de l'Epidémiologie et de Lutte contre les Maladies,  
Ministère de la Santé,  
71 Avenue Ibn sina Agdal Rabat - Maroc  
Phone: +212 537 671193  
Fax: +212 537 671298  
E-mail: [khallafm@yahoo.fr](mailto:khallafm@yahoo.fr)

**Mr. Ahmed ZOUAOU**

Chef de service pesticides Laboratoire Officiel d'Analyses et de Recherches Chimiques, LOARC  
N° 25 Rue Nichakra Rahal (Ex Rue de Tours) Casablanca 20110 Maroc  
Phone: +212 5 22 30 21 96/98  
Fax: +212 5 22 30 19 72  
E-mail: [zououiloarc@yahoo.fr](mailto:zououiloarc@yahoo.fr)

**Mr. Mustapha AARAR**

Head of Division, EACCE, Etablissement Autonome de Controle et de Coordination des Exportations  
Numero 72, rue mohamed smiha, Casablanca  
Phone: +21222305104  
Fax: +21222305168  
E-mail: [aarar@eacce.org.ma](mailto:aarar@eacce.org.ma)

**MOZAMBIQUE/MOZAMBIQUE/MOZAMBIQUE****Mr. Khalid CASSAM**

Head of Sub-Committee of Pesticide Residues of National Codex Committee  
Avenue of FPLM, Recinto do IIAM, Pavilhao Novo, Plant Protection Department, 1st floor, Maputo City  
Phone: +258 823071000  
Fax: +258 21460591  
E-mail: [khalidcassam@yahoo.com.br](mailto:khalidcassam@yahoo.com.br)

**MYANMAR/MYANMAR/MYANMAR****Mr. KO KO LATT**

Assistant Supervisor  
Plant Protection Division (Head Office) , West Gyogone, Insein, Yangon  
Phone: 95 1 644214  
Fax: 95 1 644019  
E-mail: [kokolat2004yau@gmail.com](mailto:kokolat2004yau@gmail.com)

**NEPAL/NÉPAL/NEPAL****Mr. Pramod KOIRALA**

Senior Food Research Officer  
Dept. of Food Technology and Quality Control, Babarmahal, Kathmandu, Nepal  
Phone: +977-1-4262369  
Fax: +977-1-4262337  
E-mail: [pramodkoirala2002@yahoo.com](mailto:pramodkoirala2002@yahoo.com)

**NETHERLANDS/PAYS-BAS/PAISES BAJOS****Mrs. Erica MULLER**

Geertjesweg 15, P.O. Box 9102, 6700HC Wageningen, The Netherlands  
Phone: +31 88 2231904  
Fax: +31 317 421701  
E-mail: [e.muller@minlnv.nl](mailto:e.muller@minlnv.nl)

**Mrs. Trijntje VAN DER VELDE-KOERTS**

PO Box 1, 3720 BA Bilthoven, The Netherlands  
Phone: + 31 30 274 4364  
Fax: + 31 30 274 4475  
E-mail: [Trijntje.van.der.Velde@rivm.nl](mailto:Trijntje.van.der.Velde@rivm.nl)

**NEW ZEALAND/ NOUVELLE-ZÉLANDE/ NUEVA ZELANDIA****Mrs. Debbie MORRIS**

Director, Systems, Support ACVM  
P.O. Box 2526 Wellington New Zealand  
Ministry for Primary Industries  
Phone: 644 894 2541  
E-mail: [debbie.morris@mpi.govt.nz](mailto:debbie.morris@mpi.govt.nz)

**Mr. Warren HUGHES**

Principal Adviser ACVM Standards  
Ministry for Primary Industries  
P.O. Box 2526 Wellington New Zealand  
Phone: 64 4 894 2560  
Fax: 64 4 894 2566  
E-mail: [warren.hughes@mpi.govt.nz](mailto:warren.hughes@mpi.govt.nz)

**Ms. Nikki JOHNSON**

P.O. Box 10629 Wellington New Zealand  
Phone: 64 4 473 6040  
Fax: 64 4 473 6041  
E-mail: [nikki@solutionz.co.nz](mailto:nikki@solutionz.co.nz)

**Mr. David LUNN**

Principal Adviser Plants & Residues  
Ministry for Primary Industries  
P.O. Box 2526 Wellington New Zealand  
Phone: 64 4 894 2654  
Fax: 64 4 894 2675  
E-mail: [dave.lunn@mpi.govt.nz](mailto:dave.lunn@mpi.govt.nz)

**Jennifer SCOULAR**

CEO, Avocado Industry Council, NZ  
P.O. Box 13267 Tauranga New Zealand  
Phone: 64 21 741 014  
Fax: 64 7 571 6145  
E-mail: [jen.scoular@nzavocado.co.nz](mailto:jen.scoular@nzavocado.co.nz)

**NIGERIA/NIGÉRIA/NIGERIA****Mrs. Mojisola Olufemi AMORE**

Deputy Director, National Agency for Food & Drugs Administration & Control (NAFDAC)  
Plot 2032 Olusegun Obasanjo Way, Wuse, Zone7, Abuja.  
Phone: +234-8023137385  
E-mail: [mojimore@yahoo.com](mailto:mojimore@yahoo.com) or [amore.m@nafdac.gov.ng](mailto:amore.m@nafdac.gov.ng)

**Mrs. Chibuzo Angela ENEH**

Assistant Chief Regulatory Officer, National Agency for Food & Drugs Administration & Control (NAFDAC)  
Plot 2032 Olusegun Obasanjo Way, Wuse, Zone7, Abuja.  
Phone: +234-8033113008  
E-mail: [chibseneh2002@yahoo.com](mailto:chibseneh2002@yahoo.com)

**Ms. Omolara Abiodun FASANMI**

Senior Scientific Officer  
Federal Department of Livestock and Pest Control Services  
Federal Ministry of Agriculture and Rural Development  
FCDA Secretariat, Area 11, Garki, Abuja.  
Phone: +234-8065315605  
E-mail: [faslara27@yahoo.com](mailto:faslara27@yahoo.com)

**Mr. Ikechukwu Berthrand URULOR**

Chief Laboratory Technologist, National Agency for Food & Drugs Administration & Control (NAFDAC)  
Plot 3/5 Oshodi-Apapa Expressway, Oshodi, Lagos.  
Phone: +234-7089946533,  
E-mail: [urulor.i@nafdac.gov.ng](mailto:urulor.i@nafdac.gov.ng) or [urubik@yahoo.com](mailto:urubik@yahoo.com)

**PARAGUAY/ PARAGUAY/ PARAGUAY****Jose GIMENEZ**

Delegate  
Humaita 145 - Asuncion  
Phone: +9595992431450  
E-mail: [josegd78@hotmail.com](mailto:josegd78@hotmail.com)

Cristian MARECOS  
 Delegate  
 Luis Alberto de Herrera - Asuncion  
 Phone: +59521496175  
 Fax: +59521496174  
 E-mail: [crirama82@gmail.com](mailto:crirama82@gmail.com)

Mr. Miguel LOVERA  
 President SENA  
 Humaita 145 - Asuncion  
 Phone: +595-21-441491  
 Fax: +595-21-441491  
 E-mail: [miguel.lovera@senave.gov.py](mailto:miguel.lovera@senave.gov.py)

#### PERU/PEROU/PERU

Dr. Mirna ZUZUNAGA  
 Especialista En Inocuidad  
 Agroalimentaria  
 Av. La Molina N° 1915 Lima 12-Perú  
 Phone: 511 313 3300  
 Fax: 511 340 1486  
 E-mail: [mzuzunaga@senasa.gob.pe](mailto:mzuzunaga@senasa.gob.pe) or [mirnazuzu@yahoo.es](mailto:mirnazuzu@yahoo.es)

#### REPUBLIC OF KOREA/RÉPUBLIQUE DE CORÉE/REPÚBLICA DE COREA

Dr. Geonjae IM  
 Senior researcher  
 NAAS, RDA, 126 Suin-Ro Kweonseonku,  
 Suwon, Korea  
 Phone: 82-31-290-0582  
 Fax: 82-31-290-0508  
 E-mail: [gunjim@korea.k](mailto:gunjim@korea.k)

Ms. Geunhwan GIL  
 Researcher  
 NAAS, RDA, 126 Suin-Ro Kweonseonku,  
 Suwon, Korea  
 Phone: 82-31-290-0589  
 Fax: 82-31-290-0508  
 E-mail: [ghgil@korea.kr](mailto:ghgil@korea.kr)

Dr. Moo-Hyeog IM  
 Deputy Director  
 Food Standard Division Korea FDA  
 Osong Health Technology Administration  
 Complex, 643 Yeonje-ri, Cheongwon-gun,  
 Chungcheongbuk-do, 363-700, Korea  
 Phone: 82-43-719-2416  
 Fax: 82-43-719-2400  
 E-mail: [imh0119@korea.kr](mailto:imh0119@korea.kr)

Mr. Han-Sub CHANG  
 Researcher  
 Consumer Information and Food Safety Division  
 172, Anyangro, Manan-gu, Anyang-city, Gyeonggi-Province, Korea  
 Phone: 82 31 463 1574  
 Fax: 82 31 446 0903  
 E-mail: [jjhs@korea.kr](mailto:jjhs@korea.kr)

Miss. Kyung-Hee JUNG  
 Food Standard Division Korea FDA  
 Osong Health Technology Administration  
 Complex, 643 Yeonje-ri, Cheongwon-gun,  
 Chungcheongbuk-do, 363-700, Korea  
 Phone: 82-43-719-2434  
 Fax: 82-43-719-2400  
 E-mail: [inukioo@korea.kr](mailto:inukioo@korea.kr)

Mrs. Hye Soon KANG  
 Pesticide Analyst  
 125, Chungyeol-ro, Chuncheon-si,  
 Gangwon-do, Korea  
 Phone: 82 33 252 6028  
 Fax: 82 33 241 1388  
 E-mail: [k6300n@korea.kr](mailto:k6300n@korea.kr)

Prof. Mi-Gyung LEE  
 Professor  
 Dept. of Food Science & Biotechnology,  
 College of Natural Science, Andong National  
 University, #388 Songcheon-dong,  
 Andong-si, Gyeongbuk 760-749, Korea  
 Phone: +82-10-9247-6011  
 Fax: +82-54-820-6264  
 E-mail: [leemig@andong.ac.kr](mailto:leemig@andong.ac.kr)

Dr. Jung ho LEE  
 Director  
 #2-202 Bio Venture Valley, Seoul National  
 University, 103-2 Seodun, Gwonseon,  
 Suwon, Gyeonggi, Korea 441-853  
 Phone: 82-31-278-1904  
 Fax: 82-31-278-1905  
 E-mail: [jlee@greenplant.re.kr](mailto:jlee@greenplant.re.kr)

Dr. Joong-Keun LEE  
 Head Researcher  
 Osong Health Technology Administration  
 Complex, 187 Osongsaengmyeong2(i)-ro,  
 Osong-eup, Cheongwon-gun,  
 Chungcheongbuk-do, Korea 363-700  
 Phone: 82-43-713-8488  
 Fax: 82-43-713-8907  
 E-mail: [leejk@khidi.or.kr](mailto:leejk@khidi.or.kr)

Dr. Jae-Ho OH  
 Deputy Director  
 Food Chemical Residues Division, Korea FDA  
 Osong Health Technology Administration  
 Complex, 643 Yeonje-ri, Cheongwon-gun,  
 Chungcheongbuk-do, 363-700, Korea  
 Phone: 82-43-719-4203  
 Fax: 82-43-719-4200  
 E-mail: [chopin68@korea.kr](mailto:chopin68@korea.kr)

Dr. Jinyoung SHIN  
 Veterinarian Reseacher  
 Animal, Plant and Fisheries Quarantine and Inspection Agency  
 175, Anyangro, Manangu, Anyangsi,  
 Gyeonggido, Republic of Korea  
 Phone: 82-31-467-1984  
 Fax: 82-31-467-1833  
 E-mail: [novice2002@korea.kr](mailto:novice2002@korea.kr)

#### REPUBLIC OF MOLDOVA/RÉPUBLIQUE DE MOLDOVA/REPÚBLICA DE MOLDOVA

Miss. Elena JARDAN  
 Junior Researcher, Science Laboratory  
 Toxicology and Chemical Safety, Secretary of the National Codex  
 Committee  
 67a Gh. Asachi str., MD-2028, Chisinau city Republic of Moldova  
 country  
 Phone: (373 22) 57 46 42  
 Fax: (373 22) 72 97 25  
 E-mail: [codex@cnspl.md](mailto:codex@cnspl.md) or [lenuta\\_jardan@yahoo.com](mailto:lenuta_jardan@yahoo.com)



**RUSSIAN FEDERATION/FÉDÉRATION DE  
RUSSIE/FEDERACIÓN DE RUSIA**

**Mrs. Tatiana SINITSKAYA**  
Senior researcher  
Russia, Moscow Region, mytishchi,  
Semashko str., 2  
Phone: +74955861072  
Fax: +74955861072  
E-mail: [pesticidi@yandex.ru](mailto:pesticidi@yandex.ru)

**Mr. Vladimir MAMONTOV**  
Chief expert  
Phone: +74999733012  
Fax: +74999731652  
E-mail: [mamontov\\_va@gsen.ru](mailto:mamontov_va@gsen.ru)

**Mrs. Kovtunenکو ELNARA**  
Chief of Division  
Moscow, Rahmanovskiy str, 3 bld.  
Phone: (495) 627 29 24  
E-mail: [kovtunenکو@rosminzdrav.ru](mailto:kovtunenکو@rosminzdrav.ru)

**Mrs. Korablev SERGEY**  
Chief of Division  
Moscow, Rahmanovskiy str, 3 bld.  
Phone: (495) 627 29 24  
E-mail: [korablevSK@rosminzdrav.ru](mailto:korablevSK@rosminzdrav.ru)

**SAUDI ARABIA/ARABIE SAOUDITE/ARABIA SAUDITA**

**Mr. Hussain ALSULAIMAN**  
3292 Northern Ring Road – Al Nafel Area– Riyadh 13312 - 6288  
Phone: 00966 56 5080203  
Fax: 00966 1 2105643  
E-mail: [hmsulaiman@sfda.gov.sa](mailto:hmsulaiman@sfda.gov.sa)

**Mr. Abdullah ALHADLAQ**  
3292 North Ring Road – Al Nafel  
Unit(1) – Riyadh 13312-6288  
Kingdom of Saudi Arabia  
Phone: +966505200298  
Fax: +96612753086  
E-mail: [ahadlaq@sfda.gov.sa](mailto:ahadlaq@sfda.gov.sa)

**Mr. Mohammed ALTOUM**  
3292 Northern Ring Road – Al Nafel Area– Riyadh 13312 - 6288  
Phone: +96612759222  
Fax: +96612105643  
E-mail: [MSToum@sfda.gov.sa](mailto:MSToum@sfda.gov.sa)

**Mr. Sameer BOHAMAD**  
3292 North Ring Road – Al Nafel  
Unit(1) – Riyadh 13312-6288  
Kingdom of Saudi Arabia  
Phone: 009612755925 - Ext 3205  
Fax: 0096612753086  
E-mail: [SHBhamad@saso.org.sa](mailto:SHBhamad@saso.org.sa)

**SIERRA LEONE/SIERRA LEONE/SIERRA LEONA**

**Dr. Ibrahim SHAMIE**  
Deputy Director-Crops  
Ministry of Agriculture, Youyi Building,  
Freetown, Sierra Leone  
Phone: +232 78542939  
E-mail: [imo1shamie@yahoo.co.uk](mailto:imo1shamie@yahoo.co.uk)

**SINGAPORE/SINGAPOUR/SINGAPUR**

**Dr. WU Yuan Sheng**  
Assistant Director(Pesticide Residue Section)  
Veterinary Public Health Laboratories  
Laboratories Department  
Agri-Food & Veterinary Authority of Singapore  
10 Perahu Road, Singapore 718837  
Phone: (65)67952837  
Fax: (65)68619491  
E-mail: [wu\\_yuan\\_sheng@ava.gov.sg](mailto:wu_yuan_sheng@ava.gov.sg)

**Mr. Poh Leong LIM**  
Senior Scientist, Pesticide Residue Section  
Veterinary Public Health Laboratories  
Agri-Food & Veterinary Authority of Singapore  
10 Perahu Road, Singapore 718837  
Phone: (65)67952818  
Fax: (65)68619491  
E-mail: [lim\\_poh\\_leong@ava.gov.sg](mailto:lim_poh_leong@ava.gov.sg)

**SPAIN/ESPAGNE/ESPAÑA**

**Mr. César CASADO DE SANTIAGO**  
Head of the Service of Pesticide Residues in food  
56, Alcalá Street. 28014 Madrid. Spain  
Phone: 0034 91 3380620  
E-mail: [ccasado@msssi.es](mailto:ccasado@msssi.es)

**SUDAN/SOUDAN/SUDÁN**

**Mrs. Nour ELHASSAN**  
Khartoum Gama Street Sudanese Standard  
& Metrology Organization  
P.O. BOX 13573  
Phone: 00249912367408  
Fax: 00249183741765  
E-mail: [nourssmo2009@hotmail.com](mailto:nourssmo2009@hotmail.com)

**Mr. Mahgoub ELAMIN**  
Khartoum/ Baladya ST./Sudan  
P.O.Box 13573  
Phone: 00249912667281  
Fax: 00249183762737  
E-mail: [mohgoubadelmagid@yahoo.co.uk](mailto:mohgoubadelmagid@yahoo.co.uk)

**Dr. Khidir ELFAKI**  
National Ministry of Animal Resources,  
Fisheries and Range Lands  
P. O: 293 Khartoum, Sudan  
Phone: +249 123033652  
Fax: +249 154928936  
E-mail: [khidifaki59@hotmail.com](mailto:khidifaki59@hotmail.com)

**Mrs. Suad FAGIER**  
Pesticide Registration /Officer  
Khartoum North P.O. Box 14  
Phone: +249918112385  
Fax: +249 85 339423  
E-mail: [suad.fageer@yahoo.com](mailto:suad.fageer@yahoo.com)

**SWITZERLAND/SUISSE/SUIZA**

**Mrs. Lucia KLAUSER**  
Scientific Advisor  
Food Safety Division, 3003 Berne,  
Switzerland  
Phone: 0041 31 322 95 69  
Fax: 0041 31 322 95 74  
E-mail: [lucia.klauser@bag.admin.ch](mailto:lucia.klauser@bag.admin.ch)

**Mr. Henri DISERENS**

Nestle Research Center - P.O. Box 44 - CH- 1000 Lausanne 96 -  
Switzerland  
Phone: 0041 21 785 8239  
Fax: 0041 21 7858553  
E-mail: [henri.diserens@rdls.nestle.com](mailto:henri.diserens@rdls.nestle.com)

**Dr. Neil GREENER**

Regulatory Manager  
Syngenta Crop Protection AG, WRO-  
1008.4.29, Schwarzwaldallee 215, CH-  
4058, Basel, Switzerland  
Phone: 0041 61 323 9410  
Fax: 0041 61 323 6155  
E-mail: [neil.greener@syngenta.com](mailto:neil.greener@syngenta.com)

**SWEDEN/SUÈDE/SUECIA****Mr. Magnus CARNWALL**

Senior Administrative Officer  
SE-103 33 Stockholm, Sweden  
Phone: +46-8-405 10 00  
Fax: +46 8 405 49 70  
E-mail: [magnus.carnwall@rural.ministry.se](mailto:magnus.carnwall@rural.ministry.se)

**Mr. Magnus DANIELSSON**

Head of Food Standards Department  
National Food Agency  
Box 622 SE-75126 Uppsala  
Phone: +46 18 175391  
Fax: +46 18 105848  
E-mail: [magnus.danielsson@slv.se](mailto:magnus.danielsson@slv.se)

**Mr. Bengt-Göran ERIKSSON**

Risk Benefit Assessor  
National Food Agency, Box 622, SE-751  
26 Uppsala  
Phone: +46 18 171458  
Fax: +46 18 105848  
E-mail: [bger@slv.se](mailto:bger@slv.se)

**TAJIKISTAN/ TADJIKISTAN/ TAYIKISTÁN****Otabek KHOJAEV**

Delegate  
Rudaki Avenue 44 , 734025  
Phone: +992 221 73 05  
Fax: +992 221 73 05  
E-mail: [otabek\\_khojaev@yahoo.co.in](mailto:otabek_khojaev@yahoo.co.in)

**THAILAND/THÁILANDE/TAILANDIA****Ms. Manthana MILNE**

Deputy Director-General  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: +662 579 0151  
E-mail: [manthana2001@yahoo.com](mailto:manthana2001@yahoo.com)

**Ms. Nunchana LUETRAKOOL**

Director of Agricultural Protection Science Research Development  
Office, Dept of Agriculture  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: + 662 579 3579  
Fax: + 662 940 5736  
E-mail: [nunchana.l@doa.in.th](mailto:nunchana.l@doa.in.th)

**Ms. Prapassara PIMPAN**

Senior Expert in Pesticides Department of Agriculture  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: + 662 579 3577 ext.2310  
Fax: + 662 561 4695  
E-mail: [ppimpan04@yahoo.com](mailto:ppimpan04@yahoo.com)

**Mr. Pisan PONGSAPITCH**

Director  
Office of Standard Development, National Bureau of Agricultural  
Commodity and Food Standards  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: + 662 561 2277 ext 1401  
Fax: + 662 561 3357  
E-mail: [codex@acfs.go.th](mailto:codex@acfs.go.th)

**Ms. Chitra SETTAUDOM**

Senior Expert in Food Standards  
Food and drug Administration  
Ministry of Public Health  
Tiwanont Rd., Taladkwan, Muang,  
Nonthaburi 11000 Thailand  
Phone: + 662 590 7140  
Fax: + 662 591 8446  
E-mail: [schitra@fda.moph.go.th](mailto:schitra@fda.moph.go.th)

**Ms. Kanokporn ATISOOK**

Medical Scientist, Expert Level  
Department of Medical Sciences  
Tiwanont Rd., Taladkwan, Muang,  
Nonthaburi 11000 Thailand  
Phone: + 662 951 0000 ext 99622  
Fax: + 662 951 1021  
E-mail: [kanokporn.a@dmsc.mail.go.th](mailto:kanokporn.a@dmsc.mail.go.th)

**Mr. Sasi JAROENPOJ**

Senior Veterinarian Officer  
Department of Livestock Development  
Phayathai Rd., Ratchataevee, Bangkok  
10400 Thailand  
Phone: + 662 653 4444 ext.3127  
Fax: + 662 653 4917  
E-mail: [Sasijaroenpoj@yahoo.com](mailto:Sasijaroenpoj@yahoo.com)

**Ms. Ing-Orn PANYAKIT**

Senior Standards Officer  
National Bureau of Agricultural Commodity and Food Standards  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: + 662 561 2277 ext 1424  
Fax: + 662 561 3357  
E-mail: [ingorn2011@gmail.com](mailto:ingorn2011@gmail.com)

**Ms. Nuansri TAYAPUTCH**

Consultant, Central Laboratory  
50 Phaholyothin Rd., Ladyao, Chatuchak,  
Bangkok 10900 Thailand  
Phone: + 668 7828 7658  
Fax: + 662 941 1267  
E-mail: [nuantaya@hotmail.com](mailto:nuantaya@hotmail.com)

**Mr. Charoen KAOWSUKSAI**

Deputy Secretary General  
Queen Sirikit National Convention Center,  
Zone C, 4th Floor, 60 New Rachadapisek  
Rd., Klongtoey, Bangkok 10110  
Phone: + 662 976 3088  
Fax: + 662 976 2265  
E-mail: [charoen@cpram.co.th](mailto:charoen@cpram.co.th)

**UGANDA/UGANDA/UGANDA**

Mr. Onen GEOFFREY  
Principal Government Analyst  
Directorate of Government Analytical  
Laboratory P.O. Box 2174 Kampala Uganda  
Phone: +256712832871  
Fax: +256414250470  
E-mail: [onenengff@hotmail.com](mailto:onenengff@hotmail.com)

Dr. Edson Friday AGABA  
Food Safety Coordinator  
National Drug Authority  
P.O.Box 23096, Kampala, Uganda  
Phone: +256 772 691236  
E-mail: [agabafriday@hotmail.com](mailto:agabafriday@hotmail.com)

**UNITED ARAB EMIRATES/ÉMIRATS ARABES UNIS/EMIRATOS ÁRABES UNIDOS**

Dr. Malik Mohamed Alamin  
UAE , Ministry Of Environmnet & Water ,  
Al Ain Al Foah Central Laboratories  
United Arab Emirates , Abu Dhabi AlAin Al  
Foah P.o.Box 16054  
Phone: 0097137832255  
Fax: 0097137832075  
E-mail: [mamohammed@moew.gov.ae](mailto:mamohammed@moew.gov.ae)

Ms. Sarah Ali Mohammed Al Mulla  
UAE, Ministry Of Environmnet & Water,  
Sharjah, Sharjah Central Laboratories  
Phone: 0097165672968  
Fax: 0097165668857  
E-mail: [saalmulla@moew.gov.ae](mailto:saalmulla@moew.gov.ae)

**UNITED REPUBLIC OF TANZANIA/RÉPUBLIQUE UNIE DE TANZANIE/REPÚBLICA UNIDA DE TANZANIA**

Ms. Charys Nuhu UGULLUM  
Director of Laboratory Services  
Tfda P.O. Box 77150 Dar Es  
Salaam, Tanzania  
Phone: +255 22 245 0754  
Fax: +255 22 245 0793  
E-mail: [cha\\_ug@yahoo.com](mailto:cha_ug@yahoo.com)

**UNITED STATES OF AMERICA/ÉTATS-UNIS D'AMÉRIQUE/ESTADOS UNIDOS DE AMÉRICA**

Ms. Lois ROSSI  
Director of Registration Division,  
MAIL CODE 7505P 1200 Pennsylvania  
Ave.N.W Washington,D.C,20460  
Phone: 703-308-8162  
Fax: 703-305-6920  
E-mail: [rossi.lois@epa.gov](mailto:rossi.lois@epa.gov)

Dr. Parthapratim BASU  
Senior Leader, Chermistry, Toxicology  
Related Sciences, FSIS, USDA  
1400 Independence Avenue, SW; Patriots Plaza I, Room 9-205  
Washington, DC 20250-3766  
Phone: 202-690-6558  
Fax: 202-690-2364  
E-mail: [pat.basu@fsis.usda.gov](mailto:pat.basu@fsis.usda.gov)

Dr. Lori BERGER  
Executive Director  
California Specialty Crops Council  
4500 S.Laspina Street, Tulare, CA, USA  
93274  
Phone: 559-688-5700  
Fax: 559-688-5527  
E-mail: [lori@specialtycrops.org](mailto:lori@specialtycrops.org)

Ms. Kimberly BERRY  
Bryant Christie Inc.  
Senior Regulatory Analyst  
500 Union Street, Suite 701 Seattle, WA  
98101  
Phone: 1-206-292-6340  
Fax: 1-206-292-6341  
E-mail: [kimb@bryantchristie.com](mailto:kimb@bryantchristie.com)

Ms. Doreen CHEN  
Analyst  
U.S. Department of Agriculture  
1400 Independence Avenue, SW, Washington, DC 20250-3700  
Phone: 202 205 7760  
Fax: 202 720 3157  
E-mail: [doreen.chen-moulec@fsis.usda.gov](mailto:doreen.chen-moulec@fsis.usda.gov)

Dr. Raul GUERRERO  
Consultant  
793 N. Ontare Rd. Santa Barbara, CA  
93105. USA  
Phone: 805-898-830  
E-mail: [guerrero\\_raul\\_j@yahoo.com](mailto:guerrero_raul_j@yahoo.com)

Dr. Jamin HUANG  
Senior Regulatory Manager, Bayer CropScience  
Bayer CropScience, P.O. Box 12014,  
2 T.W. Alexander Drive, Research Triangle  
Park, North Carolina USA 27709  
Phone: 919-549-2634  
E-mail: [jamin.huang@bayer.com](mailto:jamin.huang@bayer.com)

Dr. Daniel KUNKEL  
Associate Director, IR-4 Program  
500 College Road, 201 W Princeton NJ 08540  
Phone: 732-932-9575  
Fax: 609-541-2612  
E-mail: [kunkel@aesop.rutgers.edu](mailto:kunkel@aesop.rutgers.edu)

Dr. Young LEE  
Scientist  
U.S. Food and Drug Administration,  
5100 Paint Branch Pkwy, HFS-317,  
College Park, MD 20740  
Phone: 240-402-1943  
Fax: 301-436-2632  
E-mail: [Young.Lee@fda.hhs.gov](mailto:Young.Lee@fda.hhs.gov)

Ms. Caitrin MARTIN  
Agricultural Scientific Specialist  
1400 Independence Avenue SW  
Washington, DC 20250  
Phone: 202-720-5461  
Fax: 202-720-0433  
E-mail: [caitrin.martin@fas.usda.gov](mailto:caitrin.martin@fas.usda.gov)

Ms. Laura NOLLEN  
Biologist  
MAIL CODE 7505P 1200 Pennsylvania  
Ave.N.W Washington,D.C,20460  
Phone: 703-305-7390  
Fax: 703-605-0781  
E-mail: [Nollen.Laura@epa.gov](mailto:Nollen.Laura@epa.gov)



Mrs. Cindy SMITH  
 Chief Operating Officer  
 Gowon Company  
 370 South Main Street, Yuma, Arizona  
 85364  
 Phone: 928-819-1554  
 Fax: 928-373-1822  
 E-mail: [cbakersmith@gowanco.com](mailto:cbakersmith@gowanco.com)

Mr. Todd Scholz  
 Director of Research, USADPLC  
 2780 W Pullman Road, Moscow, ID 83843  
 Phone: 208-882-3023  
 Fax: 208-882-6406  
 Email: [scholz@pea-lentil.com](mailto:scholz@pea-lentil.com)

#### VIET NAM/VIET NAM/ VIET NAM

Dr. Tram VU THI  
 Principal Specialist  
 No.2 Ngoc Ha - Ba Dinh- Ha Noi  
 Phone: 84 438257534  
 Fax: 84 438433637  
 E-mail: [tramvt.khcn@mard.gov.vn](mailto:tramvt.khcn@mard.gov.vn)

#### ZIMBABWE/ZIMBABWE/ZIMBABWE

Mr. Munyaradzi Livingstone MUSIYAMBIRI  
 Director, Government Analyst  
 P.O. Box Cy 231, Causeway,  
 Harare,  
 Phone: 263 772 135 995  
 E-mail: [mimusiyambiri@yahoo.com](mailto:mimusiyambiri@yahoo.com)

#### INTERNATIONAL GOVERNMENTAL ORGANIZATIONS

##### CROPLIFE INTERNATIONAL

Ms. Sandra KELLER  
 Manager: International Regulatory Policy  
 Av. Louise 326 1050 - Brussels  
 Phone: +32 2 541 1663  
 Fax: +32 2 542 0419  
 E-mail: [sandra.keller@croplife.org](mailto:sandra.keller@croplife.org)

Ms. Changhee BAEK  
 Zone Regulatory Manager, ASEAN  
 FMC Chemical (Thailand) Ltd/15/F, K  
 Tower, Tower A, 209 Sukhumvit 21,  
 Klongtoey-nua, Wattana, Bangkok  
 10110, Thailand  
 Phone: + 662 664 4322 (#311)  
 Fax: + 662 664 1326  
 E-mail: [changhee.baek@fmc.com](mailto:changhee.baek@fmc.com)

Dr. Venkata Niranjan Kumar BOBBA  
 Member, Crop Life Asia – Regulatory  
 Affairs Steering Team  
 M.Sc(Ag), Ph.D Dow Agrosciences (Malaysia) Sdn Bhd  
 Level-6, CP tower, Jalan  
 16/11, Pusat Dagang, Section 16, Petaling  
 Jaya, Selangor, Darul Ehsan, Malaysia -  
 46350  
 Phone: 00-603-79655235  
 Fax: 00-603-7958 3377  
 E-mail: [bniranjanankumar@dow.com](mailto:bniranjanankumar@dow.com)

Dr. Philip BRINDLE  
 Manager  
 26 Davis Drive, Research Triangle  
 Park, NC 27709, USA  
 Phone: +1 919 547 2654  
 Fax: +1 919 547 2850  
 E-mail: [philip.brindle@basf.com](mailto:philip.brindle@basf.com)

Dr. Peter CHALMERS  
 APAC Head of Development and  
 Registration Makhateshim Agan Asia Pacific  
 9 Temasek Boulevard, #16-03A, Suntec  
 Tower Two, Singapore 038989  
 Phone: +65 9232 0950  
 Fax: +65 6499 9324  
 E-mail: [peter.chalmers@ma-apac.com](mailto:peter.chalmers@ma-apac.com)

Ms. Kar Ling CHIN  
 Regulatory Affairs and Risk  
 Assessment Manager, Janssen No. 2 International Business Park,  
 Tower  
 PMP One, The Strategy. #07-01, Singapore 609930  
 Phone: +65 68275858  
 Fax: +65 67200285  
 E-mail: [kchin5@its.inj.com](mailto:kchin5@its.inj.com)

Mrs. Wanda EGIDO MOYA GIMENEZ  
 Manager  
 Food Value Chain – Latin America  
 BASF Av. Brigadeiro Faria Lima, 3600 – 04538-132 – São Paulo –  
 SP - BRAZIL  
 Phone: 5511-3043-2760 -  
 Fax: 5511-3043-2285  
 E-mail: [wanda.gimenez@basf.com](mailto:wanda.gimenez@basf.com)

Mr. William GOODWINE  
 Director, Ww Regulatory  
 Affairs & Risk Assessment Janssen Pmp, A Division of Janssen  
 Pharmaceutica Nv, 1125  
 Trenton-Harbourton Road,  
 Titusville, Nj 08560  
 Phone: 609-730-2607  
 Fax: 609-730-2080  
 E-mail: [BGGOODWI@ITS.JNJ.COM](mailto:BGGOODWI@ITS.JNJ.COM)

Mr. Yong C HAHN  
 Technology Manager, Asia Pacific  
 1 Harbourfront Place #11-01  
 Harbourfront Tower One Singapore  
 Phone: 65-9238-2279  
 Fax: 65-6586-3394  
 E-mail: [young.c.hahm@sgp.dupont.com](mailto:young.c.hahm@sgp.dupont.com)

Mr. Ricky HO  
 Regional Regulatory Affairs Manager, Asia Pacific  
 Bayer (Souht East Asia) Pte Ltd  
 63 Chulia Street, OCBC Centre East, 14th Floor  
 Singapore 049514  
 Phone: +65-6496-1719  
 Fax: +65-6496-1494  
 E-mail: [ricky.ho@bayer.com](mailto:ricky.ho@bayer.com)

Dr. Peter HORNE  
 Global Regulatory Affairs Manager  
 DuPont Crop Protection, Stine-Haskell  
 Research Center, 1090 Elkton Road, P.O.  
 Box 30, Newark, DE 19714-0030  
 Phone: +1 302 366 6228  
 Fax: +1 302 351 7022  
 E-mail: [peter.horne-1@usa.dupont.com](mailto:peter.horne-1@usa.dupont.com)

Ms. Heidi IRRIG  
 Regulatory Residue Manager  
 Syngenta Crop Protection Post Office  
 Box 18300 – Greensboro, NC 27419-8300  
 Phone: 336-632-7243  
 Fax: 336-632-5688  
 E-mail: [heidi.irrig@syngenta.com](mailto:heidi.irrig@syngenta.com)

**Dr. Michael KAETHNER**  
Head of Development Affairs  
Bayer CropScience AG, Alfred Nobel Str. 50, D-40789 Monheim  
Phone: 0049 2173 38 7521  
Fax: 0049 2173 38 3572  
E-mail: [michael.kaethner@bayer.com](mailto:michael.kaethner@bayer.com)

**Mr. Neil John LISTER**  
Technical Manager – Operator and  
Consumer Safety Syngenta, Jealott's Hill Research Centre,  
Bracknell, Berkshire, RG42 6EY, United Kingdom  
Phone: +44 1344 414381  
Fax: +44 1344 413688  
E-mail: [neil.lister@syngenta.com](mailto:neil.lister@syngenta.com)

**Mr. Choon Kwong Ma**  
Asean-Registration & Regulatory Affairs Manager  
Du Pont Crop Protection Singapore  
Phone: +65 65863019  
Fax: +65 65863494  
E-mail: [choon-kwong.ma@sgp.dupont.com](mailto:choon-kwong.ma@sgp.dupont.com)

**Mr. Ung PARK**  
R&D Manager, DuPont Korea  
DuPont (Korea) Inc. 3-5th floor, Asia  
Tower, #726, Yeoksam-dong, Kangnam-ku,  
Seoul 135-719, Korea  
Phone: 82-2-2222-5313  
Fax: 82-2-2222-5484  
E-mail: [Ung.Park@kor.dupont.com](mailto:Ung.Park@kor.dupont.com)

**Dr. Vasant PATIL**  
Director –Regulatory Affairs, CropLife Asia,  
150 Cantonment Road, Block - B # 01-07, Singapore 089762  
Phone: 65 6221 1615 ext111  
Fax: 65 6222 1615  
E-mail: [vasant.patil@croplifeasia.org](mailto:vasant.patil@croplifeasia.org)

**Mrs. Juliana PRANDO FRANCO**  
Product Safety Coordinator,  
Latam-Syngenta Crop Protection  
Avenida das Nações Unidas, 18.001 –04795-900 – Santo Amaro –  
São Paulo –SP - Brazil  
Phone: +55 11 5643-3970  
Fax: +55 11 5643-2353  
E-mail: [juliana.prando@syngenta.com](mailto:juliana.prando@syngenta.com)

**Ms. Natalie SHEVCHUK**  
Global Regulatory Operations Manager  
1735 Market Street ,Philadelphia,PA 19103  
Phone: 215-299-6680  
Fax: 215-299-6468  
E-mail: [natalie.shevchuk@fmc.com](mailto:natalie.shevchuk@fmc.com)

**Dr. Ying SONG**  
China R&D Manager  
Building11, 399 Keyuan Rd, Pudong,  
201203, Shanghai, P.R.China  
Phone: 86-21-3862-2039  
E-mail: [ying.song-1@chn.dupont.com](mailto:ying.song-1@chn.dupont.com)

**Mr. Peter WATSON**  
Product Registration Specialist  
Dow Agrosiences, European Development Centre, 3 Milton Park,  
Abingdon, Ox144rn,  
United Kingdom  
Phone: +44 1235 437968  
Fax: + 44 1235 437920  
E-mail: [pwatson@dow.com](mailto:pwatson@dow.com)

**Mr. Yoshihiro NISHIMOTO**  
R&RA Manager  
Sumitomo Chemical Co., Ltd., Crop Protection Division –  
International,27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 104-8260,  
Japan,  
Phone:+81-3-5543-5692  
Fax:+81-3-5543-5695  
E-mail: [nishimotoy@sc.sumitomo-chem.co.jp](mailto:nishimotoy@sc.sumitomo-chem.co.jp)

**Mr. Yoshiyuki EGUCHI**  
Manager, Regulatory Affairs Dept., Agro Product Div., Nippon Soda  
Co., Ltd.  
2-1, Ohtemachi 2-Chome, Chiyoda-ku, Tokyo 100-8165, JAPAN  
Phone:+81 80 3691 5693  
Fax: +81 3 3245 6289  
E-mail: [y.eguchi@nippon-soda.co.jp](mailto:y.eguchi@nippon-soda.co.jp)

**Mr. Masaru NOKATA**  
Deputy General Manager  
2-5, Nihonbashi 1-chome, Chuo-ku, Tokyo 103-8236, Japan  
Phone:+81 3 3274 3383  
Fax: +81 3 3281 5462  
E-mail: [nokata-masaru@nichino.co.jp](mailto:nokata-masaru@nichino.co.jp)

**Mr. Yukio KIMURA**  
Manager  
2-5, Nihonbashi 1-chome, Chuo-ku, Tokyo 103-8236, Japan  
Phone:+81 3 3274 3383  
Fax: +81 3 3281 5462  
E-mail: [kimura-yukio@nichino.co.jp](mailto:kimura-yukio@nichino.co.jp)

**Dr. Mitsuhiro ICHINARI**  
Acting General Manager, Product Promotion Dept., Summit Agro  
International Ltd.  
Harumi Island Triton Square Office Tower Z, 1-8-12, Harumi,  
Chuo-ku, Tokyo, 104-6223 Japan  
Phone:+81-3-6221-3224  
Fax:+81-3-6221-3035  
E-mail: [mitsuhiro.ichinari@summit-agro.co.jp](mailto:mitsuhiro.ichinari@summit-agro.co.jp)

**Mr. Hiroyasu TANUMA**  
Deputy General Manager of Product Promotion Dept., Summit Agro  
International Ltd.  
Harumi Island Triton Square Office Tower Z, 1-8-12, Harumi,  
Chuo-ku, Tokyo, 104-6223 Japan  
Phone:+81-3-6221-3222  
Fax: +81-3-6221-3035  
E-mail: [hiroyasu.tanuma@summit-agro.co.jp](mailto:hiroyasu.tanuma@summit-agro.co.jp)

**Ms. Kumeta TAKAKO**  
Manager, Mitsui Chemicals Agro, Inc.  
1144, Togo, Mobara-shi, Chiba, 297-0017, Japan  
Phone: +81-475-25-6742  
Fax: +81-475-23-8297  
E-mail: [takako.kumeta@mitsui-chem.co.jp](mailto:takako.kumeta@mitsui-chem.co.jp)

**Mr. Toshio MURAYAMA**  
Hokko Chemical Industry Co., Ltd.  
4-20, Nihonbashi Hongoku-cho 4-chome, Chuo-Ku, Tokyo  
103-8341, Japan  
Phone: +81-3-3279-5361  
Fax: +81-3-3279-5165  
E-mail: [murayama-t@hokkochem.co.jp](mailto:murayama-t@hokkochem.co.jp)

**Mr. Noriyuki TAKAI**  
Hokko Chemical Industry Co.,Ltd.  
4-20, Nihonbashi Hongoku-cho 4-chome, Chuo-ku, Tokyo 103-8341,  
Japan  
Phone:+81-3-3279-5831  
Fax: +81-3-3279-5067  
E-mail: [takai-n@hokkochem.co.jp](mailto:takai-n@hokkochem.co.jp)

**Mr. Toshio SHIMOMURA**

Consultant  
1-3-1 Otemachi Chiyoda-ku, Tokyo Japan  
Phone: 81-3-6271-8289  
Fax: 81-3-5218-2536  
E-mail: [shimomura-toshio-q1@zennoh.or.jp](mailto:shimomura-toshio-q1@zennoh.or.jp)

**Mr. Makoto NABESHIMA**  
SUPERVISOR (ZEN-NOH)

1-3-1 Otemachi Chiyoda-ku, Tokyo, Japan 100-6832  
Phone: +81-3-6271-8289  
Fax: +81-3-5218-2536  
E-mail: [nabeshima-makoto@zennoh.or.jp](mailto:nabeshima-makoto@zennoh.or.jp)

**Mr. Yukiharu TANAKA**

Manager, Regulatory Affairs, Japan & North Asia Business  
Unit, Arysta LifeScience Corporation  
St. Luke's Tower, 8-1, Akashi-cho, Chuo-ku, Tokyo 104-6591  
JAPAN  
Phone: +81 3 3547 4587  
Fax: +81 3 3547 4695  
E-mail: [yukiharu.tanaka@arystalifescience.com](mailto:yukiharu.tanaka@arystalifescience.com)

**Ms. Kiyo ASHIBE**

Kyoyu Agri Co., Ltd.  
Yamaman Bldg. 11F. 6-1 Koami-cho, Nihonbashi, Chuo-ku, Tokyo  
103-0016 Japan  
Phone: +81-3-5645-0708  
Fax: +81-3-3639-5299  
E-mail: [ashibe-kiyo@kyoyu-agri.co.jp](mailto:ashibe-kiyo@kyoyu-agri.co.jp)

**Mr. Hiroo WAKIMORI**

Chemical Regulatory Affairs Lead, Monsanto Japan Limited  
Ginza Sannou Bldg. 4-10-10, Ginza, Chuo-ku, Tokyo 104 0061  
Phone: +81 3 6226 6080  
Fax: +81 3 3546 6191  
E-mail: [hiroo.wakimori@monsanto.com](mailto:hiroo.wakimori@monsanto.com)

**Mr. Yoshihiro WADA**

Manager, SDS Biotech K.K.  
1-1-5, Higashi-Nihombashi, Chuo-ku, Tokyo 103-0004, Japan  
Phone: +81-3-5825-5516  
Fax: +81-3-5825-5501  
E-mail: [yoshihiro\\_wada@sdsbio.co.jp](mailto:yoshihiro_wada@sdsbio.co.jp)

**Mr. Koji TAKEHARA**

MANAGER, Nissan Chemical Industries, Ltd.  
7-1, 3-chome, Kanda-Nishiki-cho, Chiyoda-ku, Tokyo 101-0054,  
Japan  
Phone: +81-3-3296-8151  
Fax: +81-3-3296-8016  
E-mail: [takehara@nissanchem.co.jp](mailto:takehara@nissanchem.co.jp)

**Dr. Kazuaki IJIMA**

Chief/Chemistry Division  
4321, Uchimoriya-machi, Joso-shi, Ibaraki 303-0043, Japan  
The Institute of Environmental Toxicology  
Phone: +81-297-27-4516  
Fax: +81-297-27-4517  
E-mail: [ijima@iet.or.jp](mailto:ijima@iet.or.jp)

**Mr. Tokunori YOKOTA**

Manager of Technical Affairs Division,  
Japan Crop Protection Association  
Sowa Bldg. 2-3-6 Kayaba-cho, Nihonbashi, Chuo-ku, Tokyo,  
103-0025 Japan  
Phone: +81-3-5649-7191  
Fax: +81-3-5649-7245  
E-mail: [yokota@jcpa.or.jp](mailto:yokota@jcpa.or.jp)

**GRAIN AND FEED TRADE ASSOCIATION (GAFTA)****Mr. Alan DING**

Director of GAFTA Beijing Office  
Gafta 1-1-1607, Leading International  
Center, No.1 Guang Qu Men Nan XiaoJie,  
Chong Wen District,  
100061, Beijing, China  
Phone: 86 10 6712 1741  
Fax: 86 10 6712 1742  
E-mail: [gafta@263.net](mailto:gafta@263.net)

**INTER-AMERICAN INSTITUTE FOR COOPERATION ON  
AGRICULTURE (IICA)****María Alejandra BENTANCUR**

Specialist in Project Management  
1992 Luis Piera Street. Floor 3.  
Montevideo – Uruguay  
Phone: (598) 24101676 ext 122  
Fax: (598) 24101778  
E-mail: [alejandra.bentancur@iica.int](mailto:alejandra.bentancur@iica.int)

**INTERNATIONAL NUT AND DRIED FRUIT COUNCIL  
FOUNDATION (INC)****Dr. Gabriele LUDWIG**

International Nut and Dried Fruit Council  
Associate Director, Environmental Affairs  
Almond Board of California  
1150 9th St. Suite 1500  
Modesto, CA 95354, USA  
Phone: 001 209 765 5078  
Fax: 001 209 549 8267  
E-mail: [inc@nutfruit.org](mailto:inc@nutfruit.org) or [gludwig@almondboard.com](mailto:gludwig@almondboard.com)

**INTERNATIONAL SOCIETY OF CITRICULTURE (ISC)****Mr. James R. CRANNEY**

President  
California Citrus Quality Council,  
853 Lincoln Way, Suite 206,  
Auburn, California 95603 USA  
Phone: (530) 885-1894  
Fax: (530) 885-1546  
E-mail: [jcranney@calcitrusquality.org](mailto:jcranney@calcitrusquality.org)

**INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY  
(IUPAC)****Dr. Sue-Sun WONG**

IUPAC Fellow  
7F No. 16, Lane 111, Yucyun Rd  
Wufeng District  
Taichung City 413, Taiwan  
Phone: +886-912216116  
Fax: +886-4-2331 5851  
Email: [suesun.wong@msa.hinet.net](mailto:suesun.wong@msa.hinet.net)

**Dr. Caroline Ann HARRIS**

Corporate Vice President  
Exponent International Ltd., The Lenz,  
Hornbeam Park, Harrogate HG2 8RE, UK  
Phone: +44 1423 853200  
Fax: +44 1423 810431  
E-mail: [charris@uk.exponent.com](mailto:charris@uk.exponent.com)

**Dr. Fan CHEN**

Assistant Professor  
No. 64. Wunhua Rd., Huwei township,  
Yunlin County, 63201, Taiwan  
Phone: 886-918-262605  
E-mail: [fan6636@gmail.com](mailto:fan6636@gmail.com)

**CODEX SECRETARIAT  
SECRÉTARIAT DU CODEX  
SECRETARÍA DEL CODEX**

Ms. Gracia BRISCO  
Food Standards Officer  
Secretariat, Codex Alimentarius Commission.  
Joint FAO/WHO Food Standards Programme  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Phone: +39 06 5705 2700  
Fax: +39 06 5705 4593  
E-mail: [Gracia.Brisco@fao.org](mailto:Gracia.Brisco@fao.org)

Dr. Hidetaka KOBAYASHI  
Food Standards Officer  
Secretariat, Codex Alimentarius Commission  
Joint FAO/WHO Food Standards Programme  
Nutrition and Consumer Protection Division  
Viale delle Terme di Caracalla – 00153 Rome, Italy  
Phone: (+39) 06 570 53218  
Fax: (+39) 06 570 54593  
E-mail: [Hidetaka.Kobayashi@fao.org](mailto:Hidetaka.Kobayashi@fao.org)

Dr. Selma Helena DOYRAN  
Secretary, Codex Alimentarius Commission  
Joint FAO/WHO Food Standards Programme  
00153, Viale delle terme di Caracalla  
Rome, Italy  
Phone: +39 06 5705 5826  
Fax: +39 06 5705 4593  
E-mail: [selma.doyran@fao.org](mailto:selma.doyran@fao.org)

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED  
NATIONS (FAO)  
ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION  
ET L'AGRICULTURE/ORGANIZACIÓN  
DE LAS NACIONES UNIDAS PARA LA ALIMENTACIÓN Y LA  
AGRICULTURA**

Ms. Yongzhen YANG  
FAO JMPR Secretary  
00153, Viale delle Terme di Caracalla  
Rome, Italy  
Phone: +39 0657054246  
Fax: +39 06 57053224  
E-mail: [Yongzhen.Yang@fao.org](mailto:Yongzhen.Yang@fao.org)

**WORLD HEALTH ORGANIZATION (WHO)  
ORGANISATION MONDIALE DE LA SANTÉ (OMS)  
ORGANIZACION MUNDIAL DE LA SALUD**

Dr. Philippe VERGER  
WHO JMPR secretariat  
Avenue Appia 20, CH-1211 Geneva 27, Switzerland  
Phone: +41 22 791 3053  
Fax: + 41 22 791 48 07  
E-mail: [vergerp@who.int](mailto:vergerp@who.int)

**CCPR SECRETARIAT  
SECRÉTARIAT DU CCPR  
SECRETARÍA DEL CCPR**

Mr. YE Jiming  
Deputy Director  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4081  
Fax: +86 10 6502 5929  
E-mail: [yejiming@agri.gov.cn](mailto:yejiming@agri.gov.cn)

Dr. SHAN Weili  
Director  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4253  
Fax: +86 10 5919 4107  
E-mail: [shanweili@agri.gov.cn](mailto:shanweili@agri.gov.cn)

Ms. JIAN Qiu  
Deputy Director  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4033  
Fax: +86 10 5919 4107  
E-mail: [jianqiu@agri.gov.cn](mailto:jianqiu@agri.gov.cn)

Ms. DUAN Lifang  
Chemist  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4105  
Fax: +86 10 5919 4107  
E-mail: [duanlifang@agri.gov.cn](mailto:duanlifang@agri.gov.cn)

Mr. SONG Wencheng  
Environmental Specialist  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4105  
Fax: +86 10 5919 4107  
E-mail: [songwcheng@agri.gov.cn](mailto:songwcheng@agri.gov.cn)

Ms. QIN Dongmei  
Professor  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4078  
Fax: +86 10 5919 4107  
E-mail: [qindongmei@agri.gov.cn](mailto:qindongmei@agri.gov.cn)

Mr. GONG Yong  
Professor  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4077  
Fax: +86 10 5919 4107  
E-mail: [gongyong@agri.gov.cn](mailto:gongyong@agri.gov.cn)

**Ms. PIAO Xiuying**  
Chemist  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 5919 4077  
Fax: +86 10 5919 4107  
E-mail: [piaoxiuying@agri.gov.cn](mailto:piaoxiuying@agri.gov.cn)

**Ms. LI Min**  
Health Effects Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: + 86 10 5919 4062  
Fax: +86 10 5919 4244  
E-mail: [limin@agri.gov.cn](mailto:limin@agri.gov.cn)

**Ms. KE Changjie**  
CCPR Secretariat  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
Room 906, No. 18, Maizidian Street,  
Chaoyang District  
Beijing, 100125, P. R. China  
Phone: +86 10 5919 4255  
Fax: +86 10 5919 4252  
E-mail: [ccpr@agri.gov.cn](mailto:ccpr@agri.gov.cn)

**Mr. XU Qi**  
CCPR Secretariat  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
Room 906, No. 18, Maizidian Street,  
Chaoyang District  
Beijing, 100125, P. R. China  
Phone: +86 10 5919 4254  
Fax: +86 10 5919 4252  
E-mail: [xq\\_glory@hotmail.com](mailto:xq_glory@hotmail.com)

**Ms. XU Jun**  
Associate Professor  
Institute of Plant Protection, Chinese Academy of Agricultural  
Sciences.  
No.2 West Yuan Ming yuan Road Beijing 100193 P.R. China  
Phone: 86-10-62815938  
Fax: 86-10-62815938  
E-mail: [xujun19770927@163.co](mailto:xujun19770927@163.co)

**Mr. SUN Jianpeng**  
Residue Division  
Institute for the Control of Agrochemicals  
Ministry of Agriculture  
No. 22, Maizidian Street, Chaoyang District  
Beijing 100125, P.R. China  
Phone: +86 10 6593 6997  
Fax: +86 10 5919 4107  
E-mail: [cat186@163.com](mailto:cat186@163.com)

**Mr. ZHANG Zhiyong**  
Institute of Food Safety, Jiangsu Academy of Agricultural Sciences  
No.50, Zhongling Street, Xiaolingwei, Xuanwu District, Nanjing,  
Jiangsu, 210014, P. R. China  
Phone: +86 25 8439 0401  
Fax: +86 25 8439 0401  
E-mail: [yuzzy@163.com](mailto:yuzzy@163.com)

**Mr. ZHAO Zuncheng**  
Institute of Plant Protection, Chinese Academy of Agricultural  
Sciences No. 2 West Yuanming yuan Road Beijing 100193 P.R.  
China  
Phone: +86-10-62815938  
Fax: +86-10-62815938  
E-mail: [zhaozuncheng@126.com](mailto:zhaozuncheng@126.com)

## APPENDIX II

## DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(At Step 8)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
189	<b>Tebuconazole</b>			
	VL 0482 Lettuce, head	5	8	
238	<b>Clothianidin</b>			
	FI 0327 Banana	0.02	8	
	DF 0269 Dried grapes (= currants, raisins and sultanas)	1	8	
	MO 0105 Edible offal (mammalian)	0.02 (*)	8	Except liver
	PE 0112 Eggs	0.01 (*)	8	
	FB 0269 Grapes	0.7	8	
	MF 0100 Mammalian fats (except milk fats)	0.02 (*)	8	
	MM 0095 Meat (from mammals other than marine mammals)	0.02 (*)	8	
	ML 0106 Milks	0.02	8	
	FP 0009 Pome fruits	0.4	8	
	PF 0111 Poultry fats	0.01 (*)	8	
	PM 0110 Poultry meat	0.01 (*)	8	
	GC 0649 Rice	0.5	8	
	GC 0651 Sorghum	0.01 (*)	8	
	AS 0651 Sorghum straw and fodder, dry	0.01 (*)	8	
	VS 0078 Stalk and stem vegetables	0.04	8	Except artichoke and celery
	GS 0659 Sugar cane	0.4	8	
	VO 0447 Sweet corn (corn-on-the-cob)	0.01 (*)	8	

## Recommended MRLs for Spices

(At Step 8)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
55	<b>Omethoate*</b>			
	HS 0191 Fruit or berry	0.01	8	Residues of omethoate resulting from the use of dimethoate
	HS 0193 Root or rhizome	0.05	8	Residues of omethoate resulting from the use of dimethoate

\* **Note:** Omethoate was withdrawn from the Codex list by the 36<sup>th</sup> Session of the CCPR (ALINORM 04/27/24, para. 95 and Appendix V) and consequently recommended for revocation by the Commission. The 27<sup>th</sup> Session of the Codex Alimentarius Commission revoked the compound and associated proposed MRLs from the Codex List (ALINORM 04/27/41, Appendix V).

## APPENDIX III

## PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(At Step 5/8 with omission of Steps 6/7)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
95	<b>Acephate</b>			
	CM 0649 Rice, husked	1	5/8	
	AS 0649 Rice straw and fodder, dry	0.3	5/8	
100	<b>Methamidophos</b>			
	CM 0649 Rice, husked	0.6	5/8	
	AS 0649 Rice straw and fodder, dry	0.1	5/8	
118	<b>Cypermethrins (including alpha- and zeta- cypermethrin)</b>			
	VS 0621 Asparagus	0.4	5/8	
	FC 0001 Citrus fruits	0.3	5/8	except shaddocks or pomelos
	PE 0112 Eggs	0.01 (*)	5/8	
	PO 0111 Poultry, edible offal of	0.05 (*)	5/8	
	PF 0111 Poultry fats	0.1	5/8	
	PM 0110 Poultry meat	0.1 (fat)	5/8	
	FC 0005 Shaddocks or pomelos	0.5	5/8	
	DT 1114 Tea, green, black (black, fermented and dried)	15	5/8	
	TN 0085 Tree nuts	0.05 (*)	5/8	
158	<b>Glyphosate</b>			
	VD 0533 Lentil (dry)	5	5/8	
	VR 0596 Sugar beet	15	5/8	
	VO 0447 Sweet corn (corn-on-the-cob)	3	5/8	
171	<b>Profenofos</b>			
	VO 0444 Peppers Chili	3	5/8	
	HS 0444 Peppers Chili, dried	20	5/8	
176	<b>Hexythiazox</b>			
	DH 1100 Hops, Dry	3	5/8	
	DT 1114 Tea, green, black (black, fermented and dried)	15	5/8	
184	<b>Etofenprox</b>			
	FP 0226 Apple	0.6	5/8	
	VD 0071 Beans (dry)	0.05	5/8	
	DF 0269 Dried grapes (= currants, raisins and sultanas)	8	5/8	
	MO 0105 Edible offal (mammalian)	0.05	5/8	

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
PE 0112 Eggs	0.01 (*)	5/8	
GC 0645 Maize	0.05 (*)	5/8	
MM 0095 Meat (from mammals other than marine mammals)	0.5 (fat)	5/8	
ML 0106 Milks	0.02	5/8	
FS 0245 Nectarine	0.6	5/8	
FS 0247 Peach	0.6	5/8	
FP 0230 Pear	0.6	5/8	
PO 0111 Poultry, edible offal of	0.01 (*)	5/8	
PM 0110 Poultry meat	0.01 (*)	5/8	
SO 0495 Rape seed	0.01 (*)	5/8	
GC 0649 Rice	0.01 (*)	5/8	
AS 0649 Rice straw and fodder, dry	0.05	5/8	
<b>189 Tebuconazole</b>			
FP 0226 Apple	1	5/8	
FS 0240 Apricot	2	5/8	
VS 0620 Artichoke, globe	0.6	5/8	
FI 0327 Banana	0.05	5/8	
GC 0640 Barley	2	5/8	
AS 0640 Barley straw and fodder, dry	40	5/8	
VD 0071 Beans (dry)	0.3	5/8	
VB 0400 Broccoli	0.2	5/8	
VB 0402 Brussels sprouts	0.3	5/8	
VB 0041 Cabbages, head	1	5/8	
VR 0577 Carrot	0.4	5/8	
VB 0404 Cauliflower	0.05 (*)	5/8	
FS 0013 Cherries	4	5/8	
SB 0716 Coffee beans	0.1	5/8	
SO 0691 Cotton seed	2	5/8	
VC 0424 Cucumber	0.15	5/8	
DF 0269 Dried grapes (= currants, raisins and sultanas)	7	5/8	
MO 0105 Edible offal (mammalian)	0.2	5/8	
VO 0440 Egg plant	0.1	5/8	
PE 0112 Eggs	0.05 (*)	5/8	
FB 0267 Elderberries	1.5	5/8	
VA 0381 Garlic	0.1	5/8	



<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
FB 0269 Grapes	6	5/8	
DH 1100 Hops, dry	40	5/8	
VA 0384 Leek	0.7	5/8	
FI 0345 Mango	0.05	5/8	
MM 0095 Meat (from mammals other than marine mammals)	0.05 (*)	5/8	
VC 0046 Melons, except watermelon	0.15	5/8	
ML 0106 Milks	0.01 (*)	5/8	
FS 0245 Nectarine	2	5/8	
GC 0647 Oats	2	5/8	
FT 0305 Olives	0.05 (*)	5/8	
VA 0385 Onion, bulb	0.1	5/8	
FI 0350 Papaya	2	5/8	
FI 0351 Passion fruit	0.1	5/8	
FS 0247 Peach	2	5/8	
SO 0697 Peanut	0.15	5/8	
AL 0697 Peanut fodder	40	5/8	
FP 0230 Pear	1	5/8	
HS 0444 Peppers chili, dried	10	5/8	
VO 0445 Peppers, sweet (including pimento or pimienta)	1	5/8	
FS 0014 Plums (including prunes)	1	5/8	except prunes
PO 0111 Poultry, edible offal of	0.05 (*)	5/8	
PM 0110 Poultry meat	0.05 (*)	5/8	
DF 0014 Prunes	3	5/8	
SO 0495 Rape seed	0.3	5/8	
GC 0649 Rice	1.5	5/8	
GC 0650 Rye	0.15	5/8	
AS 0650 Rye straw and fodder, dry	40	5/8	
VD 0541 Soya bean (dry)	0.15	5/8	
VC 0431 Squash, summer	0.2	5/8	
VO 0447 Sweet corn (corn-on-the-cob)	0.6	5/8	
VO 0448 Tomato	0.7	5/8	
TN 0085 Tree nuts	0.05 (*)	5/8	
GC 0653 Triticale	0.15	5/8	
GC 0654 Wheat	0.15	5/8	
AS 0654 Wheat straw and fodder, dry	40	5/8	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
203	<b>Spinosad</b>			
	FB 0264 Blackberries	1	5/8	
	FB 0020 Blueberries	0.4	5/8	
	FB 0265 Cranberry	0.02	5/8	
	FB 0266 Dewberries (including boysenberry and loganberry)	1	5/8	
	VA 0385 Onion, bulb	0.1	5/8	
	FI 0351 Passion fruit	0.7	5/8	
	FB 0272 Raspberries, red, black	1	5/8	
	VA 0389 Spring onion	4	5/8	
	TN 0085 Tree nuts	0.07	5/8	
210	<b>Pyraclostrobin</b>			
	AL 1020 Alfalfa fodder	30	5/8	
	VS 0620 Artichoke, globe	2	5/8	
	GC 0640 Barley	1	5/8	
	FB 0264 Blackberries	3	5/8	
	FB 0020 Blueberries	4	5/8	
	FS 0013 Cherries	3	5/8	
	FC 0001 Citrus fruits	2	5/8	
	VC 0045 Fruiting vegetables, cucurbits	0.5	5/8	
	VA 0381 Garlic	0.15	5/8	
	FS 0245 Nectarine	0.3	5/8	
	GC 0647 Oats	1	5/8	
	SO 0089 Oilseed, except peanut	0.4	5/8	
	VA 0385 Onion, bulb	1.5	5/8	
	OR 0004 Orange oil, edible	10	5/8	
	FI 0350 Papaya	0.15	5/8	
	FS 0247 Peach	0.3	5/8	
	FS 0014 Plums (including prunes)	0.8	5/8	
	FB 0272 Raspberries, red, black	3	5/8	
	GC 0650 Rye	0.2	5/8	
	GC 0651 Sorghum	0.5	5/8	
	VA 0389 Spring onion	1.5	5/8	
	FB 0275 Strawberry	1.5	5/8	
	TN 0085 Tree nuts	0.02 (*)	5/8	except pistachio nuts
	GC 0653 Triticale	0.2	5/8	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
229	<b>Azoxystrobin</b>			
	SB 0716 Coffee beans	0.02	5/8	
	VR 0604 Ginseng	0.1	5/8	
	DV 0604 Ginseng, dried including red ginseng	0.5	5/8	
	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
234	<b>Spirotetramat</b>			
	SO 0691 Cotton seed	0.4	5/8	
	AB 1203 Cotton seed, meal	1	5/8	
	MO 0105 Edible offal (mammalian)	1	5/8	
	PE 0112 Eggs	0.01	5/8	
	FI 0341 Kiwifruit	0.02 (*)	5/8	
	AL 0157 Legume animal feeds	30	5/8	
	VP 0060 Legume vegetables	1.5	5/8	
	FI 0343 Litchi	15	5/8	
	FI 0345 Mango	0.3	5/8	
	MM 0095 Meat (from mammals other than marine mammals)	0.05	5/8	
	VA 0385 Onion, bulb	0.4	5/8	
	FI 0350 Papaya	0.4	5/8	
	PO 0111 Poultry, edible offal of	0.01	5/8	
	PM 0110 Poultry meat	0.01 (*)	5/8	
	VD 0070 Pulses	2	5/8	except soya bean (dry)
	VD 0541 Soya bean (dry)	4	5/8	
238	<b>Clothianidin</b>			
	JF 0269 Grape juice	0.2	5/8	
241	<b>Etoxazole</b>			
	FP 0009 Pome fruits	0.07	5/8	
246	<b>Acetamiprid</b>			
	VP 0061 Beans, except broad bean and soya bean	0.4	5/8	
	VP 0062 Beans, shelled	0.3	5/8	
	FB 0018 Berries and other small fruits	2	5/8	except grapes and strawberries
	VB 0041 Cabbages, head	0.7	5/8	
	VS 0624 Celery	1.5	5/8	
	FS 0013 Cherries	1.5	5/8	
	FC 0001 Citrus fruits	1	5/8	
	SO 0691 Cotton seed	0.7	5/8	

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
MO 0105 Edible offal (mammalian)	0.05	5/8	
PE 0112 Eggs	0.01 (*)	5/8	
VB 0042 Flowerhead brassicas (includes broccoli: broccoli, Chinese and cauliflower)	0.4	5/8	
VO 0050 Fruiting vegetables other than cucurbits	0.2	5/8	except sweet corn & mushrooms
VC 0045 Fruiting vegetables, cucurbits	0.2	5/8	
VA 0381 Garlic	0.02	5/8	
FB 0269 Grapes	0.5	5/8	
MF 0100 Mammalian fats (except milk fats)	0.02	5/8	
MM 0095 Meat (from mammals other than marine mammals)	0.02	5/8	
ML 0106 Milks	0.02	5/8	
FS 0245 Nectarine	0.7	5/8	
VA 0385 Onion, bulb	0.02	5/8	
FS 0247 Peach	0.7	5/8	
VP 0064 Peas, shelled (succulent seeds)	0.3	5/8	
HS 0444 Peppers chili, dried	2	5/8	
FS 0014 Plums (including prunes)	0.2	5/8	except prunes
FP 0009 Pome fruits	0.8	5/8	
PO 0111 Poultry, edible offal of	0.05 (*)	5/8	
PM 0110 Poultry meat	0.01 (*)	5/8	
DF 0014 Prunes	0.6	5/8	
VA 0389 Spring onion	5	5/8	
FB 0275 Strawberry	0.5	5/8	
TN 0085 Tree nuts	0.06	5/8	
<b>247 Enamectin benzoate</b>			
VP 0061 Beans, except broad bean and soya bean	0.015	5/8	
VL 0510 Cos lettuce	1	5/8	
SO 0691 Cotton seed	0.002 (*)	5/8	
MO 0105 Edible offal (mammalian)	0.08	5/8	
VO 0050 Fruiting vegetables other than cucurbits	0.02	5/8	except sweet corn and mushrooms
VC 0045 Fruiting vegetables, cucurbits	0.007	5/8	
FB 0269 Grapes	0.03	5/8	
VL 0482 Lettuce, head	1	5/8	
VL 0483 Lettuce, leaf	1	5/8	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
	MF 0100 Mammalian fats (except milk fats)	0.02	5/8	
	MM 0095 Meat (from mammals other than marine mammals)	0.004	5/8	
	ML 0106 Milks	0.002	5/8	
	VL 0485 Mustard greens	0.2	5/8	
	FS 0245 Nectarine	0.03	5/8	
	FS 0247 Peach	0.03	5/8	
	HS 0444 Peppers chili, dried	0.2	5/8	
	FP 0009 Pome fruits	0.02	5/8	
248	<b>Flutriafol</b>			
	FI 0327 Banana	0.3	5/8	
	SB 0716 Coffee beans	0.15	5/8	
	SO 0697 Peanut	0.15	5/8	
	AL 0697 Peanut fodder	20	5/8	
	HS 0444 Peppers Chili, dried	10	5/8	
	VO 0445 Peppers, sweet (including pimento or pimienta)	1	5/8	
	FP 0009 Pome fruits	0.3	5/8	
	VD 0541 Soya bean (dry)	0.4	5/8	
	GC 0654 Wheat	0.15	5/8	
	CM 0654 Wheat bran, unprocessed	0.3	5/8	
	AS 0654 Wheat straw and fodder, dry	8	5/8	
249	<b>Isopyrazam</b>			
	FI 0327 Banana	0.06	5/8	
	GC 0640 Barley	0.07	5/8	
	AS 0640 Barley straw and fodder, dry	3	5/8	
	MO 0105 Edible offal (mammalian)	0.02	5/8	
	PE 0112 Eggs	0.01 (*)	5/8	
	MF 0100 Mammalian fats (except milk fats)	0.01 (*)	5/8	
	MM 0095 Meat (from mammals other than marine mammals)	0.01 (*)	5/8	
	ML 0106 Milks	0.01 (*)	5/8	
	FM 0183 Milk fats	0.02	5/8	
	PO 0111 Poultry, edible offal of	0.01 (*)	5/8	
	PF 0111 Poultry fats	0.01 (*)	5/8	
	PM 0110 Poultry meat	0.01 (*)	5/8	
	GC 0650 Rye	0.03	5/8	
	AS 0650 Rye straw and fodder, dry	3	5/8	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
	GC 0653 Triticale	0.03	5/8	
	AS 0653 Triticale straw and fodder, dry	3	5/8	
	GC 0654 Wheat	0.03	5/8	
	CM 0654 Wheat bran, unprocessed	0.15	5/8	
	AS 0654 Wheat straw and fodder, dry	3	5/8	
251	<b>Saflufenacil</b>			
	FI 0327 Banana	0.01	5/8	
	AS 0640 Barley straw and fodder, dry	0.05	5/8	
	VD 0071 Beans (dry)	0.3	5/8	
	GC 0080 Cereal grains	0.01	5/8	
	FC 0001 Citrus fruits	0.01	5/8	
	SB 0716 Coffee beans	0.01	5/8	
	SO 0691 Cotton seed	0.2	5/8	
	MO 0105 Edible offal (mammalian)	0.3	5/8	
	FB 0269 Grapes	0.01	5/8	
	AS 0645 Maize fodder (dry)	0.05	5/8	
	MF 0100 Mammalian fats (except milk fats)	0.01	5/8	
	MM 0095 Meat (from mammals other than marine mammals)	0.01	5/8	
	ML 0106 Milks	0.01	5/8	
	VD 0072 Peas (dry)	0.05	5/8	
	VP 0063 Peas (pods and succulent = immature seeds)	0.01	5/8	
	VP 0064 Peas, shelled (succulent seeds)	0.01	5/8	
	FP 0009 Pome fruits	0.01	5/8	
	SO 0495 Rape seed	0.6	5/8	
	AS 0651 Sorghum straw and fodder, dry	0.05	5/8	
	VD 0541 Soya bean (dry)	0.07	5/8	
	VP 0541 Soya bean (immature seeds)	0.01	5/8	
	FS 0012 Stone fruits	0.01	5/8	
	SO 0702 Sunflower seed	0.7	5/8	
	GC 0447 Sweet corn	0.01	5/8	
	TN 0085 Tree nuts	0.01	5/8	
	AS 0654 Wheat straw and fodder, dry	0.05	5/8	

## APPENDIX IV

## PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(At Step 5)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
130	<b>Diflubenzuron</b>			
	GC 0640 Barley	0.05 (*)	5	
	AS 0162 Hay or fodder (dry) of grasses	3	5	
	VL 0485 Mustard greens	10	5	
	FS 0245 Nectarine	0.5	5	
	GC 0647 Oats	0.05 (*)	5	
	FS 0247 Peach	0.5	5	
	SO 0697 Peanut	0.1	5	
	AL 0697 Peanut fodder	40	5	
	VO 0444 Peppers chili	3	5	
	HS 0444 Peppers chili, dried	20	5	
	VO 0445 Peppers, sweet (including pimento or pimiento)	0.7	5	
	FS 0014 Plums (including prunes)	0.5	5	
	AS 0081 Straw and fodder (dry) of cereal grains	1.5	5	
	TN 0085 Tree nuts	0.2	5	
	GC 0653 Triticale	0.05 (*)	5	
	GC 0654 Wheat	0.05 (*)	5	
176	<b>Hexythiazox</b>			
	FB 0275 Strawberry	6	5	
184	<b>Etofenprox</b>			
	FB 0269 Grapes	4	5	
234	<b>Spirotetramat</b>			
	ML 0106 Milks	0.01	5	
240	<b>Dicamba</b>			
	VD 0541 Soya bean (dry)	5	5	
246	<b>Acetamiprid</b>			
	VL 0053 Leafy vegetables	3	5	except spinach
248	<b>Flutriafol</b>			
	DF 0269 Dried grapes (= currants, raisins and sultanas)	2	5	
	FB 0269 Grapes	0.8	5	

## APPENDIX V

## CODEX MAXIMUM RESIDUE LIMITS FOR PESTICIDES RECOMMENDED FOR REVOCATION

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
<b>118 Cypermethrins (including alpha- and zeta- cypermethrin)</b>			
FC 0001 Citrus fruits	2	CXL-D	
PE 0112 Eggs	0.01 (*)	CXL-D	
PO 0111 Poultry, edible offal of	0.05 (*)	CXL-D	
PM 0110 Poultry meat	0.1 (fat)	CXL-D	
DT 1114 Tea, green, black (black, fermented and dried)	20	CXL-D	
<b>171 Profenofos</b>			
VO 0444 Peppers chili	5	CXL-D	
HS 0444 Peppers chili, dried	50	CXL-D	
<b>176 Hexythiazox</b>			
DH 1100 Hops, dry	2	CXL-D	
<b>184 Etofenprox</b>			
FP 0009 Pome fruits	1	CXL-D	
VR 0589 Potato	0.01 (*)	CXL-D	
<b>189 Tebuconazole</b>			
FI 0327 Banana	0.05	CXL-D	
GC 0640 Barley	0.2	CXL-D	
AS 0640 Barley straw and fodder, dry	10	CXL-D	
MO 0812 Cattle, edible offal of	0.05 (*)	CXL-D	
FS 0013 Cherries	5	CXL-D	
SB 0716 Coffee beans	0.1	CXL-D	
SM 0716 Coffee beans, roasted	0.5	CXL-D	
VC 0424 Cucumber	0.2	CXL-D	
DF 0269 Dried grapes (= currants, raisins and sultanas)	3	CXL-D	
PE 0112 Eggs	0.05 (*)	CXL-D	
FB 0269 Grapes	2	CXL-D	
DH 1100 Hops, Dry	30	CXL-D	
MM 0095 Meat (from mammals other than marine mammals)	0.05 (*)	CXL-D	
ML 0106 Milks	0.01 (*)	CXL-D	
GC 0647 Oats	0.05 (*)	CXL-D	
FS 0247 Peach	1	CXL-D	
SO 0697 Peanut	0.05	CXL-D	



<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
AL 0697 Peanut fodder	30	CXL-D	
HS 0444 Peppers chili, dried	5	CXL-D	
VO 0445 Peppers, sweet (including pimento or pimiento)	0.5	CXL-D	
PO 0111 Poultry, edible offal of	0.05 (*)	CXL-D	
PM 0110 Poultry meat	0.05 (*)	CXL-D	
SO 0495 Rape seed	0.5	CXL-D	
GC 0650 Rye	0.05 (*)	CXL-D	
AS 0650 Rye straw and fodder, dry	5	CXL-D	
VC 0431 Squash, summer	0.02	CXL-D	
VO 0448 Tomato	0.2	CXL-D	
GC 0654 Wheat	0.05	CXL-D	
AS 0654 Wheat straw and fodder, dry	10	CXL-D	
<b>203 Spinosad</b>			
TN 0660 Almonds	0.01 (*)	CXL-D	
AM 0660 Almond hulls	2	CXL-D	
<b>210 Pyraclostrobin</b>			
TN 0660 Almonds	0.02 (*)	CXL-D	
AM 0660 Almond hulls	2	CXL-D	
GC 0640 Barley	0.5	CXL-D	
FB 0020 Blueberries	1	CXL-D	
FC 0001 Citrus fruits	1	CXL-D	
VC 0424 Cucumber	0.5	CXL-D	
VA 0381 Garlic	0.05 (*)	CXL-D	
GC 0647 Oats	0.5	CXL-D	
VA 0385 Onion, bulb	0.2	CXL-D	
FI 0350 Papaya	0.05 (*)	CXL-D	
TN 0672 Pecan	0.02 (*)	CXL-D	
FB 0272 Raspberries, red, black	2	CXL-D	
VC 0431 Squash, summer	0.3	CXL-D	
FS 0012 Stone fruits	1	CXL-D	
FB 0275 Strawberry	0.5	CXL-D	
SO 0702 Sunflower seed	0.3	CXL-D	
<b>234 Spirotetramat</b>			
MO 0105 Edible offal (mammalian)	0.03	CXL-D	
MM 0095 Meat (from mammals other than marine mammals)	0.01 (*)	CXL-D	

## APPENDIX VI

## DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Retained at Step 7)

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
<b>90 Chlorpyrifos-Methyl</b>				
GC 0640 Barley	3	Po	7	
GC 0640 Barley	10	Po	7	
GC 0647 Oats	10	Po	7	
GC 0649 Rice	10	Po	7	
GC 0654 Wheat	3	Po	7	
CM 0654 Wheat bran, unprocessed	6	PoP	7	
CF 1210 Wheat germ	5	PoP	7	
<b>112 Phorate</b>				
VR 0589 Potato	0.5		7	
<b>126 Oxamyl</b>				
FC 0001 Citrus fruits	3		7	
VC 0424 Cucumber	1		7	
VC 0046 Melons, except watermelon	1		7	
VO 0051 Peppers	5		7	
<b>178 Bifenthrin</b>				
FI 0345 Mango	0.5		7	
VO 0442 Okra	0.2		7	
FI 0350 Papaya	0.4		7	
<b>189 Tebuconazole</b>				
VP 0526 Common bean (pods and/or immature seeds)	2		7	
<b>197 Fenbuconazole</b>				
AM 0660 Almond hulls	3		7	
AB 0226 Apple pomace, Dry	1		7	
FB 0020 Blueberries	0.5		7	
FB 0265 Cranberry	1		7	
MO 0105 Edible offal (mammalian)	0.1		7	
MM 0095 Meat (from mammals other than marine mammals)	0.01		7	
SO 0697 Peanut	0.1		7	
AL 0697 Peanut fodder	15		7	
VO 0051 Peppers	0.6		7	
HS 0444 Peppers chili, dried	2		7	

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
FS 0014 Plums (including prunes)	0.3		7	
FP 0009 Pome fruits	0.5		7	
<b>204 Esfenvalerate</b>				
SO 0691 Cotton seed	0.05		7	
VO 0448 Tomato	0.1		7	
GC 0654 Wheat	0.05		7	
<b>212 Metalaxyl-M</b>				
FP 0226 Apple	0.02 (*)		7	
SB 0715 Cacao beans	0.02		7	
FB 0269 Grapes	1		7	
VL 0482 Lettuce, head	0.5		7	
VA 0385 Onion, bulb	0.03		7	
VO 0445 Peppers, sweet (including pimento or pimiento)	0.5		7	
VR 0589 Potato	0.02 (*)		7	
VL 0502 Spinach	0.1		7	
SO 0702 Sunflower seed	0.02 (*)		7	
VO 0448 Tomato	0.2		7	
<b>224 Difenoconazole</b>				
FI 0350 Papaya	0.3		7	
<b>238 Clothianidin</b>				
VR 0075 Root and tuber vegetables	0.2	C,T	7	

## APPENDIX VII

## PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Retained at Step 4)

<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
143 <b>Triazophos</b>				
CM 0649 Rice, husked	2		4	
229 <b>Azoxystrobin</b>				
DM 0604 Ginseng, extracts	0.5		4	
246 <b>Acetamiprid</b>				
VL 0502 Spinach	5		4	

**Proposed Draft MRLs for Pesticides**  
**Pilot Project for JMPR recommendations of MRLs before national governments or**  
**other regional registration authorities for a global joint review chemical**  
**(Retained at Step 4)**

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
252	<b>Sulfoxaflor</b>				
	GC 0640 Barley	0.6		4	
	AS 0640 Barley straw and fodder, dry	3		4	
	VB 0400 Broccoli	3		4	
	VB 0041 Cabbages, head	0.4		4	
	VB 0404 Cauliflower	0.04		4	
	VS 0624 Celery	1.5		4	
	FC 0001 Citrus fruits	0.9		4	
	SO 0691 Cotton seed	0.4		4	
	DF 0269 Dried grapes (= currants, raisins and sultanas)	6		4	
	MO 0105 Edible offal (mammalian)	0.6		4	
	PE 0112 Eggs	0.1		4	
	VO 0050 Fruiting vegetables other than cucurbits	1.5		4	except sweet corn and mushrooms
	VC 0045 Fruiting vegetables, cucurbits	0.5		4	
	VA 0381 Garlic	0.01 (*)		4	
	FB 0269 Grapes	2		4	
	VL 0053 Leafy vegetables	6		4	
	MM 0095 Meat (from mammals other than marine mammals)	0.3		4	
	ML 0106 Milks	0.2		4	
	VA 0385 Onion, bulb	0.01(*)		4	
	HS 0444 Peppers chili, dried	15		4	
	FP 0009 Pome fruits	0.4		4	
	PO 0111 Poultry, edible offal of	0.3		4	
	PM 0110 Poultry meat	0.1		4	
	SO 0495 Rape seed	0.15		4	
	VR 0075 Root and tuber vegetables	0.03		4	
	VP 0541 Soya bean (immature seeds)	0.3		4	
	AL 0541 Soya bean fodder	3		4	
	VA 0389 Spring onion	0.7		4	
	FS 0012 Stone fruits	2		4	except cherries
	FB 0275 Strawberry	0.5		4	
	TN 0085 Tree nuts	0.015		4	
	GC 0653 Triticale	0.2		4	
	VL 0473 Watercress	6		4	
	GC 0654 Wheat	0.2		4	
	AS 0654 Wheat straw and fodder, dry	3		4	

**DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND FEED:  
FRUIT COMMODITY GROUPS  
(At Step 8)**

**Citrus fruit****Class A**

<b>Type 1</b>	<b>Fruits</b>	<b>Group 001</b>	<b>Group Letter Code FC</b>
---------------	---------------	------------------	-----------------------------

Citrus fruits are produced on trees or shrubs of the family Rutaceae. Aromatic oily peel, globular form and interior segments of juice-filled vesicles characterize these fruits. The fruit is fully exposed to pesticides during the growing season. Post-harvest treatments with pesticides and liquid waxes are often carried out to avoid deterioration during transport and distribution due to fungal diseases, insect pests or loss of moisture.

The fruit pulp may be consumed in succulent form and as juice. The entire fruit may be used for preserves.

Four subgroups are defined:

Group 001A Lemons and Limes: Hybrids and related species similar to lemons and limes

Group 001B Mandarins: Hybrids and related species similar to mandarins

Group 001C Oranges, Sweet, Sour: Hybrids and related species similar to oranges

Group 001D Pummelos: Hybrids and related species

Portion of the commodity to which the MRL applies (and which is analyzed): **Whole commodity.**

<b>Group 001</b>	<b>Citrus fruits</b>
------------------	----------------------

<u><b>Code No.</b></u>	<u><b>Commodity</b></u>
------------------------	-------------------------

FC 0001	Citrus Fruit
---------	--------------

(includes all commodities in this group)

**Subgroup 001A Lemons and Limes**

<u><b>Code No.</b></u>	<u><b>Commodity</b></u>
------------------------	-------------------------

FC 0002	<b>Lemons and Limes</b> (including Citron)
---------	--

- *Citrus limon* Burm.f.;

- *Citrus aurantiifolia* Swingle;

- *Citrus medica* L.;

Hybrids and related species similar to lemons and limes including *Citrus jambhiri* Lush *Citrus limetta* Risso; *Citrus limetoides* Tan.; *Citrus limonia* Osbeck.

Syn: see specific fruit species

(includes all commodities in this subgroup)

FC 2201	<b>Australian blood lime</b> , see also Lemons and Limes, FC 0002
---------	---

*Microcitrus australasica* (F. Muell.) Swingle

Syn: *Citrus australasica* F. Muell.

FC 2202	<b>Australian desert lime</b> , see also Lemons and Limes, FC 0002
---------	--

*Eremocitrus glauca* (Lindl.) Swingle

Syn: *Citrus glauca* (Lindl) Burkill

FC 2203	<b>Australian round lime</b> , see also Lemons and Limes, FC 0002
---------	---

*Microcitrus australis* (A. Cunn. ex Mudie) Swingle

Syn: *Citrus australis* (A. Cunn. ex Mudie) Planch.

- FC 2204 **Brown River finger-lime**, see also Lemons and Limes, FC 0002  
*Microcitrus papuana* Winters  
*Citrus wintersii* Mabb.
- FC 0202 **Citron**, see also Lemons and Limes, FC 0002  
*Citrus medica* L.;  
 Syn: *Citrus cedra* Link; *Citrus cedratus* Raf.;  
*Citrus medica genuina* Engl.; *Citrus medica* proper Bonavia
- FC 2206 **Kaffir lime**, see also Lemons and Limes, FC 0002  
*Citrus hirtica* DC.
- FC 0303 **Kumquats**  
*Fortunella japonica* (Thunberg) Swingle;  
*F. margarita* (Loureiro) Swingle
- **Kumquat, Marumi**, see Kumquats, FC 0303  
*Fortunella japonica* (Thunberg) Swingle
- **Kumquat, Nagami**, see Kumquats, FC 0303  
*Fortunella margarita* (Loureiro) Swingle
- FC 0204 **Lemon**, see also Lemons and Limes, FC 0002  
*Citrus limon* Burm. f.;  
 Syn: *Citrus medica limon* L.; *Citrus limonum* Risso; *Citrus medica limonum* Hook. F.; *Citrus jambhiri* Lush.
- FC 0205 **Lime**, see Codex stan. 217-1999, Amd. 1-2005, see also Lemons and Limes, FC 0002  
*Citrus aurantiifolia* Swingle;  
 Syn: *Limonia aurantiifolia* Christm.; *L. acidissima* Houtt. *Citrus lima* Lunan.; *Citrus acida* Roxb.; *Citrus limonellus* Hassk.
- FC 2205 **Lime, Sweet**, see also Lemons and Limes, FC 0002  
*Citrus limetta* Risso  
 Syn: *Citrus limettioides* Tan., *Citrus lumia* Risso)
- FC 2207 **Limequats**  
*Citrus japonica* x *Citrus aurantiifolia*
- **Mexican Lime**, see Codex stan. 217-1999, see Lime, FC 0205  
*Citrus aurantiifolia* Swingle see, Amd. 1-2005
- FC 2208 **Mount White-lime**, see also Lemons and Limes, FC 0002  
*Microcitrus garrowayae* (F. M. Bailey) Swingle
- FC 2209 **New Guinea wild lime**, see also Lemons and Limes, FC 0002  
*Microcitrus warburgiana* (F. M. Bailey) Tanaka
- FC 2210 **Russell River-lime**, see also Lemons and Limes, FC 0002  
*Microcitrus inodora* (F. M. Bailey) Swingle  
 Syn: *Citrus inodora* (F. M. Bailey)
- FC 2211 **Tahiti Lime**, see Codex stan. 213-1999, Amd. 3-2005,  
 see also Lemons and Limes, FC 0002  
*Citrus latifolia* Tan.
- **Yuja**, see Yuzu, FC 2212

FC 2212 **Yuzu**, see also Lemons and Limes, FC 0002

*Citrus junos* Siebold ex Tanaka

### Subgroup 001B Mandarins

**Code No.**            **Commodity**

FC 0003 **Mandarins** (including Mandarin-like hybrids)

- *Citrus reticulata* Blanco:

Hybrids and related species including *Citrus nobilis* Lour.:

*Citrus deliciosa* Ten.; *Citrus tangerina* Hort.; *Citrus mitis* Blanco

Syn: *Citrus madurensis* Lour.; *Citrus unshiu* Marcow;

Syn: see specific fruit species Mandarin

(includes all commodities in this subgroup)

FC 0201 **Calamondin**, see also Mandarins, FC 0003

*Citrus mitis* Blanco;

Syn: *Citrus madurensis* Lour. (hybrid of *Citrus reticulata* Blanco.

var. *austera* Swing x *Fortunella* sp.)

- **Clementine**, see Mandarins, FC 0003

*Citrus clementina* Hort. Ex Tanaka cultivar of *Citrus reticulata* Blanco (possibly natural hybrid of Mandarin x Orange, Sweet)

- **Cleopatra mandarin**, see Mandarins, FC 0003

*Citrus reshni* Hort. Ex Tan.

- **Dancy or Dancy mandarin**, see Mandarins, FC 0003

*Citrus tangerina* Hort.

- **King mandarin**, see Mandarins, FC 0003

*Citrus nobilis* Lour. (= hybrid of Mandarin x Orange, Sweet)

FC 0206 **Mandarin**, see also see Mandarins, FC 0003

*Citrus reticulata* Blanco;

Syn: *Citrus nobilis* Andrews (non Lour.); *Citrus poonensis* Hort. Ex Tanaka; *Citrus chrysocarpa* Lush.

- **Mediterranean mandarin**, see Mandarins, FC 0003

*Citrus deliciosa* Ten (= hybrid of Mandarin x Orange, Sweet)

- **Satsuma or Satsuma mandarin**, see Mandarins, FC 0003

*Citrus unshiu* Marcow.

- **Tangelo**, small and medium sized cultivars, see Mandarins, FC 0003

Hybrids of Mandarin x Grapefruit or Mandarin x Shaddock

- **Tangerine**, see Mandarins, FC 0003

*Citrus reticulata* Blanco;

Syn: *Citrus tangerina* Hort. Ex Tan. *Citrus ponnensis* Hort., *Citrus Chyrosocarpa* Lush., *Citrus Reshni* Hort.

- **Tangors**, see Mandarins, FC 0003

*Citrus nobilis* Lour. (= Hybrid of Mandarin x Orange, sweet) ;

- **Tankan mandarin**, see Mandarins, FC 0003

*Citrus reticulata* Blanco *tankan* Hyata (= probably hybrid of Mandarin x Orange, Sweet)



- FC 2212      **Unshu orange**, see also Mandarins, FC 0003  
                   *Citrus reticulata* Blanco ssp. *unshiu* (Marcow.) D.Rivera Núñez et al.
- **Willowleaf mandarin**, see Mandarins, FC 0003  
                   *Citrus deliciosa* Ten. (= hybrid of Mandarin and Orange, sweet)

### Subgroup 001C Oranges, Sweet, Sour

- | <u>Code No.</u> | <u>Commodity</u>   |
|-----------------|--|
| FC 0004         | <b>Oranges, Sweet, Sour</b> (including Orange-like hybrids)<br>several cultivars:<br>- <i>Citrus sinensis</i> Osbeck;<br>- <i>Citrus aurantium</i> L.;<br>Hybrids and related species:<br><i>Citrus myrtifolia</i> Raf.; <i>Citrus salicifolia</i> Raf.;<br>Syn: see specific fruit species<br>(includes all commodities in this subgroup) |
| -               | <b>Bergamot</b> , see Oranges, Sweet, Sour, FC 0004<br><i>Citrus aurantium</i> ssp. <i>bergamia</i>  |
| -               | <b>Bigarade</b> , see Orange, Sour FC 0207<br><i>Citrus aurantium</i> L.   |
| -               | <b>Blood orange</b> , see Orange, Sweet, FC 0208<br>Cultivar of <i>Citrus sinensis</i> Osbeck  |
| -               | <b>Chinotto</b> , see Orange, Sour, FC 0207<br><i>Citrus aurantium</i> L., var. <i>myrtifolia</i> Ker-Gawler;<br>Syn: <i>Citrus myrtifolia</i> Raf.  |
| -               | <b>Chironja (orangelo)</b> , see Oranges, Sweet, Sour, FC 0004<br><i>Citrus sinensis</i> x <i>Citrus paradise</i> (= Hybrid of Orange, Sweet x Mandarin)<br>Ichang Bitter Orange, see Orange, Sweet, FC 0208<br><i>Citrus ichangensis</i> Swingle  |
| -               | <b>Malta orange</b> , see Blood Orange   |
| -               | <b>Myrtle-leaf orange</b> , see Chinotto   |
| -               | <b>Orange, Bitter</b> , (=bigarade) see Orange, Sour FC 0207   |
| FC 0207         | <b>Orange, Sour</b> , see also Oranges, Sweet, Sour, FC 0004<br><i>Citrus aurantium</i> L.;<br>Syn: <i>Citrus vulgaris</i> Risso; <i>Citrus bigarradia</i> Loisel; <i>Citrus communis</i> Le Maout & Dec.  |
| FC 0208         | <b>Orange, Sweet</b> , See Codex stan. 245-2004 Amd 1-2005, see also Oranges, Sweet, Sour, FC 0004<br><i>Citrus sinensis</i> Osbeck;<br>Syn: <i>Citrus aurantium sinensis</i> L.; <i>Citrus dulcis</i> Pers.; <i>Citrus aurantium vulgare</i> Risso & Poit.; <i>Citrus aurantium dulce</i> Hayne   |
| -               | <b>Seville Orange</b> , see Orange, Sour, FC 0207  |
| -               | <b>Tachibana orange</b> see Oranges, Sweet, Sour, FC 0004<br><i>Citrus tachibana</i> (Makino) Tanaka<br>Syn: <i>Citrus aurantium</i> L. var. <i>tachibana</i> Makino; <i>Citrus depressa</i>   |

FC 2213 Trifoliate orange see also Oranges, Sweet, Sour, FC 0004

*Poncirus trifoliata* (L.) Raf.

### Subgroup 001D Pummelos

Code No.            Commodity

FC 0005 **Pummelo and Grapefruits** (including Shaddock-like hybrids, among others Grapefruit)

*Citrus maxima* (Burm.) Merr.

Syn: *Citrus Grandis* L. Osbeck; *Citrus paradisi* Macf.; *Citrus decumana* L.

Hybrids and related species, similar to Shaddocks, including *Citrus natsudaïdai* Hayata; Tangelos large sized (= hybrid, Grapefruit x Mandarin); Tangelolos: (hybrid, Grapefruit x Tangelo): Syn: see specific fruit species

(includes all commodities in this subgroup)

FC 0203 **Grapefruit**, see Codex stan. 219-1999 Amd 2-2005, see also Pummelo and Grapefruits, FC 0005

Hybrid of Shaddock x Orange, Sweet

*Citrus paradisi* Macf.;

Syn: *Citrus maxima uvacarpa* Merr. & Lee.

- **Natsudaïdai**, see Pummelo and Grapefruits, FC 0005

*Citrus natsudaïdai* Hayata (possibly natural hybrid of Mandarin x Shaddock)

- **Pomelo**, see Pummelo and Grapefruits, FC 0005

FC 0209 **Pummelo**, see Codex stan. 214-1999, Amd 2-2005, see Pummelo and Grapefruits, FC 0005

*Citrus maxima* (Burm.) Merr.

Syn: *Citrus grandis* L. Osbeck; *Citrus aurantium decumana* L.; *Citrus decumana* Murr.

- **Shaddock**, see also Pummelo and Grapefruits, FC 0005

*Citrus maxima* (Burm.) Merr.;

- **Tangelo**, large-sized cultivars, see Pummelo and Grapefruits, FC 0005

*Citrus x tangelo* J.W. Ingram & H.E. Moore;

- **Tangelolo**, see Pummelo and Grapefruits, FC 0005

Hybrids of Grapefruit x Tangelo

- **Ugli/Uniq fruit (=tangelo)**, see Pummelo and Grapefruits, FC 0005

Cultivar of Tangelo, large sized fruit cultivar, see there

*Citrus reticulate x Citrus paradisi*

### **Pome fruits**

#### **Class A**

**Type 1                      Fruits                      Group 002                      Group Letter Code FP**

Pome fruits are produced on trees and shrubs belonging to certain genera of the rose family (Rosaceae), especially the genera Malus, Pyrus and also Pome fruit- like fruits from temperate climates are included. They are characterized by fleshy tissue surrounding a core consisting of parchment-like carpels enclosing the seeds.

Pome fruits are fully exposed to pesticides applied during the growing season. Post-harvest treatments directly after harvest may also occur. The entire fruit, except the core, may be consumed in the succulent form or after processing.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stems.**

**Group 002                      Pome fruits**

Code No.                      Commodity

FP 0009                      **Pome fruits**

(includes all commodities in this group)

FP 0226	<b>Apple</b> <i>Malus domestica</i> Borkhausen
FP 2220	<b>Azarole</b> <i>Crataegus azarolus</i> L.
FP 2221	<b>Chinese quince</b> <i>Chaenomeles speciosa</i> (sweet) Nakai
FP 0227	<b>Crab-apple</b> <i>Malus</i> spp.; among other <i>Malus baccata</i> (L.) Borkh. var <i>baccata</i> ; <i>M. prunifolia</i> (Willd.) Borkh.
-	<b>Japanese medlar</b> , see Loquat, FP 0228
-	<b>Kaki or Kaki fruit</b> , See Persimmon, japanese, FP 0307
FP 0228	<b>Loquat</b> <i>Eriobotrya japonica</i> (Thunberg ex J.A. Murray) Lindley
FP 2222	<b>Mayhaw</b> <i>Crataegus</i> spp.
FP 0229	<b>Medlar</b> <i>Mespilus germanica</i> L.
-	<b>Nashi pear</b> , see Pear, Oriental
FP 0230	<b>Pear</b> <i>Pyrus communis</i> L.; <i>P. pyrifolia</i> (Burm.) Nakai; <i>P. bretschneideri</i> Rhd.; <i>P. sinensis</i> L.
-	<b>Pear, Oriental</b> , see Pear, FP 0230 <i>Pyrus pyrifolia</i> (Burm.) Nakai
-	<b>Persimmon, Chinese</b> , see Persimmon, Japanese, FP 0307
FP 0307	<b>Persimmon, Japanese</b> <i>Diospyros Kaki</i> Thunb.; Syn: <i>D. chinensis</i> Blume
FP 0231	<b>Quince</b> <i>Cydonia oblonga</i> P. Miller; Syn: <i>Cydonia vulgaris</i> Persoon
-	<b>Sand pear</b> , see Pear, Oriental
FP 2223	<b>Tejocote</b> <i>Crataegus mexicana</i> DC.
FP2224	<b>Wild pear</b> <i>Pyrus elaeagrifolia</i> Pallas

### Stone fruits

#### Class A

<b>Type 1</b>	<b>Fruits</b>	<b>Group 003</b>	<b>Group Letter Code FS</b>
---------------	---------------	------------------	-----------------------------

Stone fruits are produced on trees belonging to the genus *Prunus* of the rose family (Rosaceae) and also Stone fruit- like fruits from temperate climates are included. They are characterized by fleshy tissue surrounding a single hard shelled seed. The fruit is fully exposed to pesticides applied during the growing season (from fruit setting until harvest). Dipping of fruit immediately after harvest, especially with fungicides, may also occur.

The entire fruit, except the seed, may be consumed in a succulent or processed form.

Three subgroups are defined:

Group 003 A Cherries: Cherry and related species of *Prunus*, which produce stone fruits similar to cherry

Group 003 B Plums: Plum and related species of *Prunus*, which produce stone fruits similar to plum

Group 003 C Peaches: Peach, nectarine, apricot and related species of *Prunus*, which produce stone fruits similar to peach, nectarine and apricot.

Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity after removal of stems and stones, but the residue is calculated and expressed on the whole commodity without stem.

**Group 003 Stone fruits**

**Code No. Commodity**

FS 0012 Stone fruits

*Prunus* spp. (includes all commodities in this group)

**Subgroup 003A Cherries (includes all commodities in this subgroup)**

**Code No. Commodity**

FS 0013 Cherries

- Capulin, see Cherry, black, FS 2230

*Prunus serotina* Ehrh. subsp. *capuli*

FS 2230 Cherry, black (including capulin)

*Prunus serotina* Ehrh. subsp. *Serotina*;

*Prunus serotina* Ehrh. subsp. *capuli*

FS 2231 Cherry, Nanking

*Prunus tomentosa* Thunb.

FS 0243 Cherry, Sour

*Prunus cerasus* L.

FS 0244 Cherry, Sweet

*Prunus avium* L.

- Cherry, tart, see Cherry, Sour, FS 0243

FS 2232 Choke cherry

*Prunus virginiana* L.

- Morello, see Cherry, Sour, FS 0243

*Prunus cerasus* L., var. *austera* L.

**Subgroup 003B Plums**

**Code No. Commodity**

FS 0014 Plums (including Prunes)

*Prunus domestica* L.; other *Prunus* spp and ssp.

(includes all commodities in this subgroup)

FS 0241 Bullace

*Prunus insititia* L.;

Syn: *Prunus domestica* L., ssp. *insititia* (L.) Schneider

FS 0242 Cherry plum

*Prunus cerasifera* Ehrhart, syn: *P. divaricata* Ledebor *P. salicina* Lindl., var. Burbank

- Chickasaw plum, see Plum, Chickasaw, FS 0248

- Damsons (Damson plums), see Plum, Damson

FS 0302	<b>Jujube, Chinese</b> <i>Ziziphus jujuba</i> Mill.
-	<b>Greengages (Greengage plums)</b> , see Plum, Greengage
FS 2233	<b>Klamath plum</b> , <i>Prunus subcordata</i> Benth.
-	<b>Mirabelle</b> , see Plum, Mirabelle
-	<b>Myrobolan plum</b> , see Cherry plum, FS 0242
FS 2234	<b>Plum</b> <i>Prunus domestica</i> L.
-	<b>Plum, American</b> , see Sloe, FS 0249 <i>Prunus americana</i> Marshall
FS 2235	<b>Plum, beach</b> <i>Prunus maritime</i> Marshall
FS 0248	<b>Plum, Chickasaw</b> <i>Prunus angustifolia</i> Marsh.; Syn: <i>P. Chicasaw</i> Mich.
-	<b>Plum, Damson</b> , see Bullace, FS 0241
-	<b>Plum, Greengage</b> , see Plums, FS 0014 <i>Prunus insititia</i> L., var. <i>italica</i> (Borkh.) L.M Neum.
-	<b>Plum, Japanese</b> , see Plums, FS 0014 <i>Prunus salicina</i> Lindley; Syn: <i>P. triflora</i> Roxb.
-	<b>Plum, Mirabelle</b> , see Bullace, FS 0241 <i>Prunus insititia</i> L., var. <i>syriaca</i> ; Syn: <i>P. domestica</i> L., ssp <i>insititia</i> (L.) Schneider
FS 2236	<b>Plumcot</b> <i>Prunus domestica</i> x <i>P. armeniaca</i>
-	<b>Prunes</b> , see Plums, FS 0014
FS 0249	<b>Sloe</b> <i>Prunus spinosa</i> L.; several wild <i>Prunus</i> spp.

**Subgroup 003C Peaches**

<u>Code No.</u>	<u>Commodity</u>
FS 2001	<b>Peaches</b> (including Nectarine and Apricots) (includes all commodities in this subgroup)
FS 0240	<b>Apricot</b> <i>Prunus armeniaca</i> L.; Syn: <i>Armeniaca vulgaris</i> Lamarck
FS 2237	<b>Japanese apricot</b> <i>Prunus mume</i> Siebold & Zucc.
FS 0245	<b>Nectarine</b> <i>Prunus persica</i> (L.) Batch, var. <i>nectarina</i>

FS 0247                    **Peach**  
                                   *Prunus persica* (L.) Batsch;  
                                   Syn: *P. vulgaris* Mill.

### Berries and other small fruits

#### Class A

**Type 1                    Fruits                    Group 004                    Group Letter Code FB**

Berries and other small fruits are derived from a variety of perennial plants and shrubs having fruit characterized by a high surface: weight ratio. The fruits are fully exposed to pesticides applied during the growing season (blossoming until harvest).

The entire fruit, often including seed, may be consumed in a succulent or processed form.

Five subgroups are defined:

Group 004 A Caneberries: includes berries originating from canes that are erect or trailing, mainly *Rubus* species

Group 004 B Bushberries: includes berries originating from woody shrubs

Group 004 C Large shrub/tree berries: includes berries originating from large shrubs or trees

Group 004 D Small fruit vine climbing: includes berries originating from climbing vines

Group 004 E Low growing berries: includes berries originating from low growing berries that are short shrubs or herbaceous plants

Portion of commodity to which the MRL applies (and which is analysed): Whole commodity after removal of caps and stems.  
**Currants, Black, Red, White: fruit with stem.**

**Group 004                    Berries and other small fruits**

**Code No.                    Commodity**

FB 0018                    **Berries and other small fruits**  
                                   (includes all commodities in this group)

**Subgroup 004A                    Cane berries**

**Code No.                    Commodity**

FB 2005                    **Cane berries**  
                                   *Rubus* species (includes all commodities in this subgroup)

FB 0264                    **Blackberries**  
                                   *Rubus fruticosus* auct. aggr., several ssp.

-                                **Boysenberry**, see Dewberries, FB 0266  
                                   Hybrid of *Rubus* spp.

FB 0266                    **Dewberries (including Boysenberry and Loganberry)**  
                                   *Rubus ceasius* L.; several *Rubus* ssp. and hybrids

-                                **Korean Black Raspberry**, see Raspberries, Red, Black FB 0272  
                                   *Rubus coreanus* Miquel.

-                                **Korean Raspberry**, see Raspberries, Red, Black FB 0272  
                                   *Rubus crataegifolius* Bunge

-                                **Loganberry**, see Dewberries, FB 0266  
                                   *Rubus loganobaccus* L.H. Bailey, hybrid of *Rubus* spp.

-                                **Olallie berry**, see Dewberries, FB 0266

FB 0272                    **Raspberries, Red, Black**  
                                   *Rubus idaeus* L.; *Rubus occidentalis* L. ; several *Rubus* spp. and hybrids,  
                                   including wild rasp berries *Rubus molluccanus* L.

-	<b>Youngberry</b> , see Dewberries, FB 0266 <i>Rubus ursinus</i> cv. Young
<b>Subgroup 004B</b>	<b>Bush berries</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
FB 2006	<b>Bush berries</b> (includes all commodities in this subgroup)
FB 0019	<b>Vaccinium berries</b> , including Bearberry, except Cranberry <i>Vaccinium</i> spp.; <i>Arctostaphylos uva-ursi</i> (L.) Spreng.
FB 0020	<b>Blueberries</b> <i>Vaccinium corymbosum</i> L.; <i>Vaccinium angustifolium</i> Ait.; <i>Vaccinium virgatum</i> Aiton; <i>Gaylussacia</i> spp.
FB 2240	<b>Agritos</b> <i>Berberis trifoliolata</i> Moric
FB 2241	<b>Aronia berries</b> <i>Aronia</i> spp.
FB 0260	<b>Bearberry</b> <i>Arctostaphylos uva-ursi</i> (L.) Spreng.
FB 0261	<b>Bilberry</b> <i>Vaccinium myrtillus</i> L.
FB 0262	<b>Bilberry, Bog</b> <i>Vaccinium uliginosum</i> L.
FB 0263	<b>Bilberry, Red</b> <i>Vaccinium vitis-idaea</i> L.
-	<b>Blueberry, Highbush</b> , see Blueberries, FB 0020 <i>Vaccinium corymbosum</i> L.
-	<b>Blueberry, Lowbush</b> , see Blueberries, FB 0020 <i>Vaccinium angustifolium</i> Ait
-	<b>Blueberry, Rabbiteye</b> , see Blueberries, FB 0020 <i>Vaccinium virgatum</i> Aiton
FB 2242	<b>Buffalo currant</b> <i>Ribes aureum</i> var. <i>villosum</i> DC. (Syn: <i>Ribes odoratum</i> H.Wendl)
FB 2243	<b>Chilean guava</b> <i>Ugni molinae</i> Turcz. (Syn: <i>Myrtus ugni</i> Mol.)
-	<b>Cowberry</b> , see Bilberry, Red, FB 0263
FB 0021	<b>Currants, Black, Red, White</b> <i>Ribes nigrum</i> L.; <i>R. rubrum</i> L.
FB 0278	<b>Currant, Black</b> , see also Currants, Black, Red, White <i>Ribes nigrum</i> L.
FB 0279	<b>Currant, Red, White</b> , see also Currants, Black, Red, White <i>Ribes rubrum</i> L.
FB 0268	<b>Gooseberry</b> <i>Ribes uva-crispa</i> L. (Syn: <i>R. grossularia</i> L.)

FB 2244	<b>European barberry</b> <i>Berberis vulgaris</i> L.
-	<b>European Blueberry</b> , see bilberry FB 0261
FB 2245	<b>Huckleberries</b> 1. Blueberries, see above FB 0020 2. <i>Gaylussacia</i> spp., see Blueberries FB 0020 Red Huckleberry ( <i>Vaccinium parvifolium</i> L.)
FB 2246	<b>Jostaberries</b> <i>Ribes x nidigrolaria</i> Rud. Bauer & A. Bauer
FB 0270	<b>Juneberries</b> <i>Amelanchier</i> spp.
FB 2247	<b>Native currant</b> <i>Acrotriche depressa</i> R. Br.
FB 2248	<b>Riberries</b> <i>Syzygium leuhmannii</i>
FB 0273	<b>Rose hips</b> <i>Rosa</i> L., several spp.
FB 2249	<b>Salal</b> <i>Gaultheria shallon</i> Pursh
FB 2250	<b>Sea buckthorn</b> <i>Hippophae rhamnoides</i> L.
-	<b>Whortleberry, Red</b> , see Bilberry, Red, FB 0263
<b>Subgroup 004C</b>	<b>Large shrub/tree berries</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
FB 2007	<b>Large shrub/tree berries</b> (includes all commodities in this subgroup)
FB 2250	<b>Bayberries</b> <i>Morella</i> spp.
FB 2251	<b>Buffaloberry</b> <i>Shepherdia argentea</i> (Pursh) Nutt.
FB 2252	<b>Che</b> <i>Maclura tricuspidata</i> Carriera
FB 0267	<b>Elderberries</b> <i>Sambucus</i> spp.
FB 2253	<b>Guelder rose</b> <i>Viburnum opulus</i> L.
FB 0271	<b>Mulberries</b> <i>Morus alba</i> L.; <i>Morus nigra</i> L.; <i>Morus rubra</i> L.
FB 2254	<b>Phalsa</b> <i>Grewia asiatica</i> L.
-	<b>Rowan</b> , see Service berries, FB 0274 <i>Sorbus aucuparia</i> L.



FB 0274	<b>Service berries</b> 1. see Juneberries 2. <i>Sorbus torminalis</i> (L.) Crantz; <i>Sorbus domestica</i> L. <i>S. aucuparia</i> L.
FB 2255	<b>Silverberry, Russian</b> <i>Elaeagnus angustifolia</i> L.
<b>Subgroup 004D</b>	<b>Small fruit vine climbing</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
FB 2008	<b>Small fruit vine climbing</b> (includes all commodities in this subgroup)
FB 2256	<b>Arguta kiwifruit</b> <i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex. Miq.
FB 2257	<b>Amur river grape</b> <i>Vitis amurensis</i> Rupr.
FB 0269	<b>Grapes</b> <i>Vitis vinifera</i> L., several cultivars
FB 2258	<b>Schisandraberri</b> <i>Schisandra chinensis</i> (Turcz.) Baill.
FB 1235	<b>Table-grapes</b> Special cultivars of <i>Vitis vinifera</i> L., suitable for direct human consumption
-	<b>Tara vine</b> , see Arguta kiwifruit, FB 2255
FB 1236	<b>Wine-grapes</b> Special cultivars of <i>Vitis vinifera</i> L., suitable for preparing juice and fermenting into wine
<b>Subgroup 004E</b>	<b>Low growing berries</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
FB 2009	<b>Low growing berries</b> (includes all commodities in this subgroup)
-	<b>Bakeapple</b> , see Cloudberry, FB 0277
FB 0265	<b>Cranberry</b> <i>Vaccinium macrocarpon</i> Aiton
FB 0277	<b>Cloudberry</b> <i>Rubus chamaemorus</i> L.
FB 2259	<b>Muntries</b> <i>Kunzea pomifera</i> F. Muell.
FB 2260	<b>Partridge berry</b> <i>Mitchella repens</i> L.
-	<b>Squaw vine</b> , see Partridge berry, FB 2259
FB 0275	<b>Strawberry</b> <i>Fragaria x ananassa</i> Duchene ex Rozier
FB 0276	<b>Strawberries, Wild</b> <i>Fragaria vesca</i> L.; <i>Fragaria moschata</i> Duchene
-	<b>Strawberry , Musky</b> , see Strawberries wild, FB 0276 <i>Fragaria moschata</i> Duchene



FT 2307	<b>Carandas plum</b> <i>Carissa edulis</i> Vahl.
FT 2308	<b>Ceylon iron wood</b> <i>Manilkara hexandra</i> (Roxb.) Dubard
FT 2309	<b>Ceylon olive</b> <i>Elaeocarpus serratus</i> L.
FT 2310	<b>Cherry-of-the-Rio-Grande</b> <i>Eugenia aggregate</i> (Vell.) Kiaersk.
FT 0293	<b>Chinese olive, Black, White</b> <i>Canarium tramdenum</i> C.D.Dai&Yakovlev; Syn: <i>C pimela</i> Koenig <i>Canarium album</i> (Lour.) Raeusch.
FT 2311	<b>Chiraulinut</b> <i>Buchanania latifolia</i> Roxb.
FT 0294	<b>Coco plum</b> <i>Chrysobalanus icaco</i> L.
FT 0296	<b>Desert date</b> <i>Balanites aegyptiaca</i> (L.)Delile
FT 2312	<b>False sandalwood</b> <i>Ximenia americana</i> L.
FT 2313	<b>Fragrant manjack</b> <i>Cordia dichotoma</i> G. Forst.
FT 2314	<b>Gooseberry, Abyssinian</b> <i>Dovyalis abyssinica</i> (A. Rich.) Warb.
FT 2315	<b>Gooseberry, Ceylon</b> <i>Dovyalis hebecarpa</i> (Gardner) Warb.
FT 2316	<b>Governor's plum</b> <i>Flacourtia indica</i> (Burm.fF) Merr.; <i>Flacourtia inermis</i> Roxb.; <i>Flacourtia rukam</i> Zoll.&Moritzi; <i>Flacourtia jangomas</i> (Lour.)Raeusch.
FT 0298	<b>Grumichama</b> <i>Eugenia brasiliensis</i> Lam. Syn: <i>Eugenia dombeyi</i> (Spreng.) Skeels
FT 2317	<b>Guabiroba</b> <i>Campomanesia xanthocarpa</i> O. Berg
FT 2318	<b>Guava berry</b> <i>Myrciaria floribunda</i> (H. West ex Willd.) O. Berg
-	<b>Herbert river cherry</b> , See Bignay, FT 2304
FT 0299	<b>Hog plum</b> <i>Spondias mombin</i> L.; Syn: <i>S. lutea</i> L.
-	<b>Icaco plum</b> , See Coco plum, FT 0294

- FT 2319 **Illawara plum**  
*Podocarpus elatus* R. Br. Ex Endl.
- **Indian plum**, See Governor's plum, FT 2316
- FT 2320 **Jamaica cherry**  
*Muntingia calabura* L.
- FT 0339 **Jambolan**  
*Zyzigium cumini* (L.) Skeels;  
Syn: *Eugenia cuminii* (L.) Druce;
- FT 0340 **Java apple**  
*Syzigium samarangense* (Bl.) Merr. & Perry;  
Syn: *Eugenia javanica* Lam
- FT 2321 **Kaffir plum**  
*Harpephyllum caffrum* Bernh. Ex C. Krauss
- FT 2322 **Kakadu plum**  
*Terminalia latipes* Benth. Subsp. *psillicarpa* Pedley
- FT 2323 **Kapundung**  
*Baccaurea racemosa* (Reinw.) Müll. Arg.
- FT 0290 **Karanda**  
*Carissa carandas* L.
- FT 2324 **Lemon aspen**  
*Acronychia acidula* F. Muell.
- **Maya breadfruit**, See Breadnut, FT 2305
- **Mombin, yellow**, See Hog plum FT 0299
- FT 2326 **Monos plum**  
*Pseudanmomis umbellulifera* (Kunth) Kausel
- FT 2327 **Mountain cherry**  
*Bunchosia cornifolia* Kunth
- **Olives, table**, see Table olives FT 0305
- FT 0306 **Otaheite gooseberry**  
*Phyllanthus acidus* (L.) Skeels  
Syn: *Ph. distichus* (L.) Muell.-Arg.
- **Olives for oil production**, see Group 023 Oilseed
- FT 2328 **Persimmon, Black**  
*Diospyros texana* Scheele
- **Pitanga**, see Surinam Cherry, FT 0311
- FT 2329 **Pitomba**  
*Eugenia luschnathiana* Klotzsch ex O. Berg
- **Plum-of-Martinique**, See Governor's plum, FT 2316
- **Rukam**, See Governor's plum, FT 2316
- FT 2330 **Rumberry**  
*Myrciaria dubia* (Kunth) Mc Vaugh

FT 0310	<b>Sea grape</b> <i>Coccoloba uvifera</i> Jacq.
FT 2331	<b>Sete-capotes</b> <i>Campomanesia guazimifolia</i> (Cambess.) O. Berg
FT 2332	<b>Silver aspen</b> <i>Acronychia wilcoxiana</i> (F. Muell.) T.G. Hartley
FT 0311	<b>Surinam cherry</b> <i>Eugenia uniflora</i> L.
FT 0305	<b>Table Olives</b> <i>Olea europaea</i> L., var. <i>europaea</i>
-	<b>Tree strawberry</b> , see Arbutus berry, FT 0286
FT 2333	<b>Water apple</b> <i>Syzygium aqueum</i> (Burm. F.) Alston
FT 2334	<b>Water berry</b> <i>Syzygium cordatum</i> Hochst. Ex C. Krauss
FT 2335	<b>Water pear</b> <i>Syzygium guineense</i> (Willd.) DC
-	<b>Wax jambu</b> , see Java apple FT 0340
-	<b>Yumberry</b> , see Bayberry, Red, FT 2303
<b>Subgroup 005B Assorted tropical and sub-tropical fruits - edible peel – medium to large</b>	
<u>Code No.</u>	<u>Commodity</u>
FT 2012	<b>Assorted tropical and sub-tropical fruits - edible peel – large</b> (includes all commodities in this subgroup)
FT 0285	<b>Ambarella</b> <i>Spondias dulcis</i> Sol. Ex Parkinson; Syn: <i>S. cytherea</i> Sonn.
-	<b>Aonla</b> , See Gooseberry, Indian, FT 2356
FT 2350	<b>Arazá</b> <i>Eugenia stipitata</i> Mac Vaugh
FT 2351	<b>Babaco</b> <i>Vasconcella x heilbornii</i> (V.M. Badillo) V.M. Badillo
FT 0288	<b>Bilimbi</b> <i>Averrhoa bilimbi</i> L.
FT 2352	<b>Cajou (pseudofruit)</b> <i>Anacardium giganteum</i> Hance ex Engl.
FT 2353	<b>Cambucá</b> <i>Marlierea edulis</i> Nied.
FT 0289	<b>Carambola</b> <i>Averrhoa carambola</i> L.
FT 0291	<b>Carob</b> <i>Ceratonia siliqua</i> L.

FT 0292	<b>Cashew apple</b> <i>Anacardium occidentale</i> L.
FT 2354	<b>Ciruela verde</b> <i>Bunchosia armeniaca</i> (Cav.) DC.
FT 2355	<b>Davidson plum</b> <i>Davidsonia pruriens</i> F. Muell
FT 0297	<b>Fig</b> <i>Ficus carica</i> L.
FT 2356	<b>Gooseberry, Indian</b> <i>Phyllanthus emblica</i> L.
FT 0336	<b>Guava</b> <i>Psidium guajava</i> L.
FT 2357	<b>Guava, Brazilian</b> <i>Psidium guineense</i> Sw.
FT 2358	<b>Guava, Cattley</b> <i>Psidium cattleianum</i> Sabine
FT 2359	<b>Guava, Costa Rican</b> <i>Psidium friedrichsthalianum</i> (O. Berg) Nied.
FT 2360	<b>Guava, Para</b> <i>Psidium acutangulum</i> DC.
FT 2361	<b>Guayabillo</b> <i>Psidium sartorianum</i> (O. Berg) Nied.
FT 2362	<b>Imbé</b> <i>Garcinia livingstonei</i> T. Anderson
FT 2363	<b>Imbu</b> <i>Spondias tuberosa</i> Arruda ex Kost.
-	<b>Indian mulberry</b> , See Noni, FT 2371
FT 0300	<b>Jaboticaba</b> <i>Myrciaria cauliflora</i> O. Berg.; Syn: <i>Eugenia cauliflora</i> DC.
FT 0301	<b>Jujube, Indian</b> <i>Ziziphus mauritania</i> Lam.; Syn: <i>Z. jujuba</i> (L.) Lam. Gaertn.
FT 2364	<b>Kwai muk</b> <i>Artocarpus hypargyreus</i> Hance ex Benth.
-	<b>Locust tree</b> , See carob, FT 0291
FT 2365	<b>Mangaba</b> <i>Hancornia speciosa</i> Gomes
FT 2366	<b>Marian plum</b> <i>Bouea macrophylla</i> Griff
FT 2367	<b>Mombin, Malayan</b> <i>Spondias pinnata</i> (J. Koenig. ex L. f.) Kurz

FT 2368	<b>Mombin, Purple</b> <i>Spondias purpurea</i> L.
FT 2369	<b>Monkey fruit</b> <i>Autocarpus lacucha</i> Buch.-Ham.
-	<b>Muriti</b> , See Nance, FT 2370
FT 2370	<b>Nance</b> <i>Byrsonima crassifolia</i> (L.) Kunth
FT 0304	<b>Natal plum</b> <i>Carissa macrocarpa</i> (Eckl.) A.DC. Syn: <i>C. grandiflora</i> (E, Mey) A.DC.
FT 2371	<b>Noni</b> <i>Morinda citrifolia</i> L.
FT 2372	<b>Papaya, Mountain</b> <i>Vasconcellea pubescens</i> A. DC.
FT 0308	<b>Pomerac</b> <i>Syzygium Malaccense</i> (L.) Merr. et Perry; Syn: <i>Eugenia malaccensis</i> L.
-	<b>Pomarroza</b> , see Rose apple, FT 0309
-	<b>Pomarroza, Malay</b> , see Pomerac, FT 0308
-	<b>Purple strawberry guava</b> , See Guava, Cattley, FT 2358
FT 2373	<b>Rambai</b> <i>Baccaurea motleyana</i> (Müll. Arg.) Müll. Arg
FT 0309	<b>Rose apple</b> <i>Syzygium jambos</i> (L.) Alston; Syn: <i>Eugenia jambos</i> L.
FT 0364	<b>Sentul</b> <i>Sandoricum koetjape</i> (Burm.F) Merr.
-	<b>Strawberry guava</b> , See Guava, Cattley, FT 2358
-	<b>St. John's bread</b> , see Carob, FT 0291
-	<b>Umbu</b> , See Imbu FT 2363
FT 2374	<b>Uvalha</b> <i>Eugenia pyriformis</i> Cambess
-	<b>Yellow strawberry guava</b> , See Guava, Cattley, FT 2358
<b>Subgroup 005C</b>	<b>Assorted tropical and sub-tropical fruits - edible peel – palms</b>
<u>Code No.</u>	<u>Commodity</u>
FT 2013	<b>Assorted tropical and sub-tropical fruits - edible peel - palms</b> (includes all commodities in this subgroup)
FT 2400	<b>Açaí</b> <i>Euterpe oleracea</i> Mart.
FT 2401	<b>Apak palm</b> <i>Brahea dulcis</i> (Kunth) Mart.
-	<b>Assai palm</b> , see Açaí, FT 2400

FT 2402	<b>Bacaba palm</b> <i>Oenocarpus bacaba</i> Mart.
FT 2403	<b>Babaca-de-leque</b> <i>Oenocarpus distichus</i>
FT 0295	<b>Date</b> <i>Phoenix dactylifera</i> L.
FI 0333	<b>Doum or Dum palm</b> <i>Hyphaene thebaica</i> (L.) Mart.
FT 2404	<b>Jelly palm</b> <i>Butia capitata</i> (Mart.) Becc.
FT 2405	<b>Patauá</b> <i>Oenocarpus bataua</i> Mart.
FT 2406	<b>Peach palm</b> <i>Bactris gasipaes</i> Kunth var. <i>Gasipaes</i>

#### Assorted tropical and sub-tropical fruits - inedible peel

##### Class A

Type 1	Fruits	Group 006	Group Letter Code FI
--------	--------	-----------	----------------------

The Assorted tropical and sub-tropical fruits - inedible peel are derived from the immature or mature fruits of a large variety of perennial plants, usually shrubs or trees. Fruits are fully exposed to pesticides applied during the growing season (period of fruit development) but the edible portion is protected by skin, peel or husk. The edible part of the fruits may be consumed in a fresh or processed form.

The group Miscellaneous fruits – inedible peel is divided in 5-6 subgroups:

- 006A Assorted tropical and sub-tropical fruits - inedible peel – small
- 006B Assorted tropical and sub-tropical fruits - inedible smooth peel - large
- 006C Assorted tropical and sub-tropical fruits - inedible rough or hairy peel - large
- 006D Assorted tropical and sub-tropical fruits - inedible peel - cactus
- 006E Assorted tropical and sub-tropical fruits - inedible peel - vines
- 006F Assorted tropical and sub-tropical fruits - inedible peel - palms

Portion of the commodity to which the MRL applies (and which is analysed): **Whole fruit unless qualified: e.g., banana pulp. Pineapple after removal of crown. Avocado, mangos and similar fruit with hard seeds: Whole commodity after removal of stone but residue calculated and expressed on whole fruit.**

<b>Group 006</b>	<b>Assorted tropical and sub-tropical fruits - inedible peel</b>
------------------	--

<u>Code No.</u>	<u>Commodity</u>
-----------------	------------------

FI 0030	Assorted tropical and sub-tropical fruits - inedible peel
---------	---

<b>Subgroup 006A</b>	<b>Assorted tropical and sub-tropical fruits - inedible peel – small</b>
----------------------	--

<u>Code No.</u>	<u>Commodity</u>
-----------------	------------------

FI 2021	Assorted tropical and sub-tropical fruits - inedible peel – small (includes all commodities in this subgroup)
---------	--

FI 2450	<b>Aisen</b> <i>Boscia senegalensis</i> (Pers.) Lam
---------	--

FI 2451	<b>Bael fruit</b> <i>Aegle marmelos</i> (L.) Corrêa
---------	--



- FI 2452 **Burmese grape**  
*Baccaurea ramiflora* Lour.
- **Cat's eyes**  
*Dimocarpus Longan* Lour. subsp. *malesianus* Leenh., see Longan FI 0342
- FI 2453 **Ingá**  
*Inga vera* Willd. subsp. *affinis* (DC.) T.D. Penn.
- FI 0343 **Litchi**  
*Litchi chinensis* Sonn.;  
Syn: *Nephelium litchi* Camb.
- FI 0342 **Longan**, see Codex stan. 220-1999  
*Dimocarpus longan* Lour.  
Syn: *Nephelium longana* (Lam.) Camb.; *Euphoria longana* Lam.
- FI 2454 **Madras-thorn**  
*Pithecellobuim dulce* (Roxb.) benth
- FI 2455 **Manduro**  
*Balanites maughamii* Sprague
- FI 2456 **Matisia**  
*Matisia cordata* Humb. & Bonpl.
- FI 2457 **Mesquite**  
*Prosopis juliflora* (Sw.) DC.
- FI 2458 **Mongongo**  
*Schinziophyton rautanenii* (Schinz) Radcl.-Sm
- FI 2459 **Pawpaw, Small-flower**  
*Asimina parviflora* (Michx.) Dunal
- FI 2460 **Satinleaf**  
*Chrysophyllum oliviforme* L.
- FI 2461 **Sierra Leone-tamarind**  
*Dallium guineense* Willd.
- FI 0366 **Spanish lime**  
*Melicoccus bijugatus* Jacq.;  
Syn: *Melicocca bijuga* L.
- FI 0369 **Tamarind**, see also Subgroup 28B Spices: Fruit or berry  
*Tamarindus indica* L., sweet varieties
- FI 2462 **Velvet tamarind**  
*Dallium indicum* L.
- FI 2463 **Wampi**  
*Clausena lansium* (Lour.) Skeels
- FI 2464 **White star apple**  
*Chrysophyllum albidum* G. Don

**Subgroup 006B Assorted tropical and sub-tropical fruits - inedible smooth peel - large**

<u>Code No.</u>	<u>Commodity</u>
FI 2022	<b>Assorted tropical and sub-tropical fruits - inedible smooth peel – large</b> (includes all commodities in this subgroup)
FI 2480	<b>Abiu</b> <i>Pouteria caimito</i> (Ruiz & Pav.) Radlk.
FI 0325	<b>Akee apple</b> <i>Blighia sapida</i> K.D. Koenig
FI 0326	<b>Avocado</b> <i>Persea americana</i> Mill.
FI 2481	<b>Bacuri</b> <i>Platonia insignis</i> Mart.
FI 0327	<b>Banana</b> Subsp. and cultivars of <i>Musa</i> ssp. and hybrids
-	<b>Banana, Dwarf</b> , See Banana, FI 0327 <i>Musa</i> hybrids, AAA group; Syn: <i>M. cavendishii</i> Lambert; <i>M. nana</i> Lour.
FI 2482	<b>Binjai</b> <i>Mangifera caesia</i> Jack
FI 0715	<b>Cacao (pulp)</b> <i>Theobroma cacao</i> L.
FI 0330	<b>Canistel</b> <i>Pouteria campechiana</i> (Kunth.) Baenhi; this species includes former <i>Lacuma nervosa</i> A.DC. and <i>L. salicifolia</i> Kunth.
FI 2483	<b>Cupuaçu</b> <i>Theobroma grandiflorum</i> (Willd. ex Spreng.) K. Schum.
-	<b>Egg fruit</b> , see Canistel, FI 0330
FI 2484	<b>Etambe</b> <i>Mangifera zeylanica</i> (Blume) Hook. F.
FI 0335	<b>Feijoa</b> <i>Acca sellowiana</i> (O. Berg) Burret Syn: <i>Feijoa sellowiana</i> (O. Berg) O. berg
FI 2485	<b>Jatobá</b> <i>Hymenaea courbaril</i> L.
FI 2486	<b>Kei apple</b> <i>Dovyalis caffra</i> (Hook. F. & Harv.) Warb.
FI 2487	<b>Kokam</b> <i>Garcinia indica</i> (Thouars) Choisy
FI 2488	<b>Langsat</b> <i>Lansium domesticum</i> Corrèa Syn: <i>Aglala domestica</i> ; <i>A. dookoo</i>

FI 2489	<b>Lanjut</b> <i>Mangifera legenifera</i> Griff.
FI 2490	<b>Lucuma</b> <i>Pouteria lucuma</i> (Ruiz & Pav.) Kuntze
-	<b>Lulo</b> , see Naranjilla, FI 0349
FI 2491	<b>Mabolo</b> <i>Diospyros blancoi</i> A. DC.
FI 0345	<b>Mango</b> <i>Mangifera indica</i> L.
FI 2492	<b>Mango, Horse</b> <i>Mangifera foetida</i> Lour.
FI 2493	<b>Mango, Saipan</b> <i>Mangifera odorata</i> Griff.
-	<b>Mangostan</b> , see Mangosteen, FI 0346
FI 0346	<b>Mangosteen</b> <i>Garcinia mangostana</i> L.
FI 0349	<b>Naranjilla</b> <i>Solanum quitoense</i> Lam.
FI 2494	<b>Paho</b> <i>Mangifera altissima</i> Blanco
FI 0350	<b>Papaya</b> <i>Carica papaya</i> L.
FI 2495	<b>Pawpaw</b> <i>Asimina triloba</i> (L.) Dunal
FI 2496	<b>Pelipisan</b> <i>Mangifera casturi</i> Kosterm.
FI 2497	<b>Pequi</b> <i>Caryocar brasiliense</i> Cambess.; <i>C villosum</i> (Aubl.) Pers
FI 0352	<b>Persimmon, American</b> <i>Diospyros virginiana</i> L.
-	<b>Plantain</b> , See Banana, FI 0327 <i>Musa x paradisiaca</i> L., var. <i>sapientum</i> (L.) Kuntze
FI 0355	<b>Pomegranate</b> <i>Punica granatum</i> L.
FI 2498	<b>Quandong</b> <i>Satalum acuminatum</i> (R. Br.) DC.
-	<b>Quito orange</b> , see Naranjilla, FI 0349
FI 0360	<b>Sapote, Black</b> <i>Diospyros digyna</i> Jacq. Syn: <i>D.ebenaster</i> Retz.

FI 0361	<b>Sapote, Green</b> <i>Pouteria viridis</i> (Pittier) Cronquist Syn: <i>Calocarpum viride</i> Pitt.
FI 0363	<b>Sapote, White</b> <i>Casimiroa edulis</i> La Llave & Lex
FI 2499	<b>Sataw</b> <i>Parkia speciosa</i> Hassk
FI 0367	<b>Star apple</b> <i>Chrysophyllum cainito</i> L.
FI 0312	<b>Tamarillo,</b> <i>Solanum betaceum</i> Cav. Syn: <i>Cyphomandra betacea</i> (Cav.) Sendt
FI 2500	<b>Tamarind-of-the-Indies</b> <i>Vangueria madagascariensis</i> J.F/Gmel.
-	<b>Tree tomato,</b> See Tamarillo, FI 0312
FI 2501	<b>Wild loquat</b> <i>Uapaca kirkiana</i> Müll. Agr.
<b>Subgroup 006C</b>	<b>Assorted tropical and sub-tropical fruits – inedible rough or hairy peel - large</b>
<u>Code No.</u>	<u>Commodity</u>
FI 2023	<b>Assorted tropical and sub-tropical fruits – inedible rough or hairy peel - large</b> (includes all commodities in this subgroup)
FI 2520	<b>Atemoya</b> <i>Annona x atemoya</i> Mabb.
-	<b>Baobab fruit,</b> see Monkey-bread tree FI 2524
FI 2521	<b>Biriba</b> <i>Rollinia mucosa</i> (Jacq.) Baill.
FI 0329	<b>Breadfruit</b> <i>Artocarpus altilis</i> (Parkinson) Fosberg Syn: <i>Artocarpus communis</i> J.R. et G. Forster;
FI 2522	<b>Champedak</b> <i>Artocarpus integer</i> (Thunb.) Merr.
FI 0331	<b>Cherimoya</b> <i>Annona cherimola</i> Mill.
FI 0332	<b>Custard apple</b> <i>Annona reticulata</i> L.
FI 0334	<b>Durian</b> <i>Durio zibethinus</i> L..
FI 0371	<b>Elephant apple</b> <i>Limonia acidissima</i> L. Syn: <i>Feronia limonia</i> (L.) Swing; <i>Feronia elephantum</i> Corrêa
-	<b>Guanabana,</b> see Soursop, FI 0365

- FI 0337 **Ilama**  
*Annona macrophyllata* Donn. Sm.  
Syn: *A. diversifolia* Saff.
- **Indian wood apple**, see Elephant apple, FI 0371
- FI 0338 **Jackfruit**  
*Artocarpus heterophyllus* Lam.;  
Syn: *A. integrifolius* auct
- FI 0344 **Mammey apple**  
*Mammea americana* L.
- FI 2523 **Marang**  
*Artocarpus odoratissimus* Blanco
- FI 0347 **Marmalade-box**  
*Genipa americana* L.
- FI 2524 **Monkey-bread tree**  
*Adansonia digitata* L.
- FI 0353 **Pineapple**  
*Ananas comosus* (L.) Merril;
- FI 2525 **Poshte**  
*Annona liebmaniana* Baill.
- FI 0357 **Pulasan**  
*Nephelium ramboutan-ake* (labill.) Leenh.
- FI 0358 **Rambutan**  
*Nephelium lappaceum* L.
- FI 0359 **Sapodilla**  
*Manilkara zapota* (L.) P. Royen  
Syn: *Manilkara achras* (Mill.) Fosberg; *Achras zapota* L.
- FI 0362 **Sapote, Mammey**  
*Pouteria sapota* (Jacq.) H.E. Moore & Stearn  
Syn: *Calocarpum sapota* (Jacq.) Merr.
- FI 2526 **Screwpine**  
*Pandanus tectorius* Parkinson; *P. utilis* Bory; *P. leram* Jones ex Fontana; *P. julianettii* Martelli
- FI 2527 **Soncoya**  
*Annona purpurea* Moc. & Sessé ex Dunal
- FI 0365 **Soursop**  
*Annona muricata* L.
- FI 0368 **Sugar apple**  
*Annona squamosa* L.
- FI 2528 **Sun sapote**  
*Licania platypus* (Hemsl.) Fritsch
- **Sweetsop**, see Sugar apple, FI 0368

**Subgroup 006D Assorted tropical and sub-tropical fruits - inedible peel - cactus**

<u>Code No.</u>	<u>Commodity</u>
FI 2024	<b>Assorted tropical and sub-tropical fruits - inedible peel - cactus</b> (includes all commodities in this subgroup)
-	<b>Dragon fruit</b> , see Pitaya, FI 2540 <i>H. undatus</i> (Haw.) Britton & Rose
-	<b>Indian fig</b> , see Prickly pear, FI 0356
FI 2540	<b>Pitaya</b> <i>Hylocereus spp.</i> ; <i>H. undatus</i> (Haw.) Britton & Rose; <i>H. Megalanthus</i> (K. Schum. Ex Vaupel) Ralf Bauer; <i>H. Polyrhizus</i> (F.A.C. Weber) Britton & Rose; <i>H. Ocamponis</i> (Salm-Dyck) Britton & Rose <i>H. triangularis</i> (L.) Britton&Rose
FI 0356	<b>Prickly pear</b> <i>Opuntia ficus-indica</i> (L.) P. Miller; <i>O. Engelmannii</i> Salm-Dyck ex Engelm. var. <i>Lindheimeri</i> (Engelman.) B.D. Parfitt & Pinkava
FI 2541	<b>Saguaro</b> <i>Camegiea gigantean</i> (Engelm.) Britton & Rose

**Subgroup 006E Assorted tropical and sub-tropical fruits - inedible peel - vines**

<u>Code No.</u>	<u>Commodity</u>
FI 2025	<b>Assorted tropical and sub-tropical fruits - inedible peel - vines</b> (includes all commodities in this subgroup)
-	<b>Chinese gooseberry</b> , see Kiwifruit, FI 0341
FI 2560	<b>Granadilla</b> <i>Passiflora ligularis</i> Juss.
FI 2561	<b>Granadilla, Giant</b> <i>Passiflora quadrangularis</i> L.
FI 0341	<b>Kiwifruit</b> <i>Actinidia deliciosa</i> (A. Chev.) C. F. Liang & A. R. Ferguson; <i>A. chinensis</i> Planch. and hybrids
FI 2562	<b>Monstera</b> <i>Monstera deliciosa</i> Liebm.
FI 2563	<b>Passionflower, Winged-stem</b> <i>Passiflora alata</i> Curtis
FI 2564	<b>Passion fruit, Banana</b> <i>Passiflora tripartita</i> (Juss.) Poir. Var. <i>mollissima</i> (Kunth) Holm-Niels & P. Jørg.
FI 0351	<b>Passion fruit</b> Cultivars of <i>Passiflora edulis</i> Sims

**Subgroup 006F Assorted tropical and sub-tropical fruits - inedible peel - palms**

<u>Code No.</u>	<u>Commodity</u>
FI 2026	<b>Assorted tropical and sub-tropical fruits - inedible peel -palms</b> (includes all commodities in this subgroup)
FI 2580	<b>Coconut, Young</b> <i>Cocus nucifera</i> L.

---

FI 2581	<b>Guriri</b> <i>Allagoptera arenaria</i> (Gomes) Kuntze
FI 2582	<b>Moriche palm fruit</b> <i>Mauritia flexuosa</i> L.f.
FI 2583	<b>Muriti</b> <i>Mauritia flexuosa</i> L.f.
FI 2584	<b>Palmyra palm fruit</b> <i>Borassus flabellifer</i> L.
FI 2585	<b>Salak</b> <i>Salacca zalacca</i> (Gaertn.) Voss

## APPENDIX IX

**PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND FEED:  
SELECTED VEGETABLE COMMODITY GROUPS**

(At Step 5)

Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas

Class A

Type 2                      Vegetables    Group 010                      Group Letter Code VB

Brassica (cole or cabbage) vegetables and flowerhead brassicas are foods derived from the leafy heads, stems and immature inflorescences of plants belonging to the genus Brassica of the family Cruciferae. Although Kohlrabi does not comply fully with the description above, for convenience and because of the similarity in residue behaviour the commodity is classified in this group. Kohlrabi is a tuber-like enlargement of the stem.

The edible part of the crop is partly protected from pesticides applied during the growing season by outer leaves, or skin (Kohlrabi).

The entire vegetable after discarding obviously decomposed or withered leaves may be consumed.

It is proposed to divide this group in 3 subgroups:

10A Flowerhead Brassicas

10B Head Brassicas

10C Stem Brassicas

Portion of the commodity to which the MRL applies (and which is analysed): Head cabbages and Kohlrabi: Whole commodity as marketed, after removal of obviously decomposed or withered leaves. Cauliflower and broccoli: flower heads (immature inflorescence only). Brussels sprouts: "buttons" only. Kohlrabi: "tuber-like enlargement of the stem" only

<u>Code No.</u>	<u>Commodity</u>
VB 0040	Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas (includes all commodities in this group)

**Group 10A                      Flowerhead Brassicas**

<u>Code No.</u>	<u>Commodity</u>
VB 0042	Flowerhead brassicas (includes Broccoli and Cauliflower)
VB 0400	Broccoli

*Brassica oleracea* L. var. *italica* Plenck

-                      Broccoli, Chinese, See Leafy vegetables Group 13

-                      Broccoli, Sprouting, see Broccoli, VB 0400

VB 0404	Cauliflower <i>Brassica oleracea</i> L. var. <i>botrytis</i> L., several cultivars (white and green)
---------	---

-                      Cauliflower, Green, see Cauliflower, VB 0404

-                      Kailan, see Broccoli, Chinese

-                      Romanesco broccoli, See Cauliflower, VB 0404

**Group 10B                      Head Brassicas**

<u>Code NO.</u>	<u>Commodity</u>
VB 2036	Head Brassicas (includes all commodities in this group)

VB 0041	Cabbages, Head <i>Brassica oleracea</i> L. var. <i>capitata</i> L., several var. and cvs. (includes Savoy cabbage and Chinese cabbage)
---------	--



- VB 0402            **Brussels sprouts**  
                     *Brassica oleracea* L. var. *gemmifera* (DC.) Zenker
- **Cabbage**, see Cabbages, Head, VB 0041
- **Cabbage, Green**, see Cabbage, Savoy
- **Cabbage, Red**, see Cabbages, Head, VB 0041  
                     *Brassica oleracea* L. *capitata* L., var. *rubra*
- **Cabbage, Oxhead**, see Cabbages, Head, VB 0041  
                     *Brassica oleracea* L. *capitata* L., var. *alba, forma conica*
- **Cabbage, Pointed**, see Cabbage, Oxhead
- **Cabbage, White**, see Cabbages, Head, VB 0041  
                     *Brassica oleracea* L. *capitata* L., var. *alba*
- VB 0403            **Cabbage, Savoy**, see also Cabbages, Head, VB 0041  
                     *Brassica oleracea* L. var. *sabauda* L.
- **Cabbage, Yellow**, see Cabbage, Savoy, VB 0403
- **Celery cabbage**, see Chinese cabbage, (type Pe-tsai), VB 0467
- VB 0467            **Chinese cabbage**, (type Pe-tsai)  
                     *Brassica rapa* L. *subsp. pekinensis* (Lour.) Hanelt  
                     Syn: *B. pekinensis* (Lour.) Rupr.
- **Chinese cabbage (napa)**, see Chinese cabbage, (type Pe-tsai), VB 0467
- **Kimchi cabbage**, see Chinese cabbage (type Pe-tsai), VB 0467  
                     *Brassica rapa* L. *subsp. pekinensis* (Lour.) Hanelt  
                     Syn: *Brassica rapa* L. var. *glabra* Regel
- **Napa cabbage**, See Chinese cabbage (type Pe-tsai), VB 0467
- **Pak-tsai**, see Chinese cabbage, (type Pe-tsai), VB 0467

**Group 10C Stem Brassicas**

Code NO.	Commodity
[VB...	<b>Flowering Chinese cabbage</b>
	<i>Brassica?</i>

- VB 0405            **Kohlrabi**  
                     *Brassica oleracea* L var. *gongylodes* L.

- VB ...             **Stem mustard**  
                     *Brassica juncea* var. *tsatsai* Mao

**Leafy vegetables (including Brassica leafy vegetables)**

**Class A**

Type 2	Vegetables	Group 013	Group Letter Code VL
--------	------------	-----------	----------------------

Group 013 Leafy vegetables are foods derived from the leaves of a wide variety of edible plants, usually annuals or biennials. They are characterized by high surface: weight ratio. The leaves are fully exposed to pesticides applied during the growing season.

The entire leaf may be consumed, either fresh or after processing or household cooking.

It is proposed to divide this group in 7 subgroups:

- 013A Leafy greens
- 013B Brassica Leafy vegetables
- 013C Leaves of root and tuber vegetables

013D Leaves of trees, shrubs and vines

013E Leafy aquatic vegetables

013 F Witloof

013G Leaves of Cucurbitaceae

Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity as usually marketed, after removal of obviously decomposed or withered leaves.

<u>Code No.</u>	<u>Commodity</u>
VL 0053	Leafy vegetables
<b>Group 013</b>	<b>Leafy vegetables (including Brassica leafy vegetables)</b>

<u>Code No.</u>	<u>Commodity</u>
VL 2050	Leafy greens

<b>Group 013A</b>	<b>Leafy greens</b>
	(Includes all commodities in this subgroup)

VL ..	<b>Agretti</b>
	<i>Salsola soda</i> Weinm.

VL 0460	<b>Amaranth</b>
	<i>Amaranthus</i> spp.; including <i>A. spinosus</i> L.; <i>A. dubius</i> C. Mart. ex. Thell.; <i>A. hypochondriacus</i> L.; <i>A. cruentus</i> L.; <i>A. viridis</i> L.; <i>A. tricolor</i> L.

VL 2740	<b>Aster, Indian</b>
	<i>Kalimeris indica</i> (L.) Sch. Bip.

- Beet leaves, see Chard, VL 0464

VL ....	<b>Bitawiri</b>
	<i>Cestrum latifolium</i> Lam.

VL 2741	<b>Blackjack</b>
	<i>Bidens pilosa</i> L.

- Bledo, see Amaranth, VL 0460

VL 0462	<b>Boxthorn</b>
	<i>Lycium chinense</i> Mill.

- Buckhorn plantain, See Plantain leaves, VL 0490

*Plantago lanceolata* L.

- Bush greens, See Amaranth, VL 0460

*Amaranthus cruentus* L.

VL 2742	<b>Cat's Whiskers</b>
	<i>Cleome gynandra</i> L.

VL 2743	<b>Cham-chwi</b>
	<i>Doellingeria scabra</i> (Thunb.) Nees
	Syn: <i>Aster scaber</i> Thunb.

VL 2744	<b>Cham-na-mul</b>
	<i>Pimpinella calycina</i> Maxim
	Syn: <i>Pimpinella brachycarpa</i> (Kom.) Nakai;

VL 2745	<b>Cham-ssuk</b>
	<i>Artemisia dubia</i> Wall. Ex DC.

VL 0464	<b>Chard</b> <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>vulgaris</i> ; <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>cicla</i>
VL 0465	<b>Chervil</b> <i>Anthriscus cerefolium</i> (L.) Hoffmann
VL 0469	<b>Chicory leaves</b> (green and red cultivars) <i>Cichorium intybus</i> L., var. <i>foliosum</i> Hegi
-	<b>Chinese amaranth</b> , See Amaranth, VL 0460 <i>Amaranthus tricolor</i> L.
VL 2746	<b>Chipilin</b> <i>Crotalaria lingirostrata</i> Hook & Arn.
VL 2747	<b>Chrysanthemum, Edible leaved</b> <i>Glebionis</i> spp.
-	<b>Chrysanthemum, garland</b> , See Chrysanthemum, edible leaved, VL 2747 <i>Glebionis coronaria</i> (L.) Cass. ex Spach;
-	<b>Common plantain</b> , see Plantain leaves, VL 0490 <i>Plantago major</i> L.
-	<b>Corn chrysanthemum</b> , see Chrysanthemum, edible leaved, VL 2747 <i>Glebionis segetum</i> (L.) Fourr
VL 0470	<b>Corn salad</b> <i>Valerianella</i> spp.
VL 0510	<b>Cos lettuce</b> <i>Lactuca sativa</i> L. var. <i>longifolia</i> Lam.
VL 2748	<b>Cosmos</b> <i>Cosmos caudatus</i> Kunth
-	<b>Crisphead lettuce</b> , see Lettuce, Head, VL 0482
-	<b>Cutting lettuce</b> , see Lettuce, Leaf, VL 0483
VL 0474	<b>Dandelion</b> <i>Taraxacum officinale</i> F.H. Wigg. agr.
VL 2749	<b>Dang-gwi</b> <i>Angelica gigas</i> Nakai
VL 0475	<b>Dock</b> <i>Rumex</i> spp.; <b>Rumex patienta</b> L.]
VL 2750	<b>Dol-nam-mul</b> <i>Sedum sarmentosum</i> Bunge
VL 2751	<b>Ebolo</b> <i>Crassocephalum crepidioides</i> (Benth.) S. Moore
VL 0476	<b>Endive</b> <i>Cichorium endivia</i> L.
-	<b>Endive, broad or plain leaved</b> , see Endive, VL 0476 <i>Cichorium endivia</i> L., var. <i>latifolium</i> Lamarck

- **Endive, curled**, see Endive, VL 0476  
*Cichorium endivia* L., var. *crispum* Lamarck
- VL 0514 **Fame flower**  
*Talinum fruticosum* L. Juss.
- **Fennel**, see Group 027 Herbs
- VL 0515 **Feather cockcomb**  
*Glinus oppositifolius* (L.) Aug. DC.
- VL 2752 **Glasswort, common**  
*Salicornia* L.
- VL 2753 **Gom-chwi**  
*Ligularia fischeri* Turcz.
- **Good King Henry**, see Goosefoot, VL 0477  
*Chenopodium bonus-henricus* L.
- VL 0477 **Goosefoot**  
*Chenopodium* spp.
- **Huauzontle**, see Goosefoot, VL 0477  
*Chenopodium berlandieri* Moq.
- VL 2754 **Iceplant**  
*Mesembryanthemum crystallinum* L.
- **Italian corn salad**, see corn salad, VL 0470  
*Valerianella eriocarpa* Desv.;
- **Jew mallow**, see Jute, VL 2755  
*Corchorus olitorius* L.
- VL 2755 **Jute**  
*Corchorus* spp.
- **Lambs lettuce**, see Corn salad, VL 0470  
*Valerianella locusta* L.;
- VL 2756 **Lettuce, bitter**  
*Launaea cornuta* (Hochst. ex Oliv. & Hiern) C. Jeffrey
- VL 0482 **Lettuce, Head**  
*Lactuca sativa* L., var. *capitata*
- VL 0483 **Lettuce, Leaf**  
*Lactuca sativa* L., var. *crispa* L.;
- **Lettuce, Red**, see Lettuce, Head, VL 0482  
Red cultivar of *Lactuca sativa*, var. *capitata*
- VL 0486 **New Zealand spinach**  
*Tetragonia tetragonioides* (Pallas) O. Kuntze;  
Syn: *T. expansa* Murr.
- VL 0488 **Orach**  
*Atriplex hortensis* L.
- VL .. **Perilla leaves**  
*Perilla frutescens* (L.) Britton var. *frutescens*

VL 0490	<b>Plantain leaves</b> <i>Plantago major</i> L.
VL 0492	<b>Purslane</b> <i>Portulaca oleracea</i> L., ssp. <i>sativa</i> (Haw) Celak.
VL 0493	<b>Purslane, Winter</b> <i>Claytonia perfoliata</i> Donn ex Willd.;
-	<b>Red-leaved chicory</b> , see Chicory leaves, <a href="#">VL 0469</a>
<b>[VL ..</b>	<b>San-ma-neul leaves</b> <i>Allium victoralis</i> L.]
-	<b>Silver beet</b> , see Chard, VL 0464
-	<b>Slender amaranth</b> , see Amaranth, VL 0460 <i>Amaranthus viridis</i> L.
VL 0501	<b>Sowthistle</b> <i>Sonchus oleraceus</i> L.
VL 0502	<b>Spinach</b> <i>Spinacia oleracea</i> L.
-	<b>Spinach beet</b> , see Chard, VL 0464
VL 0503	<b>Spinach, Indian</b> <i>Basella alba</i> L.;
-	<b>Spiny amaranth</b> , see Amaranth, <a href="#">VL 0460</a> <i>Amaranthus spinosus</i> L.
-	<b>Spleen amaranth</b> , see Amaranth, <a href="#">VL 0460</a> <i>Amaranthus dubius</i> C. Mart. ex. Thell.
-	<b>Sugar loaf</b> , see Chicory leaves, VL 0469
-	<b>Swiss chard</b> , see Chard, VL 0464
VL 2757	<b>Tanier spinach</b> <i>Xanthosoma brasiliense</i> (Desf.) Engl.
-	<b>Tricolor chrysanthemum</b> , see Chrysanthemum, Edible leaved, VL 2747 <i>Glebionis carinata</i> (Schousb.) Tzvelev
-	<b>Vine spinach</b> , see Spinach, Indian, VL 0503
VL 2758	<b>Violet, Chinese</b> <i>Asystasia gangetica</i> (L.) T. Anderson
-	<b>Warrigal greens</b> , see New Zealand spinach, VL 0486
<b>Group 013B</b>	<b>Brassica leafy vegetables</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
VL 0054	<b>Brassica leafy vegetables</b> <i>Brassica</i> spp. (Includes all commodities in this subgroup)
-	<b>Amsoi</b> , see Indian Mustard
-	<b>Arrugula</b> , see Rucola, VL 0496
-	<b>Big-stem mustard</b> , See Mustard greens, VL 0485 <i>Brassica juncea</i> (L.) Czern subsp. <i>tsatsai</i> (T.L. Mao) Gladis
-	<b>Borecole</b> , see Kale, curly

VL 0401	<b>Broccoli, Chinese</b> <i>Brassica oleracea</i> var <i>alboglabra</i> (L.H. Bailey) Musil
VL 2770	<b>Broccoli raab</b> <i>Brassica ruvo</i> L.H. Bailey
VL 2771	<b>Cabbage, Abyssinian</b> <i>Brassica carinata</i> A. Braun
VL 2772	<b>Cabbage, Seakale</b> <i>Brassica oleracea</i> L. var. <i>costada</i> DC.
-	<b>Celery mustard</b> , see Pak-choi
VL 0466	<b>Chinese cabbage (type Pak-choi)</b> <i>Brassica rapa</i> subsp. <i>chinensis</i> (L.) Hanelt
VL 2773	<b>Chinese flat cabbage</b> <i>Brassica rapa</i> subsp. <i>narinosa</i> (L.H. Bailey) Hanelt
-	<b>Choisum</b> , see Flowering white cabbage, V L 0468
-	<b>Collards</b> , see Kale, VL 0480
VL 0472	<b>Cress, Garden</b> <i>Lepidium sativum</i> L.; <i>L. virginicum</i> L
VL 2774	<b>Cress, Upland</b> <i>Barbarea vulgaris</i> W.T. Aiton; <i>B. Verna</i> (Mill.) Asch.
-	<b>Curly Kale</b> , see Kale, curly
-	<b>Field mustard greens</b> , See Rape greens, VL 0495 <i>Brassica napus</i> L. subsp. <i>trilocularis</i> (roxb.) Hanelt; <i>Brassica napus</i> L. subsp. <i>dichotoma</i> (Roxb.) Hanelt; <i>Brassica napus</i> L. subsp. <i>oleifera</i> Metzg.
-	<b>Garden cress</b> , see Cress, Garden, VL 0472
VL 0468	<b>Flowering white cabbage</b> <i>Brassica rapa</i> L. subsp. <i>chinensis</i> (L.) Hanelt var. <i>parachinensis</i>
VL 2775	<b>Hanover salad</b> <i>Brassica napus</i> var. <i>pabularia</i> (DC.) Rchb
-	<b>Indian mustard</b> , See Mustard greens, VL 0485 <i>Brassica juncea</i> (L.) Czern.
VL 0480	<b>Kale</b> (including among others: Collards, Curly kale, Scotch kale, Thousand-headed kale, Branching bush kale, Jersey kale; not including Marrow-stem kale, no. AV 1052, see Group 052: Miscellaneous fodder and forage crops, page 108) <i>Brassica oleracea</i> L., var. <i>sabellica</i> L.
-	<b>Kale, branching bush</b> , See Kale, VL 0480 <i>Brassica oleracea</i> L., var. <i>ramosa</i> DC. L
-	<b>Kale, curly</b> , see Kale, VL 0480 <i>Brassica oleracea</i> L., convar. <i>acephala</i> (D. C.) Alef., var. <i>sabellica</i> L.
-	<b>Kale, Jersey</b> , See Kale, VL 0480 <i>Brassica oleracea</i> L., var. <i>palmifolia</i> DC.
VL 0405	<b>Kohlrabi leaves</b> <i>Brassica oleracea</i> L var. <i>gongylodes</i> L.

- VL .... **Komatsuna**,  
*Brassica rapa* L. var. *perviridis* L.H. Bailey
- **Land cress**, See Cress, Upland, VL 2774  
*B. Verna* (Mill.) Asch.
- **Leaf mustard**, See Mustard greens, VL 0485  
*Brassica juncea* (L.) Czern subsp. *integrifolia* (H. West) Thell.
- VL 2776 **Maca**  
*Lepidium meyenii* Walp.
- VL 0481 **Mizuna**  
*Brassica rapa* L. subsp. *nipposinica* (L.H. Bailey) Hanelt
- VL 0485 **Mustard greens**  
*Brassica juncea* (L.) Czern
- **Mustard, Indian**, see Indian Mustard
- **Mustard spinach**, see Komatsuna
- VL 2777 **Mustard, tuberous rooted, Chinese**  
*Brassica juncea* (L.) Czern. Subsp. *napiformis* (Pailleux & Bois)
- **Namenia**, see Turnip greens, VL 0506
- **Oil radish greens**, See Radish leaves, VL 0494  
*Raphanus sativus* L var. *oleiformis* Pers.
- **Pak-choi or Paksoi**, See Chinese cabbage (type Pak-choi), VL 0466
- **Pak-tsai**, see Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas, Group 010
- **Pak-tsoi or Pak-soi**, see Pak-choi or Paksoi
- **Peppergrass**, See Cress, garden, VL 0472  
*Lepidium virginicum* L
- VL 2778 **Purple-stem mustard**  
*Brassica rapa* subsp. *chinensis* (L.) Hanelt var. *purpuraria* (L.H. Bailey) Hanelt
- VL 0494 **Radish leaves** (including Radish tops)  
*Raphanus sativus* L., several varieties
- VL 0495 **Rape greens**  
*Brassica napus* L.
- **Rat-tail radish greens**, See Radish leaves, VL 0494  
*Raphanus sativus* L var. *mougri* H.J.W. Helm
- **Rocket salad**, see Rucola, VL 0496
- **Roquette**, see Rucola, VL 0496
- VL 0496 **Rucola**  
*Eruca sativa* Mill.
- VL 0497 **Rutabaga greens**  
*Brassica napus* L., var. *napobrassica* (L.) Rchb.

VL 2779	<b>Shepherd's purse</b> <i>Capsella bursa-pastoris</i> (L.) medik
-	<b>Tendergreen</b> , see Turnip greens, VL 0506
-	<b>Tsai shim</b> , see Choisum
-	<b>Tsoi sum</b> , see Choisum
VL 0506	<b>Turnip greens</b> <i>Brassica rapa</i> L.subsp. <i>rapa</i> ;
VL 2780	<b>Wild rocket</b> <i>Diplotaxis tenuifolia</i> (L.) Rchb
<b>Group 013C</b>	<b>Leaves of root and tuber vegetables</b>
<b>Code No.</b>	<b>Commodity</b>
VL 2052	<b>Leaves of root and tuber vegetables</b> (Includes all commodities in this subgroup)
VL 2790	<b>Alexanders leaves</b> <i>Smyrnium olusatrum</i> L.
[VL ...	<b>Bambara groundnut leaves</b> <i>Voandzeia subterranean</i> (L.) Verdc.]
-	<b>Beet leaves</b> , see Chard, VL 0464
VL 2791	<b>Bell flower, Chinese leaves</b> <i>Platycodon grandiflorus</i> (Jacq.) A. DC.
-	<b>Blue ape leaves</b> , See Tannia leaves, VL 0504 <i>Xanthosoma violaceum</i> Schott
VL 0463	<b>Cassava leaves</b> <i>Manihot esculenta</i> Crantz
-	<b>Chinese yam</b> , See Yam leaves, VL 2796 <i>Dioscorea polystachya</i> Turcz.
-	<b>Greater yam</b> , See Yam leaves, VL 2796 <i>Dioscorea alata</i> L.
-	<b>Lesser yam</b> , See Yam leaves, VL 2796 <i>Dioscorea esculenta</i> (Lour.) Burkill
-	<b>Mapuey</b> , See Yam leaves, VL 2796 <i>Dioscorea trifida</i> L.f.
[VL ...	<b>Peanut leaves,</b> <i>Arachis hypogaea</i> L.]
VL 2793	<b>Rampion leaves</b> <i>Campanula rapunculus</i> L.
VL 0498	<b>Salsify leaves</b> <i>Tragopogon porrifolium</i> L.; <i>Scorzonera hispanica</i> L.
VL 0508	<b>Sweet potato, leaves</b> <i>Ipomoea batatas</i> (L.) Lam.



VL 0504	<b>Tannia leaves</b> <i>Xanthosoma sagittifolium</i> (L.) Schott; Syn: <i>X. edule</i> (Mey) Schott; <i>X. xanthorrhizon</i> (Jacq.); C. Koch; <i>Arum sagittaefolium</i> L.
VL 0505	<b>Taro leaves</b> <i>Colocasia esculenta</i> (L.) Schott
VL 2794	<b>Ullucu leaves</b> <i>Ullucus tuberosus</i> Caldas
VL 2795	<b>Velvet plant leaves</b> <i>Gynura bicolor</i> (Roxb. ex Willd.) DC.
[VL ...	<b>Wasabi leaves</b> <i>Wasabia japonica</i> Matsum.; <i>Eutrema japonica</i>
-	<b>White yam</b> , See Yam leaves, VL 2796 <i>Dioscorea rotundata</i> Poir.
VL 2796	<b>Yam leaves</b> <i>Dioscorea</i> spp.
-	<b>Yellow yam</b> , See Yam leaves, VL 2796 <i>Dioscorea cayenensis</i> Lam.
<b>Group 013D</b>	<b>Leaves of trees, shrubs and vines</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
VL 2053	<b>Leaves of trees, shrubs and vines</b> (Includes all commodities in this subgroup)
VL ..	<b>Ben moringa leaves</b> <i>Moringa oleifera</i> Lam.
VL 0269	<b>Grape leaves</b> <i>Vitis vinifera</i> L.
VL 0517	<b>Melientha</b> <i>Melientha suavis</i> Pierre
VL ..	<b>Monkey-bread tree leaves</b> <i>Adansonia digitata</i> L.
VL 0337	<b>Papaya leaves</b> <i>Carica papaya</i> L.
VL ...	<b>Toona sinensis</b> <i>Cedrela sinensis</i> (A. Juss.) M. Roem.
<b>Group 013E</b>	<b>Leafy aquatic vegetables</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
VL 2054	<b>Leafy aquatic vegetables</b> (Includes all commodities in this subgroup)
VL 0507	<b>Kangkung</b> <i>Ipomoea aquatica</i> Forssk.;
-	<b>Sun-cha</b> , see Water shield, VL 2820



VS 3020	<b>Burdock, edible tops</b> <i>Articum lappa</i> L.
VS 0623	<b>Cardoon</b> <i>Cynara cardunculus</i> L.
VS 0624	<b>Celery</b> <i>Apium graveolens</i> L., var. <i>dulce</i>
-	Celery leaves, see Group 027: Herbs
VS 0625	<b>Celtuce</b> <i>Lactuca sativa</i> L., var. <i>angustina</i> Irish; Syn: <i>L. sativa</i> L., var. <i>asparagina</i> Bailey
VS 0380	<b>Fennel, Bulb</b> <i>Foeniculum vulgare</i> Mill. subsp. <i>vulgare</i> var. <i>azoricum</i> (Mill.) Thell-
-	Fennel, Florance, see Fennel, bulb, VS 0380
<b>VS...</b>	<b>Flowering stalk of Garlic</b> <i>Allium sativum</i> L.]
VS 3021	<b>Giant butterbur</b> <i>Petasites japonicus</i> (Siebold & Zucc.) Maxim
-	Fuki, See Giant butterbur, VS 3021
VS 0627	<b>Rhubarb</b> <i>Rheum x hybridum</i> Murray
VS 3022	<b>Zuiki</b> <i>Colocasia gigantea</i> (Blume) Hook. f.
<b>Group 017B</b>	<b>Stalk and stem vegetables - Young shoots</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
VS 2081	<b>Young shoots</b> (Includes all commodities in this subgroup)
VS ..	<b>Acacia shoots</b> <i>Acacia pennata</i> (L.) Willd.]
VS 3025	<b>Agave</b> <i>Agave</i> spp.
VS 0621	<b>Asparagus</b> <i>Asparagus officinalis</i> L.
VS 0622	<b>Bamboo shoots</b> <i>Arundinaria</i> spp.; <i>Bambusa</i> spp. including <i>B. blumeana</i> ; <i>B. multiplex</i> ; <i>B. oldhamii</i> ; <i>B. textilis</i> ; <i>Chimonobambusa</i> spp.; <i>Dendrocalamus</i> spp., including <i>D. asper</i> ; <i>D. beecheyana</i> ; <i>D. brandisii</i> ; <i>D. giganteus</i> ; <i>D. laetiflorus</i> and <i>D. strictus</i> ; <i>Gigantochloa</i> spp. including <i>G. albociliata</i> ; <i>G. atter</i> ; <i>G. levis</i> ; <i>G. robusta</i> ; <i>Nastus elatus</i> ; <i>Phyllostachys</i> spp.; <i>Thyrsostachys siamensis</i> ; <i>Thyrsostachys oliverii</i> (Poaceae (alt. Gramineae))
VS 3026	<b>Ferns, edible</b> Including: Black lady fern, <i>Deparia japonica</i> (Thunb.) M. Kato; Bracken fern, <i>Pteridium aquilinum</i> (L.) Kuhn; Broad buckler fern, <i>Dryopteris dilatata</i> (Hoffm.) A. Gray; Cinnamon fern, <i>Osmundastrum cinnamomeum</i> (L.) C.Presl; Lady fern, <i>Athyrium filix-femina</i> (L.) Roth ex Mert.; Leather fern, <i>Acrostichum aureum</i> L.; Mother fern, <i>Diplazium proliferum</i> (Lam.) Thouars; Ostrich fern, <i>Matteuccia struthiopteris</i> (L.) Tod.; Vegetable fern, <i>Diplazium esculentum</i> (Retz.) Sw.; Zenmai fern, <i>Osmunda japonica</i> Thunb.

VS 0499	<b>Kale, sea</b> <i>Crambe maritima</i> L.
VS 3027	<b>Udo</b> <i>Aralia cordata</i> Thunb.
<b>Group 017C</b>	<b>Stalk and stem vegetables - Others</b>
<b><u>Code No.</u></b>	<b><u>Commodity</u></b>
VS 0620	<b>Artichoke, globe</b> <i>Cynara scolymus</i> L.
VS 0626	<b>Palm hearts</b> various species including: Peach Palm, <i>Bactris gasipaes</i> Kunth; Palmyra palm, <i>Borassus flabellifera</i> L.; African fan palm, <i>Borassus aethiopum</i> Mart.; Coconut, <i>Cocos nucifera</i> L.; Cabbage palm, <i>Euterpe oleracea</i> Mart.; Wine palm, <i>Raphia</i> spp.; Royal palm, <i>Roystonea oleracea</i> (Jacq.) O.F. Cook; Salak palm, <i>Salacca zalacca</i> (Gaertn.) Voss; Saw palmetto, <i>Serenoa repens</i> (W. Bartram) Small; Cabbage palmetto, <i>Sabal palmetto</i> (Walter) Schult. & Schult. f., (Arecaceae (alt. Palmae))
VS <u>0356</u>	<b>Prickly pear pads</b> <i>Opuntia ficus-indica</i> (L.) Mill.
VS 3031	<b>Water-celery</b> <i>Oenanthe javanica</i> (Blume) de Candolle

## APPENDIX X

PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOOD AND FEED:  
EDIBLE FLOWERS

(At Step 7)

For inclusion in Group 027 Herbs, Subgroup 027A Herbs (herbaceous plants)

Code No.Commodity

HH 3200

Edible flowers

Calendula flowers, *Calendula officinalis* L.; Geranium (lemon, rose), *Pelargonium crispum* (P.J.Bergius) L'Her and *Pelargonium graveolens* L'Her; Common daisy, *Bellis perennis* L.; Daylily, *Hemerocallis* sp. and other edible flowers.

**DRAFT PRINCIPLES AND GUIDANCE ON THE SELECTION OF  
REPRESENTATIVE COMMODITIES  
FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS  
(At Step 8)**

## INTRODUCTION

Residue extrapolation is the process by which the residue levels on representative commodities are utilized to estimate residue levels on related commodities in the same commodity group or subgroup for which trials have not been conducted. Representative commodities are chosen based on their commercial importance and the similarity of their morphology and residue characteristics to other related commodities in the group or subgroup. Ideally representative commodities are the most economically important commodities in production and/or consumption in a group or subgroup and have a greater dietary burden and have residue characteristics similar to other members of the group or subgroup. Residue extrapolation is a common consideration utilised by regulators internationally for ensuring that data requirements are only at a level that is scientifically justified in conducting risk assessment and to ensure the regulatory process does not become unnecessarily burdensome especially for minor crops.

The objective of this document is to (1) propose criteria for the selection of representative commodities; (2) propose example representative commodities and (3) provide a detailed justification for the selection of the representative commodities.

## GENERAL PRINCIPLES

Representative commodities within each Codex Classification commodity group and subgroup will be selected and proposed, based on consideration of all available information. The following principles will be used for the selection of representative commodities:

- A representative commodity is most likely to contain the highest residues.
- A representative commodity is likely to be major in terms of production and/or consumption.
- A representative commodity is most likely similar in morphology, growth habit, pest problems and edible portion to the related commodities within a group or subgroup.

The application of the three principles in the selection of representative commodities is based on the assumption that all of the commodities, covered by the commodity group MRL, are produced following a similar<sup>1</sup> use pattern or GAP.

To facilitate the global use of the commodity groups for MRLs, alternative representative commodities may be selected giving flexibility for use of residue research conducted in different countries or regions that may vary due to regional differences in dietary consumption and/or areas of production for certain commodities.

**Note:** Table 1 in this document is provided to (1) separate the selection of representative commodities from the Codex Classification itself; (2) propose examples of representative commodities in parallel with the respective Codex commodity grouping classification revisions; (3) provide flexibility on the selection of representative crops and (4) provide guidance not only to CCPR and CCPR members, but also to JMPR, product manufacturers and other data generators.

Detailed background information regarding production, consumption, MRLs and characteristics and justification for selection of the representative commodities according to the indicated principles were provided in working documents considered by the Committee when developing the representative commodities for each commodity group.

## GUIDANCE AND PROCEDURES

As proposals for the revision of the Codex Classification are made and revised commodity groupings are developed and provided to the CCPR for their review, proposals on representative commodities will also be provided in parallel with the respective commodity grouping revisions and will advance through the CCPR step process for adoption by the CAC.

As comments are addressed on the revisions of the classification and the proposed representative commodities and these are approved by the CCPR and accepted by the CAC, two separate documents will be created and maintained: (1) the revised Codex Classification (without mention of representative commodities) and (2) principles and guidance on the selection of representative commodities.

The JMPR may be advised to use the representative commodities adopted by the CAC. However, JMPR may use other representative commodities (including those which may be specifically requested by member nations) on a case-by-case basis. The JMPR will be requested to provide to the CCPR justification for the use of any alternative representative commodities, based on all available data.

---

<sup>1</sup> Submission and Evaluation of Pesticide Residues Data for the Estimation of Maximum Residue Levels in Food and Feed (Section 6.7, Point a), FAO Plant Production and Protection Paper 197, Food and Agriculture Organization of the United Nations, Rome, 2009 (Second Edition).

### **Alternative Representative Commodities**

To facilitate the global use of the commodity groups for MRLs, alternative representative commodities may be selected giving flexibility for use of residue research conducted in different countries or regions that may vary due to regional differences in dietary consumption and/or areas of production for certain commodities. Table 1 in this document proposes examples of representative commodities for commodity groups. Depending on country or regional differences, alternative representative commodities may be proposed by a country. For example, leeks may be proposed as an alternative representative commodity for green onions in the green onion subgroup of Bulb Vegetables.

### **Precedence in Selection of Representative Commodities**

In situations where a representative commodity does not meet all three of the above principles, a representative commodity should at least meet the first two principles (likely to contain the highest residues and also major in terms of production and/or consumption).

### **Selection of Representative Commodities**

When representative commodities are utilised to extrapolate residue levels to other members of a commodity group, it is on the assumption that residues in other members of the commodity group will not be significantly different to residues found in the representative commodity. That is, the representative commodities are good indicators of the upper range of residues likely to be encountered for the group or subgroup, based on the same or comparable GAP and other available information.

An MRL for the group may be estimated from the highest residue level for any of the individual representative commodities or from the larger combined data set. The ALARA principle should be considered in terms of whether the larger residue data set should be combined and the potential impact of derived values used in the dietary risk assessment.

### **Wider Extrapolations**

A representative commodity should meet at least the first two principles described above, i.e. likely to contain the highest residues and also major in terms of production and/or consumption. However, it may not always fit well with the growth habits, or pest problems of morphology within one group or subgroup. In such situations, extrapolations beyond the members of a commodity group may be appropriate. These can be considered on a case-by-case basis when commodities (with similar GAPs) have similar size, shape and surface area. Examples of these possible wider extrapolations include (1) translation of certain stone or pome fruit MRLs to a tropical fruit; (2) where residues are all <LOQ for pre-emergent herbicide uses and (3) seed treatments for non systemic pesticides.

Table 1. Examples of the Selection of Representative Commodities, Type 01 Fruits

Codex Group / Subgroup	Examples of Representative Commodities <sup>2</sup>	Extrapolation to the following commodities
<b>Group 001 Citrus Fruits</b>	Lemon or Lime; Mandarin; Orange and Pummelo or Grapefruit	<u>Citrus Fruit (FC 0001)</u> : Australian blood lime; Australian desert lime; Australian round lime; Brown River finger-lime; Calamondin; Citron; Clementine; Grapefruit; Kaffir Lime; Kumquats; Lemon; Lime; Lime, Sweet; Limequats; Mandarin; Mount White-lime; New guinea wild lime; Orange Sour; Orange, Sweet; Pummelo; Russell River-lime; Tahiti Lime; Trifoliolate orange; Unshu orange; Yuzu.
Subgroup 001A, Lemons and Limes	Lemon or Lime	<u>Lemons and Limes (FC 0002)</u> : Australina blood lime; Australian desert lime; Australian round lime; Brown River finger-lime; Citron; Kaffir Lime; Kumquats; Lemon; Lime; Lime, Sweet; Limequats; Mount White-lime; New guinea wild lime; Russell River-lime; Tahiti Lime; Yuzu.
Subgroup 001B, Mandarin	Mandarin	<u>Mandarins (FC 003)</u> : Calamondin; Clementine; Mandarin; Unshu orange.
Subgroup 001C, Oranges, Sweet, Sour	Orange	<u>Oranges, Sweet, Sour (FC 004)</u> : Orange Sour; Orange, Sweet; Trifoliolate orange.
Subgroup 001D, Pummelos	Pummelo or Grapefruit	<u>Pummelos and Grapefruit (FC 005)</u> : Grapefruit; Pummelo.
<b>Group 002 Pome Fruits</b>	Apple or Pear	<u>Pome Fruit (FP 0009)</u> : Apple; Azarole; Chinese quince; Crab-apple; Loquat; Mayhaw; Medlar; Nashi pear; Pear; Persimmon, Japanese; Quince; Tejocote; Wild pear.
<b>Group 003 Stone Fruits</b>	Cherry, Sweet or Cherry, Sour; Plum or Prune Plum or Peach or Apricot	<u>Stone fruits (FS 0012)</u> : Apricot; Bullace; Cherry, black; Cherry, Nanking; Cherry plum; Cherry Sour; Cherry, Sweet; Choke cherry; Japanese apricot; Jujube, Chinese; Klamath plum; Nectarine; Peach; Plum; Plum, beach; Plum, Chickasaw; Plumcot; Sloe.
Subgroup 003A, Cherries	Cherry, Sweet or Cherry, Sour	<u>Cherries (FS 0013)</u> : Cherry, black; Cherry, Nanking; Cherry Sour; Cherry, Sweet; Choke cherry
Subgroup 003B, Plums	Plum or Prune Plum	<u>Plums (FS 0014)</u> : Bullace; Cherry plum; Jujube, Chinese; Klamath plum; Plum, Plum, beach; Plum, Chickasaw; Plumcot; Sloe.
Subgroup 003C, Peaches	Peach or Apricot	<u>Peaches (FS 2001)</u> : Apricot; Japanese apricot; Nectarine; Peach.
<b>Group 004 Berries and other small fruits</b>	Blackberry or Raspberry; Blueberry or Currants, black, red or white; Elderberry; Grape and Strawberry	<u>Berries and other small fruits (FB 0018)</u> : Agritos; Amur river grape; Arguta kiwifruit; Aronia berries; Bayberries; Bearberry; Bilberry; Bilberry, Bog; Bilberry, Red; Blackberries; Blueberries; Buffaloberry; Buffalo currant; Che; Chilean guava; Cloudberry; Cranberry; Currants, Black, Red, White; Dewberries; Elderberries; European barberry; Guelder rose; Gooseberry; Grapes; Huckleberries; Jostaberries; Juneberries; Mulberries; Muntries; Native currant; Partridge berry; Phalsa; Raspberries, Red, Black; Ribberries; Rose hips; Salal; Schisandrberry; Sea buckthorn; Service berries; Silverberry, Russian; Strawberry; Strawberries, Wild; Table grapes; Vaccinium berries; Wine grapes.

<sup>2</sup> Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.



Codex Group / Subgroup	Examples of Representative Commodities <sup>2</sup>	Extrapolation to the following commodities
Subgroup 004A, Cane berries	Blackberry or Raspberry	<u>Cane berries (FB 2005)</u> : Blackberries; Dewberries; Raspberries, Red, Black.
Subgroup 004B, Bush berries	Blueberry or Currants, black, red or white	<u>Bush berries (FB 2006)</u> : Vaccinium berries; Blueberries; Agritos; Aronia berries; Bearberry; Bilberry; Bilberry, Bog; Bilberry, Red; Buffalo currant; Chilean guava; Currants, Black, Red, White; Gooseberry; European barberry; Huckleberries; Jostaberries; Juneberries; Native currant; Ribberries; Rose hips; Salal; Sea buckthorn.
Subgroup 004C, Large shrub/tree berries	Elderberry	<u>Large shrub/tree berries (FB 2007)</u> : Bayberries; Buffaloberry; Che; Elderberries; Guelder rose; Mulberries; Phalsa; Service berries; Silverberry, Russian.
Subgroup 004D, Small fruit vine climbing	Grapes	<u>Small fruit vine climbing (FB 2008)</u> : Arguta kiwifruit; Amur river grape; Grapes; Schisandraberries; Table grapes; Wine grapes.
Subgroup 004E, Low growing berries	Strawberry	<u>Low growing berries (FB 2009)</u> : Cranberry; Cloudberry; Muntries; Partridge berry; Strawberry; Strawberries, Wild.
<b>Group 005 Assorted tropical and sub-tropical fruits – edible peel</b>	Olive; Fig or Guava and Date	<u>Assorted tropical and sub-tropical fruits – edible peel (FT 0026)</u> : Açai; African plum; Almondette; Ambarella; Apak palm; Apple berry; Arazá; Arbutus berry; Babaco; Bacaba palm; Bacaba-de-leque; Barbados cherry; Bayberry, Red; Bignay; Bilimbi; Breadnut; Cabeluda; Cajou (pseudofruit); Cambucá; Carambola; Carandas-plum; Carob; Cashew apple; Ceylon iron wood; Ceylon olive; Cherry-of-the-Rio-Grande; Chinese olive, Black, White; Chirauli-nut; Ciruela verde; Coco plum; Date; Davidson's plum; Desert date; Doum or Dum palm; False sandalwood; Fig; Fragrant Manjack; Gooseberry, Abyssinian; Gooseberry, Ceylon; Gooseberry, Indian; Governor's plum; Grumichama; Guabiroba; Guava; Guava, Brazilian; Guava, Cattley, Guava, Costa Rican; Guava, Para; Guava berry; Guayabillo; Hog plum; Illawarra plum; Imbé; Imbu; Jaboticaba; Jamaica cherry; Jambolan; Java apple; Jelly palm; Jujube, Indian; Kaffir plum; Kakadu plum; Kapundung; Karanda; Kwai muk; Lemon aspen; Mangaba; Marian plum; Mombin, Malayan; Mombin, purple; Monkeyfruit; Monos plum; Mountain cherry; Nance; Natal plum; Noni; Otaheite gooseberry; Papaya, Mountain; Pataúá; Peach Palm; Persimmon, Black; Pitomba; Pomerac; Rambai; Rose apple; Rumberry; Sea grape; Sentul; Sete-capotes; Silver aspen; Surinam cherry; Table olives; Uvalha; Water apple; Water berry; Water pear.
Subgroup 005A, Assorted tropical and sub-tropical, Edible Peel – Small	Olives	<u>Edible Peel - Small (FT 2011)</u> : African plum; Almondette; Apple berry; Arbutus berry; Barbados cherry; Bayberry, Red; Bignay; Breadnut; Cabeluda; Carandas-plum; Ceylon iron wood; Ceylon olive; Cherry-of-the-Rio-Grande; Chinese olive, Black, White; Chirauli-nut; Coco plum; Desert date; False sandalwood; Fragrant Manjack; Gooseberry, Abyssinian; Gooseberry, Ceylon;; Governor's plum; Grumichama; Guabiroba; Guava berry; Hog plum; Illawarra plum; Jamaica cherry; Jambolan; Java apple; Kaffir plum; Kakadu plum; Karanda; Kapundung; Lemon aspen; Monos plum; Mountain cherry;; Otaheite gooseberry; Persimmon, Black; Pitomba; Rumberry; Sea grape; Sete-capotes; Silver aspen; Table olives; Water apple; Water berry; Water pear.

Codex Group / Subgroup	Examples of Representative Commodities <sup>2</sup>	Extrapolation to the following commodities
Subgroup 005B, Assorted tropical and sub-tropical, Edible Peel – Large	Fig or Guava	<u>Edible Peel - Large (FT 2012)</u> : Ambarella; Arazá; Babaco; Bilimbi; Cajou (pseudofruit); Cambucá; Carambola; Carob; Cashew apple; Ciruela verde; Davidson's plum; Fig; Gooseberry, Indian; Guava; Guava, Brazilian; Guava, Cattley, Guava, Costa Rican; Guava, Para; Guayabillo; Imbé; Imbu; Jaboticaba; Jujube, Indian; Kwai muk; Mangaba; Marian plum; Mombin, Malayan; Mombin, purple; Monkeyfruit; Nance; Natal plum; Noni; Papaya, Mountain; Pomerac; Rambai; Rose apple; Sentul; Surinam cherry; Uvalha.
Subgroup 005C, Assorted tropical and sub-tropical, Edible Peel – Palms	Date	<u>Edible Peel - Palms (FT 2013)</u> : Açai; Apak palm; Bacaba palm; Bacaba-de-leque; Date; Doum or Dum palm; Jelly palm; Patauá; Peach Palm.
<b>Group 006 Assorted tropical and sub-tropical fruits – inedible peel</b>	Litchi (lychee) or Longans or Spanish Lime; Avocado; Pomegranate or Mango; Banana and Papaya; Atemoya; Pineapple; Dragonfruit; Prickly pear; Kiwifruit or Passionfruit and Muriti or Palmyra Palm	<u>Assorted tropical and sub-tropical fruits – inedible peel (FI 0030)</u> : Abiu; Aisen; Akee apple; Atemoya; Avocado; Bacuri; Bael fruit; Banana; Binjai; Biriba; Breadfruit; Burmese grape; Cacao (pulp); Canistel; Capuacú; Champadak; Cherimoya; Coconut, young; Custard apple; Durian; Elephant apple; Etambe; Feijoa; Granadilla; Granadilla, Giant; Guriri; Ilama; Ingá; Jackfruit; Jatobá; Kei apple; Kiwifruit; Kokam; Langsat; Lanjut; Longan; Lucuma; Litchi (lychee); Mabolo; Madras-thorn; Mammy apple; Manduro; Mango; Mango, horse; Mango, Saipan; Mangosteen; Marang; Marmalade-box; Matisia; Mesquite; Mongongo; Monkey-bread tree; Monstera; Muriti; Naranjilla; Paho; Palmyra palm; Papaya; Passionflower, Winged-stem; Passion fruit; Passion fruit, banana; Pawpaw; Pawpaw, small flower; Pelipisan; Pequi; Persimmon, American; Pineapple; Pitaya; Pomegranate; Poshte; Prickly pear, Pulasan; Quandong; Rambutan; Saguaro; Salak; Sapodilla; Sapote, black; Sapote, green; Sapote, Mammey; Sapote, white; Sataw; Satinleaf; Screwpine; Sierra Leone-tamarind; Soncoya; Soursop; Spanish lime; Star apple; Sugar apple; Sun sapote; Tamarillo; Tamarind (sweet varieties); Tamarind-of-the-Indies; Velvet tamarind; Wampi; White star apple; Wild loquat.
Subgroup 006A, Assorted tropical and sub-tropical, Inedible Peel, Small	Litchi (lychee) or Longans or Spanish Lime	<u>Inedible Peel - Small (FI 2021)</u> : Aisen; Bael fruit; Burmese grape; Ingá; Litchi; Longan; Madras-thorn; Manduro; Matisia; Mesquite; Mongongo; Pawpaw, small flower; Satinleaf; Sierra Leone-tamarind; Spanish lime; Tamarind (sweet varieties); Velvet tamarind; Wampi; White star apple.
Subgroup 006B, Assorted tropical and sub-tropical, Inedible Smooth Peel - Large	Avocado; Pomegranate or Mango; Banana and Papaya	<u>Inedible Smooth Peel - Large (FI 2022)</u> : Abiu; Akee apple; Avocado; Bacuri; Banana; Binjai; Cacao (pulp); Canistel; Capuacú; Etambe; Feijoa; Jatobá; Kei apple; Kokam; Langsat; Lanjut; Lucuma; Mabolo; Mango; Mango, horse; Mango, Saipan; Mangosteen; Naranjilla; Paho; Papaya; Pawpaw; Pelipisan; Pequi; Persimmon, American; Pomegranate; Quandong; Sapote, black; Sapote, green; Sapote, white; Sataw; Star apple; Tamarillo; Tamarind-of-the-Indies; Wild loquat.

Codex Group / Subgroup	Examples of Representative Commodities <sup>2</sup>	Extrapolation to the following commodities
Subgroup 006C, Assorted tropical and sub-tropical, Inedible, Rough or Hairy Peel - Large	Atemoya and Pineapple	<u>Inedible rough or hairy peel - Large (FI 2023)</u> : Atemoya; Biriba; Breadfruit; Champedak; Cherimoya; Custard apple; Durian; Elephant apple; Ilama; Jackfruit; Mammy apple; Marang; Marmalade-box; Monkey-bread tree; Pineapple; Poshte; Pulasan; Rambutan; Sapodilla; Sapote, Mammey; Screwpine; Soncoya; Soursop; Sugar apple; Sun sapote.
Subgroup 006D, Assorted tropical and sub-tropical, Inedible Peel - Cactus	Pitaya and Prickly pear	<u>Inedible Peel - Cactus (FI 2024)</u> : Pitaya; Prickly pear; Saguaro.
Subgroup 006E, Assorted tropical and sub-tropical, Inedible Peel - Vines	Kiwifruit or Passionfruit	<u>Inedible Peel - Vines (FI 2025)</u> : Granadilla; Granadilla, Giant; Kiwifruit; Monstera; Passionflower, Winged-stem; Passionfruit; Passionfruit, banana.
Subgroup 006F, Assorted tropical and sub-tropical, Inedible Peel - Palms	Muriti or Palmyra Palm	<u>Inedible Peel - Palms (FI 2026)</u> : Coconut, young; Guriri; Muriti; Palmyra Palm; Salak.

## APPENDIX XII

**PROPOSED DRAFT TABLE 2 –  
EXAMPLES OF THE SELECTION OF REPRESENTATIVE COMMODITIES: VEGETABLE COMMODITY GROUPS**  
(DRAFT PRINCIPLES AND GUIDANCE ON THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES TO COMMODITY GROUPS)  
(At Step 3)

Codex Group / Subgroup	Examples of Representative Commodities <sup>1</sup>	Extrapolation to the following commodities
<b>Group 009 Bulb vegetables</b>	(1) Bulb onion and (2) Spring Onion	<u>Bulb vegetables (VA 0035)</u> : Chives; Chives, Chinese; Daylilly; Elegans hosta; Fritillaria (bulb); Fritillaria (green); Garlic; Garlic chives; Garlic, Great-headed; Garlic, Serpent; Kurrat; Lady's leek; Leek; Lily; Onion, Beltsville bunching; Onion, Bulb; Onion, Chinese; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Shallot; Silverskin onion; Spring onion; Tree onion; Wild leek.
Subgroup 009A, Bulb Onions	Bulb onion	<u>Bulb Onions (VA 2031)</u> : Daylilly; Fritillaria (bulb); Garlic; Garlic, Great-headed; Garlic, Serpent; Lily; Onion, Bulb; Onion, Chinese; Shallot; Silverskin onion.
Subgroup 009B, Green Onions	Spring onion (Leek may be an alternative)	<u>Green Onions (VA 2032)</u> : Chives; Chives, Chinese; Elegans hosta; Fritillaria (green); Garlic chives; Kurrat; Lady's leek; Leek; Onion, Beltsville bunching; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Spring onion; Tree onion; Wild leek.
<b>Group 010 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead cabbages</b>	Broccoli and/or Cauliflower and Cabbage and Brussel sprouts and Kohlrabi	<u>Brassica (cole or cabbage) vegetables, Flowerhead cabbages (VB0040)</u> : Broccoli; Brussels sprouts; Cabbage, Head; Cabbage, Chinese (napa); Cabbage Savoy; Cauliflower; Flowering Chinese cabbage; Kohlrabi; Stem mustard.
Group 010A, Flowerhead Brassicas	Broccoli and/or Cauliflower	<u>Flowerhead Brassicas (VB 0042)</u> : Broccoli; Cauliflower.
Group 010B, Head brassicas	Cabbage and Brussels sprouts	<u>Head brassicas (VB 2036)</u> : Cabbages, head; Brussels sprouts; Cabbage Savoy; Chinese cabbage (napa).
Group 010C, Stem brassicas	Kohlrabi	Flowering Chinese cabbage; Kohlrabi; Stem mustard.

<sup>1</sup> Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.

Codex Group / Subgroup	Examples of Representative Commodities <sup>1</sup>	Extrapolation to the following commodities
Group 011 Fruiting vegetables, Cucurbits		
<b>Group 012 Fruiting vegetables, other than Cucurbits</b>	(1) Tomato and (2) Sweet Pepper and (3) Chili Pepper or small variety of Eggplant	<u>Fruiting vegetables, other than Cucurbits (VO 0050)</u> : African eggplant; Bush tomato; Cherry tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Ground cherries, Martynia; Okra; Pea eggplant; Pepino; Peppers, chilli; Peppers, sweet; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Thai eggplant.
Group 12A, Tomatoes	Tomato	<u>Tomatoes (VO 2045)</u> : Bush tomato; Cherry tomato; Cocona; Currant tomato; Garden huckleberry; Goji berry; Ground cherries; Sunberry; Tomatillo; Tomato.
Group 12B, Peppers	(1) Sweet Pepper and (2) one cultivar of chilli pepper	<u>Peppers (VO 0051)</u> : Martynia; Okra; Peppers, chilli; Peppers, sweet; Roselle.
Group 12C, Eggplants	(1) One cultivar of large variety eggplant and (2) one cultivar of small variety eggplant	<u>Eggplants (VO 2046)</u> : African eggplant; Eggplant; Pea eggplant; Pepino; Scarlet eggplant; Thai eggplant.
<b>Group 013 Leafy vegetables (including Brassica leafy vegetables)</b>		<u>Leafy vegetables (including Brassica leafy vegetables) (VL 0053)</u> : Agretti; Alexanders leaves; Amaranth; Aster, Indian; Balsam pear leaves; Bell flower, Ben moringa leaves; Chinese leaves; Bambara groundnut leaves; Bitawiri; Blackjack; Boxthorn; Broccoli, Chinese; Broccoli raab; Cabbage, Abyssinian; Cabbage, Seakale; Cassava leaves; Cat's Wiskers; Cham-chwi; Cham-na-mul; Chard; Chayote leaves; Chervil; Chicoly leaves; Chinese cabbage (type Pak-choi); Chinese flat cabbage; Chipilin; Cress, garden; Cress, Upland; Chrysanthum, Edible leaved; Corn salad; Cos lettuce; Cosmos; Dandelion; Dock; Dol-nam-mul; Ebolo; Endive; Fame flower; Feather cockscomb; Flowering white cabbage; Glasswort, common; Goosefoot; Grape leaves; Hanover salad; Iceplant; Jute; Kangkung; Kale; Kohlrabi leaves; Komatsuna; Lettuce, bitter; Lettuce, head; Lettuce; leaf; Maca; Melientha; Mizuna; Monkey-bread tree leaves; Mustard, greens; Mustards, tuberous rooted; New Zealand spinach; Orach; Papaya leaves; Peanut leaves; Perilla leaves; Plantain leaves; Purple-stem mustard; Purslane; Purslane, winter; Radish leaves; Rampion leaves; Rape greens; Rucola; Rutabage greens; San-ma-neul leaves; Salsify leaves; Shepherd's purse; Sowthistle; Spinach; Spinach, Indian; Sweet potato leaves; Tanier spinach; Tannia leaves; Taro leaves; Toona sinensis; Turnip greens; Ullucu leaves; Velvet plant leaves; Witloof chicory (sprouts); Violet, Chinese; Wasabi leaves; Watercress; Water clover; Water mimosa; Wild Rocket; Yam leaves.

Codex Group / Subgroup	Examples of Representative Commodities <sup>1</sup>	Extrapolation to the following commodities
Group 013A, Leafy greens	Head lettuce and Leaf lettuce and Spinach	<u>Leafy greens (VL 2050)</u> : Agretti; Amaranth; Aster, Indian; Bitawiri; Blackjack; Boxthorn; Cat's Wiskers; Cham-chwi; Cham-na-mul; Cham-ssuk; Chard; Chervil; Chicoly leaves; Chipilin; Chrysanthum, Edible leaved; Corn salad; Cos lettuce; Cosmos; Dandelion; Dang-gwi; Dock; Dol-nam-mul; Ebolo; Endive; Fame flower; Feather cockscomb; Glasswort, common; Gom-chwi; Goosefoot; Iceplant; Jute; Lettuce, bitter; Lettuce, head; Lettuce; leaf; New Zealand spinach; Orach; Perilla leaves; Plantain leaves; Purslane; Purslane, winter; San-ma-neul leaves; Sowthistle; Spinach; Spinach. Indian; Tanier spinach; Violet, Chinese.
Group 013B, Brassica leafy vegetables	Mustard greens or Kale	<u>Brassica leafy vegetables (VL 0054)</u> : Broccoli, Chinese; Broccoli raab; Cabbage, Abyssinian; Cabbage. Seakale; Chinese cabbage (type Pak-choi); Chiness flat cabbage; Cress, garden; Cress, Upland; Flowering white cabbage; Hanover salad; Kale; Kohlrabi leaves; Komatsuna; Maca; Mizuna; Mustard, greens; Mustards, tuberous rooted; Purple-stem mustard; Radish leaves; Rape greens; Rucola; Rutabage greens; Shepherd's purse; Turnip greens; Watercress; Wild Rocket.
Group 013C, Leaves of root and tuber vegetables	Beet, garden leaves or Witloof and Sweet potato	<u>Leaves of root and tuber vegetables (VL 2052)</u> : Alexanders leaves; Bambara groundnut leaves; Bell flower, Chinese leaves; Cassava leaves; Peanut leaves; Rampion leaves; Salsify leaves; Sweet potato leaves; Tannia leaves; Taro leaves; Ullucu leaves; Velvet plant leaves; Wasabi leaves Yam leaves.
Group 013D, Leaves of trees, shrubs and vines		<u>Leaves of trees, shrubs and vines (VL 2053)</u> : Ben moringa leaves; Grape leaves; Melientha; Monkey-bread tree leaves; Papaya leaves; Toona sinensis.
Group 013E, Leafy aquatic vegetables		<u>Leafy aquatic vegetables (VL 2054)</u> : Kangkung; Watercress; Water clover; Water mimosa.
Group 003F, Witloof		Witloof chicory (sprouts).
Group 013, Leaves of Cucurbitaceae		Balsam pear leaves; Chayote leaves.
Group 014 Legume vegetables		

Codex Group / Subgroup	Examples of Representative Commodities <sup>1</sup>	Extrapolation to the following commodities
Group 15 Pulses		
Group 16 Root and tuber vegetables		
Group 17 Stalk and stem vegetables		<p><u>Stalk and stem vegetables (VS 0078)</u>: Acacia shoots; Agave; Artichoke, globe; Asparagus; Bamboo shoots; Burdock, edible, tops; Cardoon; Celery; Celtuce; Fennel, Bulb, Ferns, edible; Flowering stalk of Garlic; Giant butterbur; Palm hearts; Prickly pear pads; Rhubarb; Kale, sea; Udo; Water-celery; Zuiki.</p>
Group 17A, Stems and petioles	Celery	<p><u>Stems and petioles (VS 2081)</u>: Burdock, edible, tops?; Cardoon; Celery; Celtuce; Fennel, Bulb; Flowering stalk of Garlic; Giant butterbur; Rhubarb; Zuiki.</p>
Group 17B, Young shoots	Asparagus	<p><u>Young shoots (VS 2081)</u>: Acacia shoots; Agave; Asparagus; Bamboo shoots; Ferns, edible; Kale, sea; Udo.</p>
Group 17C, Others		<p>Artichoke, globe; Palm hearts; Prickly pear pads; Water-celery.</p>

1

## APPENDIX XIII

## CCPR PRIORITY LISTS OF PESTICIDES (NEW COMPOUNDS AND FOLLOW-UP EVALUATIONS)

2013 JMPR NEW COMPOUND EVALUATIONS				
TOXICOLOGY	RESIDUE	Prioritisation Criteria	Commodities	Residue trials provided
bixafen [Bayer CropScience] Germany	Bixafen	Registered MRLs > LOQ	Cereal grains, rape seed, rape seed oil; meat from mammals and poultry, milk and eggs	Cereals (48), oilseed rape (22)
cyantraniliprole [DuPont] – USA PRIORITY 1	cyantraniliprole	Not registered 2012	pome fruit, stone fruit, brassica vegetables, cucurbit vegetables, fruiting vegetables, leafy vegetables, bulb vegetables, green/long beans, grape, potato, sweet potato, rice, cotton, canola, citrus, tree nuts	pome fruit (59+), stone fruit (51+), brassica vegetables (50+), cucurbit vegetables (146+), fruiting vegetables (192+), leafy vegetables (80+), bulb vegetables (85), green/long beans (18), grape (33), potato (46), rice (9), cotton (22+), canola (29), citrus (52), tree nuts (12)
imazapic BASF Brazil priority 1 – moved from 2012	Imazapic	Registered MRLs mostly at LOQ	Corn, peanut, rapeseed, rice, soybean, sugarcane, wheat, animal feedstuffs	Corn (6), grass (15), peanut (18), peanut hay (10), rapeseed (4), rice (8), soybean (15), sugarcane (8), wheat (6), wheat feedstuffs(14)
imazapyr BASF Brazil priority 1 – moved from 2012	Imazapyr	Registered MRLs mostly at LOQ	Corn, lentils, cereals (wheat, corn, rice), oilseeds (rapeseed, soybean, sunflower), rice, sugarcane	Corn (27), lentils (5), rapeseed (23), rice (4), Soybean (22), sugarcane (2), sunflower (33), wheat (8)
isoxaflutole [Bayer CropScience] Germany	Isoxaflutole	Registered MRLs mostly at LOQ	Maize, maize fodder and forage, soybean (dry), soybean oil, sugarcane, meat from mammals and poultry, milk and eggs	Maize (61), Soybean (31), sugarcane (25)



tolfenpyrad [Nihon Nohyaku] Japan	Tolfenpyrad	Registered in Japan, the Dominican Republic, Thailand, Taiwan, UAE, Indonesia, Saudi Arabia, China, Malaysia and Jordan	Almonds, pecans, grape (table), raisin, juice (if MRL not included under table grape), plum, peach, cherry, pear, lemon, grapefruits, oranges, cantaloupe, cucumbers, summer squash, peppers, tomatoes, cauliflower, potatoes, cotton seed, tea and corresponding animal commodity MRLs.	almond (5), pecan (5), grape (12), cherries (6), peach (9), plum (6), prune (2), pear (6), orange (12), grapefruit (6), lemon(5), cucumber (6), cantaloupe (6), squash (5), tomato (12), pepper (bell+chili) (6+3), cauliflower (6), potato (16), cottonseed (12), tea (4)
triflumizole [Nippon Soda] USA	Triflumizole	Registered  MRLs > LOQ	Pome fruits, stone fruits, grape, star apple, American persimmon, mangoes, papaya, pineapple, strawberries, cucurbits, squash, melons, leafy brassica, head and stem brassica, kohlrabi, lettuce, cress, land cress, spinach, purslane, beet leaves, chervil parsley, hazelnuts, hops and animal commodities	Pome fruits (38, P5), stone fruits, grape (25, P14), papaya (4), pineapple (3), strawberries (8), cucumber (5), squash (5), melons (6), cabbage (9), mustard green (10), swiss chard (3), lettuce (17), broccoli (10), hops (3) and animal commodities (feeding goat, poultry)  P = processing data
trinexapac – [Syngenta] - USA	Trinexapac	Registered  MRLs > LOQ	Wheat, Barley, Oats, Sugarcane, Oilseed rape	Wheat (20), Barley (12), Sugarcane (8), Oilseed rape (18)
Benzovindiflupyr [Syngenta] – Switzerland <b>RESERVE</b>	Benzovindiflupyr	Not registered  Registration expected in 2012	soybean, corn, sugarcane, cotton, dry beans	soybean (12), corn (11), sugarcane (12), cotton (11), dry beans (11)

2013 JMPR FOLLOW-UP EVALUATIONS			
TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	azoxystrobin [Syngenta] USA (229)	Potato (USA), coffee, chickpea, lentil and dry pea, sugarcane  Water melon, dragon fruit, pineapple (Indonesia)	Potato (5), coffee (8)), Dry Pea (2), Dry Bean (5), sugarcane (12)
	cyproconazole [Syngenta] (239)	Coffee (Brazil)	Coffee (10)
	cyprodinil (207) [Syngenta] USA (moved from 2012)	Pome fruit  Spinach (+ lettuce to raise MRL?), Carrot, Radish, Chives, Parsley, <i>Brassica</i> leafy greens, Beans (Snap, Lima and Dry), Pepper (+ Fruiting Veg. Crop Group), Melons, Lemon, Lime, Basil, Avocado, Guava, Lychee, Pomegranate, Watercress, Caneberry, Strawberry, Blueberry, Kiwifruit	Apple and Pear (18),  Spinach (11) (+ lettuce to raise MRL?, 14 trials), Carrot (10) + Radish (6), chives (3), parsley (4), Brassica leafy greens (7 brassica + 7 broc + 6 cab + 9 mg), Beans (Snap(8), Lima (8) and Dry(9)), Pepper (14+5GH) (+ Fruiting Veg. Crop Group), melons (Company data?), lemon (5) + lime, caneberry (5), blueberry (8), strawberry (8), basil (3), avocado (6), guava (5), lychee (3), pomegranate (4), watercress (2), kiwifruit (3)  IR4

	<p>chlorantraniliprole (230) [DuPont] - USA</p>	<p>Artichoke, globe</p> <p>Berries and other Small Fruits: blueberries, bearberries, bilberries, blackberries, boysenberries, cloudberries, cranberries, currants, dewberries, elderberries, gooseberries, grapes, huckleberries, juneberries, loganberries, mulberries, raspberries, rose hips, service berries and strawberries</p> <p>Coffee, Fruiting vegetables (other than cucurbits, except mushrooms and sweet corn)</p> <p>Legume vegetables - bean (<i>Phaseolus</i> spp.; podded and shelled); broad bean (<i>Vicia faba</i> spp; podded and shelled), bean (<i>Vigna</i> spp.; podded and shelled); jackbean; pea (<i>Pisum</i> spp.; podded and shelled); pigeon pea; soybean (immature seed); sword bean</p> <p>Oilseeds - borage, castor oil plant, Chinese tallowtree, cottonseed, crambe, cuphea, echium, euphorbia, evening primrose, flax seed, Gold of Pleasure, hare's-ear mustard, jojoba, lesquerella, lunaria, meadow foam, milkweed, mustard seed, Niger seed, oil radish, poppy seed, rapeseed (including canola), rose hip, safflower, sesame, stokes aster, sunflower, sweet rocket, tallowwood, tea oil plant, vernonia, Rice</p> <p>Root and tuber vegetables – 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, Soybean, dried</p>	<p>Artichokes (4), Blueberry (11), Carrots (18), coffee (8), Cranberry (6), Canola (6) and Sunflowers (6), succulent peas - Shelled (6); edible-podded (7), snap beans (9), green peas, processing peas, sugar snap peas, snow peas and beans (7), radishes (6), rice (27), dried soybean (16), Strawberries (8+8 [different GAP]),</p> <p>Fruiting Vegetables (20)</p> <p>No new data; planning to propose higher MRLs on fruiting vegetables</p> <p>Avocado (Dupont-NZ)</p>
--	---	--	---

	difenoconazole (224) [Syngenta] USA,	Grape, raisin, citrus, <i>Brassica</i> (broccoli, Brussels sprouts, cabbage, etc.), bulb vegetables, fruiting vegetables (pepper), cucurbits, potato ]  Persimmon, ginseng (RoK)	<b>Cantaloupe, Cucumber and Summer Squash as Representative Commodities of Vegetable, Cucurbit, Group 9 (17), Tomato and Pepper as Representative Commodities of Vegetable, Fruiting, Group 8 (20), Onions, Green and Dry Bulb, as Representative Commodities of Vegetable, Bulb, Group 3 (11), Broccoli, Cabbage, and Mustard Greens, as Representative Commodities of Brassica (Cole) Leafy Vegetables, Subgroups 5A and 5B (17), Fruit, Citrus, Group 10 (23), Grapes (12), Potato (5)</b>  Persimmon (6), ginseng
	fenbuconazole (197) [Dow AgroSciences]	blueberries; new GAP for citrus fruits	Blueberries (8); citrus fruits (30)
	fenpyroximate (193) [Nihon Nohyaku] - USA	Avocado, bean (snap), cucumber, potato, stone fruit (cherry, peach, plum), tea strawberry  watermelon	Avocado (5), Bean, snap (8), Cucumber (9), Potato (16), Cherry (8), Peach (10), Plum (6), Strawberry (8)  watermelon (bridge from residue data for cantaloupe[8])
	fludioxonil (211) [Syngenta] - USA	Ginseng, Spinach (+ lettuce to raise MRL?), Carrot, Radish, Chives, Parsley, <i>Brassica</i> leafy greens, Beans (Snap, Lima and Dry), Pepper (+ Fruiting Veg. Crop Group), Melons, Lemon, Lime, Basil, Avocado, Guava, Lychee, Pomegranate, Watercress, Caneberry, Strawberry, Blueberry, Kiwifruit  Tomato, Potato, Pineapple Chickpea, Lentil	Ginseng (4), Spinach (11) (+ lettuce to raise MRL?, 14 trials), Carrot (10) + Radish (6), chives (3), parsley (4), Brassica leafy greens (7 brassica + 7 broc + 6 cab + 9 mg), Beans (Snap(8), Lima (8) and Dry(9)), Pepper (14+5GH) (+ Fruiting Veg. Crop Group), melons (Company data?), lemon (5) + lime, caneberry (5), blueberry (8), strawberry (8), basil (3), avocado (6), guava (5), lychee (3), pomegranate (4), watercress (2), kiwifruit (3) – IR4  Tomato (6), Potato (5), Pineapple (4) Chickpea (9), Lentils (5),
	flutolanil (205) [Nihon Nohyaku]	leafy brassica, root vegetables, ginseng	Broccoli (11), cabbage(9), mustard greens(10), Carrot (9), radish (5), ginseng(4)
	malathion (49) [Cheminova] - USA	Cherry	6 trials with sweet cherries (3 57% EC and 3 ULV) and 6 trials with tart cherries (3 57% EC and 3 ULV)

	mandipropamid (231) [Syngenta] - USA	hops	Hops (11)
	picoxystrobin– [Dupont] - USA	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)
	propiconazole (160) [Syngenta] - USA	Citrus Stone fruit tomato, tree nuts not supported  Dry Bean, Lima bean, Snap bean, Mustard greens, Carrot, Radish, Mint, Pineapple, Watercress  blueberry	Tomato (postharvest) (6), Citrus (postharvest) (12), Stone fruit (postharvest) (9)  Dry Bean (12), Snap bean (7), Lima Bean (6), mustard greens (9), carrot (Co. Data?) + radish (7), turnip (6), mint (5), pineapple (3), watercress (3)  blueberry (5) IR4
	pyraclostrobin	Citrus oil (await Jmpr advice)	
	Pyrimethanil (226) (priority 1) Janssen PMP - USA	Re-evaluation of CXLs for peaches, cherries, apricots, plums, apple, pear	Stone fruit (3), Pome fruit (5) )
	Saflufenacil [BASF]	Lentils (awaiting advice from Jmpr)	
	spirotetramate(234) [Bayer CropScience] – USA	Cranberry, Artichoke, Banana, Blueberry, Coffee, Onion, Pomegranate, pineapple, watercress	Cranberry (6), Artichoke (5), Banana (7), Blueberry (11), Coffee (5), Onion (12), Pomegranate (4), pineapple (5), watercress (4)
	triazophos (143)	Rice (China)	

2014 JMPR - NEW COMPOUND EVALUATIONS				
TOXICOLOGY	RESIDUE	Prioritisation Criteria	Commodities	Residue trials provided
Aminocyclopyrachlor [DuPont] - USA	Aminocyclopyrachlor	Not registered	Meat, milk and edible offal	22 (cattle) - magnitude of residue studies in pasture and rangeland grasses- 20 MOR test sites and 2 decline test sites (to determine residues in hay and forage)
dichlobenil – [Chemtura] USA	dichlobenil	Registered  MRLs > LOQ	Cranberry, blackberry, blueberry, raspberry, grapes, cherry, pome fruit, hazelnut, and rhubarb	Apple (5), Blueberry (2), Blackberry (3), Cherry (12), Cranberry (4), Filberts (3), Grapes (12), Peach (4), Plum (3)
fenamidone [Bayer CropScience] Germany priority 1 – moved from 2013	fenamidone	Registered  MRLs > LOQ	Broccoli, Brussels sprouts, Carrots, Chinese cabbage, Cauliflower, Courgettes (Summer squash), Cucumber, Eggplant, Gherkin, Grapes (Table and wine), Head cabbage, Kale, Leek, Lettuce (Head and leafy), Melon, Onion, Pepper (Bell and sweet), Potato, Pumpkin (Winter squash), Spinach, Strawberries, Sunflower seeds, Tomato, Watermelon	Fruiting vegetables (75), Leafy vegetables (30), Bulb vegetables (12), Brassica vegetables (20), Potato and tuberous vegetables (34), Root vegetables (13), Berries and small fruit (34), Oilseeds (23)
Fluazifop-p-butyl [Syngenta] - Switzerland	Fluazifop-p-butyl	Registered  MRL>LOQ	Oil seed rape, Soybean, dry beans, cotton, Potato, Sweet potato, Sugar beets, Citrus fruits, Pome fruit, Stone fruit, Grapes, Tree nuts, Onion, Cabbage, Carrots, Vegetables, Bananas, Coffee bean, (Palm oil)	Soybean (20), Dry bean (12), Oil seed rape (12), cotton (6), Potato (16), Sweet potato (6), Carrots (12), Onion (12), Sugar beet (16), Sugar cane (4), Citrus fruit (16), Pome fruits (16), Stone fruit (16) Grape (16), Cabbage/brassica (12), Lettuce (6), Coffee (6), Tree nutspecan (12), Palm oil (4) Tomato (16), Asparagus (6), Banana (10), Cucumber/cucurbit (12)
Fluensulfone Moved from 2013 on request from Exponent	fluensulfone	Not registered	Further advice required	

flufenoxuron BASF Brazil priority 1 – moved from 2012	flufenoxuron	Registered  MRLs > LOQ	Soybean, pome fruit (apple, pear), orange, melon, tomato, grape, tea	Soybean (8), pome fruit (8), citrus (12), melon (7), tomato (12), grape (12), tea (8),
imazamox BASF Argentina	imazamox	registered	Legume group: peas and beans (fresh), beans and beans (pulses), lentils, soybean, peanuts, cereal group (rice, wheat, maize), Oilseed group (sunflower, oilseed rape), Alfalfa	29 OSR, 19 sunflower, 35 wheat, 26 maize, 5 rice, 18 beans, 23 peas, 5 lentils, 36 soybeans, 4 alfalfa, 7 peanuts, Alfalfa 19
mesotrione – [Syngenta] – USA moved from 2013	Mesotrione	Registered  MRLs some at LOQ	Asparagus, berries, Corn (grain, pop, sweet), Cranberry, Millet, Lingonberry, Oat (grain), Rhubarb, Sorghum (grain), Soybean, Sugarcane, Okra	Asparagus (8), Berries (10), Sweet Corn (12), Field Corn (20), Cranberry (5), Millet (5), Oats (16), Okra (5) Rhubarb (4), Grain Sorghum (12), Soybean (20), Sugarcane (8)
metrafenone [BASF] USA	metrafenone	Registered  MRLs > LOQ	Grape (table, wine, raisin), Pome fruits (apple, pears), Cherries, Fruiting vegetables (tomatoes, peppers, eggplant), Cucurbits (cucumber, squash, melon), Cereals (wheat, barley, oats, rye, triticale), Hops	Grapes (table and wine) (24 US) (14 EU), Raisins (dried grapes), (1 US), Pome fruits (apples, pears) (18), Cherries (16), Fruiting vegetables (tomatoes, peppers, eggplant) ( 28), Cucurbits (cucumber, squash, cantaloupe) (32), Cereals (wheat, barley, oats rye, triticale) (67), Hops (6 EU) (5 US)
norfluazuron – [Syngenta] -USA	norfluazuron	Registered  MRLs > LOQ	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, and 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
pymetrozine – [Syngenta] – USA moved from 2013	Pymetrozine	Registered  MRLs > LOQ	Hops; vegetables (tuberous and corm); asparagus; vegetable (leafy, except <i>Brassica</i> ); <i>Brassica</i> (head and Stem); <i>Brassica</i> (leafy greens); fruiting vegetables; cucurbit vegetables; cottonseed; pecans	Cucurbits Vegetables Group (19), Fruiting Vegetables Group, Including Processed Tomato Fraction (17), Crop Group 9: Cucurbit Vegetables (3), Crop Group 8: Fruiting Vegetables, Including Processed Tomato Fractions (22), Crop Subgroup 1C: Tuberous and Corm Vegetables (16), Cotton (14), Crop 5: Brassica (Cole) Leafy Vegetables (17), Magnitude of the Residues in or on Crop 4: Leafy Vegetables (24), Magnitude of the Residues in or on Hops (3), Crop Subgroup 1C: Tuberous and Corm Vegetables (16), Crop Group 8: Fruiting Vegetables (21), Pecans (5), Cotton (2), Crop Group 9: Cucurbit Vegetables (19, Asparagus (8), Potato as the Representative Commodity of Crop Subgroup 1C: Tuberous and Corm Vegetables (16)

2014 JMPR - FOLLOW-UP EVALUATIONS			
TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
Moved from 2012 on request from manufacturer	<u>2,4-D (020)</u> [Dow AgroSciences]	<u>New GAP for soya bean</u>	<u>Soya bean (24)</u>
	Chlorothalonil [Syngenta] (4 year rule)	carrot, cherry, cranberry, bulb onion, peach, sweet and chilli pepper, tomato, common beans, asparagus  blueberry USA  Apple and pear (RoK)	Cherry (8), Peach (8), Bulb onion (8), Sweet pepper (8), Tomato (8), Asparagus (6)  Blueberry (6) await advice on other commodities  <u>Apple, 6(RoK), Pear 6(RoK)</u>
	Dimethomorph [BASF]	Bulb onions (including shallots, garlic, silverskin onions), Green onions, Leek, Head cabbage, Flowerhead brassica (broccoli), Whole group leafy vegetables (excluding brassica), Celery, Globe artichokes, Oranges, Strawberry, Grapes, Ginseng	Bulb onions (including shallots, garlic, silverskin onions), 10 (US), Green onions, 6 (US), Leek, 20 (EU), Head cabbage, 10 (US), Flowerhead brassica (broccoli), 10 (US)  Whole group leafy vegetables (excluding brassica), 25 (head and leaf lettuce, spinach) (US), Celery, 9 (US), Globe artichokes, 10 (EU), Oranges, 8 (EU), Strawberry, 8 (EU), Grapes, 13 (US), Ginseng, 4 (US, IR-4)
	dithiocarbamates - mancozeb (105) [Dow AgroSciences]	mandarin (ROK) okra, chili pepper (Thailand) seed spices [HS190], fruit and berry spices [HS191] ( India)	<u>await further advice</u>
	fluopyram (243) [Bayer CropScience]	Leek, Onions, Asparagus, Lettuce heads, Herbs, Cabbage, Bush berries, Rape seed, Sunflower and Hops	Leek (24), Onions (37), Asparagus (12), Lettuce heads (50), Herbs (6), Cabbage head (16), Chinese cabbage (16), Bush berries (8), Rape seed (16), Sunflower (18) and Hops (8)
	Imidacloprid (206)	Pistachio (Iran) seed spices [HS190], fruit and berry spices [HS191] ( India)	Awaiting advice on number of field trials



	phosmet [Gowan] - USA	cranberry, tart cherry	cranberry (5), tart cherry (15) - tart cherry- 5 pre-GLP trials (2 US, 3 Canada), 6 GLP (Italy), 4 GLP (France)
	Propamocarb (148), Bayer CropScience	Broccoli, Cauliflower, Brussels Sprouts, Head Cabbage, Kale, Onions, Leeks	Broccoli (10), Cauliflower (10), Brussels sprouts (8), Cabbages, Head (12), Kale (9), Onion, Bulb (21), Leek (12)
	Propylene oxide	Tree nuts	
	Thiamethoxam (245)	Pistachio (Iran), persimmon (Republic of Korea)	Awaiting advice pistachio field trials, Persimmon (6)
	Triadimenol (168) Bayer	grapes	Grapes (16)
	Spirodiclofen (237) Bayer	avocados	Avocados (5)
	Prothioconazole (232) Bayer	Soybean, maize, potatoes	

2015 JMPR - NEW COMPOUND EVALUATIONS				
TOXICOLOGY	RESIDUE	Prioritisation criteria	Commodities	Residue trials provided
Cyazofamid [Ishihara Sangyo Kaisha] USA	cyazofamid	registered	Hops, Potato, tomato, grape, cucurbits, carrots, brassica vegetables, okra, spinach, other fruiting vegetables	U.S./Canada: Potato (27), tomato (35), Cucurbits (11), cucumber (11) muskmelon (9), summer squash, Grape (3-U.S.)(1-Argentina), (10-EU)(1-Mexico), Pepper (9-bell and non-bell), Carrot (14), Broccoli (6),Cabbage (9),Mustard greens (9),Spinach (10), Hops (3)
Fenazaquin [Gowan company] USA	fenazaquin	registered	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.	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)
Fonicamid [Ishihara Sangyo Kaisha] USA	fonicamid	registered	cucurbit, vegetables, fruiting vegetables, leafy vegetables, pome fruit, potato, stone fruit, head/stem brassica, mustard greens, brassica leafy greens, root vegetables, radish tops, tuberous/ corm vegetables, hops, okra, cottonseed	U.S./Canada: Peach – 9, Cherry – 6, Plum – 6, Apple – 12, Pear – 6, Cucumber – 6, Cantaloupe – 6, Summer Squash – 5, Tomato – 12, Bell Pepper – 6, Non-Bell Pepper – 3, Broccoli – 6, Cabbage with wrapper leaves – 6, Cabbage without wrapper leaves – 6, Mustard Greens – 5, Head Lettuce with wrapper leaves – 6, Head Lettuce without wrapper leaves – 6, Leaf Lettuce – 6, Celery – 6, Spinach – 6, Potato Tubers – 17, Carrot Roots – 8, Carrot Roots – 2, Radish Roots – 5, Radish Tops – 5, Dried hop cones – 3
Flupyradifurone [Bayer CropScience] Germany	Flupyradifurone	Not registered (expected 2014), MRLs > LOQ	Citrus fruit, table and wine grapes and small berries, pome fruit, tree nuts, hops, fruiting and brassica vegetables, lettuce, potatoes, sugar beets, onions, cereals, coffee, soya and cotton.	Citrus fruit (54), table & wine grapes & small berries (78), pome fruit (39), tree nuts (10), hops (11), fruiting vegetable, cucurbits (89), fruiting vegetables other than cucurbits (96), brassica vegetables (56), leafy vegetables including Brassica leafy vegetables (76), legume vegetables (52), root and tuber vegetables (43), onions (18), cereals (107), coffee (18), soya and cotton (44).

2015 JMPR - FOLLOW-UP EVALUATIONS			
TOXICOLOGY	RESIDUE	Commodities	Residue trials provided
	Abamectin (177)	Chili peppers (Thailand) Chilli pepper, Tomato, mango, papaya (Indonesia CRD26)	
	Acetamiprid (246)	Fruiting vegetables other than cucurbits China (tomatoes and cucumbers) seed spices [HS190], fruit and berry spices [HS191] ( India)	
	Bifenthrin [FMC]	Barley, barley (straw fodder), strawberry, papaya, okra, mango	(4 year rule)
	difenoconazole (224) [Syngenta] USA,	Papaya (Kenya)	
	Tebuconazole (189)	China (banana and cucumber), Kenya (common beans) Lettuce Head	
	Carbofuran (145) FMC	seed spices [HS190], fruit and berry spices [HS191] ( India)	

## Appendix 2a: Schedule of Periodic Re-evaluations – 2013-2016

Note 1: Advice on the provision of full data packages at 1 August 2011 is recognised. Therefore, as an interim measure, those compounds for which information on residue trials has been provided / expected are scheduled in the order specified at CCPR43.

Note 2: if at CCPR44, a full data package (including number of residue trials) is not indicated, the compound will be deferred in the schedule.

Note 3: all compounds for which a full data package is not indicated at 1 August will be considered for prioritisation in accordance with revised approach, giving a higher priority to pesticides deemed to have public / consumer health concerns

Note 4: NR denotes 'following evaluation, JMPR has deemed the establishment of an ARfD unnecessary'

Note 5: N/A denotes 'not assessed – JMPR has not had the opportunity to consider, or determine the need for, an ARfD'

## 2013 PERIODIC RE-EVALUATION SCHEDULE (includes those compounds for which advice on full data packages has been provided)

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
	bentazone (172) (BASF)	beans (green and dried), peas (green and dried), cereals, maize, sorghum, onion, peanuts, potato, linseed, meat, milk, eggs., soya bean	Barley (26), dry beans (32), common bean (pods and/or immature seeds) (50), garden pea (young pods) (30), linseed (23), maize (74), maize fodder (74), oats (6), onion (bulb) (25), peanut(15), potato (61), rice (12), rye (4), sorghum (6), soya bean (20), wheat (44)	1998	0.01 1998	NR 2004
diquat (031) [Syngenta]  priority 1 - moved on request March 2011	diquat (031) [Syngenta]	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.	Dry beans (23), dry peas (24), lentils (33), soybeans (11), potatoes (36), oilseed rape (14), sunflowers (10), apple (8), strawberry (3), banana (8), carrot (3), tomato (14), coffee (12),  (does not appear to be support for existing commodity CXLs for alfalfa fodder, cereals, edible offal, meat mammalian, milk poultry)	1994	0.002 1994	N/A

	dithianon (028) [BASF]  priority 1 moved from 2012	pome fruit, cherry, grapes, hops, mandarin	Citrus (6); Almond (4); Pome fruit (25; alternative GAP 16); Cherry (15; alt GAP 42); Peach/Nectarine/Apricot (6; alt GAP 24); Plum (6; alt GAP 9); Wine & Table Grape (37; alt GAP 17); Currants (6; alt GAP 6); Hops (14)	1992	0.01 1992	0.1 2010
--	---	--	---	------	--------------	-------------

**2014 PERIODIC RE-EVALUATION SCHEDULE (includes those compounds for which advice on full data packages has been provided)**

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
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 - Supervised trials by Thailand	<b>NOTE – new supporting manufacturer That Thailand has agreed to provide field trials.</b>	2004	0.08 2004	NR 2004
	fenpropathrin (185) [Sumitomo Chemical] – USA	cattle meat, cattle milk, cattle edible offal, cotton seed, cotton seed oil, eggplant, eggs, gherkin, grapes, chilli pepper, sweet pepper, pome fruits, poultry meat, poultry edible offal, tea, tomato, Cherries, Stone fruit (Peach, Apricots, Nectarine, Plums), Strawberries, Bushberries, Caneberries, Tree nuts including pistachio, Olive, Citrus (Oranges, Grapefruit, Lemons)  Sweet cherry (USA)  Blueberry, Peas (shelled and podded), cucumber, squash, avocado, tropical fruit, barley  Coffee, papaya, corn, soybean (Brasil)  seed spices [HS190], fruit and berry spices [HS191] (India)	Cotton seed (33), Cucumber (8), Squash (7), Grapes (20), Peppers (10), Apples (26), Tea (3), Tomato (8), Cherries (6), Peach (10), Plums (6), Strawberries (10), Caneberries (7), Tree nuts (10), Olives (3), Oranges (18), Grapefruit (7), Lemons(6)  (appears to be support for new commodities such as strawberry, cucumber, citrus and tree nuts)  Blueberry (9), Peas (8), cucumber (8), squash (7), avocado (6), tropical fruit (9), barley (12)	1993	0.03 2006	N/A
triforine (116) [Sumitomo Corp]	triforine (116)	Apple, Blueberries, Brussels sprouts, Cereal grains, Cherries, Common bean, Currants(Black,Rd, White), Fruiting vegetables, Cucurbits, Gooseberry, Peach, Plums(including prunes), Strawberry, Tomato	Await further advice  (all existing commodity CXLs appear to be supported)	1997	0.02 1997	N/A

<p>myclobutanil (181) [Dow AgroSciences]</p>	<p>myclobutanil (181)</p>	<p>pome fruits, stone fruits, black currant, grapes, strawberry, banana, hops, tomato Pesticide Initiative Project – beans with pods (manufacturer indicates support for animal product CXLs)  Soybean, melon (Brasil)</p>	<p>Total trials (616) – comprising apple (128), pear (14), apricot (18), cherry (36), peach (51), plums (51), black/red currants (12), grapes (125), strawberries (60), bananas (12), hops (25), tomato (63), beans (green) with pods (10),.</p>	<p>1992</p>	<p>0.03 1992</p>	<p>N/A</p>
<p>penconazole (182) [Syngenta]</p>	<p>penconazole (182)</p>	<p>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  (appears to be no support for animal product CXLs)</p>	<p>Awaiting advice on the numbers of trials</p>	<p>1992</p>	<p>0.03 1992</p>	<p>N/A</p>

## 2015 PERIODIC RE-EVALUATION SCHEDULE (includes those compounds for which advice on full data packages has been provided)

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
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  (appears to be no support for animal product CXLs)	Awaiting advice on number of trials	1997	0.002 1997	N/A
chlormequat (15) [BASF]	chlormequat (15)	Cereals, cottonseed, maize, rapeseed, maize fodder, cereals fodder/straw, meat, milk, eggs	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
clethodim (187) [Sumitomo - Valent USA] USA	clethodim (187)	bean, broccoli, cabbage, carrot, cranberry, cucurbits, hops, lettuce, pea, strawberry, blueberry	Blueberry (9) – awaiting further advice	1994	0.01 1994	NR 2004
ethephon (106) [Bayer CropScience]	ethephon (106)	Apple, Barley, Barley straw and fodder, Blueberries, Cantaloupe, Cherries, Chili peppers (dry), Cotton seed, Dried grapes, Figs, Grapes, Hazelnuts, Peppers, Pineapple, Rye, Rye straw and fodder, Tomato, Walnuts, Wheat, Wheat straw and fodder, Chicken eggs, Edible offal of cattle, goats, horses, pigs & sheep, Meat of cattle, goats, horses, pigs & sheep, Milk of cattle, goats & sheep, Poultry meat, Poultry, edible offal.  All CXLs supported	Awaiting advice on number of trials	1994	0.05 1997	0.05 2002

2016 PERIODIC RE-EVALUATION SCHEDULE (includes those compounds for which advice on full data packages has been provided)

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
fenpropimorph (188) [BASF]	fenpropimorph (188)	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
iprodione (111) (BASF)	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)	Awaiting advice	1994	0.06 1995	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 brussel 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

2018 PERIODIC RE-EVALUATION SCHEDULE (includes those compounds for which advice on full data packages has been provided)

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
flumethrin (195) [Bayer CropScience]	flumethrin (195)	Cattle milk, cattle meat		1996	0.004 1996	N/A



## Appendix 2b : Periodic Re-Evaluation List (Compounds listed under 15 Year Rule but not yet scheduled)

Note 6: Compounds listed in this table meet criterion 2 (15 year rule). However, to date no relevant data have been provided.

Decisions on the prioritization of these compounds should, at the very least, be based on criterion 1 (public health concerns), criteria 4 and 7 (date that data will be submitted and availability of current labels arising from recent national evaluations) and other relevant criteria found in pp135-136 of the *Codex Procedural Manual*.

TOXICOLOGY	RESIDUE	Commodities	comments	Previous evaluation	ADI	ARfD
	aldicarb (117) [Bayer CropScience]	No longer supported by the manufacturer	No longer supported by manufacturer	1995	0.003 1992	0.003 1995
amitraz (122) – [Arysta Lifesciences]	amitraz (122)	awaiting advice on commodities	Await further advice	1998	0.01 1998	0.01 1998
dichlofluanid (82) – [Bayer CropScience]	dichlofluanid (82)	No longer supported by manufacturer	No longer supported by manufacturer	1983	0.3 1983	N/A
dinocap (87) [Dow AgroSciences]	dinocap (87)	No longer supported by manufacturer	No longer supported by manufacturer	1998	0.008 1998	0.008 WCBA 0.03 general
fenbutatin oxide (109) [BASF]	fenbutatin oxide (109)	No longer supported by manufacturer	No longer supported by manufacturer	1992	1992 0.03	N/A
disulfoton (74) – [Bayer CropScience]	disulfoton (74)	awaiting advice on commodities	support from USA Confirmation of support is required	1996	0.0003 2006	0.003 2006

methidathion (51) [Syngenta]	methidathion (51)	No longer supported by manufacturer	No longer supported by manufacturer	1992	0.001 1997	0.01 1997
	azinphos-methyl (002) [Makhteshim – Agan]	awaiting advice on commodities		2007	0.03 2007	0.1 2007
bromide ion (47)	bromide ion (47)	no Croplife manufacturer responsible - support unknown		1998	1.0 1998	N/A
bromopropylate (70) [Syngenta]	bromopropylate (70)	No longer supported by manufacturer	No longer supported by manufacturer	1993	0.03 1993	N/A
tecnazene (115)	tecnazene (115)	no Croplife manufacturer listed - support unknown		1994	0.02 1994	N/A
hydrogen phosphide (46)	hydrogen phosphide (46)	no Croplife manufacturer responsible -	support unknown	1971	NR	N/A
phosalone (60) [Cheminova]	phosalone (60)	awaiting advice on commodities	Durian (Thailand)	1997	0.02 1997	0.3 2001
bioresmethrin (93) previously Sumitomo Chemical)-	bioresmethrin (93)	not supported by manufacturer	not supported by manufacturer (	1991	0.03 1991	N/A
diazinon (22) [Makhteshim – Agan] -	diazinon (22)	awaiting advice on commodities		1996	0.005 2006	0.03 2006
permethrin (120) [FMC]	permethrin (120)	not supported by manufacturer	not supported by manufacturer	1987	0.05 1999	NR 1999

tolclofos-methyl (191) [Sumitomo Chemical]	tolclofos-methyl (191)	awaiting advice on commodities ginseng (ROK)	Await advice	1994	0.07 1994	N/A
fenarimol (192) [Gowan]	fenarimol	not supported by manufacturer	not supported by manufacturer	1995	0.01 1995	N/A
fenpyroximate (193) [Nihon Nohyaku]	fenpyroximate	awaiting advice on commodities		1995	0.01 1995	0.02 2007
fenthion (39) [Bayer CropScience]	fenthion	awaiting advice on commodities		1995	0.007 1995	0.01 1997
quintozene (64) [Crompton – AMVAC]	quintozene	awaiting advice on commodities		1995	0.01 1995	N/A
ferbam, ziram (105) [Taminco]	ferbam, ziram (105)	awaiting advice on commodities		1995	1.0 1995	N/A
carbofuran FMC Corporation	carbofuran			1997	0.001 1996	0.001 2009
Carbosulfan FM C Corporation	carbosulfan		Asparagus, egg plant (Thailand)	1997	0.01 (1986)	0.02 (2003)
Fenbuconazole Dow AgroSciences	fenbuconazole		Awaiting advice on commodities	1997	0.03 (1997)	N/A

## Appendix 3: Record of Periodic Re-evaluations

Note 7: all information derived from CX/PR 11/43/3 'DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS IN FOODS AND FEEDS AT STEPS 7 AND 4'

Note 8: The year value provided in the schedule (tox) and (residue) columns is based on chronological order and is for guidance only.

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
007	captan	1963	1995T, 2004T(ARfD), 2000R			
008	carbaryl	1965	2001T(ADI, ARfD), 2002R			
017	chlorpyrifos	1972	1999T, 2000R			
020	2,4-D	1970	1996T, 2001T(ARfD), 1998R			
027	dimethoate	1965	1996T, 2003T(ARfD), 1998R			
030	diphenylamine	1969	1998T, 2001R			
032	endosulfan	1965	1998T, 2006R			
035	ethoxyquin	1969	2005T, 1999R			
037	fenitrothion	1969	2000T, 2007T(ADI, ARfD), 2003R			
041	folpet	1969	1995T, 2007T(ARfD), 1998R			
048	lindane	1965	2002T, 2003R			
049	malathion	1965	1997T, 2003T(ARfD), 1999R			
056	2-phenylphenol	1969	1999			
057	paraquat	1970	2003T, 2004R			
059	parathion-methyl	1965	1995T, 2000R			
062	piperonyl butoxide	1965	1995T, 2001T(ARfD), 2001R			
063	pyrethrins	1965	2003T, 2000R			

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
065	thiabendazole	1970	1997T(JECFA), 2006T(ARfD), 1997R			
067	cyhexatin	1970	2005T, 2005R			
072	carbendazim	1973	1995T, 2005T(ARfD), 1998R			
079	amitrole	1974	1997T, 1998R			
081	chlorothalonil	1974	2009T, 2010R			
083	dicloran	1974	1998			
084	dodine	1974	2000T, 2003R			
085	fenamiphos	1974	1997T, 2002T(ARfD), 1999R			
086	pirimiphos-methyl	1974	1992T, 2006T(ARfD), 2003R			
090	chlorpyrifos-methyl	1975	2009			
094	methomyl	1975	2001			
095	acephate	1976	2005T, 2003R			
100	methamidophos	1976	2002T, 2003R			
101	pirimicarb	1976	2004			
102	maleic hydrazide	1976	1996T, 1998R			
103	phosmet	1976	1994T, 2003T, 1997R 2002R			0.01 (1998), 0.2 (2003 Gowan)
105	dithiocarbamates	1965	1996T, 1993R, 2004 propineb			Individual dithiocarbamates are evaluated, propineb in 2004, ferbam/ziram (1996)
105	propineb	1997	2004T			Dithiocarbamates

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
110	imazalil	1977	2000T, 2005T( <i>ARfD</i> )			
112	phorate	1977	2004T, 2005R			
113	propargite	1977	1999T, 2002R			
118	cypermethrin	1979	2006T, 2008R			
126	oxamyl	1980	2002			
129	azocyclotin	1979	2005T, 2005R			
130	diflubenzuron	1981	2001T, 2002R			
132	methiocarb	1981	1998T, 1999R			
133	triadimefon / triadimenol	1979	2004T, 2007R			133 /168
135	deltamethrin	1980	2000T, 2002R			
142	prochloraz	1983	2001T, 2004R			
143	triazophos	1982	2002T, 2007R			
144	bitertanol	1983	1998T, 1999R			
146	cyhalothrin	1984	2004(JECFA)			
146	lambda-cyhalothrin		2007T, 2008R			
147	methoprene	1984	2001T 2005R			
148	propamocarb	1984	2005T, 2006R			
149	ethoprophos	1983	1999T, 2004R			
151	dimethipin	1985	1999T, 2004T( <i>ARfD</i> ), 2001R			

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
155	benalaxyl	1986	2005T, 2009R			
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			
174	cadusafos	1991	2009T, 2010R			
176	hexythiazox	1991	2008T, 2009R			
178	bifenthrin	1992	2009T, 2010R			
194	haloxyfop	1995	2006T, 2009R			
196	tebufenozide	1996	2003T( <i>ARfD</i> )			
201	chlorpropham	2000	2005T(ADI, <i>ARfD</i> )			
202	fipronil	1997	2000T,			

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
189	tebuconazole	1994	2010		2011	
180	dithianon	1992	2010		2013	
002	azinphos-methyl	1965	2007T		2017	Makhteshim
026	dicofol	1968	1992	2011	2011	Not supported by manufacturer
184	etofenprox	1993	none	2011	2011	Mitsui Chemical Inc
025	dichlorvos	1965	1993	2011	2012	AMVAC
179	cycloxydim	1992	2009T	2011	2012	support from BASF
119	fenvalerate	1979	1986T	2012	2012	Sumitomo Chemical
175	glufosinate-ammonium	1991	1999T	2012	2012	support from Bayer CropScience
172	bentazone	1991	1998T, 2004T(ARfD)	2012	2013	support from BASF
031	diquat	1970	1993T, 1994R	2013	2013	Syngenta
109	fenbutatin oxide	1977	1992T, 1993R	2013	2013	Not supported by BASF
185	fenpropathrin	1993	none	2012	2014	Sumitomo Chemical
116	triforine	1977	1997T	2014	2014	support from Sumitomo Co.
138	metalaxyl	1982	2002T	2014	2014	Quimicas del Vallés - SCC GmbH
181	myclobutanil	1992	none	2014	2014	support from Dow AgroSciences
182	penconazole	1992	none	2014	2014	Syngenta
015	chlormequat	1970	1997T, 1999T(ARfD) 1994	2015	2015	support from BASF
106	ethephon	1977	1997T, 2002T(ARfD), 1994R	2015	2015	Bayer CropScience



Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
177	abamectin	1992	1997T	2015	2015	Syngenta
187	clethodim	1994	1999T(ARfD)	2015	2015	support from USA
111	iprodione	1977	1995T, 1994R	2016	2016	support from BASF
188	fenpropimorph	1994	2004T(ARfD)	2016	2016	support from BASF
190	teflubenzuron	1994	none	2016	2016	support unknown
022	diazinon	1965	2006T, 1993	Listed-not scheduled	Listed-not scheduled	Makhteshim-Agan
039	fenthion	1971	1995, 1997T(ARfD)	Listed-not scheduled	Listed-not scheduled	
046	hydrogen phosphide	1965	1966T	Listed-not scheduled	Listed-not scheduled	support unknown
047	bromide ion	1968	1988T	Listed-not scheduled	Listed-not scheduled	support unknown
051	methidathion	1972	1997T, 1992	Listed-not scheduled	Listed-not scheduled	Not supported
060	phosalone	1972	1997T, 2001T(ARfD), 1994R	Listed-not scheduled	Listed-not scheduled	support unknown
064	quintozene	1969	1995	Listed-not scheduled	Listed-not scheduled	
070	bromopropylate	1973	1993	Listed-not scheduled	Listed-not scheduled	support unknown
074	disulfoton	1973	1996T(ARfD)	Listed-not scheduled	Listed-not scheduled	Bayer CropScience

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
082	dichlofluanid	1969	1983T	Listed-not scheduled	Listed-not scheduled	Not supported by manufacturer
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
096	carbofuran	1976	1996T, 2008T(ARfD), 1997R	Listed-not scheduled	Listed-not scheduled	
105	ferbam	1965	1996T	Listed-not scheduled	Listed-not scheduled	Dithiocarbamates
105	ziram	1965	1996T	Listed-not scheduled	Listed-not scheduled	Dithiocarbamates
115	tecnazene	1974	1994T	Listed-not scheduled	Listed-not scheduled	support unknown
117	aldicarb	1979	1992T, 1995T(ARfD), 1994R	Listed-not scheduled	Listed-not scheduled	Bayer CropScience
120	permethrin	1979	1999T	Listed-not scheduled	Listed-not scheduled	not supported by manufacturer
122	amitraz	1980	1998T	Listed-not scheduled	Listed-not scheduled	Arysta Lifesciences
145	carbosulfan	1984	2003T, 1997R	Listed-not scheduled	Listed-not scheduled	
191	tolclofos-methyl	1994	none	Listed-not scheduled	Listed-not scheduled	Sumitomo Chemical
192	fenarimol	1995	none	Listed-not scheduled	Listed-not scheduled	

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
193	fenpyroximate	1995	2007T(ARFD)	Listed-not scheduled	Listed-not scheduled	
195	flumethrin	1996	none	Listed-not scheduled	Listed-not scheduled	
197	fenbuconazole	1997	none	Listed-not scheduled	Listed-not scheduled	Dow
199	kresoxim-methyl	1998	none	Never scheduled	Never scheduled	
200	pyriproxyfen	1999	none	Never scheduled	Never scheduled	
203	spinosad	2001	none	Never scheduled	Never scheduled	
204	esfenvalerate	2002	none	Never scheduled	Never scheduled	
205	flutolanil	2002	none	Never scheduled	Never scheduled	
206	imidacloprid	2001	none	Never scheduled	Never scheduled	
207	cyprodinil	2003	none	Never scheduled	Never scheduled	
208	famoxadone	2003	none	Never scheduled	Never scheduled	
209	methoxyfenozide	2003	none	Never scheduled	Never scheduled	
210	pyraclostrobin	2003	none	Never scheduled	Never scheduled	
211	fludioxonil	2004	none	Never scheduled	Never scheduled	
212	metalaxyl-M	2002	none	Never scheduled	Never scheduled	
213	trifloxystrobin	2004	none	Never scheduled	Never scheduled	
214	dimethenamid-P	2005	none	Never scheduled	Never scheduled	
215	fenhexamid	2005	none	Never scheduled	Never scheduled	

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
216	indoxacarb	2005	none	Never scheduled	Never scheduled	
217	novaluron	2005	none	Never scheduled	Never scheduled	
218	sulfuryl fluoride	2005	none	Never scheduled	Never scheduled	
219	bifenazate	2006	none	Never scheduled	Never scheduled	
220	aminopyralid	2007	none	Never scheduled	Never scheduled	
221	boscalid	2006	none	Never scheduled	Never scheduled	
222	quinoxifen	2006	none	Never scheduled	Never scheduled	
223	thiacloprid	2006	none	Never scheduled	Never scheduled	
224	difenoconazole	2007	none	Never scheduled	Never scheduled	
225	dimethomorph	2007	none	Never scheduled	Never scheduled	
226	pyrimethanil	2007	none	Never scheduled	Never scheduled	
227	zoxamide	2007	none	Never scheduled	Never scheduled	
229	azoxystrobin	2008	none	Never scheduled	Never scheduled	
230	chlorantraniliprole	2008	none	Never scheduled	Never scheduled	
231	mandipropamid	2008	none	Never scheduled	Never scheduled	
232	prothioconazole	2008	none	Never scheduled	Never scheduled	
233	spinetoram	2008	none	Never scheduled	Never scheduled	
234	spirotetramat	2008	none	Never scheduled	Never scheduled	
235	fluopicolide	2009	none	Never scheduled	Never scheduled	

Code	Chemical	Initial JMPR evaluation	Periodic re-evaluation	Scheduled (Tox)	Scheduled (Residues)	notes
236	metaflumizone	2009	none	Never scheduled	Never scheduled	
237	spirodiclofen	2009	none	Never scheduled	Never scheduled	
238	clothianidin	2010	none	Never scheduled	Never scheduled	
239	cyproconazole	2010	none	Never scheduled	Never scheduled	
240	dicamba	2010	none	Never scheduled	Never scheduled	
241	etoxazole	2010	none	Never scheduled	Never scheduled	
242	flubendiamide	2010	none	Never scheduled	Never scheduled	
243	fluopyram	2010	none	Never scheduled	Never scheduled	
244	meptyldinocap	2010	none	Never scheduled	Never scheduled	
245	thiamethoxam	2010	none	Never scheduled	Never scheduled	
999	acetamiprid	2011	none	Never scheduled	Never scheduled	
999	emamectin-benzoate	2011	none	Never scheduled	Never scheduled	
999	flutriafol	2011	none	Never scheduled	Never scheduled	
999	isopyrazam	2011	none	Never scheduled	Never scheduled	
999	penthiopyrad	2011	none	Never scheduled	Never scheduled	
999	propylene oxide	2011	none	Never scheduled	Never scheduled	
999	saflufenacil	2011	none	Never scheduled	Never scheduled	
999	sulfoxaflor	2011	none	Never scheduled	Never scheduled	

## Appendix 4: Chemical-commodity combinations for which specific GAP is no longer supported

Code	Chemical	comment
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)

## Appendix 5: Chemicals with extraneous MRLs and recent deletions (Source: CX/PR 11/43/3)

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	Not supported
40	fentin	1991	1991	none	Not supported - Removed 2007
53	mevinphos	1997	1997	none	Not supported
136	Procymidone	1981	2007T	none	Not supported – removed 2011
159	Vinclozolin	1992	1995	none	Not supported – removed 2011

## Appendix 6: Periodic re-evaluation - chemicals no longer supported or support unknown

Compound	comments
aldicarb (117)	not supported by the manufacturer
dichlofluanid (82)	not supported by manufacturer
dinocap (87)]	not supported by manufacturer
methidathion (51)	not supported by manufacturer
bromopropylate	not supported by manufacturer
bioresmethrin	not supported by manufacturer
permethrin	not supported by manufacturer
fenarimol	not supported by manufacturer
fenbutatin oxide	not supported by manufacturer
azinphos methyl	support unknown
bromide ion	support unknown
hydrogen phosphide	support unknown
tecnazene	support unknown

## Appendix 7: Periodic re-evaluation – some commodities no longer supported

2013	Commodities	Residue trials provided
diquat (031) [Syngenta] priority 1 - moved on request March 2011	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.	Oil seeds (17 Oilseed rape, 13 soya bean, 14 sunflower), Legume vegetable group (21 peas, 11 beans, 42 pulses), Fruiting vegetable group (including 6 tomato), Root and tuber group (including 12 carrot, 34 potato + 2 potato processing studies), 4 apple, 8 banana, 12 coffee, 6 strawberry.  (does not appear to be support for existing commodity CXLs for alfalfa fodder, cereals, edible offal, meat mammalian, milk poultry)
metalaxyl (138) Quimicas del Vallés - SCC GmbH	Review in 2004 for residues was for evaluation of metalaxyl-M, Support from Quimicas del Vallés - SCC GmbH, USA - Supervised trials by Thailand	NOTE – new supporting manufacturer That Thailand has agreed to provide field trials. Support for all existing commodity CXLs is unknown



## APPENDIX XIV

## REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES

## 1. SCOPE

1. This document addresses the respective applications of risk analysis principles by the Codex Committee on Pesticide Residues (CCPR) as the risk management body and the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) as the risk assessment body and facilitates the uniform application of the Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius. This document should be read in conjunction with the Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius.

## 2. GENERAL ASPECTS

## SUMMARY OF THE MRL-SETTING PROCESS

In addressing pesticide residue issues in Codex, providing advice and taking decisions on risk management is the responsibility of the CAC and CCPR, while conducting risk assessment is the responsibility of JMPR.

The MRL-setting process begins with a member or other interested party nominating a pesticide for evaluation by the JMPR. In considering the nomination, the CCPR, in consultation with the JMPR Joint Secretaries may then prioritize and schedule the pesticide for evaluation..

The WHO Core Assessment Group consider available data encompassing a wide range of toxicological endpoints with the aim of estimating an acceptable daily intake (ADI) and an acute reference dose (ARfD) where sufficient data are available.

The FAO Panel of Experts on Pesticide Residues in Food and the Environment considers data on registered use patterns, fate of residues, animal and plant metabolism, analytical methodology and residue data derived from supervised residue trials in order to propose residue definitions and MRLs for the pesticide in food and feed commodities.

The JMPR risk assessment includes the estimation of both short-term (single day) and long-term dietary exposures and their comparison with the relevant toxicological benchmarks. MRLs in or on food commodities and animal feeds are based on GAP information, taking into consideration information on dietary intakes, and foods derived from commodities that comply with the respective MRLs are intended to be toxicologically acceptable.

The CCPR,, considers the recommendations of JMPR in the light of information provided in the relevant JMPR reports and monographs. MRLs recommendations accepted by the CCPR are submitted to the Codex Alimentarius Commission (CAC) for adoption as Codex MRLs. An active periodic review program complements this process.

CCPR and JMPR should ensure that their respective contributions to the risk analysis process result in outputs that are scientifically based, fully transparent, thoroughly documented and available in a timely manner to members<sup>1</sup>.

## 3. RISK ASSESSMENT POLICY

CCPR shall consider the following when preparing its priority list of compounds for JMPR evaluation:

- CCPR's Terms of Reference;
- JMPR's Terms of Reference;
- The Codex Alimentarius Commission's Strategic Plan;
- [The Criteria for nomination, prioritization and scheduling of compounds or
- The Criteria and Procedures for Proposing Pesticides for Codex Priority Lists;
- The Criteria for Selecting Food Commodities and Animal Feed for which Codex MRLs or Extraneous Maximum Residue Limits (EMRLs) should be Established;
- The Criteria for Evaluation of New Chemicals;
- The Criteria for the Prioritization Process of Compounds for Evaluation by JMPR;]
- A commitment to provide the necessary data for the evaluation in time.]

When referring substances to JMPR, the CCPR shall provide background information and clearly specify the reasons for the request when chemicals are nominated for evaluation.

When referring substances to JMPR, the CCPR may also refer a range of risk management options, with a view toward obtaining JMPR's guidance on the attendant risks and the likely risk reductions associated with each option.

<sup>1</sup> Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed, FAO Plant Production and Protection Paper, 197, 2009, ISBN 978-92-5-106436-8

CCPR shall request JMPR to review any risk assessment policies, methods and guidelines being considered by CCPR for assessing maximum residue limits for pesticides.

When establishing its standards, CCPR shall clearly state when it applies any considerations based on other legitimate factors in addition to JMPR's risk assessment and recommended maximum residue levels and specify its reasons for doing so.

JMPR applies a transparent, science based risk assessment process for establishing Acceptable Daily Intakes (ADIs) and Acute Reference Doses (ARfDs) where appropriate.

JMPR, in consultation with CCPR, must continue to explore developing minimum data requirements necessary for JMPR to perform risk assessments.

The JMPR Secretariat shall consider whether these minimum data requirements have been met when preparing the provisional agenda for meetings of JMPR.

### 3.1 MRLs FOR SPECIFIC COMMODITIES GROUP

#### 3.1.1 MRLs for commodities of animal origin

Farm animal metabolism studies are required whenever a pesticide is applied directly to livestock, to animal premises or housing, or when significant residues remain in crops or commodities used in animal feed, (e.g. forage crops, plant parts that could be used in animal feeds, by products or coproducts of industrial productions). The results of farm animal feeding studies and residues in animal feed serve also as a primary source of information for estimating maximum residue levels in animal products.

If no adequate studies are available, no MRLs will be established for commodities of animal origin. MRLs for feeds (and the primary crops) should not be established in the absence of animal transfer data. Where the exposure of livestock to pesticides through feeds leads to residues at the limit of quantitation (LOQ), MRLs at the LOQ must be established for animal commodities. MRLs should be established for animals for food production where pesticides on feeds are [concerned]. Where direct treatments of pesticides are [concerned] for specific species (e.g. cattle, sheep), MRL should also be established.

[Where the recommended maximum residue level for animal commodities resulting from direct treatment of the animal, regardless of whether they are recommended by JMPR or JECFA, and from residues in animal feed do not agree, the higher recommendation will prevail.]

#### 3.1.2 MRLs for spices

CCPR agreed that MRLs for spices can be established on the basis of monitoring data in accordance with the guidelines established by JMPR.

#### 3.1.3 MRLs for fat-soluble pesticides

If a pesticide is determined as "fat soluble" after consideration of the following factors, it is indicated with the text "The residues are fat soluble" in the residue definition:

- When available, information concerning the partitioning of the residue (as defined) in muscle versus fat in the metabolism studies and livestock feeding studies that determines the designation of a residue as being "fat soluble";
- In the absence of useful information on the distribution of residues in muscle and fat, residues with  $\log Pow > 3$  are likely to be "fat soluble".

For milk and milk products, two maximum residue levels would be estimated for fat-soluble pesticides, if the data permits. One MRL for whole milk and one for milk fat. For enforcement purposes, a comparison can be made between either the residues in milk fat with the MRL for milk (fat), or the residue in whole milk with the MRL for milk. When needed, MRLs for milk products can then be calculated from the two values, by taking into account the fat content of the milk product and the contribution from the non-fat fraction.

For regulation and monitoring of residues of fat-soluble pesticides in milk, where MRLs have been established for both whole milk and milk fat, whole milk should be analysed and the result should be compared with the Codex MRL for whole milk. (FAO Manual, 2009).

#### 3.1.4 MRLs for processed or ready-to-eat foods or Feeds

The JMPR evaluates processing studies to derive processing factors used to estimate residues concentrations in processed commodities for dietary risk assessments and, if necessary, recommended maximum residue levels for processed commodities.

The CCPR agreed to:

- Establish MRLs for important processed commodities;

- Establish MRL for the processed commodities only if the resulting value is higher than the MRL established for the corresponding raw agriculture commodity (RAC)<sup>2</sup> (PF>1.3);
- Continue the practice of establishing MRLs for processed commodities where, due to the nature of the residues during some specific process, significant amounts of other relevant metabolites appear or increase; and
- Support the current JMPR practice of evaluating all processing studies provided and including in each *Evaluation/Review* a summary table of all validated processing factors.

### 3.1.5 Establishment of EMRLs

The Extraneous Maximum Residue Limit (EMRL) refers to a pesticide residue or a contaminant arising from environmental sources due to former agricultural uses other than the use of the pesticide directly or indirectly on the commodity. It is the maximum concentration of a pesticide residue that is recommended by the Codex Alimentarius Commission to be recognized as acceptable in or on a food, agricultural commodity or animal feed.

Chemicals for which EMRLs are most likely to be needed are persistent in the environment for a relatively long period after uses have been discontinued and are expected to occur in foods or feeds at levels of sufficient concern to warrant monitoring.

All relevant and geographically representative monitoring data (including nil-residue results) are required to make reasonable estimates to cover international trade<sup>3</sup>. JMPR has developed a standard format for reporting pesticide residues monitoring data.

The JMPR compares data distribution in terms of the likely percentages of violations that might occur if a given EMRL is proposed to the CCPR.

Because residues gradually decrease, CCPR evaluates every 5 years, if possible, the existing EMRLs, based on the reassessments of the JMPR.

## 4. RISK ASSESSMENT

### 4.1 ROLE OF JMPR

The Joint FAO/WHO Meeting on Pesticide Residues (JMPR) consists of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group. It is an independent scientific expert body convened by both Directors General of FAO and WHO according to the rules of both organizations, charged with the task to provide scientific advice on pesticide residues.

This document applies to the work of JMPR in the context of Codex and in particular as it relates to advice requests from CCPR.

JMPR is primarily responsible for performing the risk assessments and proposing MRLs upon which CCPR and ultimately the CAC base their risk management decisions. JMPR proposes maximum residue levels based on Good Agricultural Practices (GAPs)/registered uses or in specific cases, such as EMRLs and MRLs for spices based on monitoring data.

JMPR provides CCPR with science-based risk assessments that include the four components of risk assessment as defined by CAC, namely hazard identification, hazard characterization, exposure assessment and risk characterization that can serve as the basis for CCPR's discussions.

JMPR should identify and communicate to CCPR in its assessments any information on the applicability and any constraints of the risk assessment in regard to the general population and to particular sub-populations and shall, as far as possible, identify potential risks to populations of potentially enhanced vulnerability (e.g. children).

JMPR communicates to CCPR possible sources of uncertainties in the exposure assessment and/or in the hazard characterization of the compound that, if resolved, would allow a refinement of the risk assessment.

### 4.2 DIETARY INTAKE

JMPR is responsible for evaluating exposure to pesticides. JMPR must strive to base its exposure assessment and hence the dietary risk assessments on global data, including that from developing countries. In addition to GEMS/Food data, monitoring data and exposure studies may be used. The GEMS/Food diets are used to assess the risk of chronic exposure. The acute exposure calculations are not based on those diets, but on the available high percentile consumption data as provided by members and compiled by GEMS/Food.

In undertaking dietary exposure risk assessments to assist the CCPR, the JMPR uses the WHO Guidelines<sup>4</sup> and other documents<sup>5</sup>. The JMPR recommends Supervised Trial Median Residues (STMRs) and Highest Residues (HRs) for dietary intake purposes.

<sup>2</sup> Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed; FAO Plant protection and Protection Paper, 197, 2009, ISBN 978-92-5-106436-8.

<sup>3</sup> Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed; FAO Plant protection and Protection Paper, 197, 2009, ISBN 978-92-5-106436-8.

<sup>4</sup> WHO Guidelines: WHO/FSF/FOS/97.7.

<sup>5</sup> FAO. 2003. Pesticide Residues in Food 2003- Report. FAO Plant Production and Protection Paper No. 176 FAO, Rome. Chapter 3.

When the ADI is exceeded in one or more cluster diets, the JMPR further refines the dietary intake estimates at the international level. If further refinement is possible the CCPR should advance the MRLs to Step 8 provided that the MRLs give no longer rise to intake concerns. If further refinement is not possible or the refinement still give rise to intake concern, the JMPR flags this situation when recommending maximum residue levels and the CCPR will decide on which MRLs could be advanced and which ones should be deleted.

The JMPR establishes acute reference doses (ARfDs), where appropriate, and indicates cases where an ARfD is not necessary. Since 1999, the JMPR calculates the International Estimate of Short-term Intake (IESTI), following a procedure described previously (FAO, 2003). This procedure allows for the estimation of the IESTI for the General Population and for Children (less than 6 years old).

Where the ARfD is exceeded for a compound/commodity, the JMPR report should describe the particular situation that gives rise to that acute intake concern. The JMPR shall examine available information on alternative GAPs and associated residue trials where the ARfD is not exceeded and recommends an MRL associated with this alternative GAP. This procedure has been referred to as the "prospective alternative GAP analysis"

Under this procedure, having analyzed the situation, if an acceptable alternative GAP is not available at the moment of the evaluation, interested parties should be able to supply both labels and field trial data that support an alternative GAP within the next year. If a GAP is provided but no field trial data according to this GAP, JMPR may consider a rough estimate on the safety of the use using the proportionality principle according the agreed criteria in which case the proposed MRL may be returned to Step 6 three times. The data will be evaluated by JMPR on request of CCPR as soon as they become available. If no data are supplied the CCPR should proceed to withdraw the draft MRL

The estimate of the short-term dietary intake requires substantial food consumption data that currently are only sparsely available. Governments are urged to generate relevant consumption data and to submit these data to the WHO.

## 5. RISK MANAGEMENT

### 5.1 ROLE OF CCPR

CCPR is primarily responsible for recommending risk management proposals, such as MRLs, for adoption by the CAC.

CCPR shall base its risk management recommendations to the CAC on JMPR's risk assessments of the respective pesticides, considering, where appropriate, other legitimate factors<sup>6</sup> relevant for health protection of consumers and for the promotion of fair practices in food trade

In cases where JMPR has performed a risk assessment and CCPR or the CAC determines that additional scientific guidance is necessary, CCPR or CAC may make a specific request to JMPR to provide further scientific guidance necessary for a risk management decision.

CCPR's risk management recommendations to the CAC shall take into account the relevant uncertainties as described by JMPR.

CCPR shall consider only maximum residue levels recommended by JMPR.

CCPR shall base its recommendations on the GEMS/Food diets used to identify consumption patterns. The GEMS/Food diets are used to assess the risk of chronic exposure. The acute exposure calculations are not based on those diets, but available consumption data provided by members and compiled by GEMS/Food.

[If no validated methods of analysis are available for enforcing MRLs for a specific compound, no MRLs will be established by CCPR.]

**(Remaining Section 5 on the priority setting and the periodic review – for further development)**

## 6. ELABORATION PROCEDURE

### 6.1 UTILIZATION OF STEPS 5/8 FOR ELABORATION OF MRLS

*Preconditions for utilization of Step 5/8 Procedure*

- New MRL circulated at Step 3;
- JMPR report available electronically by early February;
- No intake concerns identified by JMPR.

*Steps 5/8 Procedure (Recommendation to omit Steps 6 and 7 and adopt the MRL at Step 8)*

- If the preconditions listed above are met;

<sup>6</sup> Statement of Principle Concerning the Role of Science in the Codex Decision-Making Process and the Extent to Which Other Factors are Taken into Account, Codex Procedural Manual, 18<sup>th</sup> Edition, page 171.

- If a delegation has a concern with advancing a given MRL, a concern form must be completed detailing the concern along with a description of the data that will be submitted to substantiate the concern preferably as comments at Step 3, or at the latest, one month after the CCPR session at which the concern was raised;
- If the JMPR Secretariat or the CCPR can address that concern at the upcoming CCPR session, and the JMPR position remains unchanged, the CCPR will decide if the MRL will be advanced to Step 5/8;
- If the concern cannot be addressed at the meeting, the MRL will be advanced to Step 5 at the CCPR session and the concern will be addressed by the JMPR as soon as possible. Any other draft MRLs for the pesticide, satisfying the above conditions, should be advanced to Step 5/8;
- The result of the consideration of the concern by the JMPR will be considered at the next CCPR session. If the JMPR position remains unchanged, the CCPR will decide if the MRL will be advanced to Step 8;
- When the ADI is exceeded in one or more cluster diets, or the ARfD is exceeded in the one or more food commodities, the MRLs will not advance to Step 8.

## 6.2 DELETING CODEX MRLS

Codex MRLs are proposed for deletion in the following scenarios:

- a) As a result of the periodic reevaluation;
- b) Where new scientific data, following the JMPR risk assessment, indicate that the active compound use may compromise human health;
- c) The active compound is no longer produced and commercialized, and there is no remaining stock;
- d) The active compound is produced but is not used in food or feed;
- e) There is no international trade of commodities in which the active compound may have been used.

When a compound meets one or more of conditions (a-e), its MRL list will be included in the agenda for the next CCPR session for the Committee to consider a recommendation to the CAC for withdrawal of the MRLs. Decisions of the CAC on deletion of MRLs will take effect a year after the close of the session of the CAC where such decisions were made.

**Note:** if a pesticide meets the above stated conditions and is environmentally persistent, EMRLs are needed to cover international trade after its MRLs are deleted.

**(Section 7 – procedure for submitting concern form – for further development)**

## 8. RISK COMMUNICATION

In accordance with the *Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius*, the CCPR, in cooperation with JMPR, shall ensure that the risk analysis process is fully transparent and thoroughly documented and that results are made available in a timely manner to Members.

In order to ensure the transparency of the assessment process in JMPR, the CCPR provides comments on the guidelines related to assessment procedures being drafted and published by JMPR.

CCPR and JMPR recognize that good communication between risk assessors and risk managers is an essential requirement for successfully performing their risk analysis activities.

CCPR and JMPR must continue to develop procedures to enhance communication between the two bodies.