

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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

ALINORM 09/32/24

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

*Thirty-second Session
Rome, Italy, 29 June - 4 July 2009*

**REPORT OF THE FORTY-FIRST SESSION OF THE
CODEX COMMITTEE ON PESTICIDE RESIDUES**

Beijing, China, 20 – 25 April 2009

Note: This report includes Codex Circular Letter CL 2009/14-PR

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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

CX 4/40.2

CL 2009/14-PR
May 2009

TO: - Codex Contact Points
- Interested International Organizations

FROM: Secretary,
Codex Alimentarius Commission
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla,
00153 Rome, Italy

SUBJECT: DISTRIBUTION OF THE REPORT OF THE FORTY-FIRST SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES (ALINORM 09/32/24)

The report of the Forty-First Session of the Codex Committee on Pesticide Residues will be considered by the 32nd Session of the Codex Alimentarius Commission (Rome, Italy, 29 June - 4 July 2009).

PART A: MATTERS FOR ADOPTION BY THE 32ND SESSION OF THE CODEX ALIMENTARIUS COMMISSION:

- 1. Draft and Draft Revised Maximum Residue Limits for Pesticides at Step 8 (paras 60-130 and Appendix II); and**
- 2. Proposed Draft Maximum Residue Limits for Pesticides at Step 5/8 – with omission of Steps 6 and 7 - (paras 60-130 and Appendix III)**

Governments and interested international organizations wishing to submit comments on the above draft and proposed draft MRLs, including the implications they may have for their economic interest, should do so in writing, in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (*Codex Alimentarius Procedural Manual*), **preferably by email**, to the Secretary, 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) **before 15 June 2009**.

- 3. Proposed Draft Maximum Residue Limits for Pesticides at Step 5 (paras 79, 91, 116, 124 and Appendix IV); and**
- 4. Proposed Draft Revision of the Codex Classification of Foods and Animal Feeds at Step 5 - Proposals for Eight Commodity Groups: Bulb Vegetables; Fruiting Vegetables, other than cucurbits; Berries and other Small Fruits; Edible Fungi; Citrus Fruits; Pome Fruits; Stone Fruits; and Oilseeds (para. 146 and Appendix IX)**

Governments and interested international organizations wishing to submit comments on the above proposed draft MRLs and related texts, including the implications which they may have for their economic interest, should do so in writing in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (*Codex Alimentarius Procedural Manual*), **preferably by email**, to the above address **before 15 June 2009**.

PART B: OTHER MATTERS FOR ACTION BY THE 32ND SESSION OF THE CODEX ALIMENTARIUS COMMISSION

5. Codex Maximum Residue Limits for Pesticides recommended for Revocation and Draft Codex Maximum Residue Limits for Pesticides recommended for Withdrawal (paras 60-130 and Appendices V and VIII)

Governments and interested international organizations wishing to submit comments on the proposed revocations on Codex MRLs or discontinuation of work on draft MRLs should do so in writing, **preferably by email**, to the above address **before 15 June 2009**.

PART C: REQUEST FOR COMMENTS AND INFORMATION ON:

6. Draft Maximum Residue Limits for Pesticides at Step 6 (paras 60-130 and Appendix VII)

Those countries and observers specified under individual compounds in the ALINORM 09/32/24 concerning matters related to the FAO Panel of the JMPR (GAP, residue evaluation, intake assessment, etc.) on specific pesticide/commodity(ies) to be considered by JMPR 2009 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; **2)** Dr Angelika TRITSCHER, WHO JMPR Secretary, Appia Avenue 20, 1211 Geneva 27, Switzerland, Fax: +41 22 791 4848, E-mail: tritschera@who.int; **3)** Dr Zongmao CHEN, Chairperson of the Committee, Academician, Chinese Academy of Engineering, Professor, Chinese Academy of Agricultural Sciences, No.1, Yunqi Road, Hangzhou/Zhejiang 310008, P.R. CHINA, Fax: +86 571 8665 0056, E-mail: ccprc@agri.gov.cn; and **4)** Secretary, 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) **before 15 June 2009**.

The deadline for the submission of concern forms together with necessary data is **15 June 2009**.

Those countries and observers specified under individual compounds in ALINORM 09/32/24, Appendix XI 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

The summary and conclusions of the 41st Session of the Codex Committee on Pesticide Residues are as follows:

MATTERS FOR ADOPTION BY THE 32ND SESSION OF THE COMMISSION

The Committee recommended to the Commission:

Adoption of MRLs and other related texts

- Adoption of draft and draft revised MRLs at Step 8, including proposed draft MRLs at Step 5/8, for pesticide/commodity combinations (paras 60-130 and Appendices II and III);
- Adoption of proposed draft MRLs at Step 5 for pesticide/commodity combinations (paras. 60-130 and Appendix IV);
- Adoption of the proposed draft revision of the *Codex Classification of Foods and Animal Feeds* for eight commodity groups (para. 46 and Appendix IX).

Revocation of MRLs

- Revocation of Codex MRLs for pesticide/commodity combinations (paras 60-130 and Appendix V);

Discontinuation of work

- Discontinuation of work on the establishment of MRLs for pesticide/commodity combinations (paras 60-130 and Appendix VIII).

Approval of new work

- Priority List for the establishment of MRLs for pesticide/commodity combinations (paras 60-130 and Appendix XI);

MATTERS OF INTEREST TO THE COMMISSION

The Committee:

- agreed to retain several draft and proposed draft MRLs at Steps 7 and 4 respectively awaiting for JMPR evaluation (paras 60-130 and Appendix VI);
- agreed to return several draft MRLs to Step 6 for further comments and consideration at its next session (paras 60-130 and Appendix VII);
- agreed to return the proposed draft revision of the Guidelines on the Estimation of Uncertainty of Results for the Determination of Pesticide Residues to Step 3 for circulation for additional comments and consideration at its next session (para. 160 and Appendix X);
- agreed that the Codex Secretariat would prepare a paper containing an analysis of the references to pesticide residues in CODEX STAN 229-1993 and various sections of Volume 2 of the Codex Alimentarius, which had been discontinued for publication, for consideration at its next session (paras 9-10);
- agreed that the Codex Secretariat would issue a Circular Letter requesting monitoring data for persistent organic pollutants (POPs), falling under the Stockholm Convention and the mandate of the Committee, for commodities for which Codex extraneous maximum residue limits (EMRLs) have been or should be established, for consideration at its next session (paras 15-16);
- agreed that a list of validated analytical methods for the determination of pesticide residues in natural mineral waters would not be developed but maintained as a repository list on the IAEA website and to this purpose, information on such methods would be gathered by means of a Circular Letter to be issued by the Codex Secretariat (para. 21);
- agreed to return the proposed draft Principles and Guidelines for the Selection of Representative

Commodities for the Extrapolation of MRLs for Commodity Groups to Step 2 for redrafting, circulation for additional comments and consideration at its next session (para. 155);

- agreed to discontinue the consideration of a pilot project for achieving globally harmonized MRLs through Codex as no consensus could be reached to initiate such a project (para. 176);
- agreed to return the Risk Analysis Principles applied by the Codex Committee on Pesticide Residues for further revision, circulation for additional comments and consideration at its next session. The Committee acknowledged that the revision should be finalized by 2010 as the Committee on General Principles would review the consistency of risk analysis principles elaborated by relevant subsidiary bodies of the Commission in 2011 (paras 184-185).
- agreed to continue to identify and address issues related to minor uses and specialty crops; elaborate definitions of these terms for use by CCPR and JMPR; identify priority minor uses and specialty crops for MRLs setting for their inclusion in the Priority List and facilitate their submission to JMPR (para. 215);
- noted the information and conclusion on the evaluation of distribution of pesticide residues after primary process in selected products and agreed that a paper on the use of Kow (n-octanol-water partition coefficient) for the estimation of processing factors would be prepared for consideration at its next session (paras 158 and 216); and
- agreed that there was no need for further elaboration of principles and practices related to the establishment of MRLs for processed foods (para. 222).

TABLE OF CONTENTS

Paragraphs

INTRODUCTION	1
OPENING OF THE SESSION	2-3
DIVISION OF COMPETENCE.....	4
ADOPTION OF THE AGENDA (AGENDA ITEM 1).....	5
APPOINTMENT OF RAPPORTEURS (AGENDA ITEM 2)	6
MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND/OR OTHER CODEX COMMITTEES (AGENDA ITEM 3)	7-21
REPORT ON GENERAL CONSIDERATIONS BY THE 2007 JOINT FAO/WHO MEETINGS ON PESTICIDE RESIDUES (AGENDA ITEM 4).....	22-59
DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES IN FOODS AND FEEDS AT STEPS 7 AND 4 (AGENDA ITEM 5).....	60-130
GENERAL REMARKS	60
Carbaryl (008)	62-65
Dicofol (026)	66-67
Dimethoate (027).....	68
Malathion (049).....	71-72
Mevinphos (053)	73
Paraquat (057)	74-75
Dichlofluanid (082).....	76
Chlorpyrifos-Methyl (082).....	77
Methomyl (094).....	78-81
Acephate (095)	82
Carbofuran (096)	83-85
Methamidophos (100)	86
Phosmet (103).....	87
Dithiocarbamates (105)	88
Phorate (112)	89
Cypermethrins (including Alpha- and Zeta- Cypermethrin) (118)	90-94
Oxamyl (126)	95-96
Diflubenzuron (130)	97
Triadimefon (133)	98
Prochloraz (142).....	100
Triazophos (143)	101
Carbosulfran (145)	102
Cyhalothrin (including Lambda-Cyhalothrin) (146)	104

Cyfuthrin (157).....	106
Flusilazole (165).....	109-110
Triadimenol (168).....	111
Profenofos (171).....	113-114
Buprofezin (173)	115
Tebuconazole (189).....	116
Fenpyroximate (193).....	117
Haloxyfop (194)	118
Esfenvalerate (204).....	120
Metalaxyl-M (212)	122
Bifenazate (219)	123
Boscalid (221)	124
Chlorantraniliprole (230).....	126
Prothioconazole (232)	128
PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS AT STEP 3 (AGENDA ITEM 6)	
Revision of the Classification.....	131-146
Selection of Representative Commodities.....	147-155
MATTERS RELATED TO METHODS OF ANALYSIS FOR PESTICIDE RESIDUES (AGENDA ITEM 7)	
Proposed draft revision of the Guidelines on the Estimation of Uncertainty of Results for the Determination of Pesticide Residues (Agenda Item 7a)	156-161
ACHIEVING GLOBALLY HARMONIZED MRLs THROUGH CODEX (AGENDA ITEM 8)	
.....	162-176
REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES (AGENDA ITEM 9)	
.....	177-185
ESTABLISHMENT OF CODEX PRIORITY LIST OF PESTICIDES (AGENDA ITEM 10)	
Scheduling of compounds	186-188
New compounds.....	189-191
Periodic re-evaluations	192-194
Evaluations	195-200
.....	201-207
OTHER BUSINESS AND FUTURE WORK (AGENDA ITEM 11)	
Discussion Paper on the Guidance to facilitate the Establishment of Codex MRLs for Minor Uses and Specialty Crops (Agenda Item 11(i))	208-215
Discussion Paper on the Evaluation of Distribution of Pesticide Residues after Primary Process in Citrus Fruits, Pome Fruit, Oilseeds and Wine Grapes (Agenda Item 11 (ii))	216-217
Further consideration of Processing as related to the Establishment of MRLs for Processed Foods: Recommendations on Principles and Practice (Agenda Item 11 (iii))	218-222
DATE AND PLACE OF THE NEXT SESSION (AGENDA ITEM 12)	
.....	223

LIST OF APPENDICES

	Pages
APPENDIX I LIST OF PARTICIPANTS	27
APPENDIX II DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (RECOMMENDED FOR ADOPTION AT STEP 8).....	49
APPENDIX III PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (RECOMMENDED FOR ADOPTION AT STEP 5/8)	50
APPENDIX IV PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (RECOMMENDED FOR ADOPTION AT STEP 5).....	58
APPENDIX V CODEX MAXIMUM RESIDUE LIMITS FOR PESTICIDES RECOMMENDED FOR REVOCATION.....	59
APPENDIX VI PROPOSED DRAFT AND DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (RETAINED AT STEPS 7 AND 4 RESPECTIVELY).....	63
APPENDIX VII PROPOSED DRAFT AND DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES (RETURNED TO STEP 6).....	65
APPENDIX VIII DRAFTS CODEX MAXIMUM RESIDUE LIMITS FOR PESTICIDES WITHDRAWN.....	66
APPENDIX IX PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS - PROPOSALS FOR EIGHT COMMODITY GROUPS: <i>Bulb Vegetables; Fruiting Vegetables, other than cucurbits; Berries and other Small Fruits; Edible Fungi; Citrus Fruits; Pome Fruits; Stone Fruits; and Oilseeds</i>	68
APPENDIX X PROPOSED DRAFT REVISION OF THE GUIDELINES ON THE ESTIMATION OF UNCERTAINTY OF RESULTS FOR THE DETERMINATION OF PESTICIDE RESIDUES	94
APPENDIX XI PRIORITY LIST OF CHEMICALS SCHEDULED FOR EVALUATION AND RE-EVALUATION BY JMPR	102

LIST OF ABBREVIATIONS

(Used in this Report)

CAC	Codex Alimentarius Commission
CCFA	Codex Committee on Food Additives
CCGP	Codex Committee on General Principles
CCMAS	Codex Committee on Methods of Analysis and Sampling
CCNFSDU	Codex Committee on Nutrition and Foods for Special Dietary Uses
CCPR	Codex Committee on Pesticide Residues
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
CLI	CropLife International
EFSA	European Food Safety Authority
EWG	Electronic Working Group
EC	European Community
FAO	Food and Agricultural Organization of the United Nations
GEMS/Food	Global Environment Monitoring System - Food Contamination Monitoring and Assessment Programme
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meetings on Pesticide Residues
OECD	Organisation for Economic Co-operation and Development
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
USA	United States of America
WHO	World Health Organization
WTO	World Trade Organization
ARfD	Acute Reference Dose
ADI	Acceptable Daily Intake
CXL	Codex Maximum Residue Limit for Pesticide
DIE	Daily Intake Estimate
GAP	Good Agricultural Practice in the Use of Pesticides
EMRL	Extraneous Maximum Residue Limit
HR	Highest residue in edible portion of a commodity found in trials used to estimate a maximum residue level in the commodity
IESTI	International Estimated of Short-Term Intake
MRL	Maximum Residue Limit

INTRODUCTION

1. The Codex Committee on Pesticide Residues (CCPR) held its 41st Session in Beijing, China, from 20 to 25 April 2009 at the kind invitation of the Government of China. Professor Chen Zongmao, Academician of the Chinese Academy of Engineering chaired the Session, assisted by Dr Qiao Xiongwu, Vice President, Shanxi Academy of Agricultural Sciences, China, as Vice-chairperson. The Session was attended by 246 delegates representing 71 Member Countries, one Member organization and 10 International Organizations. The list of participants is attached as Appendix I to this Report.

OPENING OF THE SESSION

2. Mr Zhang Taolin, Vice Minister of Agriculture, China, opened the session. In welcoming participants, he emphasized the important role and achievements of this Committee in ensuring the safety of agricultural products traded internationally. Mr Zhang informed the delegates about the new developments in improving food safety in China, including the new Food Safety Law that had been adopted and would come into force in June 2009, as well as China's continuing efforts to support the work of this Committee.

3. Dr Mukundan Pillay, Environmental Health Adviser, WHO Representative Office in China also welcomed delegates. He thanked the Government of China for its support in hosting two important Codex committees, namely this Committee and the Committee on Food Additives and welcomed the recent developments in China as presented by the Vice Minister of Agriculture. He emphasized the need for such modern food safety laws comprising the farm-to-table concept as recommended by FAO and WHO.

Division of Competence¹

4. The Committee noted the division of competence between the European Community (EC) 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)²

5. The Committee adopted the Provisional Agenda as the Agenda for the Session, noting that the two documents on pesticide residues in processed foods (CX/PR 09/41/10 and CX/PR 09/41/11), which had been in advertently omitted from the Provisional Agenda, would be considered by this session.

APPOINTMENT OF RAPORTEURS (Agenda Item 2)

6. Mr David Lunn (New Zealand) and Ms Kathy Monk (United States of America) were appointed as rapporteurs.

MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND/OR OTHER CODEX COMMITTEES (Agenda Item 3)³

7. The Committee noted that a number of matters referred from the 31st Session of the Codex Alimentarius Commission (CAC) and the 61st Session of the Executive Committee were for information purposes or would be discussed in more detail by the current session of the CCPR under the relevant Agenda Items.

8. Other issues were discussed as follows.

¹ CRD 2 (Division of the Competence between the European Community and its Member States).

² CX/PR 09/41/1.

³ CX/PR 09/41/2; CX/PR 09/41/2-Add.1; CRD 2 (Division of Competence Between the European Community and its member States), CRD 3 (European Community), CRD 4 (Kenya), CRD 17 (China).

Amendments to Codex Standards and Related Texts

9. Until 2001 Codex standards and related texts had been published in a number of volumes, which had since been discontinued to save costs.

10. The Commission noted that the “Analysis of Pesticide Residues: Recommended methods (CODEX STAN 229-1993)” contained a number of references to different sections of Volume 2 dealing with pesticide residues, which were still valid because they had not been replaced with other texts and which had no separate identification number. The Committee agreed to request the Codex Secretariat to prepare a paper containing an analysis of these discrepancies in order to take a more informed decision on this matter at its next session.

Persistent Organic Pollutants (POPs)

11. The Committee noted that the Codex Alimentarius Commission had established a number of EMRLs in the past for pesticides whose agricultural use has been phased out under the Stockholm Convention on Persistent Organic Pollutants (POPs).

12. The Representative of the WHO informed the Committee that DDT will be discussed at the upcoming fourth Conference of the Parties to the Stockholm convention, and that WHO is holding an expert consultation in early June to review DDT and possible health effects, taking into account all new data.

13. Some delegations were of the view that Codex EMRLs for POPs were necessary for trade purposes and should be retained for some time because, due to persistence, they were still present in the environment and, as a consequence, in food, despite the fact that POPs were not used for plant protection anymore.

14. However, some delegations were of the view that there was possibly a need for revision of these EMRLs based on new monitoring data because their data indicate that levels of POPs were decreasing in foods.

15. After some discussion, the Committee agreed, by means of circular letter, to request monitoring data for POPs which fall under the Stockholm Convention and that are within the CCPR terms of reference, not only for commodities for which Codex EMRLs were established but also in other foods. Countries are requested to provide the monitoring data and additional information on methods of analysis using the GEMS/Food format.

16. The Committee also agreed to establish an Electronic Working Group chaired by India and co-chaired by Australia and New Zealand working in English only who, based on information received in response to the above CL, would prepare a paper containing proposals on how to deal with this issue for consideration by the next session of the Committee. The Committee requested this electronic working group to make a provisional evaluation of the monitoring data in order to make a more informed decision at the next session.

Amendment to the Standard for Natural Mineral Waters (CODEX STAN 108-1991)

17. The Committee noted that the 30th Session of the Commission agreed with the revision of the Standard for Natural Mineral Waters on the provisions for health-related substances in view of the completion of the revision of the WHO Guidelines for Drinking Water Quality which resulted in some discrepancies of the values of certain health related substances between the two documents⁴. The 31st Session of the Commission noted that the Standard did not indicate specific methods of analysis and sampling procedures for a number of chemical substances including pesticides and agreed to refer the issue to the relevant committees, including the Committee on Pesticide Residues⁵.

18. The Committee had an exchange of views on how to approach this matter in relation to its mandate.

19. The WHO Representative informed the Committee that the WHO Guidelines described analytical methods for pesticide residues in drinking water and was of the view that the Committee could make reference to these methods.

⁴ ALINORM 07/30/REP, paras. 164-167.

⁵ ALINORM 08/31/REP, paras. 106-108.

20. The Delegation of the European Community drew the attention of the Committee to its previous decision that a list of methods of analysis for pesticides would not be developed as a Codex document but would stay as a repository list on the IAEA website⁶. The Representative of IAEA expressed its support to expand the database on methods of analysis by collecting data on validated analytical methods for pesticide residues in natural mineral waters.

21. In view of the above considerations, the Committee noted that the WHO Guidelines for Drinking Water Quality contained guideline levels for pesticide residues and corresponding methods of analysis and agreed that, in view of its previous decision not to develop a list of methods of pesticide analysis in the Step Procedure, there was no need to develop a list of analytical methods for the determination of pesticide residues in natural mineral waters but that validated methods for natural mineral water should be maintained in the repository on the IAEA website. The Committee also agreed that information on validated analytical methods for the control of pesticide levels in natural mineral waters would be gathered through the issuance of a Circular Letter.

REPORT ON ITEMS OF GENERAL CONSIDERATION BY THE 2008 JOINT FAO/WHO MEETINGS ON PESTICIDE RESIDUES (JMPR) (Agenda Item 4 (a))⁷

2.1 Comments from JMPR on a pilot process for JMPR to recommend maximum residue levels prior to national government registration

22. The Committee noted that considerations and recommendations by JMPR have already been taken into account in the paper on Globally Harmonized MRLs through Codex to be discussed under Agenda Item 8 and details would be discussed under this item.

2.2 Comments on the “Global Assessment” of chlorantraniliprole in terms of its usefulness as a work-sharing tool for JMPR

23. In order to continue efforts on work-sharing to preserve limited resources, a document on the pilot global assessment of chlorantraniliprole, conducted by several regulatory authorities under the auspice of OECD, was made available to JMPR. Only the toxicological assessment was available, the residue component of the global assessment was not available in time for the JMPR meeting.

24. The JMPR concluded that the global assessment of chlorantraniliprole was helpful for the preparation of the JMPR monograph on this pesticide and also made a number of recommendations to improve the usefulness of the global assessment documents for JMPR.

2.3 A process to ensure the scientific robustness and transparency of retrospective analyses of toxicity data on pesticide chemicals

25. Compilation and analysis of toxicity data on the hundreds of chemicals evaluated, so-called retrospective analyses are currently undertaken by several national and supra-national bodies to address specific questions such as the duration of studies in dogs as the basis for ADI, etc. In order to improve transparency and harmonization of these retrospective analysis OECD has formed a task group to develop guidance on this matter. This task group has asked JMPR to comment on how retrospective analysis of toxicity databases may improve the risk assessment of pesticides.

26. JMPR acknowledged the importance of retrospective analyses of toxicity databases and noted that JMPR could provide an independent international opinion on the scientific robustness and transparency of these analyses. JMPR recommended a pilot process and to liaise with the OECD task group to identify a suitable retrospective analysis.

⁶ ALINORM 07/30/24, para. 164.

⁷ Section II, Pesticide Residues in Food 2008, Joint FAO/WHO Meeting on Pesticide Residues, Report 2008, FAO Plant Production and Protection Paper 193, Rome, 2009; and CRD 5 (comments from the European Community; the United States of America (CRD 8); and CRD 20 (CropLife International).

2.4 Comments on OECD guidance document for derivation of an acute reference dose

27. JMPR discussed a recent draft of the OECD guidance document for the derivation of an acute reference dose. This document is generally based on the JMPR guidance, which was developed for oral exposure. However, the OECD guidance also includes dermal and inhalation exposure. JMPR recommended that the OECD guidance document focus only on oral exposure, and that for dermal and inhalation exposure, which requires specific considerations, a separate document be developed. JMPR also recommended that the JMPR and OECD guidance on the setting of ARFDs would benefit from further detailed guidance, based on considerations already developed by several JMPR meetings.

2.5 Cumulative risk assessment for pesticide residues in food: Activities of the European Food Safety Authority

28. The JMPR will continue to monitor ongoing activities on cumulative risk assessment and advice on the need for cumulative risk assessment for certain groups of compounds.

2.6 Safety factors for Acute C_{MAX} -Dependent effects: Specific considerations with respect to carbamates such as carbofuran

29. In deriving health-based guidance values, such as ADI and ARfD, JMPR applies the paradigm developed by IPCS, in identifying the critical No-Observed Adverse-Effect-Level (NOAEL) and applying appropriate safety factors, also called uncertainty or adjustment factors. These factors allow for inter-species and inter-individual variations in toxicokinetics and toxicodynamic responses. In order to allow for integration of chemical-specific data, IPCS subsequently published guidance on subdividing the default factors to derive Chemical Specific Adjustment Factors (CSAF). JMPR applies this guidance and together with other published scientific considerations aims to develop chemical specific adjustment/uncertainty factors if data allow, instead of using default assumptions. This approach is applied to compounds where toxicological effects are dependant on peak exposures (C_{max}) rather than total exposure (area-under-the-curve), and hence adjustments to default factors are justified. JMPR applies this approach to carbamates and specifically it was used for carbofuran at the 2008 meeting when it was concluded that there is strong scientific support to use a combined uncertainty factor of no more than 25 for carbofuran.

2.7 Transparency in the maximum residue level estimation process of the JMPR

30. The 40th Session of the Committee requested the JMPR to provide brief explanations of the derivation of each MRL estimate and to publish a calculation summary table in the JMPR report.

31. The Committee was informed that the JMPR had been using the NAFTA spreadsheet as a tool and not as the primary determinant of estimations, since NAFTA spreadsheet was not a statistical model for the accurate estimation of maximum residue levels but it was rather a decision-tree logic that utilized statistical calculations to arrive at a reasonable MRL that should be acceptable to different parties considering the same data set. The FAO JMPR Secretariat emphasized that the estimation was not a simple matter of entering the residue trial numbers into a spreadsheet and recording the output but that JMPR looked at both the numbers and the basis of those numbers and considered all relevant aspects in arriving at its MRL estimates.

32. In response to the CCPR request, a simple example was used to illustrate the process, but no number of examples could address all the situations encountered by the Meeting in reaching decisions on MRLs. The JMPR Meeting provided to the CCPR, on a trial basis, a concise form summarizing the derivation of MRLs from the 2008 Meeting.

33. The FAO JMPR Secretariat requested the Committee to review the forms, evaluate the usefulness of the information, and decide if they wish JMPR to include the information routinely in an Annex to the JMPR Report.

34. JMPR welcomed a harmonized statistical calculation method and agreed to use the 'OECD calculator for MRLs' as a trial in the 2009 evaluation, if this method was available for the upcoming JMPR meeting.

However, it was difficult for JMPR to provide a table to explain every recommended MRL, in particular at the testing stage of 'OECD calculator for MRLs'.

35. The Delegation of the USA indicated that the explanations contained in the table of 2008 JMPR Report were not sufficient because they did not explain the derivations of MRLs, but only why the NAFTA calculator was not used. The Delegation requested that a statistical calculation method be used as the first estimation of an MRL and the MRL recommended by the statistical procedure would be rejected only if it was clearly unreasonable. The Delegation indicated that there was a need to develop calculation procedures that all members could support and strive for a harmonized commodity grouping scheme because their analysis showed that those were two of the main reasons that different MRLs are derived from the same data set. The Delegation reiterated that it would be useful if JMPR could include a brief description on how the MRL was derived, when the calculator results are not used.

36. Other delegations stressed the importance of improving transparency of the MRLs establishment process and were of the view that a short explanation why one or the other decision was taken should be provided.

37. To the proposal that JMPR participate actively in the OECD work, the FAO JMPR Secretariat pointed out that JMPR was continually striving for the development and utilization of a statistical calculation method and that JMPR experts actively took part in the development of relevant OECD Guidelines, including the calculation method.

38. The Committee recommended that JMPR participate in the ongoing efforts of the OECD Residue Chemistry Expert Group and provide their input into the development of a revised statistical calculation method.

39. After some discussion it was recommended that for the 2009 JMPR meeting the OECD statistical calculation method would be used, if available, and if not available the NAFTA calculator method would continue to be used and reported and, to the extent possible, brief explanations of derivation of the MRLs would be provided when the calculator was not used.

40. The Committee noted the need for testing the "OECD calculator" for establishment of MRLs and suggested JMPR to test it when it became available.

41. Some delegations proposed to send a Circular letter requesting information on actual use by member countries of statistical calculation methods in establishing MRLs.

42. The Committee also noted that the 'OECD calculator for MRLs' is still in development and there were some questions regarding MRL setting policies which needed to be solved in order to finish this work.

43. The Committee noted that a questionnaire containing questions regarding these MRL setting policies had been distributed to OECD countries (CRD 20). Some delegations suggested that this questionnaire be distributed to all Codex Members in order to have more inclusiveness in the development of this calculator since OECD had limited participation and proposed that replies to this questionnaire could be evaluated by an electronic working group in order to prepare a paper for consideration by the next session of the Committee.

44. Other delegations questioned the usefulness of sending this questionnaire as the establishment of risk analysis policy was part of risk analysis and could be discussed on Agenda Item 9 while considering Risk Analysis Principles Applied by the CCPR.

45. After some discussion, the Committee agreed to send a circular letter containing questionnaire as presented in CRD 23 (modified version of CRD 20) with minor amendments. The Committee agreed to establish an electronic working group led by the United States and working in English only which would analyse replies and prepare a paper for consideration by the next session of the Committee.

2.8 Nature of residue data populations and methods for combining residue trial data sets

46. The Committee was informed that JMPR has recently been exploring the approach of combining data sets for estimation of MRLs, since about 50% of supervised trial data sets submitted to the JMPR contained

less than 10 residue values. The JMPR reemphasised that a sufficient number of trials is necessary for obtaining reliable estimates of the maximum residue levels and STMR values.

47. In order to decide whether data sets representing various national maximum GAPs can be combined or not, the nature of residue distributions in supervised trial data sets were examined and the large inevitable variability of the residues, especially in small data sets below 15-20 residue values, was demonstrated with practical examples.

48. The JMPR recommended that where a sufficient number of trials is available, reflecting the maximum GAP of one country or geographical region (maximum dosage at shortest PHI), the MRL estimates should be based on that residue data alone, however, where such a data base is limited and the combination of residue data reflecting different GAPs is considered, the distribution of residue data shall be carefully examined and only those datasets combined, which may be expected to arise from the same populations based on comparable GAP. The expert judgment could be assisted with appropriate statistical tests (e.g. Mann-Whitney U-test or Kruskal-Wallis H-test).

49. The Delegation of Japan supported the JMPR principles in data combination and in using statistical calculations for MRL estimation in accordance with those principles.

2.9 Evaluation for follow crops

50. The Committee was informed that the 2008 JMPR reviewed information about regulation of residues in follow crops provided by Australia, the EU, Japan and the United States. The JMPR recognized that neither approach is applicable for the JMPR, since label restrictions are limited to national authorisations and MRLs for “other plant commodities” are currently not supported by the Codex classification system for foods and animal feeds.

51. The Committee was informed that for an estimation of possible residues in follow crops, the JMPR must rely on the information provided and that the JMPR made recommendations on its evaluation for follow crops.

2.10 Selection of representative commodities when establishing commodity group MRLs

52. The JMPR noted that the selection of representative crops and corresponding commodities for particular crop and commodity groups would be very valuable to those planning residue trials.

53. The Committee was informed that JMPR evaluates available data, whether on a ‘representative’ commodity or not. In estimating a group MRL, JMPR includes available data, if valid and sufficient, from all commodities whether potentially representative or not.

54. The JMPR looked forward to further progress with commodity grouping and representative commodities. Careful attention to grouping will assist the JMPR in proposing group MRLs more often.

2.11 Proportionality of pesticide residue concentrations and application rates in supervised trials

55. The Committee was informed that research work and side-by-side trials on ‘proportionality’ were initiated in some countries.

56. The JMPR recommended that before the results of such work can be applied to residue evaluation, it is important to examine the conditions where proportionality is valid and where it is not. Where proportionality is valid, the residues from trials other than the GAP rate could be adjusted to values equivalent to the GAP rate.

57. The Committee noted that publication of the relevant information is needed as a basis for JMPR and national authorities to make more use of non-GAP rate trials in residue evaluation.

REPORT ON 2008 JMPR RESPONSES TO SPECIFIC CONCERNS RAISED BY CCPR (Agenda Item 4b)⁸

58. The Committee noted that specific concerns raised by CCPR at its last meeting will be considered when discussing the relevant chemicals under Agenda Item 5.

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

DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES IN FOOD AND FEEDS AT STEP 7 AND 4 (AGENDA ITEM 5)⁹**GENERAL REMARKS**

60. The Committee noted that when new draft MRLs were advanced to Step 5/8 or to step 8 for a commodity or group of commodities, and adopted by the Commission, any existing CXLs or draft or proposed draft MRLs for the related commodities would be revoked.

CAPTAN (007)

61. The Committee decided to recommend revocation of the temporary CXLs for apple and pear, because they had been replaced by the CXL for pome fruits. The Committee also decided to recommend revocation of the CXL for peach at 15mg/kg, as the new CXL for peach at 20mg/kg had been adopted by Commission.

CARBARYL (008)

62. The Committee decided to withdraw the draft MRL for stone fruits (except cherries) and to recommend the revocation of the temporary CXLs for apricot; nectarine and peach for acute dietary intake reasons, and to return the draft MRL for cherries to Step 6 as new data will be submitted to JMPR.

63. The Committee also decided to recommend revocation of the temporary CXLs for peppers (which had been replaced by the CXL for peppers, Sweet, and Pepper, Chilli) and for pear as recommended by JMPR.

64. The Committee decided to advance the draft MRL for citrus fruit for adoption at Step 8, noting the reservation expressed by the EC and Norway due to their intake concerns.

65. The Committee decided to recommend revocation of the CXL for grapes and to withdraw the draft MRLs for citrus pulp, dry; dried grapes (=currants, raisins and sultanas); grape juice; grape pomace, dry; and grapes due to acute dietary intake concerns, and to withdraw the draft MRL for citrus juice, as residues don't concentrate in the juice.

DICOFOL (026)

66. The Committee noted that new data for supporting the existing CXL for tea, green, black will be submitted by India and Morocco for JMPR evaluation. The JMPR secretariat informed the Committee that dicofol toxicological evaluation was rather old and there is a need for a review hence submission of toxicological data is also necessary. The Delegation of India indicated that they will contact the Indian manufacturer and encourage the submission of toxicological data.

67. The Committee noted that dicofol was scheduled for evaluation in 2011 but that the manufacturer was no longer supporting this compound.

⁸ Section III, Pesticide Residues in Food 2008, Joint FAO/WHO Meeting on Pesticide Residues, Report 2008, FAO Plant Production and Protection Paper 193, Rome, 2009.

⁹ CX/PR 09/41/03; CL 2008/39-PR; CX/PR 09/41/03-Add.1; CRD 3 (Australia); CRD 4 (Kenya); CRD 9 (EC); CRD11 (Thailand); CRD 12 (Mali); CRD17 (China); CRD 21(Korea).

DIMETHOATE (027)

68. The Committee, noting the reservation expressed by the EC and Norway on the MRLs for lettuce, head and peppers, sweet due to their intake concerns, decided to advance the proposed draft MRLs for chilli peppers (dry); lettuce, head (at 0.3mg/kg); and peppers, sweet (at 0.5mg/kg) for adoption at Step 5/8 and recommended revocation of the CXL for lettuce, peppers, due to intake concerns.

DIPHENYLAMINE (030)

69. The Committee decided to advance the proposed draft MRLs for milk fats and milks for adoption at Step 5/8.

ETHOXYQUIN (035)

70. The Committee decided to advance the proposed draft MRL for pear for adoption at Step 5/8.

MALATHION (049)

71. The Committee decided to advance the proposed draft MRLs for wheat and wheat bran, unprocessed for adoption at Step 5/8, noting the reservation expressed by the EC and Norway on wheat due to their intake concerns. The Committee decided to recommend revocation of the existing CXL for wheat flour, as residues do not concentrate in wheat flour.

72. The Committee was advised that the CXLs for apples, grapes and citrus were based on European GAP which no longer existed. The Committee agreed that these CXLs would be considered for revocation at the next meeting (*see paras 78 and 202*).

MEVINPHOS (053)

73. The Committee decided to recommend revocation of the CXL for Cabbages, Head because new supporting data was not available.

PARAQUAT (057)

74. The Committee recalled that the 38th session of the Committee had decided to retain CXL for rice for four years under the periodic review procedure at the request of the Delegation of Thailand, and noted that paraquat was scheduled for evaluation by JMPR in 2009.

75. The Committee decided to maintain the CXL for rice, awaiting the outcome of the 2009 JMPR evaluation.

DICHLORFLUANID (082) (information only)

76. The Committee was informed by the Delegation of Australia, speaking as the Chair of the working group on priorities, that dichlofluanid was listed in the tentative schedule for 2013 JMPR evaluation, although this compound was no longer supported by the manufacturer.

CHLORPYRIFOS-METHYL (090)

77. The Committee agreed to retain the draft MRLs for barley; oats and rice to Step 7, awaiting the 2009 JMPR evaluation.

METHOMYL (094)

78. The Committee noted the acute dietary intake concerns expressed by the EC and Norway for grape and tomato, based on the EC Acute Reference Dose established. The Delegation of the EC informed the Committee that they would submit a concern form for apple.

79. The Committee agreed to advance the proposed draft MRL for apple to Step 5 and the draft MRLs for fruiting vegetables, cucurbits; grapes; lettuce, head; lettuce, leaf; pear and tomato to Step 5/8, noting the reservation of the EC and Norway on the MRLs for grape and tomato.

80. Since no new data were submitted to 2008 JMPR, the Committee decided to withdraw the draft MRLs for brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas and celery and to recommend revocation of the CXLs for cabbages, head; cauliflower and celery because of acute dietary intake concerns.

81. The Committee also agreed to recommend revocation of the CXL for pea vines (green), in line with its policy of not recommending CXLs for fresh animal forage commodities.

ACEPHATE(095)

82. The Committee decided to withdraw the draft MRLs for flowerhead brassicas; mandarin; nectarine; peach; pepper and pome fruit due to no new data available to support alternative GAPs, and decided to recommend the revocation the existing CXLs for broccoli and cauliflower as recommended by 2003 JMPR.

CARBOFURAN(096)

83. The Committee decided to withdraw the draft MRLs for cantaloupe; cucumber; potato; squash, summer and sweet corn (corn-on-the-cob) due to no new data available to resolve dietary intake concerns, and to retain the draft MRLs for mandarin and orange, sweet, sour at Step 7 awaiting 2009 JMPR dietary intake estimation.

84. The Committee also decided to recommend revocation of the CXL for potato and milk because of dietary intake concerns.

85. The Committee noted the concern form submitted by EC relating to the use of different ARfDs and agreed to reconsider the CXLs for banana; edible offal; maize; meat; milks; rice, husked; sugar beet; sugar cane and sunflower seed for the further discussion next year based on the JMPR response.

METHAMIDOPHOS(100)

86. The Committee decided to withdraw the proposed draft MRLs for flowerhead brassicas; mandarins; nectarine; peach; peppers and pome fruits, and also decided to recommend the revocation the CXLs for cauliflower; peppers, chili and peppers, sweet because of dietary intake concerns as recommended by 2003 JMPR.

PHOSMET(103)

87. The Committee decided to recommend the revocation of the CXLs for apple and pear because they had been replaced by the CXL for pome fruits as recommended by 2003 JMPR.

DITHIOCARBAMATES(105)

88. The Committee decided to recommend the revocation the CXL for apple because this had been replaced by the CXL for pome fruits as recommended by 2004 JMPR.

PHORATE (112)

89. The Committee decided to retain the draft MRL for potato at step 7, awaiting the 2009 JMPR evaluation and to recommend deletion of the CXL for wheat as recommended by the 2005 JMPR, as no new data are available.

CYPERMETHRINS (INCLUDING ALPHA- AND ZETA CYPERMETHRIN) (118)

90. The Committee decided to advance the draft MRLs for all commodities except asparagus for adoption at Step 5/8, noting the EU and Norway reservations on the MRLs for cauliflower; scarole (broad-leaf); apple (covered by pome fruits) and peach (covered by stone fruits) because of their acute intake concerns.

91. The Committee decided to advance the proposed draft MRL for asparagus for adoption at Step 5, noting that data will be submitted by Thailand for evaluation by the 2011 JMPR.

92. The Committee decided to retain the CXL for citrus fruits for four years under the Periodic Review Procedure, noting that data will be submitted by Thailand for evaluation by the 2011 JMPR.

93. The Committee decided to retain the CXLs tea, green, black for four years under the Periodic Review Procedure, noting that China and India will submit data for evaluation by the 2011 JMPR.

94. The Committee agreed to recommend revocation of the CXL for mushrooms as there was insufficient data for JMPR to consider an alternative GAP; revocation of the CXL for berries and other small fruits as this was being replaced by a new level for strawberry and revocation of the CXL for vegetable oils, as this was being replaced by a new level for refined and virgin olive oils.

OXAMYL (126)

95. The Committee noted that 2008 JMPR could not recommend MRLs based on alternative GAP as the new data were residues of the parent compound only while the current residue definition included the Oxime metabolite.

96. The Committee agreed to retain all CXLs and draft MRLs at step 7 awaiting a review of the residue definition and analytical methods by JMPR.

DIFLUBENZURON (130)

97. The Committee noted that the CXLs for apple and pear had been revoked in 2004 because they had been replaced by a CXL for pome fruits as recommended by 2002 JMPR.

TRIADIMEFON (133)

98. The Committee agreed to retain the draft MRL for grapes at Step 7 due to intake concerns expressed by the EC and await to the outcome of 2009 JMPR evaluation.

99. The Committee decided to advance the draft MRLs for banana; fruiting vegetables other than cucurbits and fruiting vegetables, cucurbits for adoption at Step 8.

PROCHLORAZ (142)

100. The Committee decided to retain the draft MRL for mushroom at Step 7, awaiting the outcome of 2009 JMPR evaluation of an alternative GAP to resolve the dietary intake concern.

TRIAZOPHOS (143)

101. The Committee decided to retain the MRL for soya bean (immature seeds) at Step 7 awaiting further data from Thailand on edible portion residues. The Committee decided to retain the CXL for cereal grains for four years under the Periodic Review Procedure noting that the data will be submitted by China for 2010 JMPR evaluation.

CARBOSULFAN (145)

102. The Committee decided to retain the draft MRLs for mandarin and oranges, sweet, sour, to withdraw the draft MRL for potato and to recommend revocation of the CXL for milks in line with the decision made for Carbofuran.

CYHALOTHRIN (INCLUDES LAMBDA-CYHALOTHRIN) (146)

103. The WHO JMPR Secretariat informed the Committee that JMPR at the 2008 meeting had considered the concerns raised by the EC regarding the use of different safety factors when deriving the ADI and the use of a different end point to derive the ARfD and that details were described in Section 3 of the report.

104. The Committee decided to advance all the proposed draft MRLs to Step 5/8, noting the reservation of the EC and Norway on apricot; peaches; nectarines; tomatoes; peppers, sweet corn, broccoli; cauliflower; cabbage, heads and milk due to acute intake concerns.

105. The Committee decided to recommend revocation of the CXLs for cotton seed; cotton seed oil, crude; cotton seed oil, edible and potato.

CYFUTHRIN (157)

106. The Committee decided to return the draft MRLs for broccoli and cabbages, Head to Step 6 and to consider their withdrawal at its next session if no data for an alternative GAP would be available by then.

107. The Committee agreed to delete the CXL of 2 mg/kg for chilli peppers (dry), which was replaced by the CXL of 1 mg/kg for the same commodity.

FLUSILAZOLE (165)

108. The WHO JMPR Secretariat informed the Committee that JMPR at the 2008 meeting considered the concerns raised by the EC regarding differences in ARfD set by the EC and JMPR and those details were described in Section 3 of the report.

109. The Committee decided to advance the draft MRLs for edible offal (mammalian); nectarine; peach and pome fruits to Step 8, noting the reservation of the EC and Norway regarding their intake concerns for apple; peach and edible offal.

110. The Committee decided to recommend revocation of the CXL for cattle, edible offal of, as recommended by 2007 JMPR.

TRIADIMENOL (168)

111. In line with the decisions taken for triadimefon (133), the Committee decided to advance the draft MRLs for banana; dried grapes (= currants, raisins and sultanas); fruiting vegetables other than cucurbits and fruiting vegetables, cucurbits to Step 8 and to retain the draft MRL for grape at Step 7, awaiting 2009 JMPR evaluation.

PROFENOFOS (171)

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

113. The Committee decided to recommend revocation of the CXLs for cabbages, head; peppers, sweet and potato, as recommended by 2008 JMPR, and the CXL for cotton seed oil, edible as residues do not concentrate during processing.

114. The Committee agreed to retain the CXLs for peppers, chilli and chilli peppers (dry) for four year under the periodic review procedure, noting that the Delegation of Thailand would submit data to support those commodities.

BUPROFEZIN (173)

115. The Committee decided to advance all the proposed draft MRLs to Step 5/8 and to recommend revocation of the CXL for oranges, sweet, sour, as recommended by 2008 JMPR.

TEBUCONAZOLE (189)

116. The Committee decided to advance the artichoke, Globe; barley; barley straw and fodder, dry; brassica; carrot; common bean; edible offal; elderberry; garlic; leek; lettuce, head; maize; mango; melons, except watermelon; onion, bulb; papaya; peanut; plums (except prunes); pome fruits; prunes; rice; Soya bean (dry); sweet corn; tomato and watermelon to step 5 due to the concern expressed by the EC that no short term dietary intake had been estimated, and decided to advance the coffee bean; coffee bean roasted; eggs; hops, dry; meat; milks; poultry meat; poultry, edible offal of and rape seed to Step 5/8.

FENPYROXIMATE (193)

117. The Committee decided to maintain the MRL for grapes at Step 7 awaiting the review of alternative GAP by JMPR in 2010.

HALOXYFOP (194)

118. The Committee decided to retain all the draft MRLs at Step 4 and Step 7 awaiting the review by JMPR 2009 evaluation.

CHLORPROPHAM (201)

119. The Committee decided to advance the proposed MRLs for milk fats and milks to Step 5/8.

ESFENVALERATE (204)

120. The Committee agreed to retain the draft MRLs for cotton seed, tomato and wheat at Step 7 awaiting the phase-out of fenvalerate.

IMIDACLOPRID (206)

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

METALAXYL-M (212)

122. The Committee agreed to retain all the draft MRLs at Step 7, awaiting the periodic review by JMPR for both toxicology and residues in 2013.

BIFENAZATE (219)

123. The Committee noted that an incomplete data submission precluded the estimation of MRL or STMR values for additional commodities in 2008 JMPR, and was informed by the delegation of Australia that the manufacturer will submit additional data for the 2010 JMPR evaluation.

BOSCALID (221)

124. The Committee decided to advance the proposed draft MRLs for banana and kiwi to Step 5 noting the concern expressed by the EC that no long term dietary intake had been estimated. The JMPR Secretariat clarified that it appears that incomplete rotational crop data had been submitted, and that JMPR will re-consider all data at the 2009 JMPR with the aim to finalize the dietary risk assessment.

AZOXYSTROBIN (229)

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

CHLORANTRANILIPROLE (230)

126. The Committee decided to advance all the proposed draft MRLs for adoption at Step 5/8, noting that USA had submitted a concern form relating to the evaluation of MRLs for Grapes and Leafy Vegetable by JMPR. The JMPR agreed to provide a more detailed explanation of the basis of these MRLs at the next meeting.

MANDIPROPAMID (231)

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

PROTHIOCONAZOLE (232)

128. The Committee decided to withdraw the proposed draft MRL for wheat flour because residues do not concentrate during processing, and advance all the remaining proposed draft MRLs for adoption at Step 5/8, noting that USA had submitted a concern form relating to the exclusion of field trials data reporting only total residues rather than parent and metabolite residues separately. The JMPR agreed to reconsider the data previously submitted and the manufacturer agreed to supply available data on the various residues components. The Delegation of the USA requested that the response from JMPR include a complete discussion of the issues for consideration by the Committee.

SPINETORAM (233)

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

SPIROTETRAMAT (234)

130. The Committee decided to advance all proposed draft MRLs for adoption at Step 5/8, noting that the USA concern form relating to the MRL evaluation had been addressed.

PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS (Agenda Item 6)¹⁰

131. The Committee recalled that at its last session it had agreed to return the Proposed Draft Revision to Step 2 and to establish the electronic working group, led by the Netherlands and the United States of America, to continue the revision of the Classification according to the agreed timetable, including the redrafting of the commodity groups for “Bulb Vegetables” and “Fruiting Vegetables, Other than Cucurbits”, taking into account the comments presented at the session; the redrafting of the commodity groups for “Berries and Small Fruits” and “Edible Fungi”; and the revision of the coding system.

132. The Delegation of the Netherlands introduced the Proposed Draft Revision and highlighted the content and changes presented in the document. The Committee expressed its appreciations for the excellent work of the Electronic Working Group and noted the proposals for the revision of the coding system and the revision of the classification of eight commodity groups, namely, Bulb vegetables, Fruiting vegetables, other than Cucurbits, Berries and small fruits, Edible fungi, Citrus fruits, Pome fruits, Stone fruits and Oilseeds.

Coding System

133. The Committee agreed with the proposal of the electronic Working Group to:

¹⁰ CX/PR 09/41/4; CX/PR 09/41/4-Add.1 (comments of Costa Rica and the Republic of Korea); CRD 4 (Kenya); CRD 5 (European Community); CRD 6 (Morocco); CRD 11 (Thailand); CRD 15 (South Africa); CRD 18 (Indonesia); CRD 22 (Revised proposed revision of the Codex Classification of Foods and Animals prepared by the Netherlands).

- retain the current coding system;
- add only codes for new commodity groups and commodities (2000-2199 for new commodity (sub) groups and 2200 to 4000 for new commodities); and
- remove the codes from 4000 to 5000 for synonyms, while maintaining the synonyms in the classification for easy reference.

134. The Committee further agreed that the codes presented in Annex 2 to CX/PR 09/41/4 would be used for new commodities and commodity (sub) groups in the Revised Classification, noting that relevant codes would be assigned to subgroups under 027 Herbs and 028 Spices.

Draft Proposals for Commodity Groups

135. The Committee noted that comments contained in the working document CX/PR 09/41/4-Add.1 and Conference Room Documents had been reflected in the revised proposal prepared by the Netherlands (CRD 22) and agreed to base its discussion on CRD 22. The Committee generally supported the revised proposal and made the following decisions and observations.

Fruiting vegetables, other than Cucurbits

136. The Committee noted that Okra and Roselle were placed under 12B Peppers and that Pepino was included under 12C Egg plants although they were not actually belonging to these groups and considered whether they should be placed under a new subgroup.

137. The Delegation of the United States of America, speaking as the co-chairperson of the Electronic Working Group, explained that Okra was placed under the Peppers subgroup because of the similar morphology, pesticide use pattern and residues. The Delegation further indicated that these commodities were minor crops and their proposed placement would facilitate the establishment of MRLs for these commodities and did not support the proposal to move them to a new subgroup. This view was supported by some delegations.

138. Other delegations noted that the extrapolation of pesticide residues for the establishment of MRLs would best be considered when discussing the document on Draft Principles and Guidelines on the Selection of Representative Commodities for Extrapolation of MRLs to Commodity Groups.

139. The Codex Secretariat reminded the Committee that “the Classification is intended to be as complete a listing of food commodities in trade as possible, classified into groups on the basis of the commodity’s similar potential for pesticide residues” and that “the Codex Classification is intended to promote harmonisation of the terms used to describe commodities which are subject to maximum residue limits and of the approach to grouping commodities with similar potential for residue for which a common group maximum residue limit can be set”¹¹.

140. After some discussion, the Committee agreed to place Okra, Roselle and Pepino in square brackets for further consideration. The Committee further agreed that, as a matter of principle, the introduction of a subgroup covering other commodities, should be considered whenever absolutely necessary, because this would allow the inclusion of commodities which were not easily placed under relevant specific subgroups in each group. It was also noted that a similar approach had already been taken in the Proposed Draft Revision, for example, “subgroup 023D Other oilseeds”.

Pome fruits

141. The Committee agreed to place Azarole, Mayhaw and Tejocote in square brackets for further consideration, taking into account the proposal of the European Community to include them in Berries and other small fruits.

¹¹ Foreword to the Codex Classification of Foods and Animal Feeds (CAC/MISC 4).

Stone fruits

142. In response to the question of one delegation, it was clarified that Cherries, Plums and Peaches should be separated into different subgroups because of their different morphology (size of fruits and existence of short hairs on the fruit skin), pre-harvest intervals and resultant residue levels.

Oil seeds

143. The Committee agreed to place Linseed, Poppy seed and Sesame seed under 023A Rape seeds subgroup in square brackets for further consideration, because they did not belong to rape seeds.

144. The Committee noted the proposal of the European Community to create an entry for olives used for oil production under Oil fruits and to have a separate entry for table olives in another group for miscellaneous fruits. However, having been unable to identify the relevant group for table olive, the Committee agreed to ask the Electronic Working Group to prepare proposals on where and how olives should be located.

145. To the question why Hempseed was included in the Classification, the Committee noted that Hempseed was traded internationally either for the production of hempseed oil or as a spice and that MRLs were established in some countries and therefore agreed to retain the proposed classification. The Delegation of Uganda expressed its reservation on this decision because both the seeds and leaves of hemsps were prohibited for trade in their national legislation.

Status of the Proposed Draft Revision of the Codex Classification of Foods and Animal Feeds

146. The Committee agreed to forward to the Commission the Proposed Draft Revision of the Classification for the eight commodity groups for adoption at Step 5 (*see* Appendix IX). The Committee further agreed to re-establish the electronic working group led by the Netherlands and the United States of America, which would consider the unresolved issues in commodity groups of Fruiting vegetables, other than cucurbits (*see* para. 140), Pome fruits (*see* para 141) and Oil seeds (*see* paras 143 and 144) and prepare new draft proposals for other commodity groups according to the schedule earlier agreed to by the Committee.

PROPOSED DRAFT PRINCIPLES AND GUIDANCE FOR THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MRLS TO COMMODITY GROUPS¹²

147. The 40th Session of the Committee agreed that principles and guidance on the selection of representative crops for the extrapolation of MRLs to commodity groups should be considered by the electronic Working Group on the Revision of the Classification of Foods and Animal Feeds but as a separate document in order to facilitate its consideration at the next session of the Committee¹³.

148. The Delegation of the United States of America introduced the document highlighting the main issues associated with the extrapolation of MRLs to commodity groups. The Delegation recalled the objectives of the document and introduced the proposed principles by which representative commodities should be: the major item in terms of production and consumption, likely to contain the highest residues and similar in morphology, growth habit, similar pest problems and edible portion to the related commodity within a group or subgroup. In addition, group MRLs should be based on similar GAPs. Based on these principles, information on the rationale for the selection of representative commodities was provided in Addendum 1 to CX/PR 09/41/6-Add.2 using as an example the Group 009 Bulb Vegetables.

149. The Delegation further explained that proposals on representative commodities should be provided in parallel with the respective commodity grouping revisions and that JMPR should be advised to use the representative crops adopted by the Commission and, on a case by case basis, use other representative commodities (including those which might be specifically requested by Codex members). In addition, the

¹² CX/PR 09/41/6-Add.2. Comments from the United States of America (CRD 7); Thailand (CRD 11) and Japan (CRD 19).

¹³ ALINORM 08/31/24, paras. 113-115.

Delegation proposed that JMPR should be requested to provide the Committee with justification for the use of any alternative representative commodities.

150. The Delegation invited the Committee to adopt the framework for the selection of representative commodities, principles and guidance and to consider moving “Crop Types” forward as they were completed, e.g. fruits, vegetables, herbs and spices.

151. The Delegation of Japan indicated that, in order to make the document more useful and user-friendly, the draft principles and guidance should be re-structured in a similar way as other related Codex texts e.g. having sections on introduction, scope, definitions, general principles, application, etc. The Delegation also noted that additional information for guidance on the selection of representative commodities for extrapolations should be included, taking into account the work done by the OECD, JMPR, etc. Furthermore, there might be a need to prioritize the criteria as it might be difficult for a given commodity to comply with all of them. Moreover, information on individual commodities should be examined before deciding if a candidate commodity could qualify as a representative commodity for the setting of a global MRL as they might vary across regions depending on production and consumption patterns, climatic conditions, etc. The Delegation further noted that, after adoption of the principles and guidance by the Commission, each country could select representative commodities in accordance with these principles and guidance and provide this information to the Committee as the basis for their inclusion as alternative representative commodities at the international level. This view was supported by some delegations.

152. A number of delegations supported the principles and guidance as presented in Addendum 1 to CX/PR 09/41/6. Some of these delegations presented comments for clarification or enhancement of the document, for instance, the possibility to include other alternative representative commodities that better matched the criteria in their regions e.g. leeks rather than green onions. It was noted that by applying the principles spring onions represented the major item for production worldwide, tended to show the highest residues and presented a number of similarities in terms of morphology, cultivation, phytosanitary treatments, etc. in the subgroup, however, other alternative representative commodities could also be selected to accommodate Codex members needs when appropriate. It was also noted that the principle on the production and consumption should be further described in order to facilitate its implementation and to this purpose it might be better to refer to “production and/or consumption”.

153. It was also suggested that, in determining representative commodities “similar/same residue” needed to be defined and justification was needed on why the selected commodities were considered to be representative. In addition, it would be useful to demonstrate how the principles were applied to each of the revised commodity groups. It was further noted that representative commodities should be selected based on real data showing similarity of residues and not on extrapolated data (group MRLs) as indicated in the different combinations of commodity/chemicals in Table 5 of CX/PR 09/41/6-Add.2.

154. In view of the above considerations, the Committee agreed that representative commodities within each Codex Classification commodity group would be selected and proposed, based on consideration of all available information and using the following principles: A representative commodity should be major in terms of production and consumption, should be likely to contain the highest residues and should be similar in morphology, growth habit, similar pest problems and edible portion to the related commodities within a group or subgroup while assuming that group MRLs would be based on similar GAPs. The Committee also agreed that alternative representative commodities might be selected to reflect regional differences in dietary consumption and/or areas of production for certain commodities. In addition, proposals on representative commodities would also be provided in parallel with the respective commodity grouping.

Status of the Proposed Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of MRLs to Commodity Groups

155. The Committee agreed to return the proposed draft Principles and Guidance to Step 2 for redrafting by the Delegation of the United States of America in order to take account of the comments and decisions made at this session and to present a revised version for circulation, comments and consideration at its next session.

PROPOSED DRAFT REVISION OF THE GUIDELINES ON THE ESTIMATION OF UNCERTAINTY OF RESULTS FOR THE DETERMINATION OF PESTICIDE RESIDUES (Agenda Item 7)¹⁴

156. The 40th Session of the Committee agreed to propose new work on the revision of the Guidelines on the Estimation of Uncertainty of Results (CAC/GL 59-2006) and the 31st Session of the Commission concurred with this proposal.¹⁵

157. The Representative of IAEA, as Chair of the in-session Working Group on Methods of Analysis, introduced a revised version of the Guidelines and outlined the major issues associated with the revision of the text including conclusions and recommendations as indicated in CRD 24. Several delegations supported the revised version while requesting the inclusion of more examples of measurement uncertainty (MU) calculations to facilitate understanding by laboratory practitioners in addition to those already provided on proficiency testing schemes. It was also noted that the revision should be consistent with the general relevant texts currently being developed by the Committee on Methods of Analysis and Sampling.

158. The Representative of IAEA also referred to the discussion that took place on the evaluation of distribution of pesticide residues after primary process in citrus fruits, pome fruits, oilseeds and wine grapes as summarized in CRD 24 (see also Agenda Item 11(ii)). The Delegation of the European Community informed the Committee that it would prepare a discussion paper on the use of Kow (n-octanol-water partition coefficient) for processing factors for consideration by the next session of the Committee.

159. The Committee noted that the revised document was intended to be incorporated as an Annex to the Guidelines.

Status of the Proposed Draft Revision to the Guidelines on the Estimation of Uncertainty of Results for the determination of Pesticides

160. The Committee agreed to return the proposed draft Guidelines to Step 3 for circulation, comments and consideration by an electronic Working Group under the coordination of the IAEA, open to all Codex Members and Observers and working in English only, which would prepare a revised version for consideration by the next session of the Committee (Appendix X).

161. The Committee agreed to re-establish a working group during its next session, chaired by the IAEA.

ACHIEVING GLOBALLY HARMONIZED MRLS THROUGH CODEX (Agenda Item 8)¹⁶

162. The Committee recalled that the 40th Session it had agreed to establish an electronic working group led by the United States to prepare a discussion paper describing in more detail the proposed pilot process for JMPR recommendation of MRLs before national or regional authorities, for consideration by this session of the Committee.

163. The Delegation of the USA introduced the document which described the proposed pilot process. The Delegation indicated that the idea for this pilot project had come from the Global Minor Use Summit and noted that the discussion paper explained in detail the proposed process, advantages and disadvantages of such a process emphasizing that it would provide JMPR recommended MRLs before national/regional authorities registration occurs and this would facilitate global harmonization with Codex MRLs. The Delegation indicated that it was expected that the advantages of such a process would outweigh the disadvantages and emphasized that the outcome of the pilot project would help CCPR and JMPR to make an informed determination on whether to progress the concept of parallel evaluations, hopefully leading to greater harmonization of MRLs. The Delegation also pointed out that no government or other authority would give up its independent rights for pesticide registration and that the JMPR would remain an independent scientific body following its governing requirements and meeting its responsibilities.

¹⁴ CX/PR 09/41/5; CX/PR 09/41/5-Add.1; CRD 4 (Kenya); CRD 12 (Mali); CRD 14 (Argentina); CRD 17 (China); CRD 18 (Indonesia); and CRD 24 (Report of the in-session Working Group on Methods of Analysis).

¹⁵ ALINORM 08/31/24, paras. 118-123.

¹⁶ CX/PR 09/41/6; CRD 12 (Mali); CRD 15 (South Africa).

164. The JMPR Secretariat informed the Committee that JMPR was in support of this initiative to enhance global harmonization of MRLs. JMPR supports the proposal of a pilot project since only through practical experience can all potential issues be identified in particular for residue evaluation. The JMPR Secretariat noted that if there was no firm commitment by the Committee for this pilot project, then JMPR would not have time to evaluate the pilot compound at the 2009 Meeting because there would not be sufficient time after the Commission meeting in July 2009.

165. Some delegations while supporting the concept of the pilot project, drew the attention of the Committee to the fact that it was an exceptional case which would not be done according to the usual procedure and that the Committee should consider very carefully the outcome of this pilot project, especially what to do with the proposed MRLs recommended by JMPR based on proposed GAPs which could have changed following the JMPR evaluation.

166. The Delegation of Australia drew the attention of the Committee to the fact that the Committee had significantly streamlined its working procedures during the last several years and indicated that the current CCPR procedures, especially use of the rapid Step 5/8, were timely and efficient. The Delegation supported the concept of the pilot but considered that fluopyram was not the most appropriate candidate and that a more complicated insecticide, having different GAPs from various regions, should be selected as a better example, alternatively the delegation proposed that the pilot project could be done for the JMPR toxicology evaluation only. These views were supported by some delegations.

167. The Delegation of the European Community also noted the improved speed of the work of the Committee and indicated that it was willing to consider other feasible ways to improve the Committee's work. The Delegation expressed doubts about the added value of this pilot project and drew the attention of the Committee to the fact that OECD and JMPR work sharing might be helpful in this regard. The Delegation of the EC stated that it would agree to move forward under the condition that this will be limited to low-risk substances, for which MRLs are proposed for a wide variety of crops used world wide, and that the outcome of the project should be thoroughly evaluated.

168. Many delegations, including a significant number of developing countries, supported the proposal to initiate a pilot project to gain experience from its application, in order to possibly implement a new procedure that would further efforts to as much as possible harmonize MRLs. A number of developing countries emphasized that due to limited capacity and resources, they were unable to conduct independent risk assessments and are faced with often widely varying MRLs which cause issues for determining safety and for trade; therefore all efforts to improve harmonization should be encouraged.

169. The JMPR Secretariat suggested that due to limited resources JMPR may only be able to evaluate 3-5 commodities for the pilot compound in 2009. Some delegations were of the view that in order to gain an experience and evaluate the usefulness of the pilot project, the JMPR should consider as many commodities as possible; however no agreement was reached on this matter.

170. The Committee noted that the central issue for the pilot project was that the work of JMPR would be based on the proposed labels and GAPs, rather than registered labels. The Joint FAO JMPR Secretary drew the attention of the Committee to the fact that successful completion of an evaluation by JMPR required registered label information, including GAP, for the estimation of MRLs and reminded that GAPs for a pesticide mean more than just the maximum proposed use pattern as described by the 2008 JMPR.

171. The Joint WHO Secretary for JMPR emphasized that while the pilot project was not in accordance with existing procedure, i.e. only proposed but not yet registered GAPs, it could be done on an exceptional basis to identify issues for such a process. If GAPs change significantly after evaluation by JMPR then MRL proposals were not valid. However, only a pilot process can really address such issues in practice.

172. The Delegation of the USA noted that while this presents the possibility that the GAP may change, it is necessary in order to realise the two central benefits of the proposed process; for registration authorities to have the benefit of knowing the JMPR recommended MRLs before they set their own MRLs and to allow JMPR to work in parallel with the global joint review teams rather than following along after their assessments are completed, both of which may be expected to aid in harmonization of MRLs in the future.

173. The Delegation further noted that issue of the GAP possibly changing was addressed in the discussion paper. First, it would be necessary to document for the CCPR that the GAP which was evaluated by the JMPR was the GAP that was registered and only those MRLs would be eligible for advancement. Second, it was acknowledged that some GAPs would change and for those the JMPR would have to do some re-evaluation of the residue side.

174. The Delegation of the USA drew the attention of the Committee to the fact that the pilot project provides an opportunity for doing the work in a new way, that is expected to promote harmonization, that the discussion paper addressed the questions that were being raised in relation to the pilot project; that doing a pilot on fluopyram would provide useful information and that there were no new chemicals in the pipeline suitable for this purpose in the near future.

175. The Delegation of Australia expressed the concern that suggestions that the current CCPR processes required improvement were being used as an argument to support the project and indicated that no tangible scientific or statistical evidence had been forwarded to demonstrate any level of MRL disharmonization.

176. After an extensive discussion and despite of the support by many delegations, the Committee did not reach an agreement to initiate the pilot project as many delegations were not in favour. Many delegations, especially from developing countries, expressed the view that a very good opportunity to learn and benefit from this pilot project had been lost and expressed their disappointment with this decision.

REVISION OF THE RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON PESTICIDE RESIDUES (Agenda Item 9)¹⁷

177. The 31st Session of the Codex Alimentarius Commission approved the revision of the Risk Analysis Principles applied by the Codex Committee on Pesticide Residues and the establishment of an electronic Working Group led by Argentina to carry out this revision as agreed to by the 40th Session of the Committee on Pesticide Residues.

178. The Delegation of Argentina, speaking as the leading country of the Working Group, introduced the document and reported on progress to date and highlighted the pending issues for consideration by the Working Group, these included: the MRL Periodic Re-Evaluation Procedure; the deletion of MRLs without scientific grounds; the modification of the Criteria for the Prioritization with respect to compounds not leading to detectable residues; the consideration of other legitimate factors when establishing MRLs for pesticides; MRLs for fat-soluble pesticides and the establishment of acute reference dose (ArfD); and the consideration of a revised layout for the Risk Analysis Principles document which relates to a re-arrangement of the sections of the text but not to changes in the content of the document. The Delegation drew the attention of the Committee to the discrepancies between the English and Spanish versions and solicited their alignment in order to ensure consistency of both versions.

179. The Delegation of Japan stressed the need to include newly agreed CCPR risk management policies such as “concern form” and “proposal for alternative GAPs” and suggested the work on the revision of periodic review procedure and modification of the prioritization criteria with respect to compounds leading to no detectable residues be separated from the other work of consolidating the criteria, procedures and policies already agreed by the CCPR.

180. Several delegations were in support of continuing to discuss the withdrawal of MRLs for pesticides when they were no longer supported by a government and/or industry but still in use in other countries, especially when there were no identified safety concern associated with their use, as the costs associated with the JMPR re-evaluation of such pesticides was difficult to cope with by developing countries.

181. Many delegations supported the retention of the periodic re-evaluation procedures although it was proposed that data review requirements and procedures for revocation of MRLs should be revised especially providing criteria for MRLs revocation.

¹⁷ CX/PR 09/41/7. CX/PR 09/41/7-Add.1 (Not issued due to late availability of the document). Comments from Argentina (CRD 13); China (CRD 17); and Japan (CRD 19).

182. The WHO JMPR Secretariat noted that, in their view, it was important to keep the periodic re-evaluation programme, since it was the only way to assure that systematic review of new toxicological or residue data was done. If a review was based on an ad hoc basis, criteria would have to be established and it was not clear who would observe this and nominate chemicals for re-evaluation criteria. Moreover, having compounds scheduled in advance in the Priority List of Pesticides gave interested parties an opportunity to be prepared to provide the proper data for the re-evaluation.

183. In view of the above discussion, the Committee agreed to retain the Periodic Re-Evaluation Procedure while acknowledging that there was a need to review data requirements and procedures for revocation of MRLs for pesticides.

184. The Committee further agreed to re-convene the electronic Working Group led by Argentina, open to all Codex members and observers and working in English and Spanish, to revise the Risk Analysis Principles applied by the Committee on Pesticide Residues in light of the above discussion and comments submitted to the current Session and to address pending issues for circulation, comments and consideration at the 42nd Session of the Committee.

185. The Committee recalled that in 2011, the Committee on General Principles would review the consistency of risk analysis principles elaborated by relevant subsidiary bodies of the Commission, therefore, the revision should be done on the understanding that the document should be finalized by 2010 in order to present a revised Risk Analysis Principles to the CCGP in 2011.

ESTABLISHMENT OF CODEX PRIORITY LIST FOR PESTICIDES (Agenda Item 10)¹⁸

186. The report of the electronic working group was introduced by its Chair, Mr Ian Reichstein (Australia). He pointed out the new format of the working document, in particular the table of compounds which now included more detailed information, such as the nominating country, crops for which MRLs were sought, and the crops and compounds being supported and that this would inform Members ahead of time regarding uncertainties in support of compounds and to allow members sufficient time to generate and provide relevant data for additional crops. The Chair informed the Committee that more efforts had been undertaken to further align toxicological and residue evaluations, and by 2012/2013 alignment should have been fully achieved.

187. Furthermore the Working Group Chair noted that there have been misunderstandings regarding the timelines for finalising the evaluation schedules. It was confirmed that the proposals for evaluation by the JMPR are finalized by the Committee for adoption by the CAC in the same year and no further changes to the current year's schedule were possible. For example the CCPR41 meeting of 2009 will finalize the priority requests for the 2010 JMPR meeting.

188. The report of the electronic working group was then introduced with focused discussion on changes in scheduling of compounds as listed in CRD1.

Scheduling of compounds:

189. The Committee was informed of the following changes for the 2009 JMPR schedule.

190. Based on the decision taken by the Committee under agenda item 8, the tentatively scheduled evaluation of fluopyram as a pilot project will be removed from the 2009 schedule, and moved to 2010, not as pilot project, but as a normal full evaluation. Procymidone is no longer supported by the manufacturer hence no residue evaluation can be performed. As a consequence existing CXLs will be revoked in the future if no further support will be provided.

191. For boscalid, based on discussions under agenda item 5, the JMPR will review data on rotational crops in 2009 and evaluate data on hops in 2010.

¹⁸ ALINORM 08/31/24, Appendix X, CX/PR 09/41/8, CX/PR 09/41/8-Add.1; CRD 1 (Report of the working group); CRD 5 (EC); CRD 7 (USA); CRD 17 (China).

New Compounds:

192. With respect to the requests for evaluation of new compounds for both toxicology and residues, the following proposals are made:

193. For 2010 dicamba, mepyldinocap, etoxazole, clothianidin; cyproconazole, thiamethoxam, flubendiamide; fluopyram; for 2011 MCPA, emamectin-benzoate, clopyralid and ethaboxam are tentatively scheduled.

194. No further new compounds have been scheduled at this point.

Periodic Re-evaluations

195. For 2010 dithianon and tebuconazole are tentatively scheduled for toxicological re-evaluation, for residue evaluations azinphos-methyl, bifenthrin, cadusafos and chlorotalonil are scheduled. Vinclozolin is no longer supported and was hence removed from the schedule; consequently CXLs will be considered for revocation in the future if no support is indicated. Residue evaluations of amitraz and cycloxydim were moved to 2012 at the request of the manufacturers. The EC requested earlier re-evaluation of toxicology and residues for amitraz because current evaluations are old and outdated. However the data will not be available earlier and the compound will be scheduled for 2012.

196. For 2011 diquat, etofenprox and dicofol (supported by India for tea) are scheduled for toxicological and residue evaluation. In addition dichlorvos, fenbutatin oxide and fenpropathrin are scheduled for toxicological re-evaluation; cycloxydim, dithianon, and tebuconazole scheduled for residue re-evaluation.

197. For 2012 amitraz, bentazone, disulfoton, fenvalerate, glufosinate-ammonium and tecnazene are tentatively scheduled for periodic re-evaluation of toxicology and residues; in addition aldicarb was tentatively scheduled for toxicological evaluation and dichlorvos, fenpropathrin, fenbutatin oxide and oxamyl for residue evaluation.

198. For 2013 bromide ion, dichlofluanid, dinocab, metalaxyl, methidathion, triforine, and aldicarb (residues only) are tentatively scheduled for re-evaluation of toxicology and residues.

199. For 2014-2016 compounds are tentatively scheduled for re-evaluation and no changes have been proposed compared to the document provided for this session by the EWG.

200. The Chair of the electronic working group pointed out that for some compounds information on continued support and on the crops for which MRLs are sought is still missing and that this information should be provided through the electronic working group for consideration at the next session of the Committee.

Evaluations

201. For 2010 additional MRLs have been requested for a number of compounds and commodities as listed in the document, with no changes requested.

202. For 2011 in addition to the additional MRL requests already listed, acephate (rice) was requested, and based on discussions under agenda item 5 cyfluthrin (soy bean), cypermethrin (citrus, asparagus, tea) and profenofos (chilli pepper and chilli pepper dry) were proposed. Oxamyl residue evaluation was moved to 2012.

203. No further changes with respect to evaluations are to be reported.

204. The chair of the electronic working group drew the Committee's attention to a new Appendix 3 which will list chemicals for which specific GAPs for certain commodities are no longer supported. The EC supported this initiative to ensure when a chemical is scheduled for re-evaluation the information in Appendix 3 can be taken into consideration.

205. The JMPR Secretariat informed the Committee that a number of concerns raised by the EC regarding toxicological evaluations had been raised during discussions under agenda item 5. Concern forms have been submitted (procymidone, carbofuran, carbaryl, tebuconazole) or are still pending (methomyl), and JMPR will attempt to address as many of these concerns as possible at the 2009 meeting and the rest at the 2010 meeting.

206. The Committee thanked the chair of the electronic working group for the excellent work and the Committee agreed to forward the amended priority list to the 32nd Session of the Codex Alimentarius Commission for approval of new work (Appendix XI).

207. The Committee also agreed to re-establish the electronic working group under the chairmanship of Australia, working in English only, and encouraged interested parties to participate and to provide information to this working group.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 11)

DISCUSSION PAPER ON THE GUIDANCE TO FACILITATE THE ESTABLISHMENT OF CODEX MRLS FOR MINOR USE AND SPECIALTY CROPS¹⁹ (Agenda Item 11(i))

208. The Committee recalled that at its last session it had agreed to establish an electronic working group chaired by United States and co-chaired by Australia and Kenya, which would prepare a discussion paper to provide guidance to facilitate the establishment of Codex MRLs for minor uses and specialty crops.

209. The Delegation of Kenya introduced the Discussion Paper, which contained several recommendations based on the responses to a questionnaire circulated to members of the Electronic Working Group. These recommendations, among others, related to the inclusion of new commodities in the Codex Classification; encouraging the development of representative commodities; training in residue data generation and submission to JMPR; fostering collaboration to develop and promote submissions to JMPR for prioritised specialty crops and minor uses; promoting the pilot project on JMPR recommending MRLs before national authorities; supporting the development and use of a global MRL calculator and proposing suitable definitions for minor uses and specialty crops. The Delegation further proposed to re-establish the Electronic Working Group on Minor Uses and Specialty Crops in order to implement the recommendations contained in the Discussion Paper.

210. The Committee expressed its appreciation of the work of the Electronic Working Group. Many delegations supported the recommendations, stating that these recommended actions would facilitate the establishment of MRLs for minor uses and specialty crops, as well as definitions of minor uses and specialty crops proposed by the Electronic Working Group.

211. The Committee noted that the recommendation concerning development of a training manual and programs on the generation and submission of data to the JMPR was outside the mandate of the Committee and is addressed to FAO and WHO.

212. The Delegation of Thailand informed the Committee that in Southeast Asia harmonization of MRLs had been considered by an expert group, which had expressed strong interest in the ongoing discussion in the CCPR. The Delegation further pointed out that although the JMPR used different data requirements for minor crops, no clear definition of minor crops has been agreed by either the CCPR or the JMPR and suggested the development of such a definition, which, for example, could be based on world production and/or proportion to daily diet.

213. The Delegation of the Czech Republic, speaking on behalf of the Member States of the European Community, while supporting in general the recommendations of the Electronic Working Group, reminded the Committee that both the CCPR and OECD were undertaking work on minor uses and specialty crops and stated that the two organizations should work collaboratively and avoid duplication of work.

¹⁹ CX/PR 09/41/9; RD 4 (Kenya); CRD 10 (OECD Secretariat and Australia); CRD 11 (Thailand); CRD 12 (Mali); CRD 16 (Brazil).

214. The Observer from CropLife International, while supporting further work by the Committee on this matter, indicated that in order to allow for pesticides for minor uses and specialty crops, national legislation should be developed to promote their registration and drew the attention of the Committee to a training manual for data submitters on procedures how to work with JMPR and CCPR which had been elaborated by CropLife International and made publicly available.

215. After some discussion, the Committee agreed to re-establish the Electronic Working Group on Minor Uses and Specialty Crops, led by the United States of America and co-chaired by Australia and Kenya and working in English only, which would continue to identify and address issues related to minor uses and specialty crops (within mandate of the CCPR) and specifically would further elaborate the definitions of minor use and specialty crops for use by the CCPR and JMPR and identify priority minor uses and specialty crops for MRL setting for proposing in the CCPR priority scheduling and facilitate submissions to JMPR for these.

DISCUSSION PAPER ON THE EVALUATION OF DISTRIBUTION OF PESTICIDE RESIDUES AFTER PRIMARY PROCESS IN CITRUS FRUIT, POME FRUIT, OILSEEDS AND WINE GRAPES (Agenda Item 11(ii))²⁰

216. The Committee noted that this Discussion Paper had also been considered by the Working Group on Methods of Analysis (*see* Agenda Item 7). The Delegation of the European Community explained that the paper investigated factors affecting the concentration or dilution of pesticide residues in primary processed foods (PPF) (juice, wine and olive oil) and concluded that the *n*-octanol/water partition coefficient (Kow) of pesticides could be used in the first rough estimate of processing factors, which could be used in intake assessments. The Delegation expressed the willingness to continue this study further.

217. The Delegation of India pointed out that only a small portion of pesticide residues in black tea leaves were usually transferred to tea brew after infusion, especially when the pesticide had a high Kow value, and that MRLs should be set for tea brew and not for tea leaves.

FURTHER CONSIDERATION OF PROCESSING AS RELATED TO THE ESTABLISHMENT OF MRLS FOR PROCESSED FOODS: RECOMMENDATIONS ON PRINCIPLES AND PRACTICE (Agenda Item 11(iii))²¹

218. The Delegation of the European Community introduced the Discussion Paper prepared jointly with the United States of America, which aimed to examine how and when MRLs for processed commodity should be established, which could be considered for inclusion in the Risk Analysis Principles applied by the CCPR. The Delegation drew the attention of the Committee to the ten conclusions and recommendations contained in the document.

219. The Observer from International Fruit Juice Union (IFJU) pointed out that fruit juices were usually transported as concentrates in international trade, that the concentration of pesticide residues in fruit juice concentrates would generally be five to six times higher than in the reconstituted juices for consumption, and that this concentration was occasionally not taken into account in the regulation of pesticide residues by national authorities. The Observer requested the Committee to make a statement that appropriate concentration factors should be considered when MRLs were applied to concentrated juices.

220. The Committee expressed its appreciation for the work done by the European Community and the United States of America and, noting that processing factors were developed by the JMPR to derive recommended MRLs and published in JMPR reports, supported the following recommendations contained in the Discussion Paper:

- To reaffirm its policy of establishing MRLs for important processed commodities;

²⁰ CX/PR 09/41/10; CRD 16 (Brazil)

²¹ CX/PR 09/41/11; CRD 16 (Brazil).

- to continue the practice of recommending MRLs for processed commodities only where there is a significant increase in residue from the RAC to the processed commodity (PF >1.3) and/or where the calculated processed commodities MRL is less than the MRL of the corresponding RAC;
- to continue the practice of recommending 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
- to 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.

221. The Delegation of France proposed that the four recommendations agreed above should be considered for inclusion in the ongoing revision of the Risk Analysis Principles applied by the CCPR.

222. The Committee agreed that there was no need for further elaboration of the document.

DATE AND PLACE OF THE NEXT SESSION (Agenda Item 12)

223. The Committee was informed that its 42nd Session was tentatively scheduled to be held in Xian, China, from 19 through 24 April 2010, the final arrangements being subject to confirmation by the Host Country and the Codex Secretariat.

SUMMARY STATUS OF WORK

Subject	Step	Action by	Reference
Draft and Revised Draft MRLs	8	Governments, 32 nd CAC	Paras 60 – 130 and Appendix II
Proposed Draft and Revised Draft MRLs	5/8	Governments, 32 nd CAC	Paras 60 – 130 and Appendix III
Proposed Draft MRLs	5	Governments, 32 nd CAC, Governments, 42 nd CPR	Paras 60 – 130 and Appendix IV
Codex Maximum Residue Limits Recommended for Revocation		Governments, 32 nd CAC	Paras 60 – 130 and Appendix V
Proposed Draft and Draft MRLs Retained at Steps 7 and 4	7/4	JMPR, Governments, CCPR (depending on the year of the JMPR clarification)	Paras 60 – 130 and Appendix VI
Draft MRLs Returned to Step 6	6	Governments, 2009 JMPR, 42 nd CCPR	Paras 60 – 130 and Appendix VII
Proposed Draft Revision of the Codex Classification of Foods and Animal Feeds - <i>Proposals for Eight Commodity Groups: Bulb Vegetables; Fruiting Vegetables, other than cucurbits; Berries and other Small Fruits; Edible Fungi; Citrus Fruits; Pome Fruits; Stone Fruits; and Oilseeds</i>	5	Governments, 42 nd CCPR	Para. 146 and Appendix IX
Proposed Draft Revision of the Guidelines on the Estimation of Uncertainty of results for the determination of Pesticide Residues (CAC/RCP 59-2006) at Step 3	3	Governments, EWG (IAEA), 42 nd CCPR	Para. 160 and Appendix X
Proposed Draft Principles and Guidance for the Selection of Representative Commodities for the Extrapolation of MRLs to Commodity Groups	2/3	USA, 42 nd CCPR	Para. 155
Revision of the CCPR Risk Analysis Principles	Procedure	EWG led by Argentina, Governments, 42 nd CCPR	Paras 177 - 185
Discussion papers:			
The Use of Kow (n-octanol-water partition coefficient) for Processing Factors	-	European Community, 42 nd CCPR (Working Group on Methods of Analysis and Sampling)	Para. 158
The Guidance to Facilitate the Establishment of Codex MRLs for Minor Use and Specialty Crops	-	EWG led by the USA and co-chaired by Australia and Kenya	Paras 208 - 215
New work:			
Priority List of Pesticides (New Pesticides and Pesticides under Periodic Review)	1/2/3	32 nd CAC, Governments, Australia, 42 nd CCPR	Paras 186 - 207 and Appendix XI

Subject	Step	Action by	Reference
Discontinuation of work:			
Discontinuation of Work on the Proposed Draft and Draft Maximum Residue Limits for Pesticides		Governments, 31 st CAC	Paras 60 - 130 and Appendix VIII

LIST OF PARTICIPANTS**Chairperson****Président****Presidente**

Dr Zongmao CHEN
Academician, Chinese Academy of Engineering
Professor, Tea Research Institute
Chinese Academy of Agricultural Sciences
No.9, Meilin Road, Hangzhou,
Zhejiang 310008, P.R. CHINA
Tel: +86 571 8665 0100
Fax: +86 571 8665 0056
E-mail: ccprc@agri.gov.cn;
zmchen2006@163.com

Vice-Chairperson**Vice-Président****Vice-Presidente**

Dr Xiongwu QIAO
Vice president
Shanxi Academy of Agricultural Sciences
2 Changfeng Street, Taiyuan,
Shanxi 030006, P.R. CHINA
Tel: +86 351 7581865
Fax: +86 351 7126215
E-mail: ccpr_qiao@agri.gov.cn

ALGERIA/ALGÉRIE/ARGELIA

Prof Bhakahom ALAMIR
 Chef de service de Toxicologie et Centre Anti-Poison
 Directrice Générale du Centre National de Toxicologie,
 Petit Staouili Dely Brahim, ALGER
 Tel: +0021321360480
 Fax: +0021321360476
 E-mail:alamir.@hotmail.com

ANGOLA

Dra. Cláudia R. SICATO DIAS
 Coordenadora do Comité do Codex sobre Resíduos de
 Pesticidas e Medicamentos Veterinários nos Alimentos
 do Codex-Angola
 Ministério da Agricultura, 7º ANDARIEDIFICIOB
 Largo dos Ministérios-LUANDA| ANGOLA
 Tel: +244 – 923403039
 Fax: +244 222-390238
 E-mail: claudiasicato@yahoo.com

ARGENTINA/ARGENTINE

Dr Omar Ernesto ODARDA
 Agricultural Attaché
 Embassy of Argentina, San Li Tun, Dong 5 Jie, 11,
 100600 Beijing, China
 Tel: +86-10-6532 0790
 Fax:+86-10-6532 0270
 E-mail:odarda@agrichina.org

Mr Carlos Enrique CAPPARELLI
 Asesor
 Rivadavia 1367 7º B – 1033 Buenos
 Aires - Argentina
 Tel: +54-11-4381-2742
 Fax:+54-11-4383-1562
 E-mail:carloscapparelli@ciafa.org.ar

Dr Laura Ester Bernardi BONOMI
 Secretaria Del Comité Técnico Del Codex
 Sobre Resíduos de Plaguicidas
 Servicio Nacional de Sanidad y Calidad Agroalimentario-
 (SENASA)
 Paseo Colón 439 Piso 2
 Tel: +54-11-4342-2502
 Fax:+54-11-4121-5069

Prof Augusto PIAZZA
 Ingeniero Agronomo
 Reconquista 661, 1º Piso (1003) Ciudad
 Autónoma De Buenos Aires - Argentina
 Tel: +5238-3587
 Fax:+5238-3588
 E-mail: piazza@sirconsultora.com

AUSTRALIA/AUSTRALIE

Mr Ian REICHSTEIN
 Director National Residue Survey
 Australian Government Department of Agriculture,
 Fisheries and Forestry
 GPO Box 858,
 CANBERRA ACT 2601
 Australia
 Tel: +61 2 6272 5668
 Fax: +61 2 6272 4023
 E-mail: ian.reichstein@daff.gov.au

Dr Pieter SCHEELINGS
 Principal Scientist
 Queensland Health Forensic and Scientific Services 39
 Kessels Road
 COOPERS PLAINS QLD 4108, AUSTRALIA
 Tel: +61 7 3274 9095
 Fax:+61 7 3274 9186
 E-mail:pieter_scheelings@health.gov.au

Dr Rajumati BHULA
 Program Manager-Pesticides
 Australian Pesticides and Veterinary Medicines
 Authority
 18 Wormald Street
 SYMONSTON ACT 2609
 AUSTRALIA
 Tel: +61 2 6210 4826
 Fax: +61 2 6210 4776
 E-mail:raj.bhula@apvma.gov.au

Ms Amy GUIHOT
 Counsellor Agriculture (Technical)
 Beijing Post, LOCKED BAG 40, KINGSTON ACT,
 AUSTRALIA, 2604
 Tel: +8610 5140 4155
 Fax:+8610 6532 5779
 E-mail: amy.guihot@dfat.gov.au

Mr Vincent HUDSON
 Counsellor Agriculture (Policy)
 Beijing Post, LOCKED BAG 40, KINGSTON ACT,
 AUSTRALIA, 2604
 Tel: +8610 5140 4212
 Fax:+8610 6532 5779
 E-mail:vincent.hudson@dfat.gov.au

Mr Bill MURRAY
 Grains Research and Development Corporation
 22 Thornley Close
 FERNTREE GULLY VIC 3156 AUSTRALIA
 Tel:+61 3 97638396
 E-mail:wjmurray@bigpond.net.au

AUSTRIA/AUSTRICHE

Ms Anna IRZL
Spargelfeldstrasse 191, 1220 Vienna, Austria
Tel: +43 50 555 - 33423
Fax: +43 50 555 - 33404
E-mail: anna.irzl@ages.at

BELGIUM/BELGIQUE/BÉLGICA

Ms Samira JARRAH
Pesticide Residues Expert
EUROSTATION Bloc II – 7th Floor, Place Victor Horta
40, bte 10 1060 Brussels (BELGIUM)
Tel: +32 (0)2 524 72 69
Fax: +32 (0)2 524 72 99
E-mail: Samira.Jarrah@health.fgov.be

Dr Olivier PIGEON
Head a.i. of the Chemistry Section
Wallon Agricultural Research Centre (CRA-W),
Pesticides Research Department, Rue du Bordia, 11, B-
5030 GEMBLoux, BELGIUM
Tel: +32 81 62 52 62
Fax: +32 81 62 52 72
E-mail: pigeon@cra.wallonnie.be

BURKINA FASO

Mr Karim KOUDOU GOU
Directeur du Contrôle des Aliments et de la Nutrition
Appliquée au Laboratoire National de Santé Publique.
Président du Comité technique national Codex pour les
contaminants et additifs chimiques. 09 BP 24
Ouagadougou 09
Tel: + (226) 78 83 72 99
Fax: + (226) 50 37 24 30
E-mail: krmkdg@yahoo.fr

BRAZIL/BRASIL/BRASIL

Carlos Ramos VENANCIO
Federal Food Inspection
SQS 409-BL. C- Ent.E – Apto. 301 ASA Sul –
Brasilia/DF - Brazil
Tel: +55 61 3218-2329
E-mail: carlos.venancio@agricultura.gov.br

Cleide OLIVEIRA
Chemist
Rua Cunha Gago, 700 - 11º andar
CEP 05421-001 Sao Paulo/SP - Brazil
Tel: +55 11 3094-3833
Fax: +55 11 3094-3830
E-mail: cleide@vignabrasil.com.br

Ms Rosemarie RODRIGUES
Manager
Av. Das Nacoes Unidas 18001 – 2º andar
Sao Paulo/SP Brazil
Tel: +55 11 5643-2166
Fax: +55 11 5643-2353
E-mail: rose.rodrigues@syngenta.com

Heloisa H.B. DE TOLEDO
Chemist
Rua Carlos Gomes, 539
CEP-14800-270-Araraquara/SP – Brazil
Tel: +55 16 3322-4360
E-mail: he.toledo@hotmail.com

Arlindo BONIFACIO
Federal Inspector – Ministry of Agriculture
Esplanada dos Ministerios – Bl. D – Anexo A sala 343
CEP 70043-900 Brasilia/DF – Brazil
Tel: +55 61 3218-2445
Fax: +55 61 3225-5341
E-mail : arlindo.bonifacio@agricultura.gov.br

Lucas DANTAS
Manager – ANVISA
SIA Trecho 5, Area Especial 57 Lote 200, Bl. D, 2º andar
Brasilia/DF – Brazil
Tel: +55 61 3462-5340
Fax: +55 61 3462 5726
E-mail : lucas.medeiros@anvisa.gov.br

Lidia NUNES Goncalves
Assessora – ANVISA
SIA Trecho 5, Area Especial 57 Lote 200, Bl. D, Sub-
solo
Brasilia/DF – Brasil
Tel: +55 61 3462-6507
Fax : +55 61 3462 5726
E-mail : lidia.nunes@anvisa.gov.br

Carlos GOMES
Regulatory Agent
SIA Trecho 5, Area Especial 57 Lote 200, Bl. D, Sub-
solo
Brasilia/DF – Brasil
Tel: +55 61 3462-6857
Fax: +55 61 3462 5726
E-mail: carlos.gomes@anvisa.gov.br

CANADA/CANADÁ

Dr Peter Ka-Lin CHAN
Director General
2720 Riverside Drive, Ottawa, Ontario, Canada, K1A
0K9
Tel: + (613) 736-3510
Fax: + (613) 736-3909
E-mail: peter_chan@hc-sc.gc.ca

Ms DONNA GRANT
Chemist, Pesticide Residues Unit Calgary Laboratory,
Canadian Food Inspection Agency
3650-36 Street, NW, Calgary, Alberta, Canada T2L 1L2
Tel: + 403-299-7636
Fax: + (403) 221-3293
E-mail: donna.grant@inspection.gc.ca

CAMEROON/CAMEROUN/CAMERÚN

Boniface BOOTO A NGON CHARLES
Director, Ministry of Industry
B P 5674 YAOUNDE
Tel: +237 99937621
Fax: +237 2222 64 96
E-mail: bootoangon@yahoo.fr

Ms Helene Julienne Felicite MALATEN
ATTACHE/SPM
SPM-YAOUNDE
Tel: +77461172
Fax: + 22 230917
E-mail: malatjulie@yahoo.fr

CHINA/CHINE

Prof Xiaojun XU
Deputy Director General
Bureau of Quality and Safety Supervision of Agricultural
Products, Ministry of Agriculture
11 Nongzhanguan Nanli, Chaoyang District
Beijing, 100125, P.R. China
Tel: +86-10-59193156
Fax: +86-10-594193315
E-mail: xuxiaojun@agri.gov.cn

Mr Yanqiu Zhang
Director
Institute for Control of the Agrochemicals Ministry of
Agriculture (ICAMA)
No. 22 Maizidian Street Chaoyang District,
100125, Beijing, P. R. China
Tel: +86-10-5919 4195/4243
Fax: +86-10-6502 5929
E-mail: zhangyanqiu@agri.gov.cn

Mr Minghui NING
Director of Division
Department of Agriculture, Ministry of Agriculture
11 Nongzhanguan Nanli, Chaoyang District
Beijing, 100125, P.R. China
Tel: +86-10-59193345
E-mail: ningminghui@agri.gov.cn

Ms Xiaohua FANG
Bureau of Quality and Safety Supervision of Agricultural
Products, Ministry of Agriculture
11 Nongzhanguan Nanli, Chaoyang District
Beijing, 100125, P.R. China
Tel: +86-10-59193156
Fax: +86-10-594193315
E-mail: fangxiaohua@agri.gov.cn

Dr Yehan CUI
Director of Division
Development Center of Science & Technology, Ministry
of Agriculture
18 Maizidian Street, Chaoyang District,
Beijing, 100125, P.R. China
Tel: +86-10-59195082
Fax: +86-10-59194550
E-mail: cuiyehan@agri.gov.cn

Prof Ying JI
Director of pesticide residue division
Institute for Control of the Agrochemicals Ministry of
Agriculture (ICAMA)
NO.22, Maizidian Street, Chaoyang District
Beijing, 100125.R. China
Tel: +86-10-59194106
Fax: +86-10-59194107
E-mail: jiyiying@agri.gov.cn

Prof Guangxue LIU
Professor
Institute for Control of the Agrochemicals Ministry of
Agriculture (ICAMA)
NO.22, Maizidian Street, Chaoyang District
Beijing, 100125.R. China
Tel: +86-10-5919?
Fax: +86-10-59194107
E-mail: liuguangxue@agri.gov.cn

Dr Qiang WANG
Zhenjiang Academy of Agricultural Sciences
198 Shiqiao Road,
Hangzhou, 310021, P.R. China
Tel: +86-571-86 404355
Fax: +86-571-86401834
E-mail: qiangwang2003@sina.com

Dr Leiming CAI
Director
Supervision and Test Center for Pesticide Safety
Evaluation
No. 8, Eastern Shenliao Road
Shenyang, P.R. China
Tel: +86-24-62353468
Fax: +86-24-62353458
E-mail: lmcai@toxisafe.com

Prof Canping PAN
Professor
Department of Applied Chemistry, China Agricultural
University
Beijing, 100094, P.R. China
Tel: +86-10-62733219
Fax: +86-10-62733620
E-mail: panc@cau.edu.cn

Dr Yongning WU
Professor
Chinese Center for Disease Control and Prevention
National Institute of Nutrition and Food Safety
29 Nanwei Road,
Beijing, 100050, P.R. China
Tel: +86-10-83132933
Fax: +86-10-83132933
E-mail: wuyn@public.bta.net.cn

Prof Dajin YANG
Professor
Chinese Center for Disease Control and Prevention
29 Pan Jia Yuan Nanli
Beijing, 100021, P.R. China
Tel: +86-10-87789835
Fax: +86-10-67711813
E-mail: ydj66513@sina.com

Dr Jieping SHI
Director of Division of State Food and Drug
Administration
A38, Beilishi road, West District,
Beijing, 100810, P.R. China
Tel: +86-10-88330509
Fax: +86-10-88370947
E-mail: shijp@sda.gov.cn

Ms Yaling HE
Chief pharmacist
Institute for Drug and Food Control, Chengdu, 610036,
Sichuan Province, China
Tel: +86-028-87530762
Fax: +86-028-87536405
E-mail: hyl-326@163.com

Dr Changxing XU
Director of Division (Standardization Administration)
9 Madian East Road Haidian District, 100088
Beijing, P.R. China
Tel: +86-10-82262657
Fax: +86-10-82260687
E-mail: xuchx@sac.gov.cn

Dr Xiaogang CHU
Deputy Director of Division
Chinese Academy of Inspection and Quarantine
No.3, Gaobeidian North Road, chaoyang District
Beijing, P.R. China
Tel: +86-10-85791012
Fax: +86-10-85778904
E-mail: xgchu@vip.163.com

Dr Yukei Anne FUNG
Principal Medical Officer
Centre for Food Safety
Food and Environmental Hygiene Department
43/F, Queensway Government Offices
66 Queensway
Hong Kong, P.R. China
Tel: +852 2867 5185
Fax: +852 2893 3547
E-mail: aykfung@fehd.gov.hk

Mr Foowing LEE
Senior Chemist
Food and Environmental Hygiene Department
43/F, Queensway Government Offices, 66 Queensway,
Hong Kong, P.R. China
Tel: +852 2867 5022
Fax: +852 2810 6717
E-mail: fwlee@fehd.gov.hk

YAU Chung-wan Joan
Scientific Officer
Centre of Food Safety, Food and Environmental
Hygiene Department, 431F Queensway Government
Officers, 66 Queensway, Hong Kong, P.R. China
Tel: +852 2867 5608
Fax: +852 2893 3547
E-mail: jcwyau@fehd.gov.hk

CHEUNG Sui-chun, Syndia
Chief Health Inspector
Centre for Food Safety, Food and Environmental
Hygiene Department, 43/F Queensway Government
Offices, 66 Queensway, Hong Kong
Tel: + (852) 2867 5569
Fax: + (852) 2521 4784
E-mail: suiccheung@fehd.gov.hk

HO Chung
Chief Health Inspector
Centre for Food Safety, Food and Environmental
Hygiene Department, 43/F Queensway Government
Offices, 66 Queensway, Hong Kong
Tel: + (852) 2867 5531
Fax: + (852) 2521 4784
E-mail: chungho@fehd.gov.hk

LEE WAI ON
Senior Chemist
Government Laboratory
800, Victoria Road,
Pokfulam,
Hong Kong, P.R. China
Tel: +852 2538 2012
Fax: +852 2551 5632
E-mail: wolee@govtlab.gov.hk

CHILE/CHILI

Dr Roberto H. Gonzalez
Professor of Pesticide Sciences
P. O. Box 1004
Tel: 56-2-9785714
E-mail: rgonzale@uchile.cl

Ms Jimena LOPEZ ARAVENA
Ingeniero Agronomo Jefe Departamento Tecnico
ASOEX
Tel: + 56-2-4724722
E-mail: jlopez@asoex.cl

Paulina Chávez
Asesor Departamento Alimentos y Nutricion Ministerio
de Salud
Mac Iver 459. 8° piso
Tel: +56-2-5740619
E-mail: pchavez@minsal.cl

Maria Elvira Lermanda
AFIPA Croplife CHILE
Felix de Amesti 124 of 31. cas condes. Santiago
Tel: +56-2-2066792
E-mail: infoafipa@afipa.cl

Sylvia Soledad Ferrada Chamorro
Head of the Mission, Foodsafety Unit Chief. Exports
Subdepartment Plant Protection Division SAG
Bulnes 140 3rd floor
Tel: +56-2-3451224/+56-2-345 1202
Fax: +56-2-3451138
E-mail: soledad.ferrada@sag.gob.cl

COOK ISLANDS/ÎLES COOK/ISLAS COOK

Mr William WIGMORE
Director of Research
Ministry of Agriculture, PO Box 96 Rarotonga.
Tel: +682 28711
Fax: +682 21881
E-mail: research@oyster.net.ck

COSTA RICA

Mr Roger RUIZ ZAPATA
Jefe Laboratorio de Residuos de Plaguicidas
Ministerio de Agriculturay Ganaderia
Apdo. 70-3006 Heredia; Costa Rica
Tel:+ (506) 2260-4925
Fax: + (506) 2260-4925
E-mail: rruiz@proteconet.go.cr
r_ruizmbt@yahoo.com

**CZECH REPUBLIC/ RÉPUBLIQUE TCHÈQUE/
REPÚBLICA CHECA**

Mr JINDRICH FIALKA
Director of Food Production and Legislation Department
Ministry of Agriculture
Těšnov 17, 117 05 Prague 1, Czech Republic
Tel: +420 221 812 465
Fax: +420 222 314 117
E-mail: jindrich.fialka@mze.cz

Ms ANNA IOVDIJOVA
Specialist for PPP (Plant Protection Products)
ZEMEDELSKA 1a, 613 00 BRNO, CZECH REPUBLIC
Tel: +420 545 137 068;
+420 776 769 477
Fax:+420 545 217 038
E-mail: anna.iovdijova@gmail.com

Dr JIRI ZBIRAL
Director
UKZUZ, Hroznova 2, 656 06 Brno, CZECH REPUBLIC
Tel: +420 543 548 329
Fax: +420 543 210 444
E-mail: jiri.zbiral@ukzuz.cz

Ms IVA STRIZOVA
Specialist
UKZUZ, Hroznova 2, 656 06 Brno, CZECH REPUBLIC
Tel: +420 543 548 327
Fax: +420 543 210 444
E-mail: iva.strizova@ukzuz.cz

Mr TOMAS SYROVATKA
ZAVODOV 442, BEROUN 26601, CZECH REPUBLIC
Tel: +420 731 463 435
E-mail: tomas.syrovatka@gmail.com
tomas.syrovatka@szu.cz

Mr Kari TÖLLIKKÖ
Principal Administrator, Council of the EU, General
Secretariat
Rue de la Loi 175, 1048 Brussels, Belgium
Tel: +32 - 2 281 7841
Fax:+32 - 2 281 6198
E-mail:kari.tollikko@consilium.europa.eu

DENMARK/DANEMARK/DINAMARCA

Ms Bodil Hamborg Jensen JENSEN
Senior scientific adviser
Mørkhøj Bygade 19, 2860, Søborg
Tel: +45 7234 7468
Fax: +45 7234 7000
E-mail: bhje@food.dtu.dk

Ms GURLI VAGNS
SCIENTIFIC ADVISOR
MØRKHØJ BYGADE 19 DK 2860 SØBORE
Tel: +45 33 956000
Fax: +453395 6001
E-mail: gurv@fvst.dk

**DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
/RÉPUBLIQUE POPULAIRE DÉMOCRATIQUE
DE CORÉE/ REPÚBLICA POPULAR
DEMOCRÁTICA DE COREA**

Jong Guk Song
Academy of Health and Food
Pyongyang Daesong Streed
Tel: +85-02-18111
Fax: +85-02-381-4605
E-mail: ksctc151@co.chesin.com

Kang Chol Yong
Academy of Health and Food Science
Pyongyang, Daesong District
Tel: +85-02-18111
Fax: +85-02-381-4605
E-mail: ksctc151@co.chesin.com

ETHIOPIA/ÉTHIOPIE/ETIOPÍA

Dr Dereje G. HAILEGIORGIS
Senior Researcher
P.O.Box 2003, Addis Ababa, Ethiopia
Tel: +251 116454431
Fax: +251 116461294
E-mail: dgorfu@yahoo.com

**EUROPEAN COMMUNITY (MEMBER
ORGANIZATION)/COMMUNAUTE
EUROPEENNE (ORGANISATION
MEMBRE)/COMUNIDAD UROPEA
(ORGANIZACIÓN MIEMBRO)**

Dr Eva Maria ZAMORA ESCRIBANO
Health and Consumer Directorate-General, European
Commission
Rue Froissart 101 2/60, B-1049 Brussels, Belgium
Tel: + (32 2) 2998682
Fax: + (32 2) 2998566
E-mail: Eva-maria.zamora-escribano@ec.europa.eu

Mr Luis Martin PLAZA
Health and Consumer Directorate-General, European
Commission
F 101-4/88
B 1049 Brussels, Belgium
Tel: +3222993736
Fax: +3222965963
E-mail: luis.Martin-plaza@ec.europa.eu

Prof Amadeo Rodriguez FERNANDEZ-ALBA
Head of the Community Reference Laboratory for Fruit
and Vegetables
University of Almeria. Fac. of Sciences. Almeria 04071
Almeria (Spain)
Tel: +34 950 0150015034
Fax: +34 950 015483
E-mail: amadeo@ual.es

Dr Hubert ZIPPER
Lab Manager- Community Reference Laboratory using
Single Residue Methods
Schaflandstrasse 3/2, D-70736
Fellbach, Germany
Tel: +49-711-3426-1141
Fax: +49-711-588176
E-mail: Hubert.Zipper@cvas.bwl.de

Dr Bastiaan DRUKKER
Health and Consumer Directorate-General, European
Commission
F 101-4/71
B 1049 Brussels, Belgium
Tel: +32 2 2965779
Fax: +3222965963
E-mail: bas.drukker@ec.europa.eu

FINLAND/FINLANDE/FINLANDIA

Mr Vesa TUOMAALA
Senior Adviser
Ministry of Agriculture and Forestry
PO Box 30 FI-00023 GOVERNMENT
Tel: +358 9 16052727
Fax: +358 916053338

Ms Tiia MÄKINEN-TÖYKKÄ
Senior Officer
Finnish Food Safety Authority
Mustialankatu 3, FI-00790 Helsinki
Tel: +358-2077 25190
Fax: +358-2077 25195
E-mail: tiia.makinen@evira.fi

FRANCE/FRANCIA

Dr Véronique MEUNIER SOLERE
Gestionnaire du risqué
MINISTERE DE L'AGRICULTURE ET DE LA
PECHE
DIRECTION GENERALE DE L'ALIMENTATION
SOUS_DIRECTION DE LA QUALITE ET DE LA
PROTECTION DES VEGETAUX
251 rue de Vaugirard 75732 PARIS CEDEX 15
Tel: +33 1 49 55 58 92
Fax: +33 1 49 55 59 49
E-mail: veronique.meunier-solere@agriculture.gouv.fr

Mr Pascal AUDEBERT
Point de Contact du Codex Alimentarius en France
2, boulevard Diderot 75572 PARIS cedex 12
Tel: +33 1 44 87 16 03
Fax: +33 1 44 87 16 04
E-mail: sgae-codex-fr@sgae.gouv.fr

Dr Xavier G SARDA
Evalueur Scientifique
Afssa, DiVE URSC/ 10 rue pierre Curie /94704 Maisons-
Alfort/ France
Tel: +33 1 49 77 21 66
Fax: + 33 1 49 77 21 60
E-mail: x.sarda@afssa.fr

GABON/GABÓN

Colette-Lydie AMBONGUILAT
Directeur
Ministère de la Santé
Tel : +24107355698
E-mail: clamy_75@yahoo.fr

GHANA

Mr Peter MAXWELL BINEY
Deputy Director
Ministry of Food and Agriculture, Plant Protection and
Regulatory Services Directorate, P. O. Box M 37, Accra-
Ghana
Tel: +00233-21-290404/ +00233-20-8161608
Fax: +233-21-662690
E-mail: pmbiney@yahoo.com

Mr Cheetham MINGLE
Senior Regulatory Officer
P.O. BOX CT 2783, Cantonments Accra, GHANA
Tel: +233 21-673864
E-mail: tawa_gh@yahoo.com

Mr PAUL OSEI-FOSU
Head, Pesticide Residue Laboratory, Ghana Standards
Board
P.O. BOX MB245, ACCRA, GHANA
Tel: + (233-21)506991-4,500065/6
Fax: + (233-21)50092,500231
E-mail: posei@ghanastandards.org

GERMANY/ALLEMAGNE/ALEMANIA

Dr Wilhelm VON DER HUDE
Administrator
Rochusstraße 1; D-53123 BONN
Tel: +49 228 99-529-4661
Fax: +49 228 99-529-4943
E-mail: wilhelm.vonderhude@bmelv.bund.de

Dr URSULA BANASIAK
Director and Professor
Thielallee 88-92, D-14195 Berlin
Tel: +49 30 8412 3337
Fax: +49 30 8412 3008
E-mail: ursula.banasiak@bfr.bund.de

Dr Karsten HOHGARDT
Wissenschaftlicher Direktor
Messeweg 11-12D, 38104 Braunschweig
Tel: +49-531-299 35 03
Fax: +49-531-299 30 02
E-mail: karsten.hohgardt@bvl.bund.de

Dr Hans-Dieter JUNGBLUT
Advisor
Agricultural Center, Speyerer Straße 2, D-67117
Limburgerhof
Tel: + 49-21/60-27774
Fax: + 49-21/60-27092
E-mail: hans-dieter.jungblut@basf.com

Dr Otto KLEIN
Product Safety Manager
D-Alfred-Nobel-Str. 50, 40789 Monheim, Germany
Tel: +49-2173-383463
Fax: +49-2173-383469
E-mail: otto.klein@bayercropscience.com

Bernd ROSENSTEIN
Managing Director
Gruson strasse 221 D-22113 Hamburg
Tel: +49-40-733 335105
E-mail: brosenstein@worlee.de

GUINEA/GUINÉE

Mr JEAN-LUC FABER
 Chef De La Section Reglementation Des
 Pesticides et Agrements Professionnels,
 Point Focal SPS – Guinée, Vice-President du Comité
 National du Codex Alimentarius De Guinée
 576 Conakry, République De Guinée
 Tel:(+224)30 41 51 07 / 60 55 36 76
 E-mail: elsabang@yahoo.fr
 snpv-guinee@laposte.net

GUINEA-BISSAU/GUINÉE-BISSAU

Mr DOMINGOS KEBATY
 BP 85-BISSAU
 Tel:+ (245)668 31 99
 Fax:+ (245)322 10 19
 E-mail: doty64@yahoo.com.br

HAITI/HAÏTI/HAÏTÍ

Michel Alain LOUIS
 Directeur du Laboratoire Vétérinaire et de Contrôle de
 Qualité des Aliments
 BP 625
 Tel: + 2513-5733/3681-8472
 Fax: +2245-0635
 E-mail: michelalainlouis@yahoo.com

HUNGARY/HONGRIE/HUNGRÍA

Dr Mária SZERLETICSNÉ TÚRI
 Head of Department Risk Assessment, HFSO
 H-1097 Budapest, Gyáli út 2-6
 Tel: + 36 1 437 0237
 Fax: + 36 1 387 9400
 E-mail:turi.maria@mebih.gov.hu

INDIA/INDE

Dr Debabrata KANUNGO
 Additional Director General
 West Block NO.1, RK Puram,
 New Delhi, INDIA
 Tel: +91-11-26101268
 Fax: +91-11-26189307
 E-mail: dkanungo@nic.in

Dr Rajendran THEKEPAT PISHARATH
 Assistant Director General (PLANT
 PROTECTION)
 Krishi Bhavan, Dr Rajendra Prasad Road,
 New Delhi-110 114
 Tel: +91-1123384414
 Fax:+ 91-1123384414
 E-mail: electrónico:adgpp.icar@nic.in

Dr Biswajit BERA
 Director (Research)
 Tea Board of India, 14-B.T.M.Sarani,
 Brabourne Road, Kolkata-700001, India
 Tel: +91-033-2235 5539
 Fax:+91-033-221 5715
 E-mail: biswajittra@yahoo.co.in ,
 biswajitberateaboard@yahoo.com

Mr Chanchal CHAND SARKAR
 Deputy Director
 Room NO. 423, Udyog Bhawan,
 New Delhi, Pin, 110107, India
 Tel:+91-11-23063916
 Fax: +91-11-23063418
 E-mail: cc.sarkar@nic.in

Mr Rajvir SINGH
 Department of Agriculture and Cooperation ,Ministry of
 Agriculture, Directorate of Plant Protection, Quarantine
 and Storage, N.H.IV, Faridabad (Haryana)
 PIN-121 001
 Tel: +91-129-2418507/0129-6579881
 E-mail: chemcil@nic.in

INDONESIA/INDONÉSIE

Dr Nyoman Oka TRIDJAJA
 Director
 Ministry of Agriculture, Republic of Indonesia, Jalan
 Harsono, RM, No.3, Jakarta 12550,Bldd, 3rd Floor
 Tel:+62 21 7811468
 Fax:+62 21 7811468
 E-mail:ntridjaja@yahoo.com
 Dr. PUDJIATMOKO
 Agricultural Attaché
 Indonesian Embassy
 5-2-9 Higashi-Gotanda, Shinagawa-ku,Tokyo
 Tel: +81334476364
 Fax: +81334476365
 E-mail: pudjiatmokol@yahoo.com

Dr Mohammad DANI
 Director
 Centre of Permit and Investment Services
 Gedung Arsip Lt.3.
 JL. Harsono RM No.3 Ragunan- Jakarta
 Tel:+62.21.78839619
 Fax:+62.21.78836171
 E-mail: mdani@cbn.net.id

Ms Yulia PURWANTI
Centre of Permit and Investment Services, Ministry of
Agriculture
Secretariat of Pesticide Committee
Arsip Building, 3rd floor, 21. Harsono RM No.3 Jakarta
Tel:+62.21.788396919
Fax: +6221 78836171
E-mail: yulia@deptan.go.id
yulia_pungki@yahoo.com

Ms Noviana Kus Yuniati
Directorate of Supervision and Quality Control,
Directorate of Foreign Trade, Ministry of Trade
Raya Bogor Street km.26 Gracas Jakarta 13740
Tel: +62-21-8710321/3
Fax: +62-21-8710478
E-mail: juniati_ana@yahoo.com

Ms Gabriella Susilowati
Secretariat of Directorate General of Horticulture,
Ministry of Agriculture
Jl. A. U. P. No.3, Pasar Minggu, South Jakarta
Tel:+62-21-78843032
Fax:+62-21-7805880
E-mail: isusilowatiimp@yahoo.com

Prof Dr.Sri Noegrohati
Gadjah Mada University- Yogyakarta
Faculty of Pharmacy, Gadjah Mada University, Sekip
Utara Yogyakarta, Indonesia
Tel: +628122743387
Fax: +62-274-552962
E-mail: sri_noegrohati@ugm.ac.id

Mr SYAIFUL
National Standardization Agency
Gdg. Manggala Wanabhakti Blok IV. LT4
Tel: +21-5747043
Fax: +21- 5747045
E-mail: syaiful@bsn.go.id

Ms Eny TULAK
Directorate of Supervision and Quality Control,
Directorate of Foreign Trade
Ministry of Trade
Jl. Raya Bogor Km 26 jakarta
Tel: +62-21-8710321
Fax: +62-21-8710478
E-mail: enytulakl@yahoo.co.id

IRAQ

Mr Laith Abbas AL-RUBAIEE
Chief agricultural engineer
AlAndalussq.CPHL Baghdad
Tel:+009647904403901
E-mail: laith_a58@yahoo.com

Ms Khadeeja Ibraheem MOHAMMED
Chief-Chemist, Ministry of Health
CPHL/ Baghdad AL-Andalus.sq
Tel:0009647903592205
E-mail: alsady2000@gmail.com

JAMAICA/JAMAÏQUE

Mr Michael RAMSAY
Registrar
4th Floor Ministry of Health Building,
2-4 King Street, Kingston, Jamaica
Tel: +876 - 967-1281
Fax:+876 - 967-1285
E-mail: ramsay@caribpesticides.net

JAPAN/JAPON/JAPÓN

Dr Chieko IKEDA
Director, Office of International Food Safety, Policy
Planning and Communication Division, Department of
Food Safety, Ministry of Health, Labour and Welfare
1-2-2, Kasumigaseki, Chiyoda-ku, Tokyo 100-8916
Japan
Tel: +81-3-3595-2326
Fax:+81-3-3503-7965
E-mail: codexj@mhlw.go.jp

Mr Kenji ASAKURA
Director, Plant Products Safety Division, Food Safety
and Consumer Affairs Bureau
Ministry of Agriculture, Forestry and Fisheries
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8950
Tel: +81-3-6744-2026
Fax:+81-3-3580-8592
E-mail: kenji_asakura@nm.maff.go.jp

Mr Toshiaki KUDO
Deputy Director, Standards and Evaluation Division,
Department of Food Safety, Ministry of Health, Labor
and Welfare
1-2-2, Kasumigaseki, Chiyoda-ku, Tokyo 100-8916,
Japan
Tel: +81-3-3595-2341
Fax: +81-3-3501-4868
E-mail: codexj@mhlw.go.jp

Ms Atsuko HORIBE
Deputy director, Agricultural Chemicals Office, Plant
Products Safety Division, Food Safety and Consumer
Affairs Bureau, Ministry of Agriculture, Forestry and
Fisheries
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8950
Tel: +81-3-3502-5969
Fax: +81-3-3501-3774
E-mail: horibe_atsuko@nm.maff.go.jp

Mr Makoto IRIE
 Section chief, Agricultural Chemicals Office, Plant
 Products Safety Division, Food Safety and Consumer
 Affairs Bureau, Ministry of Agriculture, Forestry and
 Fisheries
 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8950
 Tel: +81-3-3502-5969
 Fax: +81-3-3501-3774
 E-mail: makoto_irie@nm.maff.go.jp

Mr Masahiro TAKAHATA
 Section chief, Pesticide Residue, Risk Assessment
 Division, Food Safety Commission Secretariat, Cabinet
 Office, Government of Japan
 Prudential Tower 6F 2-13-10 Nagata-cho, Chiyoda-ku,
 Tokyo 100-8989
 Tel: +81-3-5251-9146
 Fax: +81-3-3591-2236
 E-mail: masahiro.takahata@cao.go.jp

KENYA

Ms LUCY NAMU
 Chief Analytical Chemist
 Kenya Plant Health Inspectorate Service
 P.O.BOX 49592, 00100 GPO Nairobi, Kenya
 Tel: +254-3536171/2
 Fax: +254-3536175
 E-mail: lnamu@kephis.org

GLADYS MAINA
 Chief Executive, Pest Control Products Board
 P.O. BOX 13794 – 00800 Nairobi
 Tel: +254-020-4450242/4446115
 Fax: +254-020-4449072
 E-mail: md@pcpb.or.ke / njeri_gladys@yahoo.com

Ms Chemutai TONUI SAWE
 Assistant Manager
 Kenya Bureau of Standards, Popo Road ,
 P.O. BOX 54974-00200 Nairobi
 Tel: +254 -206948452
 Fax: +254-20604031
 E-mail: sawec@kebs.org

LAO PEOPLE'S DEMOCRATIC REPUBLIC/ RÉPUBLIQUE ÉMOCRATIQUE/POPULAIRE LAO/REPÚBLICA DEMOCRÁTICA POPULAR LAO

Mrs Khamphoui LOUANGLATH
 Director, Regulaory Division
 Department of Agriculture
 P. O. BOX 811, VIENTIANE
 Tel: +856 21 412350
 Fax: +856 21 412349
 E-mail: phoui2@hotmail.com

LESOTHO

Mr ESAIAH TJELELE
 SENIOR PLANT PROTECTION OFFICER
 P.O BOX 829, MASERU.100, LESOTHO, SOUTHERN
 AFRICA
 Tel: (+266) 58843373 / (+266) 22312395
 Fax: (+266) 22310362
 E-mail: etjelele@yahoo.co.uk

MADAGASCAR

Marie Jeannine Christiane RAJAONARIVONY
 Ingenieur Agronome-Membre du Comité National du
 Codex Alimentarius-Ministère du Commerce
 B.P.454
 Tel: 261 32 41 70731
 E-mail: rajaojeannine@yahoo.fr

MALAWI

Mr Evasio EVANS KAPEYA
 Registrar of Pesticides
 P.O. BOX 51300, LimBE, Malawi
 Tel: +265 1 471 312
 Fax: +265 1 471 312
 E-mail:
 ekapeya@yahoo.com/pesticideboard@malawi.net

MALAYSIA/MALAISIE

Mr SUHAIMI DOLLAH
 Veterinary Public Health Laboratory, DVS, Jln Nilai-
 Banting, BB Salak TINGGI, 43900 Sepang, Selangor,
 Malaysia
 Tel: +603-8706 8681
 Fax: +603-8706 8675
 E-mail: dsuhaimi@jph.gov.my

Ms Noor Hafizah Binti ABDUL HALIM
 Assistant Director, Pesticide Control Division
 Pesticide Control Division, 4 – 6th Floors,
 Wisma Tani, Jalan Sultan Salahuddin, 50632 Kuala
 Lumpur, Malaysia
 Tel: +603 2030 1498
 Fax: +603 2691 7551
 E-mail: noorhafizah@doa.gov.my

Ms Nursiah Binti Mohamad Tajul AROS
 Director, Pesticide Control Division
 Pesticide Control Division, 4 – 6th Floors,
 Wisma Tani, Jalan Sultan Salahuddin, 50632 Kuala
 Lumpur, Malaysia
 Tel: +603 20301 1472
 Fax: +603 2691 7551
 E-mail: nursiah@doa.gov.my

Mr Chai Keong NGAN
Strategic Resource Research Centre, MARDI
Headquarters, PO Box 12301, 50774 Kuala Lumpur,
Malaysia
Tel: +6 03 8943 7672
Fax: +6 03 8948 7639
E-mail: ckngan@mardi.gov.my

Mr Kenny YEOH
NO. 6, PERSIARAN INSTITUSI, 43000 KAJANG,
SELANGOR, MALAYSIA
Tel: +603 87694975
E-mail: cbyeoh@mpob.gov.my

MALDIVES/MALDIVAS

Mr Ibrahim SHABAU
Director
Ghazee Building,
Ameer Ahmed Mage, (20-05)
Tel: +960 3322625
Fax: +960 3326558
E-mail: ibrahim.shabau@fishagri.gov.mv

Ms. Fathimath SAFOORA
Scientific Officer
Maldives Food and Drug Authority,
Sosun Magu, Male', Republic of Maldives
Tel: + (960)3343538
Fax: + (960)330457
E-mail: nhl@mfa.gov.mv

MALI/MALÍ

Mr Ousmane TOURE
Directeur Général Agence Nationale de la Sécurité
Sanitaire des Aliments (ANSSA)
Ministère de la Santé/ Agence Nationale de la Sécurité
Sanitaire des Aliments, Centre Commercial, Rue 305
Quartier du fleuve, BPE: 2362 Bamako Mali,
Tel : +223-20-22-07-54
+223 20 23 01 83
+223 66 72 90 13
Fax: +223 20 22 07 47
E-mail: oussou_toure@hotmail.com

MAURITANIA/MAURITANIE

Dr Mokhtar FALL
Bp 2750 Nouakchott
Tel: +222 521 23 28
Fax: +222 525 74 75
E-mail: Fmoctar@agriculture.gov.mr

MONGOLIA/ MONGOLIE

Ms Solongo BAYARSAIKHAN
Investigator of the Central Joint Laboratory of the state
specialized inspection agency
Sukhbaatar district, Gun Chin van Chagdarjav street
210648 Ulaanbaatar ,Mongolia
Tel: +976-331652
Fax: +976-11-322725/976-11-319586
E-mail: bcoko_o1267@yahoo.com

Dr Purevsuren TSERENDASH
Deputy chief of the Central Joint Laboratory of the state
specialized inspection agency
Sukhbaatar district, Gun Chin van Chagdarjav street,
Ulaanbaatar 210648, Mongolia
Tel: 976- 319586
Fax: +976-11-319586
+976- 11-322725
E-mail: puujee_ts2000@yahoo.com

MOROCCO/MAROC/MARRUECOS

Dr Mohamed BENZINE
Chef Departement Produits Frais
72, Angle Rue Mohamed Smiha et Rue
Moulay Mohamed el Baamrani - Casablanca
Tel: +2125 22 30 51 04
Fax: +2125 22 30 51 68
E-mail: benzine@eacce.org.ma

Mr AHMED ZOUAOUÍ
Chef De Service Pesticides
No25 Rue Nichakra Rahal Casablanca Maroc
Tel: +212 52230 2196/98
Fax: +212 522301972
E-mail: zouaouiloarc@yahoo.fr

MOZAMBIQUE

Mr Khalid CASSAM
AV. DAS FPLM – Recinto do IIAM – Pavilhão Novo –
Departamento de Sanidade Vegetal – 1st Floor
Tel: +258 21462034/+25821460591
Fax: +258 21462035/+25821460591
E-mail: khalidcassam@yahoo.com.br

Julaya MUSSÁ
Anthropologist
Av. Eduardo Mondlane/Salvador Allende 264 Maputo -
Mozambique
Tel: +258 21 310281/ +258 82 85 26 780
Fax: +258 21 32 61 64
E-mail: juhamica@yahoo.com.br

NETHERLANDS/PAYS-BAS/PAÍSES BAJOS

Ms Erica MULLER- M.Sc
 Plant Protection Expert, Ministry of Agriculture, Nature
 and Food Quality, Plant Protection Service
 P.O. Box 9102, 6700 HC Wageningen,
 The Netherlands
 Tel: +31 317 496881
 Fax: +31 317 421701
 E-mail: e.muller@minlnv.nl

Ms Fabianne HUIS IN 'T VELD – M.Sc
 Policy Worker on food safety and quality Productboard
 for Horticulture
 P.O. Box 280, 2700 AG Zoetermeer
 The Netherlands
 Tel: +31(0)793470604
 Fax: +31(0)793470800
 E-mail: f.huisintveld@tuinbouw.nl

Dr Bernadette C. OSSENDORP
 Head Dept. Toxicology & Risk Assessment
 RIVM
 PO Box 1, 3720 BA Bilthoven,
 The Netherlands
 Tel: +31-30-274 3970
 Fax: +31-30-274 4475
 E-mail: bernadette.ossendorp@rivm.nl

Mr Cornelis PLANKEN
 Policy officer
 Ministry of Health, Welfare and Sport
 PO Box 20350,
 2500 EJ The Hague,
 The Netherlands
 Tel: +31 703407132
 Fax: +31 703407303
 E-mail: k.planken@minvws.nl

**NEW ZEALAND/NOUVELLE-ZÉLANDE/
NUEVA ZELANDIA**

Ms Debbie MORRIS
 Director (Approvals)
 NZ Food Safety Authority
 PO BOX 2835 Wellington New Zealand
 Tel: +6448942541
 Fax: +6448942501
 E-mail: Debbie.morris@nzfsa.govt.nz

Ms Nikki JOHNSON
 PO BOX 10629, Wellington, New Zealand
 Tel: +64 4 4736040
 Fax: +64 4 4736041
 E-mail: nikki@solutionz.co.nz

Mr Warren HUGHES
 Programme Manager (Approvals and ACVM Standards)
 NZ Food Safety Authority
 PO Box 2835, Wellington,
 New Zealand 6140
 Tel: +64 4 894 2560
 Fax: +64 4 894 2566
 E-mail: warren.hughes@nzfsa.govt.nz

Mr David LUNN
 Senior Programme Manager
 NZ Food Safety Authority
 PO BOX 2835 Wellington 6140
 New Zealand
 Tel: +64 4 894 2654
 Fax: +64 4 894-2675
 E-mail: David.Lunn@nzfsa.govt.nz

NIGERIA/NIGÉRIA

Dr YAYA OLANIRAN
 Permanent Representative To FAO/UN
 via CASSIODORO 2/C 00193 Rome Italy
 Tel: +0039-06-6896093
 Fax: +0039-06-6877840
 E-mail: nigeriapermrep@email.com

Mrs Denloye Stella AGEGBU
 Director
 Laboratory Services, National Agency for Food and Drug
 Admin. and Control (NAFDAC)
 Plot 2032 Olusegun Obasanjo Way, Zone 7,
 Wuse, Abuja
 Tel: +234-8023118986
 E-mail: denloye_stella@yahoo.com

Mrs Amore MOJI
 Deputy Director
 Chemical Imports, NAFDAC
 Plot 2032 Olusegun Obasanjo Way,
 Zone 7, Wuse, Abuja
 Tel: +234-8023137385
 E-mail: mojimore@yahoo.com

NORWAY/NORVÈGE/NORUEGA

Ms ELLEN MARI GRANDE
 Senior adviser
 Felles Postmottak, Postboks 383, N-2381
 Brumunddal, Norway
 Tel: +47 23 21 68 75
 Fax: +47 23 21 68 01
 E-mail: ellen.mari.grande@mattilsynet.no

PAKISTAN/PAKISTÁN

Mr MUBARIK AHMED
Director/Incharge, PARC, Karachi- Pakistan
SARC, PARC, Karachi University Campus, Karachi,
Pakistan
Tel:+21-9261555
Fax:+21-9261561
E-mail: gqtl_parac@hotmail.com

PARAGUAY

Jose Eduardo GIMENEZ DUARTE
Ingeniero Agronomo
Humaita 145 Asuncion
Tel: +595 21492872
Fax: +59521492 872

QATAR

Mr Saeed J.H.MAKKI
Technologist
P.O.BOX14916 DOHA-QATAR
Tel: +4417676
Fax:+4353769

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

Dr GeonJae Im
Pesticide Safety Evaluation Division, National Academy
of Agricultural Science,
Rural Development Administration
150 Suinro, Gwonseon-gu, Suwon, Gyunggi, 441-707
Republic of Korea
Tel: +82-31-290-0587
Fax: +82-31-0508
E-mail: gunjim@korea.kr

Dr MooHyeog Im
Deputy Director
Division of Pesticide & Veterinary Drug Residues
Korea Food & Drug Administration
194 Tongil-ro, Eunpyung-gu, Seoul 122-704, Rep. of
Korea
Tel: +82-2-380-1674
Fax: +82-2-355-6037
E-mail: imh0119@kfda.go.kr

Mr Dong-Gyu Kim
Researcher
Toxicology & Chemistry Division
National Veterinary Research & Quarantine Service
480, Anyang 6-dong, Manan-gu, Anyang-City,
Gyeonggi-do 430-824, Rep. of Korea
Tel: +82-31-467-1983
Fax: +82-31-467-1897
E-mail: kims@nvrqs.go.kr

Dr ChanHyeok Kwon
Reviewer & scientific officer
Division of Pesticide & Veterinary Drug Residues
Korea Food & Drug Administration
194 Tongil-ro, Eunpyung-gu, Seoul 122-704, Rep. of
Korea
Tel: +82-2-380-1674
Fax: +82-2-355-6037
E-mail:chkwon@kfda.go.kr

Ms.Mi Ra Kim
Reviewer & Scientific Officer
Testing & Analysis Division, Daejeon Regional Korea
Food & Drug Administration, Daejeon 302-828,
Republic of Korea
Tel: +82-42-480-8791
Fax: +82-42-480-8790
E-mail: mrkim06@kfda.go.kr

Ms SeungYun Jung
Senior Researcher
Division of Food Policy
Ministry for Health, Welfare and Family Affairs
75 Yulgong-ro, Jongno-gu, Seoul 110-793, Rep. of
Korea
Tel: +82-2-2023-7792
Fax: +82-2-2023-7780
E-mail: sy0511@korea.kr

Prof Mi-Gyung Lee
Associate Professor
Food Science & Biotechnology Division, College of
Natural Science, Andong National University
388 Songcheon-dong, Andong-si, Gyeongbuk, 760-749,
Rep. of Korea
Tel: +82-54-820-6011
Fax: + 82-54-820-6264
E-mail: leemig@andong.ac.kr

Mr KyewWan Yang
Deputy senior manager for regulatory affairs
19F Dongbu Financial Center, Seoul, Rep. of Korea
Tel: +82-(0)2-3484-1777
Fax: +82-(0)2-565-8534
E-mail: kwyang@dongbu.com

Mr Yong-Jae Lee
Safety Research Center, Korea Ginseng Corp.
302, Shinseong-dong, Yuseong-gu, Daejeon, 305-805,
Rep. of Korea
Tel: +82-42-866-5678
Fax: +82-42-866-5345
E-mail: yongjae95@ktng.com

SENEGAL/SÉNÉGAL

Prof Amadou DIOUF
 Professeur de Toxicologie, Directeur du
 Centre Antipoison
 B : 4024 Dakar Fann
 Tel:CAP + (221) 33 825 40 07
 + (221)33 8246539
 Mobile: + (221)776449823
 + (221)774406976
 Fax: + (221) 33 825 40 52 et
 + (221) 33 822 44 45 et
 + (221)33 824 65 39
 E-mail: amdiouf@refer.sn; amdiouf53@orange.sn;
 capsminsante@gmail.com

SERBIA/SERBIE

Ms Snežana SAVČIĆ-PETRIĆ
 Head of Department for Plant Protection and Plant
 Nutrition Products
 Plant Protection Directorate of the Forestry and Water
 Management
 11070 Novi Beograd, Omladinskih brigade 1 street
 Tel:+381(0)11 2600 081
 Fax:+381(0)11 2600 081
 E-mail:snezana.savcicpetric@minpolj.gov.rs

SIERRA LEONE/SIERRA LEONA

Dr IBRAHIM M.O. SHAMIE
 Principal Crop Protection Officer
 Crop Protection Services, Ministry of Agriculture,
 Forestry and Food Security Youyi Building, Freetown,
 Sierra Leone
 Tel:+232 77542939
 E-mail:imo1shamie@yahoo.co.uk

SINGAPORE/SINGAPOUR/SINGAPUR

Dr Paul, King Tiong CHIEW
 Deputy Director (Veterinary Public Health)
 10 Perahu Road Singapore 718837
 Tel:+ (65) 6795 2828
 Fax:+ (65) 6861 9491
 E-mail: paul_chiew@ava.gov.sg

Mr Poh Leong LIM
 Senior Scientist,
 Pesticide Residue Branch
 10 Perahu Road Singapore 718837
 Tel:+ (65) 6795 2818
 Fax:+ (65) 6861 9491
 E-mail: lim_poh_leong@ava.gov.sg

**SOUTH AFRICA/AFRIQUE DU SUD/
SUDÁFRICA**

Dr Nolwazi MKIZE
 Agricultural Management Advisor
 Private BAG X 343 Pretoria South Africa
 Tel:+2712 319 7910
 Fax:+27 12 319 7179
 E-mail:nolwazim@nda.agric.za

Mr MADIBA MOTLANA
 Private BAG X 343 Pretoria South Africa
 Tel:+27 123196051
 Fax:+27 123196055
 E-mail:madibaw@nda.agric.za

SPAIN/ESPAGNE/ESPAÑA

Mr. CÉSAR CASADO DE SANTIAGO
 Alcalá Street, 56, 4th floor. 28071 Madrid- Spain.
 Tel:+34 913380620
 Fax:+34 913380169
 E-mail:ccasado@msc.es

SUDAN/SOUDAN/SUDÁN

Aziza Abdelgader ALI HAMAD
 Head of Safe Use Pesticides Section,
 Plant Protection Department, Ministry of
 Agriculture & Forests
 Khartoum North, PO Box: 14 Sudan
 Tel:+249 912 244476
 Fax:+249 185339458
 E-mail:azizaabdelgader@yahoo.com

Hatim Hassan ALI MOHAMED
 Manager of Interrelations
 Sudanese Standard and Metrology Organization,
 Khartoum-Sudan
 Tel: +24912219753
 E-mail: hatimali78@yahoo.com

Nour Elsayed MUKHTAR GRASHI
 Sudan Khartoum Baldi Street Sudanese Standard and
 Metrology Organization
 Tel: +249912367408
 E-mail: nourssmo@hotmail.com

SWEDEN/SUÈDE/SUECIA

Arne ANDERSSON
 Head of Division
 BOX 622, SE 75126, Sweden
 Tel:+46 - 18 - 17 55 00
 Fax:+46 - 18 - 10 58 48
 E-mail: aran@slv.se

Magnus CARNWALL
Senior Administrative Officer
BOX 622, SE 75126, Sweden
Tel:+46 - 18 - 17 55 00
Fax:+46 - 18 - 10 58 48
E-mail:maca@slv.se

SWITZERLAND/SUISSE/SUIZA

Ms Lucia Verena KLAUSER
Schwarzenburgstrasse 165, CH-3003 Bern
Tel:+4131 322 95 69
Fax:+4131 322 95 74
E-mail:lucia.klauser@bag.admin.ch

Dr Thomas MUELLER
Global Product Registration Manager Fungicides
Syngenta Crop Protection AG
Schwarzwaldallee 215
CH-4058 Basel, Switzerland
Tel: +41 61 323 8035
Fax: +41 61 323 8970
Email: Thomas.mueller@syngenta.com

TAJIKISTAN/TADJIKISTAN/ TAYIKISTÁN

Dr Kosim KURBONOV
Head specialist
8 Tchapaeva street, Dushanbe, Tajikistan
Tel:+ 992372274947; +992918503274
Fax:+ 992372274947
E-mail: kosim.kurbonov@gmail.com;
repses@yandex.ru

THAILAND/THAÏLANDE/TAÏLANDIA

Mr Somchai Charnnarongkul
Director General, Department of Agriculture
50 Phaholyotin Road, Chatuchak, Bangkok 10900,
THAILAND
Tel:+662-579-6133
Fax:+662-579 5528
E-mail: somchaic@moac.go.th,
somchaic@hotmail.com

Dr Mantana MILNE
Director of Agricultural Production Science Research
and Development Office
50 Phaholyotin Road, Chatuchak, Bangkok 10900,
THAILAND
Tel: +662 579 3577
Fax: +662 940 5736
E-mail: milne@doa.go.th

Mr Pisan PONGSAPITCH
Senior Expert
National Bureau of Agricultural Commodity and Food
Standards
50 Phaholyotin Road, Chatuchak, Bangkok 10900,
THAILAND
Tel: +6625612277 ext 1421
Fax: +6625613373
E-mail: pisan@acfs.go.th

Ms Chitra SETTAUDOM
Senior Expert in Food Standard
Food and Drug Administration
Ministry of Public Health Nonthaburee 11000, Thailand
Tel: +6625907140
Fax: + 6625918446
E-mail:schitra@fda.moph.go.th

Ms Prapassara PIMPAN
Chief of Pesticide Research Group
Department of Agriculture, 50 Phaholyotin Road,
Chatuchak, Bangkok 10900, Thailand
Tel: +662 9405442 ext.2310
Fax: +622 561 4695
E-mail:ppimpan04@yahoo.com

Ms Warunee SENSUPA
Food and Drug Specialist, Food and Drug
Administration, Ministry of Public Health
Nonthaburee 11000, Thailand
Tel: +622-5907173
Fax: +622-5918476
E-mail warunee@fda.moph.go.th

Dr Nuansri TAYAPUTCH
Executive Consultant
Central Laboratory, Inside Kasetsart University
Jatujak, Paholyothin Road, Bangkok 10900, Thailand
Tel: +662-9406881 ext.202
Fax: +662-5794895
E-mail: nuantaya@hotmail.com

Mr Charoen KAOWSUKSAI
Queen Sirikit National Convention Center Zone C, 4th
floor, 60 New Rachadapisek Rd., Klongtoey Bangkok
10110 Thailand
Tel: +66(0) 29763088
Fax: +66(0)29762265
E-mail: charoen@cpram.co.th

Ms Vipaporn SAKULKRU
Technical Officer
Thai Food Processors' Association, 170/21-22 9th Floor
Ocean Tower Bld, New Rachadapisek Rd., Klongtoey
Bangkok 10110 Thailand
Tel:+66(0) 2 2612684-6
Fax:+66 (0) 226122996-7
E-mail: datacenter@thaifood.org

TOGO

Dr TCHALA KAZIA
Codex Contact Point
P.O.Box 1163 – Lome – Togo
Tel: +228 225 41 18
Fax: +228 225 15 59
E-mail: kaziatchala@yahoo.fr

TURKEY/TURQUIE/TURQUÍA

Dr PELIN AKSU
Food Engineer
Ministry of Agriculture and Rural Affairs
Plant Protection Central Research Insititute
Fatih Sultan Mehmet Bulvari
No: 66-68/A
Postal code: 06172
Yenimahalle Ankara/Turkey
Tel: +90312-3445994 exp 205
Fax: +903123151531
E-mail: pelinaksu@zmmae.gov.tr; codex@kkgm.gov.tr

UGANDA/OUGANDA

Mr Geoffrey ONEN
Senior Government Analyst
Government Chemist and Analytical Laboratory
P. O. Box 2174 Kampala
Tel: +256712832871/256250464
E-mail: onengff1@yahoo.com/ onengff@hotmail.com

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

Ms Lois ROSSI
Director of Registration Division, Office of Pesticide
Programs
U.S. Environmental Protection Agency
1200 Pennsylvania AVE.NW
Washington, DC 20090
Tel: +703-305-5447
Fax: +703-305-6920
E-mail: rossi.lois@epa.gov

Dr Robert L. EPSTEIN
Deputy Administrator, Science and Technology
Programs, Agriculture Marketing Service
U.S. Department of Agriculture Room 1090s, Mail stop
0222
14th and Independence Avenue Washington, DC 20250
Tel: +1-202-720-5231
Fax: +1-202-720-6496
E-mail: Robert.Epstein@USDA.gov

Dr Young LEE
Regulatory scientist,
Food and Drug Administration
5100 Paint Branch Pkway (HFS-317), College Park, MD
20740
Tel: +1-301-436-1943
Fax: +1-301-436-2632
E-mail: Young.Lee@fda.hhs.gov

Dr Gabriele LUDWIG
Associate Director
1150 9th Street, Almond Board of California, Suite 1500
Modesto, CA USA 95354
Tel: +209.765.0578
Fax: +209.549.8267
E-mail: gludwig@almondboard.com

Ms Cynthia BAKER
President, Exigent
370 South Main Street, Yuma,
Arizona 85364
Tel: + (928) 819-1554
Fax: + (928) 373-1822
E-mail: cbaker@gowanco.com

Dr Lori BERGER
Executive Director
CA Specialty Crops Council
4500 S. Laspina Suite 214 Tulare,
CA 93274
Tel: +559.799.8266
Fax: +559.688.5527
E-mail: lori@specialtycrops.org

Mr William BRYANT
Chairman, BCI
500 Union St. Seattle Washington
98101 USA
Tel: +206 292 6340
Fax: +206 292 6341
E-mail: billb@bryantchristie.com

Kenneth CHISHOLM
Vice President, Development
4550 New Linden Hill Rd,
Ste 501 Wilmington, De 19808 USA
Tel: +11-302-636-9001 ext. 205
Fax: +11-302-636-9122
E-mail: kchiz@nichino.net

Mr James CRANNEY
President of the California Citrus Quality Council
210 Magnolia Ave., Suite 3,
Auburn, CA 95603
Tel: + (530)885-1894
Fax: + (530)885-1546
E-mail: jcranney@calcitrusquality.org,
cprice@calcitrusquality.org

Ms Cecilia GASTON
Managing Scientist
Exponent, 1150 Constitution Ave.,
NW, Washington,
DC 20036, USA
Tel: + (703) 912 4210
Fax: + (703) 912 6530
E-mail: cgaston@exponent.com

Dr Jamin HUANG
Product Registration Manager Bayer CropScience
Bayer CropScience, P.O. Box 12014,
2 T.W. Alexander Drive
Research Triangle Park,
North Carolina, USA
27709
Tel: +919-549-2634
Fax: +919-549-2475
E-mail: jamin.huang@bayercropscience.com

Dr Daniel KUNKEL
Associate Director
500 College Road East, Suite 201 W Princeton, NJ
08540
Tel: +732.932.9575 ext: 4616
Fax: +609.514.2612
E-mail: kunkel@aesop.rutgers.edu

Ms Kathy MONK
Senior Regulatory Specialist
USEPA MAIL CODE 7505P 1200 Pennsylvania
Ave.N.W
Washington,D.C.,20460
Tel: +703-308-8071
Fax: +703-308-9382
E-mail: monk.kathy@epa.gov

Dr Jason F. Sandahl
Senior International Programs Manager U.S. Department
of Agriculture, Foreign Agriculture Service, 1400
Independence Avenue, SW Washington, D.C. 20250-
1084
Tel: + 541-436-0565
Fax: +202-690-3982
E-mail: Jason.Sandahl@fas.usda.gov

Luis Suguiyama
International Trade Specialist
U.S. Department of Agriculture/Foreign Agriculture
Service Office of Science and Technological Affairs
Room 5940, South Building
1400 Independence Ave, SW Washington, D.C. 20250-
1084
Tel: +202 720-0629
Fax : +202 720-0433
E-mail: Luis.Suguiyama@fas.usda.gov

Mr Sven-Erik NIELSEN
Manager Chemical-Technical Services BCI 500 Union St.
Seattle Washington USA
Tel: +206 292 6340
Fax: +206 292 6341
E-mail: svenerik@bryantchristie.com

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

Dr Bakari Salim KIONDO KAONEKA
Principal Research Scientist
P.O Box 3024, ARUSHA, TANZANIA
Tel: +255 27 250 8813-5
Fax: +255 27 250 8217
E-mail: kaonekab@yahoo.com

Mr Mathias NG'IMBA MISSANGA
Standards Officer
Tanzania Bureau of Standards, BOX 9524,
Dar es Salaam
Tel: +255 22 2450206
Fax: +255 22 2450959
E-mail: obuzeva@yahoo.com

Ms Charys NUHU UGULLUM
Director of Laboratory Services
Tanzania Food and Drugs Authority
BOX 77150 DAR ES SALAAM
Tel: +255 22 2450512
Fax: +255 22 2450793
E-mail: cha_ug@yahoo.com

VIET NAM

Ms Thi Lan HUONG LAI
Pesticide official surveyor - Vice Head of Pesticide
Formulation & Residue Laboratory, Plant Protection
Department, Ministry of Agriculture and Rural
Development
No 149- HO DAC DI STREET - Dong Da District -
Hanoi- Vietnam
Tel: +84 04 38513113
Fax: + 84 04 35330205
E-mail: lhuongkdt@yahoo.com

Prof Quoc VONG NGUYEN
Director, Centre for International Development
Hanoi university of Agriculture
Trau Quy, Gia Lam, Hanoi - Vietnam
Tel: +84-4-38760115
Fax: +84-4-38276554
E-mail: nqvong@hua.edu.vn

ZAMBIA/ZAMBIE

Mr Christopher MOYA
 Chief Environmental Health Officer
 Ministry of Health, Ndeke House, Environmental
 Health Unit, Box 30205, Lusaka, Zambia
 Tel: +977351186
 Fax: +1253344
 E-mail: chistophemooya2006@yahoo.com

ZIMBABWE

Mr Munyaradzi Livingstone Musiyambiri
 Director Government Analyst,
 Ministry of Health and Child Welfare
 P.O. BOX CY 231, Causeway, Harare,
 Zimbabwe
 Tel: +263-4-708527
 E-mail: mlmusiyambiri@yahoo.com
 mmusiyambire@healthnet.org

INTERNATIONAL GOVERNMENTAL ORGANIZATIONS**INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)**

Dr Peter Josef BRODESSER
 Food Safety Specialist
 Wagramer Strasse 5, 1400 Vienna, Austria
 Tel: +43-1-2600-26058
 Fax: +43-1-2600-7
 E-mail: J.Brodesser@iaea.org

INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS**ASOCIACIÓN LATINOAMERICANA DE LA INDUSTRIA NACIONAL DE AGROQUÍMICOS (ALINA)**

Lic Laura Beatriz RUIZ
 Department of Registration. IPESA S.A.
 201 South Biscayne Blvd. Fl. 15 – Miami, Florida, USA
 Tel: +3056703716
 E-mail: lruiz@ipesa-sa.com

CROPLIFE INTERNATIONAL

Dr Michael KAETHNER
 Bayer CropScience Building 6100 A1.4 Alfred Nobel Str.
 50D-40789 Monheim Germany
 Tel: +49 2173 387521
 Fax: +49 2173 383572
 E-mail: michael.kaethner@bayercropscience.com

Ms Mika CHIBA
 Development Dept., Summit Agro International Ltd
 Harumi Island Triton Square Office Tower Z, 1-8-12,
 Harumi, Chuo-ku, Tokyo, 104-6223 Japan
 Tel: +81 3 6221 3034
 Fax: + 81 3 6221 3035
 E-mail: mika.chiba@summit-agro.co.jp

Ms Sandra KELLER
 Manager, International Regulatory
 326 Avenue Louise, BOX 35
 1050 Brussels-Belgium
 Tel: +3225420410
 Fax: +3225420419
 E-mail: sandra.keller@croplife.org

Mr Bill PICKERING
 Registration Manager,
 Nichino Europe Co.Ltd
 39 Landcroft Lane, Sutton Bonington, Leicestershire, UK
 Tel: +44 1509 670743
 Fax: +441509674938
 E-mail: bpickering@nichino-europe.com

Dr Philip BRINDLE
 Sr Manager, Global MRLs & Import Tolerances, BASF
 Crop Protection
 BASF Crop Protection, 26 Davis Drive, P.O. Box 13528,
 Research Triangle Park, NC 27709, USA
 Tel: +1 919 547 2654 (mobile +1 609 510 1548)
 Fax: +1 919 547 2850
 E-mail: philip.brindle@basf.com

Dr Mitsuhiro ICHINARI
 General Manager, Development Dept., Summit Agro
 International Ltd.
 Harumi Island Triton Square Office Tower Z, 1-8-12,
 Harumi, Chuo-ku, Tokyo, 104-6223 Japan
 Tel: +81 3 6221 3039
 Fax: +81 3 6221 3035
 E-mail: mitsuhiro.ichinari@summit-agro.co.jp

Mr Neil LISTER
 Head – Human Exposure and Risk Assessment
 Jealott's Hill Research Centre, Bracknell, Berkshire,
 RG42 6EY, United Kingdom
 Tel: +44 1344 414381
 Fax: +44 1344 413688
 E-mail: neil.lister@syngenta.com

Ms MIKI MATSUI
 Manager, Regulatory Affairs Unit, NIHON NOHYAKU
 CO., LTD.
 345 Oyamada-cho, Kawachinagano, 586-0077, OSAKA,
 JAPAN
 Tel: +81 721 56 9014
 Fax: +81 721 56 9090
 E-mail: matsui-miki@nichino.co.jp

Ms Mary JEAN MEDINA
Regional Regulatory Affairs Manager,
ASIA-PACIFIC
4/F 111 Paseo de Roxas Building, 111 Paseo de Roxas
Street, Makati City 1229, Philippines
Tel: + (63-2) 902-1100
Fax: + (63-2) 818-1485
E-mail: jean.medina@fmc.com

Mr Scott RAWLINS
Director, Governmental Relations and Trade
4515 Falls of Neuse Road Suite 300 Raleigh, North
Carolina 27609
Tel: +919-256-9324
Fax: + 919-256-9308
E-mail: scottr@manainc.com

Mr Masao SHIGEMURA
Manager, Regulatory Affairs Unit, Nihon Nohyaku CO.,
LTD.
2-5, Nihonbashi 1-Chome, Chuo-ku, Tokyo 103-8236,
JAPAN
Tel: +81 3 3274 3383
Fax: +81 3 3281 5462
E-mail: shigemura-masao@nichino.co.jp

Dr Ying SONG
DuPont Crop Protection, Stine-Haskell Research Center,
1090 Elkton Rd., P.O. Box 30, Newark, DE 19714
Tel: +302-451-4546
Fax: + 302-351-7183
E-mail: ying.song-1@usa.dupont.com

Mr Koji TAKEHARA
Manager, Regulatory Affairs, Agricultural Division
7-1, 3-chome, Kanda-Nishiki-cho, Chiyoda-ku, Tokyo
101-0054, Japan
Tel: +81-3-3296-8151
Fax: +81-3-3296-8016
E-mail: takehara@nissanchem.co.jp

Mr Yukiharu TANAKA
Manager, Japan & Asia Regulatory Affairs, Arysta
LifeScience Corporation
St. Luke's, 8-1, Akashi-cho, Chuo-ku, Tokyo 104-6591,
JAPAN
Tel: +81 3 3547 4587
Fax: +81 3 3547 4695
E-mail: yukiharu.tanaka@arystalifescience.com

Mr Yoshihiro WADA
Manager, SDS Biotech K.K.
1-1-5, Higashi-Nihombashi, Chuo-ku, Tokyo 103-
0004, JAPAN
Tel: +81-3-5825-5516
Fax: +81-3-5825-5501
E-mail: yoshihiro_wada@sdsbio.co.jp

Mr Hiroo WAKIMORI
Chemical Regulatory Affairs Lead, Monsanto Japan
8F Ginza Sannou Bldg. 4-10-10, Ginza, Chuo-ku, Tokyo
104-0061
Tel: +81 3 6226 6080
Fax: +81 3 3546 6191
E-mail: hiroo.wakimori@monsanto.com

Toshikazu Miyakawa
JCPA 5-8, 1-chome, nihonbashi, muromachi, chuo-ku,
Tokyo
Tel: +81332410230
E-mail: miyakawa@jcpa.or.jp

Natalie Shevchuk
Manager, Global Regulatory, FMC Corporation
1735 Market St. , Philadelphia, PA 19103
Tel: +215-299-6680
Fax: + 215-299-6468
E-mail: Natalie.shevchuk@fmc.com

Yoshiyuki Eguchi
Manager, Regulatory Affairs Dept.
2-1, ohtemachi 2-chome, chiyoda-ku, Tokyo, 100-8165
Japan
Tel: +81 3 3245 6042
Fax: +81 3 3245 6289
E-mail: y.eguchi@nippon-soda.co.jp

Yoshihiro Nishimoto
Manager, Registration & Regulatory Affairs
27-1, shinkawa 2-chome , chuo-ku, Tokyo 104-
8260, Japan
Tel: +81-3-5543-5692
Fax: +81-3-5543-5695
E-mail: nishimotoy@sc.sumitomo-chem.co.jp

Toshio Shimomura
Consultant
Technical Products & Development Section, Fertilizers
and Pesticides Dept. National Federation of Agricultural
Cooperative Association
1-3-1 Otemachi Chiyoda-ku, Tokyo, Japan
Tel: +81-3-6271-8289
Fax: +81-3-5218-2536
E-mail: shimomura-toshio-q1@zennoh.or.jp

INTERNATIONAL COUNCIL OF BEVERAGES ASSOCIATIONS (ICBA)

Ms Pranee TURBUSH
Senior Innovation Consultant, Ingredient
International Council of Beverage Associations
c/o American Beverage Association 1101 16th ST NW
Washington, DC 20036
Tel: +202-463-6790
Fax: +202-659-5349
E-mail: pturbush@na.ko.com

INTERNATIONAL FRUIT JUICE UNION (IFJU)

Dr David HAMMOND
President of IFU Analytical Commission
23 Boulevard des Capucines, F-75002, Paris, France
Tel: +33 1 47 42 62 80
E-mail: davidfruitjuice@aol.com

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY (IUPAC)

Ms Sue-Sun WONG
43 Sheng-Li Rd, Tainan City, Taiwan
Tel:+886-6-2377101
Fax: +886-6-2377104
E-mail: sswong@mail.eversing.com.tw

Dr Caroline HARRIS
Exponent International Ltd., The Lenz,
Hornbeam Park, Harrogate HG2 8RE, UK
Tel:+44 1425 883201
Fax:+ 44 1423 810431
E-mail: caroline@rivecslea.net

Dr Kenneth RACKE
Chairman
9330 Zionsville Road, Bldg 308/2E, Indianapolis, IN
46268 USA
Tel:+1317 337 4654
Fax:+ 1 317 337 4649
E-mail: kracke@dow.com

CCPR SECRETARIAT

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

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

Ms Qiu JIAN
Deputy Director
Residue Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No.22 Maizidian Street Chaoyang District
Beijing 100125, P.R. China
Tel: +86 10 5919 6593
Fax: +86 10 5919 4107
E-mail: jianqiu-sichuan@hotmail.com

Mr Wencheng SONG
Environmental Specialist
Residue Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 18, Maizidian Street, Chaoyang District
Beijing 100125, P.R. China
Tel: +86 10 5919 4254
Fax:+86 10 5919 4252
E-mail: songwencheng@agri.gov.cn

Ms Lifang DUAN
Chemist
Residue Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 18, Maizidian Street, Chaoyang District
Beijing 100125, P.R. China
Tel:+86 10 5919 4255
Fax:+86 10 5919 4252
E-mail: duanlifang@agri.gov.cn

Ms Mengmeng QU
Environmental Specialist
Health and Environment Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 22 Maizidian Street Chaoyang District,
Beijing ,100125, P. R. China
Tel:+86 10 5919 4062
Fax: +86 10 5919 4244
E-mail: qumengmeng@agri.gov.cn

Ms Liying Zhang
Toxicologist
Health and Environment Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 22 Maizidian Street Chaoyang District,
Beijing ,100125, P. R. China
Tel: +86 10 5919 4084
Fax: +86 10 5919 4244
E-mail: zhangliying@agri.gov.cn

Ms Junhua SONG
Import and Export Administration Department
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 22 Maizidia Street Chaoyang District,
Beijing ,100125, P. R. China
Tel: +86 10 5919 4101
Fax:+86 10 6507 1072
E-mail: junesong@agri.gov.cn

Dr Hongjun ZHANG
Deputy Director
Efficacy Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 22 Maizidia Street Chaoyang District,
Beijing ,100125, P. R. China
Tel: +86 10 5919 4095
Fax:+86 10 5919 4110
E-mail: hongjun-zh1975@163.com

Ms Wei ZHANG
Efficacy Division
Institute for Control of the Agrochemicals
Ministry of Agriculture (ICAMA)
No. 22 Maizidia Street Chaoyang District,
Beijing ,100125, P. R. China
Tel:+ 86 10 5919 4136
Fax:+86 10 5919 4907
E-mail: zhangwei@agri.gov.cn

Ms Ying XU
Foreign Language and Literature Department, China
Youth University for Political Sciences
E-mail: xuyinghere@yahoo.cn

**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 AGRICULTURA Y
LA ALIMENTACIÓN**

Ms Yongzhen Yang
Agricultural Officer and JMPR Secretary
00153, Viale delle Terme di Caracalla
Rome, Italy
Tel: +39 0657054246
Fax: +39 06 57053224
E-mail: yongzhen.yang@fao.org

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

Dr Angelika TRITSCHER
WHO JMPR Secretary
Avenue Appia 20 1211 Geneva 27
Switzerland
Tel: +41 22 791 3569
Fax:+41 22 791 4848
E-mail:tritschera@who.int

CODEX SECRETARIAT

Dr Jeronimas MASKELIUNAS
Food Standards Officer
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla
00153 Rome, Italy
Tel: +39 06 5705 3967
Fax:+39 06 5705 4593
E-mail:jeronimas.maskeliunas@fao.org

Ms Gracia BRISCO
Food Standards Officer
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla
00153 Rome, Italy
Tel:+39 06 5705 2700
Fax: +39 06 5705 4593
E-mail:gracia.brisco@fao.org

Mr Masashi KUSUKAWA
Food Standards Officer
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla
00153 Rome, Italy
Tel: +39 06 5705 4796
Fax:+39 06 5705 4593
E-mail: Masashi.Kusugawa@fao.org

APPENDIX II

DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Recommended for adoption at Step 8)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
8	Carbaryl				
	FC 0001 Citrus fruits	15		8	
133	Triadimefon				
	FI 0327 Banana	1		8	Based on triadimenol use only
	DF 0269 Dried grapes (=currants, raisins and sultanas)	10		8	Based on triadimefon and triadimenol uses
	VC 0045 Fruiting vegetables, cucurbits	0.2		8	Based on triadimefon uses only
	VO 0050 Fruiting vegetables, other than cucurbits	1		8	Except fungi and sweet corn. Based on triadimefon and triadimenol uses
165	Flusilazole				
	MO 0105 Edible offal (mammalian)	2		8	
	FS 0245 Nectarine	0.2		8	
	FS 0247 Peach	0.2		8	
	FP 0009 Pome fruits	0.3		8	
168	Triadimenol				
	FI 0327 Banana	1		8	Based on triadimenol use only
	DF 0269 Dried grapes (=currants, raisins and sultanas)	10		8	Based on triadimefon and triadimenol uses
	VC 0045 Fruiting vegetables, cucurbits	0.2		8	Based on triadimefon and triadimenol uses
	VO 0050 Fruiting vegetables, other than cucurbits	1		8	Except fungi and sweet corn. Based on triadimefon uses only

APPENDIX III

PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Recommended for adoption at Step 5/8 with omission of Steps 6 and 7)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
27	Dimethoate			
HS	0444 Chilli peppers (dry)	3		5/8
VL	0482 Lettuce, Head	0.3		5/8
VO	0445 Peppers, Sweet	0.5		5/8
30	Diphenylamine			
FM	0183 Milk fats	0.01		5/8
ML	0106 Milks	0.01	(*)	5/8
35	Ethoxyquin			
FP	0230 Pear	3	Po	5/8
49	Malathion			
GC	0654 Wheat	10		5/8
CM	0654 Wheat bran, Unprocessed	25		5/8
94	Methomyl			
VC	0045 Fruiting vegetables, cucurbits	0.1		5/8
FB	0269 Grapes	0.3		5/8
VL	0482 Lettuce, Head	0.2		5/8
VL	0483 Lettuce, Leaf	0.2		5/8
FP	0230 Pear	0.3		5/8
VO	0448 Tomato	1		5/8
118	Cypermethrins (including alpha- and zeta-cypermethrins)			
AL	1020 Alfalfa fodder	30 acZ		5/8
VS	0620 Artichoke, Globe	0.1 Ac		5/8
AL	0061 Bean fodder	2 Acz		5/8
VB	0040 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	1 cAz		5/8
FT	0289 Carambola	0.2C		5/8
GC	0080 Cereal grains	0.3 Acz		5/8
HS	0444 Chilli peppers (dry)	10 C		5/8
SB	0716 Coffee beans	0.05 aZ	(*)	5/8
DF	0269 Dried grapes (=currants, raisins and sultanas)	0.5 cA		5/8
FI	0334 Durian	1C		5/8
MO	0105 Edible offal (mammalian)	0.05	(*)	5/8

Except rice

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
VO	0440 Egg plant	0.03 A	5/8	
PE	0112 Eggs	0.01 (*)	5/8	
VC	0045 Fruiting vegetables, cucurbits	0.07 cAz	5/8	
FB	0269 Grapes	0.2 cA	5/8	
VL	0053 Leafy vegetables	0.7 cAz	5/8	
VA	0384 Leek	0.05 cA	5/8	
VP	0060 Legume vegetables	0.7 caZ	5/8	
FI	0343 Litchi	2 C	5/8	
FI	0342 Longan	1C	5/8	
FI	0345 Mango	0.7 C	5/8	
MM	0095 Meat (from mammals other than marine mammals)	2 (fat)	5/8	
FM	0183 Milk fats	0.5	5/8	
ML	0106 Milks	0.05	5/8	
SO	0088 Oilseed	0.1 Acz	5/8	
VO	0442 Okra	0.5 C	5/8	
OR	0305 Olive oil, Refined	0.5 cA	5/8	
OC	0305 Olive oil, Virgin	0.5 cA	5/8	
FT	0305 Olives	0.05 (*)	5/8	
VA	0385 Onion, Bulb	0.01 (*)	5/8	
FI	0350 Papaya	0.5 C	5/8	
AL	0072 Pea hay or pea fodder (dry)	2 Acz	5/8	
VO	0444 Peppers, Chili	2 Cz	5/8	
VO	0445 Peppers, Sweet	0.1aZ	5/8	
FP	0009 Pome fruits	0.7 aZ	5/8	
PM	0110 Poultry meat	0.05 (*) (fat)	5/8	
PO	0111 Poultry, Edible offal of	0.05 (*)	5/8	
VD	0070 Pulses	0.05 aZ (*)	5/8	
GC	0649 Rice	2 aZ	5/8	
VR	0075 Root and tuber vegetables	0.01Acz (*)	5/8	Except sugar beet
FS	0012 Stone fruits	2 aZ	5/8	
AS	0081 Straw and fodder(dry)of cereal grains	10	5/8	
FB	0275 Strawberry	0.07 A	5/8	
VR	0596 Sugar beet	0.1Acz	5/8	
GS	0659 Sugar cane	0.2 Z	5/8	
VO	0447 Sweet corn (corn-on-the-cob)	0.05 Z (*)	5/8	
VO	0448 Tomato	0.2 caZ	5/8	

146 Cyhalothrin (includes lambda-cyhalothrin)

AM	0660 Almond hulls	2	5/8
FS	0240 Apricot	0.5	5/8
VS	0621 Asparagus	0.02	5/8
GC	0640 Barley	0.5	5/8
FB	0018 Berries and other small fruits	0.2	5/8
VA	0035 Bulb vegetables	0.2	5/8
VB	0041 Cabbages, Head	0.3	5/8
FS	0013 Cherries	0.3	5/8
HS	0444 Chilli peppers (dry)	3	5/8
FC	0001 Citrus fruits	0.2	5/8

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
DF	0269 Dried grapes (=currants, raisins and sultanas)	0.3	5/8	
VB	0042 Flowerhead brassicas	0.5	5/8	
VC	0045 Fruiting vegetables, cucurbits	0.05	5/8	
VO	0050 Fruiting vegetables, other than cucurbits	0.3	5/8	Except Mushrooms
MO	0098 Kidney of cattle, goats, pigs & sheep	0.2	5/8	
VP	0060 Legume vegetables	0.2	5/8	
MO	0099 Liver of cattle, goats, pigs & sheep	0.05	5/8	
GC	0645 Maize	0.02	5/8	
FI	0345 Mango	0.2	5/8	
MM	0095 Meat (from mammals other than marine mammals)	3	(fat) 5/8	
ML	0106 Milks	0.2	5/8	
FS	0245 Nectarine	0.5	5/8	
GC	0647 Oats	0.05	5/8	
SO	0088 Oilseed	0.2	5/8	
FT	0305 Olives	1	5/8	
FS	0247 Peach	0.5	5/8	
FS	0014 Plums	0.2	5/8	Except prunes
VD	0070 Pulses	0.05	5/8	
GC	0649 Rice	1	5/8	
VR	0075 Root and tuber vegetables	0.01	(*) 5/8	
GC	0650 Rye	0.05	5/8	
AS	0081 Straw and fodder(dry)of cereal grains	2	5/8	Dry weight
GS	0659 Sugar cane	0.05	5/8	
TN	0085 Tree nuts	0.01	(*) 5/8	
GC	0653 Triticale	0.05	5/8	
GC	0654 Wheat	0.05	5/8	
CM	0654 Wheat bran, Unprocessed	0.1	5/8	
171 Profenofos				
SO	0691 Cotton seed	3	5/8	
MO	0105 Edible offal (mammalian)	0.05	(*) 5/8	
PE	0112 Eggs	0.02	(*) 5/8	
FI	0345 Mango	0.2	5/8	
FI	0346 Mangosteen	10	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.05	(*) 5/8	
ML	0106 Milks	0.01	(*) 5/8	
PM	0110 Poultry meat	0.05	(*) 5/8	
PO	0111 Poultry, Edible offal of	0.05	(*) 5/8	
VO	0448 Tomato	10	5/8	
173 Buprofezin				
FC	0001 Citrus fruits	1	5/8	
AB	0001 Citrus pulp, Dry	2	5/8	
VC	0424 Cucumber	0.2	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	
FI	0345 Mango	0.1	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.05 (*)	5/8	
ML	0106 Milks	0.01 (*)	5/8	
VO	0448 Tomato	1	5/8	
189 Tebuconazole				
SB	0716 Coffee beans	0.1	5/8	
SM	0716 Coffee beans, Roasted	0.5	5/8	
PE	0112 Eggs	0.05 (*)	5/8	
DH	1100 Hops, Dry	30	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.05 (*)	5/8	
ML	0106 Milks	0.01 (*)	5/8	
PM	0110 Poultry meat	0.05 (*)	5/8	
PO	0111 Poultry, Edible offal of	0.05 (*)	5/8	
SO	0495 Rape seed	0.5	5/8	
201 Chlorpropham				
FM	0183 Milk fats	0.02	5/8	
ML	0106 Milks	0.01 (*)	5/8	
206 Imidacloprid				
AM	0660 Almond hulls	5	5/8	on dry matter basis
FB	0018 Berries and other small fruits	5	5/8	Except cranberry, grapes, and strawberry
SB	0716 Coffee beans	1	5/8	
MO	0105 Edible offal (mammalian)	0.3	5/8	
PE	0112 Eggs	0.02	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.1	5/8	
ML	0106 Milks	0.1	5/8	
SO	0697 Peanut	1	5/8	
AL	0697 Peanut fodder	30	5/8	on dry matter basis
VD	0072 Peas (dry)	2	5/8	
VP	0063 Peas (pods and succulent=immature seeds)	5	5/8	
VP	0064 Peas, Shelled (succulent seeds)	2	5/8	
FI	0355 Pomegranate	1	5/8	
PM	0110 Poultry meat	0.02	5/8	
PO	0111 Poultry, Edible offal of	0.05	5/8	
VL	0494 Radish leaves (including radish tops)	5	5/8	
VR	0075 Root and tuber vegetables	0.5	5/8	
FB	0275 Strawberry	0.5	5/8	
SO	0702 Sunflower seed	0.05 (*)	5/8	
TN	0085 Tree nuts	0.01	5/8	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
229	Azoxystrobin			
AM	0660 Almond hulls	7	5/8	
VS	0620 Artichoke, Globe	5	5/8	
VS	0621 Asparagus	0.01 (*)	5/8	
FI	0327 Banana	2	5/8	
GC	0640 Barley	0.5	5/8	
FB	0018 Berries and other small fruits	5	5/8	Except cranberry, grapes, and strawberry
VB	0040 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	5	5/8	
VA	0035 Bulb vegetables	10	5/8	
VS	0624 Celery	5	5/8	
HS	0444 Chilli peppers (dry)	30	5/8	
FC	0001 Citrus fruits	15	5/8	
SO	0691 Cotton seed	0.7	5/8	
FB	0265 Cranberry	0.5	5/8	
DH	0170 Dried herbs	300	5/8	Except dry hops
MO	0105 Edible offal (mammalian)	0.07	5/8	
PE	0112 Eggs	0.01 (*)	5/8	
VC	0045 Fruiting vegetables, cucurbits	1	5/8	
VO	0050 Fruiting vegetables, other than cucurbits	3	5/8	Except Mushrooms and corn
Sweet				
FB	0269 Grapes	2	5/8	
HH	0092 Herbs	70	5/8	
DH	1100 Hops, Dry	30	5/8	
VP	0060 Legume vegetables	3	5/8	
VL	0482 Lettuce, Head	3	5/8	
VL	0483 Lettuce, Leaf	3	5/8	
GC	0645 Maize	0.02	5/8	
AS	0645 Maize fodder (dry)	40	5/8	Dry weight
OR	0645 Maize oil, Edible	0.1	5/8	
FI	0345 Mango	0.7	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.05 (fat)	5/8	
FM	0183 Milk fats	0.03	5/8	
ML	0106 Milks	0.01	5/8	
GC	0647 Oats	0.5	5/8	
FI	0350 Papaya	0.3	5/8	
SO	0697 Peanut	0.2	5/8	
AL	0697 Peanut fodder	30	5/8	
TN	0675 Pistachio nuts	1	5/8	
FI	0354 Plantain	2	5/8	
PM	0110 Poultry meat	0.01 (*)	5/8	
PO	0111 Poultry, Edible offal of	0.01 (*)	5/8	
GC	0649 Rice	5	5/8	
VR	0075 Root and tuber vegetables	1	5/8	
GC	0650 Rye	0.2	5/8	
VD	0541 Soya bean (dry)	0.5	5/8	
AL	0541 Soya bean fodder	100	5/8	Dry weight

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
FS	0012 Stone fruits	2	5/8	
AS	0081 Straw and fodder(dry)of cereal grains	15	5/8	Dry weight. Except maize
FB	0275 Strawberry	10	5/8	
SO	0702 Sunflower seed	0.5	5/8	
TN	0085 Tree nuts	0.01	5/8	Except pistachios
GC	0653 Triticale	0.2	5/8	
GC	0654 Wheat	0.2	5/8	
VS	0469 Witloof chicory (sprouts)	0.3	5/8	
230 Chlorantraniliprole				
VS	0624 Celery	7	5/8	
GC	0080 Cereal grains	0.02	5/8	
HS	0444 Chilli peppers (dry)	5	5/8	
SO	0691 Cotton seed	0.3	5/8	
MO	0105 Edible offal (mammalian)	0.01	(*)	5/8
PE	0112 Eggs	0.01	(*)	5/8
VC	0045 Fruiting vegetables, cucurbits	0.3	5/8	
VO	0050 Fruiting vegetables, other than	0.6	5/8	Except Mushrooms and
Sweet	cucurbits			corn
FB	0269 Grapes	1	5/8	
VL	0053 Leafy vegetables	20	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.01	(*) (fat)	5/8
FM	0183 Milk fats	0.1	5/8	
ML	0106 Milks	0.01	(*)	5/8
FP	0009 Pome fruits	0.4	5/8	
PM	0110 Poultry meat	0.01	(*) (fat)	5/8
PO	0111 Poultry, Edible offal of	0.01	(*)	5/8
VR	0075 Root and tuber vegetables	0.02	5/8	
FS	0012 Stone fruits	1	5/8	
AS	0081 Straw and fodder(dry)of cereal grains	0.3	5/8	
231 Mandipropamid				
VA	0389 Spring Onion	7	5/8	
VB	0400 Broccoli	2	5/8	
VB	0041 Cabbages, Head	3	5/8	
VS	0624 Celery	20	5/8	
HS	0444 Chilli peppers (dry)	10	5/8	
VC	0424 Cucumber	0.2	5/8	
DF	0269 Dried grapes (=currants, raisins and sultanas)	5	5/8	
FB	0269 Grapes	2	5/8	
VL	0053 Leafy vegetables	25	5/8	
VC	0046 Melons, except watermelon	0.5	5/8	
VA	0385 Onion, Bulb	0.1	5/8	
VO	0051 Peppers	1	5/8	
VR	0589 Potato	0.01	(*)	5/8

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
VC	0431 Squash,summer	0.2	5/8	
VO	0448 Tomato	0.3	5/8	
232 Prothioconazole				
GC	0640 Barley	0.05	5/8	
OS	0640 Barley straw	2	5/8	
MO	0105 Edible offal (mammalian)	0.2	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	0.004 (*)	5/8	
OS	0647 Oat straw	2	5/8	
GC	0647 Oats	0.05	5/8	
SO	0697 Peanut	0.02 (*)	5/8	
SO	0495 Rape seed	0.05	5/8	
GC	0650 Rye	0.05	5/8	
OS	0650 Rye straw	2	5/8	
GC	0653 Triticale	0.05	5/8	
OS	0653 Triticale straw	2	5/8	
GC	0654 Wheat	0.05	5/8	
OS	0654 Wheat straw	2	5/8	
233 Spinetoram				
MO	0105 Edible offal (mammalian)	0.01 (*)	5/8	
VL	0482 Lettuce, Head	10	5/8	
VL	0483 Lettuce, Leaf	10	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.2 (fat)	5/8	
FM	0183 Milk fats	0.1	5/8	
ML	0106 Milks	0.01 (*)	5/8	
FC	0004 Oranges, Sweet, Sour	0.07	5/8	
FP	0009 Pome fruits	0.05	5/8	
VR	0596 Sugar beet	0.01 (*)	5/8	
VO	0448 Tomato	0.06	5/8	
TN	0085 Tree nuts	0.01	5/8	
234 Spirotetramate				
AM	0660 Almond hulls	10	5/8	
VB	0041 Cabbages, Head	2	5/8	
VS	0624 Celery	4	5/8	
HS	0444 Chilli peppers (dry)	15	5/8	
FC	0001 Citrus fruits	0.5	5/8	
DF	0269 Dried grapes (=currants, raisins and sultanas)	4	5/8	
MO	0105 Edible offal (mammalian)	0.03	5/8	
VB	0042 Flowerhead brassicas	1	5/8	
VC	0045 Fruiting vegetables, cucurbits	0.2	5/8	
VO	0050 Fruiting vegetables, other than cucurbits	1	5/8	Except sweet corn, and chili pepper
	mushrooms			

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
AB	0269 Grape pomace, Dry	4	5/8	
FB	0269 Grapes	2	5/8	
DH	1100 Hops, Dry	15	5/8	
VL	0053 Leafy vegetables	7	5/8	
MM	0095 Meat (from mammals other than marine mammals)	0.01 (*)	5/8	
ML	0106 Milks	0.005 (*)	5/8	
VO	0444 Peppers, Chili	2	5/8	non-bell
VR	0589 Potato	0.8	5/8	
DF	0014 Prunes	5	5/8	dried plums
FS	0012 Stone fruits	3	5/8	
TN	0085 Tree nuts	0.5	5/8	

APPENDIX IV

PROPOSED DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Recommended for adoption at Step 5)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
94	Methomyl			
FP	0226 Apple	0.3	5	Resulting from data on supervised trials with methomyl. The Previous MRL is from data on supervised trials with thiodicarb.
118	Cypermethrins (including alpha- and zeta-cypermeth			
VS	0621 Asparagus	0.01 Ac (*)	5	
189	Tebuconazole			
VS	0620 Artichoke, Globe	0.5	5	
GC	0640 Barley	2	5	
AS	0640 Barley straw and fodder, Dry	30	5	
VB	0040 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	1	5	
VR	0577 Carrot	0.5	5	
VP	0526 Common bean (pods and/or immature seeds)	2	5	
MO	0105 Edible offal (mammalian)	0.5	5	
FB	0267 Elderberry	2	5	
VA	0381 Garlic	0.1	5	
VA	0384 Leek	1	5	
VL	0482 Lettuce, Head	5	5	
GC	0645 Maize	0.1	5	
FI	0345 Mango	0.1	5	
VC	0046 Melons, except watermelon	0.2	5	
VA	0385 Onion, Bulb	0.1	5	
FI	0350 Papaya	2	5	
SO	0697 Peanut	0.1	5	
FS	0014 Plums(including prunes)	0.2	5	Excluding prunes
FP	0009 Pome fruits	1	5	
DF	0014 Prunes	0.5	5	
GC	0649 Rice	2	5	
VD	0541 Soya bean (dry)	0.1	5	
VO	0447 Sweet corn (corn-on-the-cob)	0.1	5	
VO	0448 Tomato	0.5	5	
VC	0432 Watermelon	0.1	5	
221	Boscalid			
FI	0327 Banana	0.6	5	
FI	0341 Kiwi fruit	5	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>
7	Captan			
	FP 0226 Apple	25		CXL-D
	FS 0247 Peach	15		CXL-D
	FP 0230 Pear	25		CXL-D
8	Carbaryl			
	FS 0240 Apricot	10		CXL-D
	FC 0001 Citrus fruits	7		CXL-D
	FB 0269 Grapes	5		CXL-D
	FS 0245 Nectarine	10		CXL-D
	FS 0247 Peach	10		CXL-D
	FP 0230 Pear	5		CXL-D
	VO 0051 Peppers	5		CXL-D
27	Dimethoate			
	VL 0482 Lettuce, Head	2		CXL-D
	VO 0051 Peppers	1	Po	CXL-D
30	Diphenylamine			
	ML 0812 Cattle milk	0.0004	(* F)	CXL-D
35	Ethoxyquin			
	FP 0230 Pear	3	Po	CXL-D
49	Malathion			
	GC 0654 Wheat	0.5		CXL-D
	CF 1211 Wheat flour	0.2		CXL-D
53	Mevinphos			
	VB 0041 Cabbages, Head	0.05		CXL-D
94	Methomyl			
	VB 0041 Cabbages, Head	5		CXL-D
	VB 0404 Cauliflower	2		CXL-D
	VS 0624 Celery	2		CXL-D
	VC 0424 Cucumber	0.2		CXL-D
	FB 0269 Grapes	5		CXL-D
	VL 0482 Lettuce, Head	5		CXL-D
	VC 0046 Melons, except watermelon	0.2		CXL-D
	AL 0528 Pea vines (green)	40		CXL-D
	FP 0230 Pear	0.3		CXL-D
	VC 0432 Watermelon	0.2		CXL-D
95	Acephate			
	VB 0400 Broccoli	2		CXL-D
	VB 0404 Cauliflower	2		CXL-D
96	Carbofuran			

	<u>Commodity</u>	<u>MRL (mg/kg)</u>		<u>Step</u>
ML	0106 Milks	0.05	(*)	CXL-D
VR	0589 Potato	0.1	(*)	CXL-D
100	Methamidophos			
VB	0404 Cauliflower	0.5		CXL-D
VO	0444 Peppers, Chili	2		CXL-D
VO	0445 Peppers, Sweet	1		CXL-D
103	Phosmet			
FP	0226 Apple	10		CXL-D
FP	0230 Pear	10		CXL-D
105	Dithiocarbamates			
FP	0226 Apple	2		CXL-D
112	Phorate			
GC	0654 Wheat	0.05		CXL-D
118	Cypermethrins (including alpha- and zeta-cypermethrins)			
GC	0640 Barley	0.5		CXL-D
VP	0062 Beans, Shelled	0.05	(*)	CXL-D
FB	0018 Berries and other small fruits	0.5		CXL-D
VB	0040 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicac	1		CXL-D
FS	0013 Cherries	1		CXL-D
HS	0444 Chilli peppers (dry)	5		CXL-D
SB	0716 Coffee beans	0.05	(*)	CXL-D
VP	0526 Common bean (pods and/or immature seeds)	0.5		CXL-D
VC	0424 Cucumber	0.2		CXL-D
MO	0105 Edible offal (mammalian)	0.05	(*)	CXL-D
VO	0440 Egg plant	0.2		CXL-D
PE	0112 Eggs	0.05	(*)	CXL-D
VL	0480 Kale	1		CXL-D
VA	0384 Leek	0.5		CXL-D
VL	0482 Lettuce, Head	2		CXL-D
GC	0645 Maize	0.05	(*)	CXL-D
AS	0645 Maize fodder (dry)	5		CXL-D
MM	0095 Meat (from mammals other than marine mammals)	0.2	(fat)	CXL-D
ML	0106 Milks	0.05	F	CXL-D
VO	0450 Mushrooms	0.05	(*)	CXL-D
FS	0245 Nectarine	2		CXL-D
SO	0089 Oilseed, except peanut	0.2		CXL-D
VA	0385 Onion, Bulb	0.1		CXL-D
FS	0247 Peach	2		CXL-D
SO	0697 Peanut	0.05	(*)	CXL-D
VP	0063 Peas (pods and succulent=immature seeds)	0.05	(*)	CXL-D
VO	0051 Peppers	0.5		CXL-D
FS	0014 Plums(including prunes)	1		CXL-D
FP	0009 Pome fruits	2		CXL-D

	<u>Commodity</u>	<u>MRL (mg/kg)</u>		<u>Step</u>
PM	0110 Poultry meat	0.05	(*)	CXL-D
VR	0075 Root and tuber vegetables	0.05	(*)	CXL-D
AS	0651 Sorghum straw and fodder, Dry	5		CXL-D
VD	0541 Soya bean (dry)	0.05	(*)	CXL-D
VL	0502 Spinach	2		CXL-D
VO	0447 Sweet corn (corn-on-the-cob)	0.05	(*)	CXL-D
VO	0448 Tomato	0.5		CXL-D
OR	0172 Vegetable oils, Edible	0.5		CXL-D
GC	0654 Wheat	0.2		CXL-D
AS	0654 Wheat straw and fodder, Dry	5		CXL-D
145 Carbosulfan				
ML	0106 Milks	0.03	(*)	CXL-D
146 Cyhalothrin (includes lambda-cyhalothrin)				
VB	0041 Cabbages, Head	0.2		CXL-D
SO	0691 Cotton seed	0.02	(*)	CXL-D
OC	0691 Cotton seed oil, Crude	0.02	(*)	CXL-D
OR	0691 Cotton seed oil, edible	0.02	(*)	CXL-D
VR	0589 Potato	0.02	(*)	CXL-D
157 Cyfluthrin/beta-cyfluthrin				
HS	0444 Chilli peppers (dry)	2		CXL-D
165 Flusilazole				
MO	0812 Cattle, Edible offal of	0.02	(*)	CXL-D
168 Triadimenol				
FI	0327 Banana	0.2		CXL-D
VC	0045 Fruiting vegetables, cucurbits	2		CXL-D
171 Profenofos				
VB	0041 Cabbages, Head	1		CXL-D
SO	0691 Cotton seed	2		CXL-D
OR	0691 Cotton seed oil, edible	0.05	(*)	CXL-D
PE	0112 Eggs	0.02	(*)	CXL-D
MM	0095 Meat (from mammals other than marine mammals)	0.05	(*)	CXL-D
ML	0106 Milks	0.01	(*)	CXL-D
VO	0445 Peppers, Sweet	0.5		CXL-D
VR	0589 Potato	0.05	(*)	CXL-D
VO	0448 Tomato	2		CXL-D
173 Buprofezin				
VC	0424 Cucumber	1		CXL-D
FC	0004 Oranges, Sweet, Sour	0.5		CXL-D
VO	0448 Tomato	1		CXL-D
189 Tebuconazole				
MM	0812 Cattle meat	0.05	(*)	CXL-D
ML	0812 Cattle milk	0.01	(*)	CXL-D
PE	0840 Chicken eggs	0.05	(*)	CXL-D
PM	0840 Chicken meat	0.05	(*)	CXL-D

	<u>Commodity</u>	<u>MRL (mg/kg)</u>		<u>Step</u>
PO	0840 Chicken, Edible offal of	0.05	(*)	CXL-D
SO	0495 Rape seed	0.05		CXL-D
201	Chlorpropham			
ML	0812 Cattle milk	0.0005	(*) F	CXL-D
206	Imidacloprid			
MO	0105 Edible offal (mammalian)	0.05		CXL-D
PE	0112 Eggs	0.02	(*)	CXL-D
MM	0095 Meat (from mammals other than marine mammals)	0.02	(*)	CXL-D
ML	0106 Milks	0.02	(*)	CXL-D
TN	0672 Pecan	0.05		CXL-D
VR	0589 Potato	0.5		CXL-D
PM	0110 Poultry meat	0.02	(*)	CXL-D
PO	0111 Poultry, Edible offal of	0.02	(*)	CXL-D
VR	0596 Sugar beet	0.05	(*)	CXL-D

APPENDIX VI

PROPOSED DRAFT AND DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Retained at Steps 7 and 4 respectively)

<u>MRLs retained at Step</u>	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
	7				
90 Chlorpyrifos-Methyl					
GC 0640	Barley	10	Po	7	
GC 0647	Oats	10	Po	7	
GC 0649	Rice	10	Po	7	
96 Carbofuran					
FC 0206	Mandarin	0.5		7	Based on the use of carbosulfan.
FC 0004	Oranges, Sweet, Sour	0.5		7	
112 Phorate					
VR 0589	Potato	0.5		7	
126 Oxamyl					
FC 0001	Citrus fruits	3		7	
VC 0424	Cucumber	1		7	
VC 0046	Melons, except watermelon	1		7	
VO 0051	Peppers	5		7	
133 Triadimefon					
FB 0269	Grapes	5		7	Based on triadimefon and triadimenol uses
142 Prochloraz					
VO 0450	Mushrooms	40		7	
143 Triazophos					
VP 0541	Soya bean (immature seeds)	1		7	With the pod.
145 Carbosulfan					
FC 0206	Mandarin	0.1		7	
FC 0004	Oranges, Sweet, Sour	0.1		7	
168 Triadimenol					
FB 0269	Grapes	5		7	Based on triadimefon and triadimenol uses
193 Fenpyroximate					
FB 0269	Grapes	1		7	
194 Haloxyfop					
PE 0840	Chicken eggs	0.01	(*)	7	
PM 0840	Chicken meat	0.01	(*)	7	
PO 0840	Chicken, Edible offal of	0.05		7	
SO 0691	Cotton seed	0.2		7	
OC 0691	Cotton seed oil, Crude	0.5		7	
AM 1051	Fodder beet	0.3		7	

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
SO	0697 Peanut	0.05		7	
VP	0063 Peas (pods and succulent=immature seeds)	0.2		7	
VR	0589 Potato	0.1		7	
VD	0070 Pulses	0.2		7	
SO	0495 Rape seed	2		7	
OC	0495 Rape seed oil, Crude	5		7	
OR	0495 Rapeseed oil, Edible	5		7	
CM	1206 Rice bran, Unprocessed	0.02	(*)	7	
CM	0649 Rice, Husked	0.02	(*)	7	
CM	1205 Rice, Polished	0.02	(*)	7	
OC	0541 Soya bean oil, Crude	0.2		7	
OR	0541 Soya bean oil, Refined	0.2		7	
VR	0596 Sugar beet	0.3		7	
SO	0702 Sunflower seed	0.2		7	

204 Esfenvalerate

SO	0691 Cotton seed	0.05		7	
VO	0448 Tomato	0.1		7	
GC	0654 Wheat	0.05		7	

212 Metalaxyl-M

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	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	

MRLs retained at Step 4**194 Haloxyfop**

MO	1280 Cattle kidney	1		4	
MO	1281 Cattle liver	0.5		4	
MM	0812 Cattle meat	0.05		4	
ML	0812 Cattle milk	0.3		4	

APPENDIX VII

PROPOSED DRAFT AND DRAFT MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Returned to Step 6)

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Source</u>	<u>Step</u>	<u>Note</u>
8	Carbaryl				
	FS 0013 Cherries	20		6	
157	Cyfluthrin/beta-cyfluthrin				
	VB 0400 Broccoli	2		6	
	VB 0041 Cabbages, Head	4		6	

APPENDIX VIII

DRAFTS CODEX MAXIMUM RESIDUE LIMITS FOR PESTICIDES WITHDRAWN

	<u>Commodity</u>	<u>MRL (mg/kg)</u>	<u>Step</u>	<u>Note</u>
8	Carbaryl			
JF	0001 Citrus juice	0.5		W
AB	0001 Citrus pulp, Dry	4		W
DF	0269 Dried grapes (=currants, raisins and sultanas)	50		W
JF	0269 Grape juice	30		W
AB	0269 Grape pomace, Dry	80		W
FB	0269 Grapes	40		W
FS	0012 Stone fruits	10		W Except cherries
27	Dimethoate			
VL	0482 Lettuce, Head	3		W
VO	0445 Peppers, Sweet	5	Po	W
94	Methomyl			
VB	0040 Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	7		W
VS	0624 Celery	3		W
VC	0045 Fruiting vegetables, cucurbits	0.1		W
FB	0269 Grapes	7		W
VL	0053 Leafy vegetables	30		W
95	Acephate			
VB	0042 Flowerhead brassicas	2		W
FC	0003 Mandarins	7		W
FS	0245 Nectarine	2		W
FS	0247 Peach	2		W
VO	0051 Peppers	5		W
FP	0009 Pome fruits	7		W
96	Carbofuran			
VC	4199 Cantaloupe	0.2		W
VC	0424 Cucumber	0.3		W
VR	0589 Potato	0.2		W
VC	0431 Squash, summer	0.3		W
VO	0447 Sweet corn (corn-on-the-cob)	0.1		W
100	Methamidophos			
VB	0042 Flowerhead brassicas	0.5		W
FC	0003 Mandarins	0.5		W
FS	0245 Nectarine	0.5		W
FS	0247 Peach	0.5		W
VO	0051 Peppers	2		W
FP	0009 Pome fruits	0.5		W
145	Carbosulfan			
VR	0589 Potato	0.05		W

232 Prothioconazole

CF 1211 Wheat flour

0.05

W

APPENDIX IX

PROPOSED DRAFT REVISION OF THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS - Proposals for Eight Commodity Groups: **Bulb Vegetables; Fruiting Vegetables, other than cucurbits; Berries and other Small Fruits; Edible Fungi; Citrus Fruits; Pome Fruits; Stone Fruits; and Oilseeds**

(For adoption at Step 5)

Bulb vegetables

CLASS A

Type 2 Vegetables Group 009 Group Letter Code VA

Bulb vegetables are pungent highly flavoured foods derived from fleshy scale bulbs (in some commodities including stem and leaves), of the genera *Allium* of the familia Alliaceae and *Lilium* of the family Liliaceae.

The subterranean parts of the bulbs and shoots are protected from direct exposure to pesticides during the growing season.

The entire bulb may be consumed after removal of the parchment-like skin. The leaves and stems of some species or cultivars may also be consumed.

Bulb onions are bulb vegetables with mature bulbs. The entire bulb may be consumed after removal of the parchment-like skin.

Green onions are bulb vegetables with immature bulbs. Immature bulbs may be consumed and also leaves and stems of some species of cultivars may also be consumed.

Group 009A Bulb onions: Mature bulbs (dry)

Group 009B Green onions: immature bulbs including leaves stems and flowers

Portion of the commodity to which the MRL applies (and which is analysed): **Bulb onions: Whole commodity after removal of roots and adhering soil and whatever parchment skin is easily detached. Green onions: Whole vegetable after removal of roots and adhering soil.**

Group 009 Bulb vegetables

<u>Code No.</u>	<u>Commodity</u>
VA 0035	Bulb vegetables

Group 009A, Bulb onions

<u>Code No.</u>	<u>Commodity</u>
VA 2031	Bulb Onions

(includes all commodities in this subgroup)

VA 2600	Daylily
---------	----------------

Hemerocallis fulva (L.) L.; *H. minor* Mill; *H. citrina* Baroni; *H. lilioasphodelus* L.

VA 2601	Fritillaria (bulb) <i>Fritillaria camchatcensis</i> (L.) Ker. Gawl.
VA 0381	Garlic <i>Allium sativum</i> L.
VA 0382	Garlic, Great-headed <i>Allium ampeloprasum</i> L., var. <i>ampeloprasum</i>
VA 2602	Garlic, Serpent <i>Allium sativum</i> var. <i>ophioscorodon</i> (Link) Döll
VA 2603	Lily <i>Lilium</i> spp.
VA 0385	Onion, Bulb <i>Allium cepa</i> L. var. <i>cepa</i> , various cultivars
VA 0386	Onion, Chinese <i>Allium chinense</i> G. Don.; syn: <i>A. bakeri</i> Regel
-	Rakkyo , see Onion, Chinese VA 0386
VA 0388	Shallot <i>A. cepa</i> L., var. <i>aggregatum</i> Don.
VA 0390	Silverskin onion <i>Allium cepa</i> L.

Group 009B, Green onions

<u>Code No.</u>	<u>Commodity</u>
VA 2032	Green Onions (includes all commodities in this subgroup)
VA 2605	Chives <i>Allium schoenoprasum</i> L.
VA 2606	Chives, Chinese <i>Allium tuberosum</i> Rottler ex Spreng.
VA 2607	Elegans hosta <i>Hosta sieboldiana</i> (Hook.) Engl.
VA 2608	Fritillaria (green) <i>Fritillaria camchatcensis</i> (L.) Ker. Gawl.
VA 2609	Garlic chives <i>Allium sativum</i> L. var. <i>sativum</i>
-	Japanese bunching onion , see Onion, Welsh, VA 0387
VA 0383	Kurrat

Allium kurrat Schweinf. Ex K. Krause

VA 2610

Lady's leek

Allium cernuum Roth

VA 0384

Leek

Allium porrum L.;

syn: *A. ampeloprasum* L., var. *porrum* (L.) Gay

-

Multiplying onion, see Onion, Welsh, VA 0387

VA 2611

Onion, Beltsville bunching

Allium x proliferum (Moench) Schrad.

syn: *Allium cepa* L. x *A. fistulosum* L.)

-

Onion, Egyptian, see Tree onion, VA 0391

VA 2612

Onion, fresh

Allium fistulosum L. var. *caespitosum* Makino

-

Onion, green, see Spring onion, VA 0389

VA 2613

Onion, macrostem

Allium macrostemom Bunge

VA 2614

Onion, pearl

Allium porrum L. var. *sectivum* Lueder

VA 2615

Onion, potato

Allium cepa var. *aggregatum* G. Don.

VA 0387

Onion, Welsh

Allium fistulosum L.

VA 0389

Spring onion

Allium cepa L., various cultivars, a.o. White Lisbon; White Portugal

VA 0391

Tree onion

Allium x proliferum (Moench) Schrad. ex Willd.; *Allium x wakegii* Araki

syn: *A. cepa* var. *proliferum* (Moench) Regel

syn: *A. cepa* L. var. *bulbiferum* L.H. Bailey

syn: *A. cepa* L. var. *viviparum* (Metz.) Alef.

VA 2616

Wild leek

Allium tricoccum Aiton

Fruiting vegetables, other than Cucurbits

CLASS A**Type 2 Vegetables Group 012 Group Letter Code VO**

Group 012 Fruiting vegetables, other than Cucurbits are derived from the immature and mature fruits of various plants, usually annual vines or bushes. Many plants of this group belong to the botanical family Solanaceae.

This group does not include fruits of vegetables of the botanical family Cucurbitaceae or the pods of vegetables of the Leguminosae family.

The vegetables of this group are fully exposed to pesticides applied during the period of fruit development, except those of which the edible portion is covered by husks, such as ground cherries (*Physalis* spp.). The latter fruiting vegetables are protected from most pesticides by the husk except from pesticides with a systemic action.

The entire fruiting vegetable or the edible portion after discarding husks or peels may be consumed in a fresh form or after processing.

Three subgroups are defined:

Group 012 A Tomatoes

Group 012 B Peppers

Group 012 C Egg plants

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

Group 012 *Fruiting vegetables, other than Cucurbits*

<u>Code No.</u>	<u>Commodity</u>
VO 0050	Fruiting vegetables, other than Cucurbits (includes all commodities in this group)

Group 12A Tomatoes

<u>Code No.</u>	<u>Commodity</u>
VO 2045	Tomatoes (includes all commodities in this subgroup)
-	Alkekengi , see Ground cherries, VO 0441 <i>Physalis alkekengi</i> L.
VO 0451	Bush tomato <i>Solanum centrale</i> Black
-	Cape gooseberry , (Codex Stand. 226 – 2001), see Ground cherries, VO 0441 <i>Physalis peruviana</i> L.
VO 2700	Cherry tomato <i>Lycopersicon esculentum</i> var. <i>cerasiforme</i> (Dunal) A. Gray

- **Chinese lantern plant**, see Ground cherries, VO 0441
- VO 2701 **Cocona**
Solanum sessiliflorum Dunal.
- VO 2702 **Currant tomato**
Lycopersicon pimpinellifolium (L.) Mill.
- VO 2703 **Garden huckleberry**
Solanum scabrum Mill.
- VO 2704 **Goji berry**
Lycium barbarum L.
- **Golden berry**, see Ground cherries, VO 0441
Physalis peruviana L.
- VO 0441 **Ground cherries**
Physalis alkekengi L.; *Ph. ixocarpa* Brot. ex Horn.; *Ph. peruviana* L.
- **Husk tomato**, see Ground cherries, VO 0441
- **Naranjilla**, see Group 006 Assorted tropical and sub-tropical fruits - inedible peel, FI 0349
Solanum quitoense Lam.
- **Quito Orange**, see Naranjilla, FI 0349
- VO 2705 **Strawberry tomato**, see Ground cherries, VO 0441
- VO 2706 **Sunberry**
Solanum retroflexum Dunal.
- VO 2707 **Tomatillo**
Physalis philadelphica Lam.
Syn. *Physalis ixocarpa* auct.
- VO 0448 **Tomato**
Lycopersicon esculentum Mill.;
syn: *Solanum lycopersicum* L.
- **Tree tomato**, see Group 06 Assorted tropical and sub-tropical fruits – inedible peel , FT 0312

Group 12B Peppers

- VO 0051 **Peppers**
(includes all commodities in this subgroup)
- **Bird chili peppers**, see Peppers, Chili
Capsicum Frutescens L.
- **Cherry pepper**, see Peppers, Chili, VO 0444
Capsicum annuum L., var. *acumimata* Fingerh.
- **Chili peppers**, see Peppers, Chili, VO 0444

Cluster pepper, see Peppers, Chili, VO 0444

Capsicum annuum L., var. *fasciculatum* (Sturt.) Irish

- **Cone pepper**, see Peppers, Chili, VO 0444

[- **Lady's finger**, see Okra, VO 0442]

VO 2709 **Martynia**

Proboscidea louisianica (Mill.) Thell.

[VO 0442 **Okra**

Abelmoschus esculentus (L.) Moench.]

- **Paprika**, see Peppers, Sweet, VO 0445

- **Pimento or Pimiento**, see Peppers, Sweet, VO 0445

- **Peppers, bell**, see Peppers, Sweet, VO 0445

VO 0444 **Peppers, Chili**

Capsicum annuum L.; several pungent cultivars

- **Peppers, Long**, see Peppers, Sweet, VO 0445

Capsicum annuum L., var. *longum* (D. C.) Sendt.

VO 0445 **Peppers, Sweet** (including pimento or pimiento)

Capsicum annuum, var. *grossum* (L.) Sendt. and var. *longum* (D. C.) Sendt.

[VO 0446 **Roselle**

Hibiscus sabdariffa L., var. *sabdariffa* L.]

Group 12C Egg plants

VO 2046 **Egg plants**

(includes all commodities in this subgroup)

VO 2711 **African Eggplant**

Solanum macrocarpon L.

- **Aubergine**, see Egg plant, VO 0440

VO 0440 **Egg plant**, various cultivars

Solanum melongena L.

- **Melon pear**, see Pepino, VO 0443

VO 2712 **Pea Eggplant**

Solanum torvum Swartz

[VO 0443 **Pepino**

Solanum muricatum L.]

VO 2713 **Scarlet Eggplant**

Solanum aethiopicum L.

VO 2714 **Thai eggplant**

Solanum undatum Jacq. Non Lam.

[VO 0443 **Tree melon**, see Pepino]

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 origination from woody shrubs

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

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

Group 004 E Low growing berries: includes berries origination 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*

<u>Code No.</u>	<u>Commodity</u>
FB 0018	Berries and other small fruits

Subgroup 004A Cane berries

<u>Code No.</u>	<u>Commodity</u>
FB 2005	Cane berries , (<i>Rubus</i> species)
FB 0264	Blackberries <i>Rubus fruticosus</i> auct. aggr., several ssp.
-	Boysenberry , see Dewberries, FB 0266 Hybrid of <i>Rubus</i> spp.
FB 0266	Dewberries (including Boysenberry and Loganberry) <i>Rubus ceasius</i> L.; several <i>Rubus</i> 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.

- **Youngberry**, see Dewberries, FB 0266

Rubus ursinus cv. Young

Subgroup 004B Bush berries

Code No.

Commodity

FB 2006

Bush berries

FB 0019

Vaccinium berries, including Bearberry

Vaccinium spp.; *Arctostaphylos uva-ursi* (L.) Spreng.

FB 0020

Blueberries

Vaccinium corymbosum L.; *Vaccinium angustifolium* Ait.;
Vaccinium virgatum Aiton; *Gaylussacia* spp.

FB 2240

Aronia berries

Aronia spp

FB 0260

Bearberry

Arctostaphylos uva-ursi (L.) Spreng.

FB 0261

Bilberry

Vaccinium myrtillus L.

FB 0262

Bilberry, Bog

Vaccinium uliginosum L.

FB 0263

Bilberry, Red

Vaccinium vitis-idaea L.

- **Blueberry, Highbush**, see Blueberries, FB 0020

Vaccinium corymbosum L.

- **Blueberry, Lowbush**, see Blueberries, FB 0020

Vaccinium angustifolium Ait.

- **Blueberry, Rabbiteye**, see Blueberries, FB 0020

Vaccinium virgatum Aiton

FB 2241

Buffalo currant

Ribes aureum var. *villosum* DC. (Syn: *Ribes odoratum* H.Wendl)

- FB 2242 **Chilean guava**
 Ugni molinae Turcz. (syn: *Myrtus ugni* Mol.)
- **Cowberry**, see Bilberry, Red, FB 0263
- FB 0021 **Currants, Black, Red, White**
 Ribes nigrum L.; *R. rubrum* L.
- FB 0278 **Currant, Black**, see also Currants, Black, Red, White
 Ribes nigrum L.
- FB 0279 **Currant, Red, White**, see also Currants, Black, Red, White
 Ribes rubrum L.
- FB 0268 **Gooseberry**
 Ribes uva-crispa L. (syn: *R. grossularia* L.)
- FB 2243 **European barberry**
 Berberis vulgaris L.
- **European Blueberry**, see bilberry FB 0261
- FB 2244 **Huckleberries**
 1. Blueberries, see above FB 0020
 2. *Gaylussacia* spp., see Blueberries FB 0020
 Red Huckleberry (*Vaccinium parvifolium* L.)
- FB 2245 **Jostaberries**
 Ribes x nidigrolaria Rud. Bauer & A. Bauer
- FB 0270 **Juneberries**
 Amelanchier spp.
- FB 2246 **Native currant**
 Acrotriche depressa R. Br.
- FB 2247 **Riberries**
 Syzygium leuhmannii
- FB 0273 **Rose hips**
 Rosa L., several spp.
- FB 2248 **Salal**
 Gaultheria shallon Pursh
- FB 2249 **Sea buckthorn**
 Hippophea rhamnoides L.
- **Whortleberry, Red**, see Bilberry, Red, FB 0263

Subgroup 004C Large shrub/tree berries

<u>Code No.</u>	<u>Commodity</u>
FB 2007	Large shrub/tree berries

FB 2250	Bayberries <i>Morella spp.</i>
FB 2251	Buffaloberry <i>Shepherdia argentea</i> (Pursh) Nutt.
FB 2252	CHE <i>Maclura tricuspidata</i> Carrièra
FB 0267	Elderberries <i>Sambucus spp.</i>
FB 0271	Mulberries <i>Morus alba</i> L.; <i>Morus nigra</i> L.; <i>Morus rubra</i> L.
FB 2253	PHALSA <i>Grewia asiatica</i> L.
-	Rowan , see Service berries FB 0274 <i>Sorbus aucuparia</i> L.
FB 0274	Service berries 1. see Juneberries 2. <i>Sorbus torminalis</i> (L.) Crantz; <i>Sorbus domestica</i> L. <i>S. aucuparia</i> L.
Subgroup 004D	Small fruit vine climbing
<u>Code No.</u>	<u>Commodity</u>
FB 2008	Small fruit vine climbing
FB 2255	ARGUTA KIWIFRUIT <i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex. Miq.
FB 2256	Amur river grape <i>Vitis amurensis</i> Rupr.
FB 0269	Grapes <i>Vitis vinifera</i> L., several cultivars
FB 2257	SCHISANDRABERRY <i>Schisandra chinensis</i> (Turcz.) Baill.
FB 1235	Table-grapes Special cultivars of <i>Vitis vinifera</i> L., suitable for direct human consumption
-	Tara vine , see Arguta kiwifruit FB 2255
FB 1236	Wine-grapes Special cultivars of <i>Vitis vinifera</i> L., suitable for preparing juice and fermenting into wine

Subgroup 004E Low growing berries

<u>Code No.</u>	<u>Commodity</u>
FB 2009	Low growing berries
-	Bakeapple , see Cloudberry FB 0277
FB 0265	Cranberry <i>Vaccinium macrocarpon</i> Aiton
FB 0277	Cloudberry <i>Rubus chamaemorus</i> L.
FB 2258	Muntries <i>Kunzea pomifera</i> F. Muell.
FB 2259	Partridge berry <i>Mitchella repens</i> L.
-	Squaw vine , see Partridge berry FB 2259
FB 0275	Strawberry <i>Fragaria x ananassa</i> Duchene ex Rozier
FB 0276	Strawberries, Wild <i>Fragaria vesca</i> L.; <i>Fragaria moschata</i> Duchene
-	Strawberry , Musky , see Strawberries wild, FB 0276 <i>Fragaria moschata</i> Duchene

Edible fungiCLASS A**Type 1 Vegetables Group 18 Group Letter Code VF**

Edible Fungi are derived from lower plants. The fruiting bodies could be fully exposed to pesticides during the growing season.

The entire fruiting body may be consumed in a succulent or processed form.

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of soil and growing medium**

Group 18 Edible Fungi

<u>Code No.</u>	<u>Commodity</u>
VF 2084	Edible fungi Various edible species of fungi, wild and cultivated.
VF 0449	Fungi, Edible, except Mushrooms

According to Codex Stand. 38-1981: various edible species of fungi, mainly wild, among others *Boletus edulis*; other *Boletus* spp, *Morchella* spp, *Pleurotus ostreatus*

- VF 0450 **Mushrooms**
 Cultivated cultivars of *Agaricus* spp. (included Royal sun agaricus = Hime-Matsutake (*Agaricus brasiliensis*), Rodman's agaricus, White button mushroom)
 syn: *Psalliota* spp., mainly *Agaricus bisporus* (definition Codex Stand. 55-1981)
- **Bearded tooth**, see Pom pom VF 3065
- **Beech mushroom**, see Bunashimeji VF 3052
- VF 3050 **Black poplar mushroom**
Agrocybe aegerita (V. Brig.) Singer
- VF 3051 **BLEWITT**
Lepista nuda (Bull.) Cooke
- VF 3052 **Bunashimeji**
Hypsizygus marmoreus (Peck) H.E. Bigelow, *H. tessulatus* (Bull.) Singer
- VF 3053 **Cauliflower mushroom**
Sparassis crispa (Wulfen) Fr.
- VF 3054 **Cep**
Boletus edulis Bull. and other *Boletus* spp.
- VF 3055 **Chanterelle**
Cantharellus cibarius Fr. (Codex Stand. 40-1981)
- VF 3056 **Enoke**
Flammulina velutipes (curtis) Singer
- **Enoki mushroom**, see Enoke VF 3056
- **Hen-of-the-Woods mushroom**, see Maitake, VF 3059
- VF 3057 **Hirmeola**
Auricularia auricular-judea (Fr.) J. Schröt (Syn. *Auricularia auricular* (Hook.f.)Underw.)
- VF 3058 **Ink mushroom**
Coprinus comatus (O.F. Müll.) Persoon
- **Jews ear mushroom**, see Hirmeola VF 3057
- **Lion's mane mushroom**, see Pom pom VF 3065
- VF 3059 **Maitake**
Grifola frondosa (Dicks) Gray
- VF 3060 **MOREL**
Morchella spp.
- VF 3061 **Nameko**
Pholiota nameko (T. Ito) S. Ito & S. Imai and other *Pholiota* spp.
- VF 3062 **Net bearing Dictyophora**

Phallus impudicus L.

- **Oakwood mushroom**, see Shiitake mushroom VF 3067
- VF 3063 **Oyster mushroom**
Pleurotus ostreatus (Jacq.) P. Kumm and other *Pleurotus spp.*, including grey-oyster mushroom, abalone mushroom
- **Paddy straw mushroom**, see Straw mushroom VF 3059
- VF 3064 **Pine mushroom**
Tricholoma matsutake (S. Ito & Imai) Singer
- VF 3065 **Pom pom**
Hericum erinaceus (Bull.) Pers.
- VF 3066 **REISHI MUSHROOM**
Ganoderma lucidum (Curtis) P. Karst. and other *Ganoderma spp.*
- VF 3067 **Shiitake mushroom**
Lentinula edodes (Berk.) Pegler
- VF 3068 **Shimeji**
Lyophyllum fumosum (Pers.) P.D. Orton (syn: *Tricholoma conglobatum*(Vitt.) Ricken) and other *Lyophyllum spp.*
- **Slimy mushroom**, see Nameko VF 3061
- VF 3069 **STRAW MUSHROOM**
Volvariella volvacea (Bull.) Singer
- VF 3070 **Stropharia**
Stropharia spp.
Stropharia rugosoannulata Farl. ex Murrill
- VF 3071 **TRUFFLE**
Tuber spp.
- VF 3072 **Wangsongi**
Macrocybe gigantea (Masse) Pegler & Lodge
(syn : *Tricholoma giganteum* Masse)
- **Winter mushroom**, see Enoke VF 3056
- VF 3073 **White jelly mushroom**
Tremella fuciformis Berk.
- VF 3074 **Wood ears mushroom**,
Auricularia polytricha (Mont.)Sacc.

Citrus fruitsCLASS A**Type 1 Fruits Group 001 Group Letter Code FC**

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 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.

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.**

Group 001 Citrus fruits

Code No. Commodity

FC 0001 **Citrus Fruit**

Subgroup 001A Lemons and Limes

Code No. Commodity

FC 0002 **Lemons and Limes** (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 limettoides* Tan.; *Citrus limonia* Osbeck.

Synonyms: see specific fruit species

FC 2201 **Australian blood lime**, see also Lemons and Limes, FC 0002

Microcitrus australasica (F. Muell.) Swingle

synonyms: *Citrus australasica* F. Muell.

FC 2202 **Australian desert lime**, see also Lemons and Limes, FC 0002

Eremocitrus glauca (Linl.) Swingle

synonyms: *Citrus glauca* (Lindl) Burkill

FC 2203 **Australian round lime**, see also Lemons and Limes, FC 0002

Microcitrus australis (A. Cunn. ex Mudie) Swingle

- synonyms: *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 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)
- **Mexican Lime**, see Codex stan. 217-1999, see Lime, FC 0205
Citrus aurantifolia Swingle see, Amd. 1-2005
- FC 2206 **Mount White-lime**, see also Lemons and Limes, FC 0002
Microcitrus garrowayae (F. M. Bailey) Swingle
- FC 2207 **New Guinea wild lime**, see also Lemons and Limes, FC 0002
Microcitrus warburgiana (F. M. Bailey) Tanaka
- FC 2208 **Russell River-lime**, see also Lemons and Limes, FC 0002
Microcitrus inodora (F. M. Bailey) Swingle
syn: *Citrus inodora* (F. M. Bailey)
- FC 2209 **Tahiti Lime**, see Codex stan. 213-1999, Amd. 3-2005,
see also Lemons and Limes, FC 0002
Citrus latifolia Tan.
- FC 2210 **Yuzu**, see also Lemons and Limes, FC 0002
Citrus junos Siebold ex Tanaka

Subgroup 001B Mandarins

- | <u>Code No.</u> | <u>Commodity</u> |
|-----------------|--|
| FC 0003 | Mandarins (including Mandarin-like hybrids)
- <i>Citrus reticulata</i> Blanco: |

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

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

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

synonyms: see specific fruit species Mandarin

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 tangarina* 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 2211

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	<p>Oranges, Sweet, Sour (including Orange-like hybrids)</p> <p>several cultivars:</p> <ul style="list-style-type: none"> - <i>Citrus sinensis</i> Osbeck; - <i>Citrus aurantium</i> L.; <p>Hybrids and related species:</p> <p><i>Citrus myrtifolia</i> Raf.; <i>Citrus salicifolia</i> Raf.;</p> <p>synonyms: see specific fruit species</p>
-	<p>Bergamot, see Oranges, Sweet, Sour, FC 0004</p> <p><i>Citrus aurantium</i> ssp <i>bergamia</i></p>
-	<p>Bigarade, see Orange, Sour FC 0207</p> <p><i>Citrus aurantium</i> L.</p>
-	<p>Blood orange, see Orange, Sweet, FC 0208</p> <p>Cultivar of <i>Citrus sinensis</i> Osbeck</p>
-	<p>Chinotto, see Orange, Sour, FC 0207</p> <p><i>Citrus aurantium</i> L., var. <i>myrtifolia</i> Ker-Gawler;</p> <p>syn: <i>Citrus myrtifolia</i> Raf.</p>
-	<p>Chironja (orangelo), see Oranges, Sweet, Sour, FC 0004</p> <p><i>Citrus sinensis</i> x <i>Citrus paradise</i> (= Hybrid of Orange, Sweet x Mandarin)</p>
	<p>Ichang Bitter Orange, see Orange, Sweet, FC 0208</p> <p><i>Citrus ichangensis</i> Swingle</p>
-	<p>Malta orange, see Blood Orange</p>
-	<p>Myrtle-leaf orange, see Chinotto</p>
-	<p>Orange, Bitter, (=bigarade) see Orange, Sour FC 0207</p>
FC 0207	<p>Orange, Sour, see also see Oranges, Sweet, Sour, FC 0004</p> <p><i>Citrus aurantium</i> L.;</p> <p>syn: <i>Citrus vulgaris</i> Risso; <i>Citrus bigarradia</i> Loisel; <i>Citrus communis</i> Le Maout & Dec.</p>
FC 0208	<p>Orange, Sweet, See Codex stan. 245-2004 Amd 1-2005, see also see Oranges, Sweet, Sour, FC 0004</p> <p><i>Citrus sinensis</i> Osbeck;</p> <p>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</p>
-	<p>Seville Orange, see Orange, Sour, FC 0207</p>
-	<p>Tachibana orange see Oranges, Sweet, Sour, FC 0004</p> <p><i>Citrus tachibana</i> (Makino) Tanaka</p>

Syn: *Citrus aurantium* L. var. *tachibana* Makino; *Citrus depressa*

FC 2212 **Trifoliolate orange** see also Oranges, Sweet, Sour, FC 0004

Poncirus trifoliolate (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 natsudaidai* Hayata; Tangelos large sized (= hybrid, Grapefruit x Mandarin); Tangelolos: (hybrid, Grapefruit x Tangelo); synonyms: see specific fruit species

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.

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

Citrus natsudaidai 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 reticulata 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* and *Pyrus*. 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

<u>Code No.</u>	<u>Commodity</u>
FP 0009	Pome fruits
FP 0226	Apple <i>Malus domestica</i> Borkhausen
[FP 2220	Azarole <i>Crataegus azarolus</i> L.]
FP 2221	Chinese quince <i>Chaenomeles speciosa</i> (sweet) Nakai
FP 0227	Crab-apple <i>Malus</i> spp.; among other <i>Malus baccata</i> (L.) Borkh. var <i>baccata</i> ; <i>M. prunifolia</i> (Willd.) Borkh.
-	Japanese medlar , see Loquat, FP 0228
FP 0228	Loquat <i>Eriobotrya japonica</i> (Thunberg ex J.A. Murray) Lindley
[FP 2222	Mayhaw <i>Crataegus</i> spp.]
FP 0229	Medlar <i>Mespilus germanica</i> L.
-	Nashi pear , see Pear, Oriental
FP 0230	Pear <i>Pyrus communis</i> L.; <i>P. pyrifolia</i> (Burm.) Nakai; <i>P. bretschneideri</i> Rhd.; <i>P. sinensis</i> L.
-	Pear, Oriental , see Pear, FP 0230 <i>Pyrus pyrifolia</i> (Burm.) Nakai

FP 0231	Quince <i>Cydonia oblonga</i> P. Miller; syn: <i>Cydonia vulgaris</i> Persoon
-	Sand pear , see Pear, Oriental
[FP 2223	Tejocote <i>Crataegus mexicana</i> DC.]

Stone fruits**CLASS A****Type 1 Fruits Group 003 Group Letter Code FS**

Stone fruits are produced on trees belonging to the genus *Prunus* of the rose family (Rosaceae). 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.

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 and 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 calculated and expressed on the whole commodity without stem.**

Group 003 Stone fruits

<u>Code No.</u>	<u>Commodity</u>
FS 0012	Stone fruits <i>Prunus</i> spp.

Subgroup 003A Cherries

<u>Code No.</u>	<u>Commodity</u>
FS 0013	Cherries (includes all commodities in this subgroup)
-	Capulin , see Cherry, black <i>Prunus serotina</i> Ehrh. subsp. <i>capuli</i>
FS 2230	Cherry, black (including capulin) <i>Prunus serotina</i> Ehrh. subsp. <i>Serotina</i> ; <i>Prunus serotina</i> Ehrh. subsp. <i>capuli</i>
FS 2231	Cherry, Nanking <i>Prunus tomentosa</i> Thunb.

FS 0243	Cherry, Sour <i>Prunus cerasus</i> L.
FS 0244	Cherry, Sweet <i>Prunus avium</i> L.
-	Cherry, tart , see Cherry, Sour
FS 2232	Choke cherry <i>Prunus virginiana</i> L.
-	Morello , see Cherry, Sour <i>Prunus cerasus</i> L., var. <i>austera</i> L.

Subgroup 003B Plums**Code No.****Commodity**

FS 0014	Plums (including Prunes) <i>Prunus domestica</i> L.; other <i>Prunus</i> spp and ssp. (includes all commodities in this subgroup)
FS 0241	Bullace <i>Prunus insititia</i> L.; syn: <i>Prunus domestica</i> L., ssp. <i>insititia</i> (L.) Schneider
FS 0242	Cherry plum <i>Prunus cerasifera</i> Ehrhart, syn: <i>P. divaricata</i> Ledebour <i>P. salicina</i> Lindl., var. Burbank
-	Chickasaw plum , see Plum, Chickasaw
-	Damsons (Damson plums) , see Plum, Damson
-	Greengages (Greengage plums) , see Plum, Greengage
FS 2233	Klamath plum , <i>Prunus subcordata</i> Benth.
-	Mirabelle , see Plum, Mirabelle
-	Myrobolan plum , see Cherry plum
FS 2234	Plum <i>Prunus domestica</i> L.
-	Plum, American , see Sloe <i>Prunus americana</i> Marshall
FS 2235	Plum, beach <i>Prunus maritime</i> Marshall
FS 0248	Plum, Chickasaw <i>Prunus angustifolia</i> Marsh.; syn: <i>P. Chickasaw</i> Mich.
-	Plum, Damson , see Bullace

- **Plum, Greengage**, see Plums
Prunus insititia L., var. *italica* (Borkh.) L.M Neum.
- **Plum, Japanese**, see Plums
Prunus salicina Lindley;
syn: *P. triflora* Roxb.
- **Plum, Mirabelle**, see Bullace
Prunus insititia L., var. *syriaca*;
syn: *P. domestica* L., ssp *insititia* (L.) Schneider
- FS 2236 **Plumcot**
Prunus domestica x *P. armeniaca*
- **Prunes**, see Plums
- FS 0249 **Sloe**
Prunus spinosa L.; several wild *Prunus* spp.

Subgroup 003A Peaches

<u>Code No.</u>	<u>Commodity</u>
FS 2001	Peaches (including Nectarine and Apricots) (includes all commodities in this subgroup)
FS 0240	Apricot <i>Prunus armeniaca</i> L.; syn: <i>Armeniaca vulgaris</i> Lamarck
FS 2237	Japanese apricot <i>Prunus mume</i> Siebold & Zucc.
FS 0245	Nectarine <i>Prunus persica</i> (L.) Batch, var. <i>nectarina</i>
FS 0247	Peach <i>Prunus persica</i> (L.) Batsch; syn: <i>P. vulgaris</i> Mill.

Oilseed**CLASS A****Type 4 Nuts and seeds Group 023 Group Letter Code SO**

Oilseed consists of seeds from a variety of plants used in the production of edible vegetable oils, seed meals and cakes for animal feed. Some important vegetable oil seeds are by-products of fibre or fruit crops (e.g. cotton seed, olives).

Some of the oilseeds are, directly or after slight processing (e.g. roasting), used as food (e.g. peanuts) or for food flavouring (e.g. poppy seed, sesame seed).

Oilseeds are protected from pesticides applied during the growing season by the shell , husk of fruit flesh.

The group Oilseed is divided into five subgroups:

023A Rape seeds

023B Sunflower seeds

023C Cottonseed

023D Other oilseeds

023E Oilfruits (fruits of palm trees)

Portion of the commodity to which the MRL applies (and which is analyzed): **Oilseeds: Unless specified, seed or kernels, after removal of shell or husk. Oilfruits: whole commodity**

Group 023 Oilseed

Code No. Commodity

SO 0088 **Oilseed** (rape seeds, sunflowerseeds, cotton seeds and other oilseeds)

SO 0089 **Oilseed except peanut**

Subgroup 023A Rape seeds

Code No. Commodity

SO 2090 **Rape seeds**
(includes all commodities in this subgroup)

SO 0090 **Mustard seeds**
(Mustard seed; Mustard seed, Field; Mustards seed, Indian)

SO 3140 **Borage seed**
Borago officinalis L.

- **Colza**, see Rape seed, SO 0495

- **Colza, Indian**, see Mustard seed, Field, SO 0694

- **Canola**, see Rape seed, SO 0495

- **Flax-seed**, see Linseed, SO 0693

SO 3141 **Gold of pleasure seed**
Camelina sativa (L.) Crantz

SO 3142 **Hare's ear mustard seed**
Congringia orientalis (L.) Dumort

SO 3143 **Lesquerella seed** (gaslight bladderpod)
Lesquerella recurvata (Engelm. ex. A. Gray) S. Watson

SO 0693 **Linseed**
Linum usitatissimum L.

SO 3144 **Meadow foam seed**
Limnanthes alba Hartw. ex Benth.

SO 0485 **Mustard seed**

Brassica nigra (L.) Koch; *Sinapis alba* L.

Synonym: *Brassica hirta* Moench.

SO 0694 **Mustard seed, Field**

Brassica campestris L., var. *sarson* Prain; *B. campestris* L., var. *toria* Duthie & Fuller (??)

SO 0478 **Mustard seed, Indian**

Brassica Juncea (L.) Czern. & Coss.

SO 3145 **Perrilla seed**

Perrilla frutescens (L.) Britton var. *frutescens*

SO 0698 **Poppy seed**

Papaver somniferum L.

SO 0495 **Rape seed**

Brassica napus L.

- **Rape seed, Indian**, see Mustard seed, Field

Brassica campestris L., var. *toria* Duthie & Fuller

SO 0700 **Sesame seed**

Sesamum indicum L.

Synonym: *S. orientale* L.

Subgroup 023B Sunflower seeds

Code No.

Commodity

SO 2091

Sunflower seeds

(includes all commodities in this subgroup)

SO 3146

Jojoba seed

Simmondsia chinensis (Link) C. K. Schneid.

SO 0695

Niger seed

Guizotia abyssinica (L.) Cass.

SO 0699

Safflower seed

Carthamus tinctorius L.

SO 0702

Sunflower seed

Helianthus annuus L.

SO 3147

Tallowwood nut

Ximenia americana L.

SO 3148

Tea oil plant

Camellia oleifera C. Abel

Subgroup 023C Cotton seed

SO 0691 **Cotton seed**
Gossypium spp.; several species and cultivars

Subgroup 023D Other oilseeds

Code No. Commodity

SO 3150 **American oil palm seed**
Elaeis oleifera (Kunth) Cortés

SO 3151 **Babassu seed**
Attalea speciosa Mart. Ex Spreng

SO 0690 **Ben Moringa seed**
Moringa oleifera Lam.
 Synonyms: *M. pterygosperma* Gaertn.

- **Coconut**, see Group 022: Tree nuts

SO 3152 **Coyoli palm seed**
Acrocomia aculeata (Jacq.) Lodd. ex Mart.

- **Drumstick tree seed**, see Ben Moringa seed, SO 0690

SO 3153 **Grape seed**
Vitis vinifera L., several cultivars

- **Groundnut**, see Peanut, SO 0697

SO 3154 **Hempseed**
Cannabis sativa L.

- **Horseradish tree seed**, see Ben Moringa seed, SO 0690

SO 0692 **Kapok**
Ceiba pentandra (L.) Gaertn.

- **Karite nuts**, see Shea nuts SO 0701

- **Maize**, see Group 020: Cereal grains

SO 3155 **Melon seed**
Cucumis melo L. spp. several species and cultivars

- **Palm kernel**, see Palm nut, SO 0696

SO 0696 **Palm nut**
Elaeis guineensis Jacq.

SO 0697 **Peanut**
Arachis hypogaea L.

SO 0703 **Peanut, whole**

SO 3156 **Pumpkin seed**
Cucurbita pepo L. subsp. *pepo*

SO 0701 **Shea nuts**
Butyrospermum paradoxum (Gaertn.) Hepper, subsp. *parkii* (G. Don.) Hepper

Synonym: *B. parkii* (G. Don.) Kotsky

- **Soya bean (dry)**, see Group 015: Pulses
- **Soybean (dry)**, see Soya bean (dry)

Subgroup 23 E Oilfruits

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

SO 2093	Oilfruits
---------	------------------

(includes all commodities in this subgroup)

SO 3158	American oil palm fruit
---------	--------------------------------

Elaeis oleifera (Kunth) Cortés

- **Desert date**, see Group 005: Assorted topical and sub-tropical fruits - edible peel

SO 3159	Maripa palm fruit
---------	--------------------------

Attalea maripa (Aubl.) Mart

- **Olive**, see Group 005: Assorted tropical and sub-tropical fruits - edible peel

SO 3160	Palm fruit (African oil palm)
---------	--------------------------------------

Elaeis guineensis Jacq.

- **Peach palm**, see Group 005: Assorted topical and sub-tropical fruits - edible peel

Bactris gasipaes Kunth var. *gasipaes* .

SO 3161	Tucum fruit
---------	--------------------

Bactris setosa Mart.

APPENDIX X

**PROPOSED DRAFT REVISION OF THE GUIDELINES ON THE ESTIMATION OF
UNCERTAINTY OF RESULTS FOR THE DETERMINATION OF PESTICIDE RESIDUES
(CAC/RCP 59-2006) AT STEP 3**

BACKGROUND INFORMATION AND JUSTIFICATION

1. The determination of residues at trace levels (0.001 - 10 mg/kg) is subject to considerable analytical variability. To have a sound estimate of the quality of results the expression of measurement uncertainty (MU) is used. Due to the large scope of analytes and commodities in this field validation and consequently the estimation of MU can be extremely demanding. However, in order to minimise disputes resulting from questionable exceedance of regulatory limits, the estimation and reporting of MU is essential for demonstrating the boundaries and equivalence of analytical results generated in different laboratories. When results are obtained by analytical methods affected by bias, this difference should be considered in comparative evaluations (e.g., through an adequate estimation of the MU). Moreover, MU estimation is an essential prerequisite for accreditation and a requirement for laboratories.

2. Organizations often have limited financial, personnel and time resources which are necessary for a thorough MU calculation as described in numerous guidance papers on MU. Therefore, and in the interest of rationalizing laboratory work, it is considered impractical to calculate individual values for countless commodity/pesticide combinations¹, particularly when using the rigorous bottom-up approach. It was proposed in ALINORM 07/30/24, paras. 156-160 to develop a simplified guidance document for the estimation of MU, e.g., based on method validation, quality control and proficiency testing (PT) results.

3. At the 39th CCPR Meeting a discussion paper was prepared, forming the basis for a guidance document to be discussed at the 40th CCPR Meeting. The Committee decided to undertake new work and a revised draft paper was prepared by IAEA taking into account contributions from national Governments and international organizations as responses to CX/PR 09/41/5 towards the revision of CAC/GL 59-2006 at the 41st CCPR Meeting.

4. A revision of the MU guidance document using this discussion paper and the proposal for an extension of CAC/GL 59-2006 takes into consideration inputs by the EWG. The objective would be a guideline containing a practical supplement based on empirical data.

5. The revised document intends to support the practical adoption of the MU concept in food laboratories dealing with pesticide residue analysis. MU estimation should consider the complexity of pesticide residue analysis, i.e., several working steps eventually involving instrument calibration, chemical changes of the target analytes; limited laboratory resources; large number of combinations of commodities and pesticides. The key considerations are:

- (a) elaboration of a practically oriented and straightforward guidance based on empirical top-down concepts;
- (b) allowing for simplified MU estimation for the ease of compliance with ISO Standard 17025.

Uncertainty related to sampling is not subject of this guideline.

6. The need to control analytical procedures – and consequently the necessity for quantitative expression of MU – is widely recognized. The technical part of ISO Standard 17025 requires the estimation of MU as an essential parameter which laboratories must have in place².

¹ More than 1,000 pesticides are known worldwide; more than 220 pesticides have a Codex Reference Number

² See ISO/IEC Standard 17025, Para. 5.10.3.1: In addition ... test reports shall ... include the following: “(c) where applicable, a statement on the **estimated uncertainty** of measurement; information on uncertainty is needed in test reports when it is relevant to the validity of application of the test results, when a client’s instruction so requires, or when the uncertainty affects compliance to a specification limit.”

7. A number of guidance documents describe different approaches towards estimating MU. With regard to pesticide residue analysis, bottom-up calculations in particular are perceived as overly complicated and extremely laborious. This may in part be due to the fact that the MU concept had originally been developed for physical measurements where influencing factors and analytical parameters are limited and rather straightforward to define and to calculate. The concept is not easily transferable to complicated and multi-factorial chemical residue analysis procedures.

8. Pesticide residue methods involve several independent processes: (a) sample preparation, processing and storage, (b) extraction of analyte(s), (c) clean-up, (d) derivatization, (e) quantitation of analyte(s). Each sub-procedure can involve several steps including sample comminution, weighing, pipetting, calibration, and so on. Each procedural and/or working step will influence MU values, eventually different from analyte to analyte, from commodity to commodity, and mostly it is concentration dependent. Therefore, specific guidance applicable to pesticide residue analysis of food would be useful towards simplification and wider acceptance of the uncertainty concept, particularly in terms of top-down approaches on MU.

MU CONCEPTS FOR PESTICIDE RESIDUE ANALYSIS

9. Difficulties related to MU were discussed by CCMAS in 2007 (see ALINORM 07/30/23, paras 6-10). Although pesticide residue analysis in its complexity was not of particular concern, the matter is perceived similarly in CX/MAS 07/28/2-Add.2. The guidance document on MU summarizes the situation and draws together various developments in that area. In parts A to L the main relevant approaches as outlined in different publications are summarized and discussed. However, there is no specific guidance for particular analytical procedures as to which approach would be applicable for which purpose.

10. ISO/TS 21748:2004³ provides additional mathematical concepts especially for estimating zones of acceptance and rejection around analytical values; straightforward top-down approaches are also discussed. One important statement relevant in this context is that the reproducibility standard deviation obtained from collaborative studies is considered as a valid basis for MU evaluation. If accuracy (or trueness) data can be utilized, e.g., with respect to an established reference value based on (certified) reference material, then uncertainty associated with the estimated bias should be included in the MU budget. Evaluating uncertainty according to ISO/TS 21748 comprises the following elements:

- (a) repeatability, reproducibility and bias estimates from collaborative study;
- (b) laboratory bias and precision within that expected on the basis of collaborative studies;
- (c) laboratory bias and precision under control and effects appropriately combined to form a combined uncertainty estimate.

Most of the interlaboratory trials performed in this field may not allow the estimation of the uncertainty through this approach since some participants may use different analytical methods and the reference value is the consensus mean.

11. In guideline EA-4/16⁴ it is recognized that “laboratories cannot in general be expected to initiate scientific research to assess the uncertainties associated with their measurements and tests”. The guideline, among others, describes the use of validation and method performance data for uncertainty evaluation. Data accumulated during validation and verification of test methods, interlaboratory studies according to ISO 5725, accumulated quality control data, and proficiency testing schemes typically characterize test method performance.

³ Technical Specification ISO/TS 21748:2004: Guidance for the use of repeatability, reproducibility and trueness estimates in measurement uncertainty estimation, First edition 2004-03-15

⁴ EA-4/16 EA guidelines on the expression of uncertainty in quantitative testing, December 2003 rev00

12. SANCO ACQ Guidelines⁵ support this line of action towards evaluating MU associated with proficiency test results. Eurolab Technical Report⁶ and NORDTEST Report⁷ TR 537 outline in greater detail, among others, the use of method validation and PT data for estimating MU.

ALTERNATIVE MU APPROACHES

13. A comprehensive and easily applicable MU concept is not provided by existing guidelines in terms of the practical application to pesticide residue analysis in foodstuffs. Calculating uncertainty budgets for thousands of relevant pesticide/crop combinations and dozens of analytical methods used in pesticide residue analysis is not practical in routine laboratory operation.

14. Empirical approaches proposed show alternatives also for pesticide residue analysis of foodstuffs. Practical and straightforward guidance for application in the determination of pesticide residues in foodstuffs could be made available through top-down MU concepts. Validation data, repeatability, reproducibility, outcomes of PT schemes can be utilized for simplified MU estimation applicable in food control laboratories.

15. Based on a series of PT schemes, the ACQ Guidelines of the EC indicate that actual and target values according to different performance and quality criteria were well within the same order of magnitude. For instance, values derived from Fitness-for-Purpose (FFP), the Horwitz equation and standard deviation calculated from EC PT schemes, after rejection of outliers (Qn), expressed in (%), were very similar. Accordingly, the evaluation of the recent EC PT schemes demonstrates that a FFP variability of 25% can be accepted as a sound representation of performance under these circumstances. As a consequence, accepting 25% variability as a standard deviation would lead to a generalized assumption of $\pm 50\%$ MU. The laboratories must prove that this uncertainty value is adequate to describe the performance of their analytical method, for instance through satisfactory participations in proficiency tests (see para 21.). The extrapolation of good performance for the analysis of one analyte/matrix combination to a broader scope of analysis should be based on the knowledge of the equivalence of the performance of the method within the considered scope of analysis.

MU ESTIMATION BASED ON HORWITZ FORMULAS

16. Similarly to the PT based approach MU may be estimated using empirical Horwitz formula. These generalized expressions are based on countless empirical interlaboratory comparison data. This approach takes into account that expected MU values are dependent on the residue level, i.e., the higher the residue concentration, the lower the anticipated relative MU. The Horwitz approach is expressed by the following equation (equivalent approximations exist):

$$RSD_R = 2^{1-0.5 \log c} = 2 * c^{-0.1505}$$

with:

RSD_R = expected relative interlaboratory standard deviation (%)

c = concentration of the analyte (expressed as kg/kg,
i.e., 0.01 mg/kg = 0.00000001 kg/kg)

Accordingly putting real figures into the above formulas concentration dependent RSD_R values are obtained, i.e.:

0.01 mg/kg \Rightarrow 32.0 %

0.1 mg/kg \Rightarrow 22.6 %

1 mg/kg \Rightarrow 16.0 %

⁵ Document N° SANCO/2007/3131 - METHOD VALIDATION AND QUALITY CONTROL FOR PESTICIDE RESIDUE ANALYSIS IN FOOD AND FEED (www.crl-pesticides.eu)

⁶ Eurolab Technical Report No. 1/2007, March 2007, Measurement uncertainty revisited: Alternative approaches to uncertainty evaluation (www.eurolab.org)

⁷ NORDTEST Report TR 537, HANDBOOK FOR CALCULATION OF MEASUREMENT UNCERTAINTY IN ENVIRONMENTAL LABORATORIES, EDITION 2

17. RSD_R values depending on the respective concentration levels can be transformed into MU by multiplying with an appropriate coverage factor, normally $k = 2$. Advantages of this concept⁸ include the incorporation of laboratory bias because laboratory variability is also randomized. Deviations generated by different laboratories have been included. The Horwitz equation was found to be widely applicable to all concentration, methods and analytes.

18. Drawbacks associated with the approach are that appropriate and sufficient data are needed as the basis for the estimation of a valid relation between concentration and uncertainty since the Horwitz data came from a highly diverse range of collaborative trials with concentrations ranging from 0.05 $\mu\text{g}/\text{kg}$ to 60%, involving a large number of other compounds than pesticides. Prescribed methods were used, and PT data were not included. It should be also noted, that ever since the establishment of the Horwitz equation, instrumentation technology has experienced significant advancements both in terms of sensitivity and selectivity, which reduces the uncertainty contribution by the instrumental measurement process. The resulting estimates of uncertainty accordingly are based on the distribution of between-laboratory standard deviations.

MU VALUES IN PESTICIDE RESIDUE ANALYSIS BASED ON EMPIRICAL DATA

19. Data derived from method validation can be utilized for verifying recovery values and associated standard deviations characterizing the use of analytical methods. A step by step practical guidance should incorporate representative examples of commonly used analytical methods. In practical terms a guidance document would incorporate empirical data and outcomes of PT schemes. In particular the following information and data can be utilized:

(a) Initially, laboratories should estimate MU from precision and method bias data derived from validation studies and/or verification experiments and adjusted by the use of long term quality control data, Practical Application, clause (1), such as recovery, repeatability and intermediate precision.

(b) Results from the participation in PT schemes.

20. Applying a PT-based simplified $\pm 50\%$ MU approach should only be used by individual laboratories if the following analytical performance and quality criteria can be demonstrated:

(a) Within-laboratory SD smaller than the between-laboratories SD.

(b) Successful participation in PT schemes ($z\text{-score} \leq |2|$ for 95%, $z\text{-score} \leq |3|$ for not more than 5% of the values).

(c) Small bias from method and/or laboratory recovery tests.

(d) Verification of analytical performance by regularly analysing suitable reference material, if available.

21. As is an emerging practice in the EC and elsewhere already, empirical top-down estimation of $\pm 50\%$ MU could complement a mathematically stringent bottom-up calculation model if the respective empirical quality criteria are met. Alternatively the Horwitz formula approach of estimating concentration-dependent MU based on the evaluation of results of interlaboratory collaborative tests could be applied as well. However, the laboratory must prove the applicability of this uncertainty value to their measurements.

Note: Laboratories uncomfortable with these empirical approaches or where such is not deemed applicable may wish to apply step-by-step bottom-up calculation to specifically generate distinct individual uncertainty estimates as given elsewhere⁹ including guidance on the treatment of concentration levels eventually conflicting with trigger values¹⁰.

⁸ L. Alder et al.: Estimation of Measurement Uncertainty in Pesticide Residue Analysis. JAOAC International. Vol. 84, No 5, 2001, 1569-1577.

⁹ primarily: EURACHEM/CITAC Guide CG 4, Quantifying Uncertainty in Analytical Measurement, Second Edition, QUAM 2000.1

¹⁰ EURACHEM/CITAC Guide, Use of uncertainty information in compliance assessment, First Edition 2007

PRACTICAL AND SIMPLIFIED MU ESTIMATION BASED ON TOP-DOWN APPROACHES

Underlying principles, formulas and statistics for PT based estimation of MU

Within-laboratory reproducibility standard deviation is combined with estimates of the method and laboratory bias using PT data:

$$U' = k * u' \quad \text{and} \quad u' = \sqrt{u'(R_w)^2 + u'(bias)^2}$$

where:

$$u'(bias) = \sqrt{RMS'_{bias^2} + u'(C_{ref})^2}$$

and:

$$RMS'_{bias} = \sqrt{\frac{\sum (bias'_i)^2}{m}}$$

and:

$$u'(C_{ref}) = \frac{\sum_i \frac{S'_{Ri}}{\sqrt{n_i}}}{m}$$

with:

U'	=	expanded relative uncertainty
k	=	coverage factor
u'	=	combined relative standard uncertainty
$u'(R_w)$	=	intermediate precision relative standard uncertainty
$u'(bias)$	=	relative standard uncertainty component from method and laboratory bias, based on PT data
RMS'_{bias}	=	root mean square of relative bias values
$bias'_i$	=	relative bias of PT i [obtained result _i – assigned value _i]/assigned value _i]
$u'(C_{ref})$	=	average relative standard uncertainty of assigned values
S'_{Ri}	=	interlaboratory relative standard deviation of PT i
n_i	=	number of participants in PT i
m	=	total number of PT schemes

Requirements

Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed, SANCO document (ref 5) para. 64: Acceptability of analytical performance for routine analysis.

- Individual recovery result should normally be in the range of the mean recovery $\pm 2 \times \%RSD$.
- Addition of a spiked sample to each batch of analysis.
- Results may be used for quality control charts.

Long-term quality control

Suitable samples for long-term quality control are:

- Certified reference materials.
- Remaining materials from proficiency tests.
- Other materials with suitable (and stable) concentrations of pesticides.
- Spiked samples.
- Matrices and analytes have to be stable.

Practical application

- (1) Prerequisites for using an expanded relative uncertainty of 50 %:

- The laboratory has demonstrated its technical capability to generate reliable results at the required level of quality, i.e. by:
 - validation data for the respective analytical method;
 - acceptable quality control data, e.g., control charts for respective methods and compounds;
 - successful participation in PT schemes which fulfil PT quality criteria conducted according to the Harmonized Protocol¹¹, ISO Guide 43-1 etc.;
 - Evidence of the equivalence of the performance of the analytical method for selected analytes and commodities representing the entire scope of analysis.
- (2) Uncertainty evaluation using laboratory evaluation data:
 - identification of the main sources of uncertainty (weighing, calibration, purity, temperature, volumetric glassware, etc.);
 - evaluation of the order of magnitude of the uncertainty of basic laboratory operations in relation to the overall uncertainty of the procedure;
 - expected result:
 - uncertainty of basic laboratory operations almost negligible;
 - random run-to-run variability as the principal source of MU.
 - estimation of overall bias and recoveries from in-house validation and quality control data (fortification, spiking, reference materials, etc.):
 - the mean of the resulting relative standard deviation taken as relative uncertainty is associated with random variation;
 - analyte mean recovery within 70-120 %.
- (3) Comparison with PT results:
 - series of PT rounds with slightly varying concentrations and matrices;
 - the relative standard deviation of valid data is comparable to the expected relative standard deviation (comparing PT results with real laboratory data).
- (4) Verification of uncertainty estimates:
 - checks using observed within-laboratory precision;
 - checks using certified reference materials or suitable test materials;
 - checks using reference methods;
 - checks based on the results of PT (including external QA data or measurement audits);
 - checks based on comparison of results with other laboratories,
 - comparison with other uncertainty estimates based on different approaches or different data (some approaches are expected to produce significantly different MU estimations).
- (5) Conclusion:
 - PT data can provide strong support for the laboratory estimate of MU based on validation data;
 - PT data can form the basis for estimating MU, using the dispersion of relative differences.

¹¹ M Thompson, S L R Ellison, R Wood; The International Harmonized Protocol for the proficiency testing of analytical chemistry laboratories (IUPAC Technical Report); Pure Appl. Chem. 78(1) 145-196 (2006)

Evaluation of uncertainty estimates against PT results

Checking the quality of uncertainty estimates may apply the zeta (ζ) score formula laid out in the Eurolab Report⁶:

$$\zeta = \frac{x - x_a}{\sqrt{u(x)^2 + u(x_a)^2}}$$

with:

- x = laboratory result
- x_a = assigned value
- $u(x)$ = standard uncertainty of laboratory results
- $u(x_a)$ = standard uncertainty of assigned values

Uncertainties are considered correct if $|\zeta|$ is in the range 0 to 2; underestimated if $|\zeta|$ is frequently over 2.

Limitations

In general, proficiency tests are not carried out frequently enough to provide good estimates of the performance of an individual laboratory's implementation of a test method. However, in the special case where:

- the types of test items used in the scheme are appropriate to the types tested routinely,
- the assigned values in each round are traceable to appropriate reference values, and,
- the uncertainty associated with the assigned value is small compared with the observed spread of results,

the dispersion of the differences between the reported values and the assigned values obtained in repeated rounds provides a basis for an evaluation of the uncertainty (see Eurolab and NORDTEST references).

A PT-based top-down approach is therefore applicable where PT data support this. Referring to EC-PT schemes this approach could be different for various matrices and pesticide/ matrix combinations.

Certain matrix/pesticide combinations would need separate MU evaluation following the guidelines and approaches given elsewhere.

Summary

With the assumptions and prerequisites outlined for conducting and evaluating PT schemes and classification of laboratory performance, based on top-down approaches, an estimate MU of $\pm 50\%$ as a generalized value would provide an acceptable and practical approximation of pesticide residue analysis of foodstuffs to daily laboratory reality.

Appendix: Practical application of the top-down approach on MU estimation by utilizing PT and internal validation and quality assurance data.

Application example:

$$S_R = \sqrt{S_{ip}^2 + S_{bl}^2}$$

When each laboratory report the mean of n replicated measurements obtained within the laboratory in intermediate precision conditions (e.g. different days), the reproducibility of the method is reduced from S_R to $S_{R;n}$:

$$S_{R;n} = \sqrt{\frac{S_{ip}^2}{n} + S_{bl}^2}$$

Considering the reproducibility, $S_{R;2}$, of an analytical method estimated in a interlaboratory trial where each participant reports the mean of two replicates obtained within a laboratory in intermediate precision conditions, equal to 0.2325 mg/kg (mean concentration of 0.93 mg/kg and RSD of 25 %):

$$S_{R;2} = 0.2325 = \sqrt{\frac{S_{ip}^2}{2} + S_{bl}^2}$$

If the relative intermediate precision standard deviation is 17 % (i.e. 0.1581 mg/kg), then:

$$S_{R;2} = 0.2325 = \sqrt{\frac{0.1581^2}{2} + S_{bl}^2}$$

Therefore:

$$S_{bl} = \sqrt{0.2325^2 - \frac{0.1581^2}{2}} = 0.2038 \text{ mg / kg}$$

Therefore, the reproducibility, S_R , associated with single measurements is:

$$S_R = \sqrt{S_{ip}^2 + S_{bl}^2} = \sqrt{0.1581^2 + 0.2038^2} = 0.2579 \text{ mg / kg}$$

Therefore, it should be reported an expanded relative uncertainty associated with single measurements of 55 %.

Note: There is a relation between the following precision values:

s_{ip} – intermediate precision standard deviation;

s_{bl} – between laboratory precision standard deviation;

s_R – reproducibility standard deviation.

APPENDIX XI

**PRIORITY LIST OF CHEMICALS SCHEDULED FOR EVALUATION AND RE-EVALUATION
BY JMPR**

The following are the tentative schedules to be evaluated by the FAO/WHO Joint Meeting on Pesticides Residues from 2010 to 2016.

2010 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds
clothianidin	clothianidin – corn, barley, wheat, rye, oilseed rape, lupin, sugar beet, sunflower, rice, cotton, sorghum, potato, poppy, mustard, carrot, cucumber, onion, lettuce, tomato, pepper, squash, cabbage, pome fruit, stone fruit, banana, grape, broccoli, eggplant, soybean, milk, egg, poultry meat
cyproconazole	cyproconazole – almond, apple, barely, bean, coffee, maize, oat, pea, peanut, rice, sugar beet, soybean, triticale and wheat.]
dicamba	dicamba –wheat, barley, corn, cottonseed, soybean, sugarcane molasses, asparagus, blueberry
etoxazole	etoxazole – grape, melons, cucumber, stone fruit, plum, hops, mint, tomato, coffee
flubendiamide	flubendiamide – apples, pears, apricot, nectarine, peach, cherries, plum, prune, grape (table), raisin, wine (if MRL not included under table grape), almonds, pecans, walnuts, muskmelon, watermelon, cucumbers, summer squash, celery, head lettuce, leaf lettuce, spinach, broccoli, cauliflower, cabbage, mustard greens, tomatoes, peppers, sweet corn, corn, soybean, cotton seed, rice, tea, and corresponding animal commodity MRLs.
fluopyram	fluopyram – root and tuber vegetables, bulb vegetables, leafy vegetables, brassica (cole) leafy vegetables, Legume vegetables, Fruiting vegetables, Cucurbit vegetables, Citrus fruits, Pome fruits, Stone fruits, Small berries, Grapes, Strawberry, Tree nuts, Cereal grains (except rice), Grasses (forage, fodder, hay), Herbs and spices, Artichoke, Canola/rape, Hops, Peanuts, Sunflower
meptyldinocap	meptyldinocap – pome fruits, stone fruits, grapes, strawberries, cucurbits with edible and inedible peel
thiamethoxam	thiamethoxam – plant origin: aubergine, artichokes, asparagus, avocados, barley, banana, beans, beetroot, berries (blackberry, bush-berry, cranberries, currants, strawberries, others), brassicas (cabbage, broccoli, brussel sprouts, buckwheat, Chinese cabbage, others), carrots, citrus group (grapefruits, lemons, mandarins, oranges, others), cereals (barley, rye, wheat, others) celery, chicory, cocoa, coffee, cotton, cucurbits (cucumber, melon, watermelon, zucchini), fennel, garlic, ginkgo, ginseng, grapes, guava, hops, kaki, kiwifruit, lettuce, linseed, maize, mango, mushrooms, nuts (almonds, cashew, chestnuts, coconuts, hazelnuts, pistachio, others), onions, papaya, parsley, passion fruit, peanuts, peas, peppermint, peppers, pineapples, pome fruits (apples, pears, others), pomegranates, potatoes, radish, rice, root and tuber vegetables, safflower, salsify, sesame seeds, spinach, soybean, stone fruits (apricots, cherries, nectarines, peach, plums, others), sugar beets, sugarcane, sunflower, tea, tomatoes, watercress. Animal origin: cattle, (fat, kidney, liver, meat), goat, horse (meat), milk, pork (fat, kidney, liver, meat), poultry (meat, eggs), sheep (meat).]

Periodic re-evaluations	Periodic re-evaluations
dithianon (028)	
	azinphos-methyl (002) – [awaiting advice on commodities]
tebuconazole (189)	bifenthrin (178) – wheat, barley, corn, potato, hops, rye, sweet potato, brassica group, citrus group, lettuce, fruiting vegetables, cucurbit group, pear, berry group, grape, banana, cottonseed, rapeseed and tea.
	cadusafos (174) – banana and potato
	chlorotalonil (081) – barley, rice, triticale, wheat, lupin, soybean, lentil, sugar-beet, artichoke, asparagus, aubergine, bean, broccoli, brussel sprouts, cabbage, carrot, cauliflower, celery, cucumber, pumpkin, garlic, leek, lettuce, melon, onion, pea, peanut, peppers, shallot, spinach, tomato, watermelon, zucchini, sweet corn, potato, banana, blackberry, blueberry, citrus, cranberry, gooseberry, grape, mango, papaya, peach, plum, pome-fruit, apricot, cherry, nectarine, strawberry, cacao, coffee, hop, almond, pistachio, oil seed rape, animal commodities, ginseng, horseradish, okra, persimmon, rhubarb, yam
Evaluations	Evaluations
	bifenazate (219) – egg plant, tea, citrus fruits, melons, tropical fruits, caneberry, legume vegetables, soybean, peas and beans.
	boscalid (221) – hops (dried cones)
	chlorantraniliprole (230) – brassica vegetables (broccoli, cabbage (chinese, chinese mustard, green, head, napa, oxhead, pointed, red, savoy, white, yellow), mustard greens, cauliflower, broccoli (chinese), brussel sprouts, cavalo, broccoli, kailan and kohlrabi), tree nuts (almonds, beech nuts, brazil nuts, butternuts, cashews, chestnuts, chinquapins, filberts (hazelnuts), hickory nuts, japanese horse-chestnut, java almonds, macadamia nuts, pachira nuts, paradise nuts, pecans, pine nuts, pili nuts, pistachio nuts, sapucaia nuts, tropical almonds, and walnuts), edible-podded beans (bean (phaseolus spp.; includes runner bean, snap bean, wax bean); bean (vigna ssp., includes asparagus bean, chinese longbean, moth bean, yardlong bean); jackbean; soybean (immature seed); sword bean), caneberries (cane fruits - blackberry; loganberry; red and black raspberry; cultivars and/or hybrids of these), strawberries, 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), sweet corn, maize/field corn, rice, mint, alfalfa seed, commodities of animal origin
	difenoconazole (224) – review of alternative GAP (banana – higher MRL (china); additional MRLs (green beans, passion fruit), (USA – tree nuts)
	endosulfan (32) – tea green / black (China)

	fenpyroximate (193) – re-evaluate data for grapes following JMPR recommended new ARfD, additional MRLs for fruiting vegetables, okra, melons, cucumber, citrus fruits, pome fruit, tree nuts, pistachio, hops, mint (USA)
	fludioxonil (211) – sweet potato, pomegranate (post harvest)
	novaluron (217) – turnips green, potato (increase MRL), sweet potato, broccoli, cauliflower, collard greens, mustard greens, tomato (increase MRL), cherry ,p each, plum, blueberry, sugar cane.
	triazophos (143) – residue evaluation in edible portion (soybean – immature seeds, Thailand); cereals incl. rice (China)

2011 JMPR

Toxicological Evaluations	Residue Evaluations
New Compounds	New Compounds
clopyralid	clopyralid – hops, pome fruits, stone fruits, cranberry, strawberry, spinach, sugar beets, barley, corn, oats, sorghum, wheat, linseed, rape seed, grass forage
emamectin-benzoate	emamectin-benzoate – grapes, potatoes, pome & stone fruits, tomatoes, eggplants, cucurbits (cucumber, melon, watermelon), lettuce, spinach, pepper, beans & peas, brassicas
ethaboxam	ethaboxam– grape
MCPA	MCPA -Wheat grain, barley grain, peas
Periodic re-evaluations	Periodic re-evaluations
dicofol (026) – no longer supported by the manufacturer	dicofol (026) – not supported by the manufacturer – tea and data package to be provided by India
diquat (031)	diquat (031) – cereals (including barley, wheat, maize, oats, rice, sorghum), oilseeds (including linseed, oilseed rape, soya bean, sunflower, cotton, poppy), legume vegetable group (including peas, beans, lentils), head brassica group (including cabbage), flowering brassica group, leafy brassica group, fruiting vegetable group (including tomato, pepper), root and tuber group (including carrot, radish, beetroot, sugarbeet, potato), stem vegetable group (including asparagus, celery, leek), cucurbits (edible and inedible peel), Bulb vegetables (including onion), citrus fruit, lettuce group, spinach, canary, lupine, mustard, apple, banana, chicory witloof, coffee, sweet corn, grape, herbs (including parsley and sage), hop, kohlrabi, lucerne, olive, peach, strawberry, clover, grass, alfalfa, sugarcane
dichlorvos (025)	
	dithianon (028) – pome fruit, cherry, grapes, hops, mandarin
etofenprox (184)	etofenprox (184) – [awaiting advice on commodities]
fenpropathrin (185)	
	cycloxydim (179) – beans (green and dried), brassicae, carrot, grape, leek, lettuce (head and leafy), peas (fresh and dried), potato, rapeseed, strawberry, sugarbeet
fenbutatin oxide (109)	tebuconazole (189) – artichoke, banana, barley, brassica vegetables,

	broad bean, citrus, carrot, coffee beans, cucumber, elderberries, garlic, grapes, hops, leek, lettuce head, maize, mango, melons, oats, onion, papaya, peach, peanut, peppers sweet, plums, pome fruit, prunes, rape seed, rice, rye, soya bean, summer squash, sweet corn, tomato, watermelon, wheat
Evaluations	Evaluations
	cyfluthrin (157) – soybean
	cypermethrin (118) – citrus fruit, asparagus (Thailand) and tea (India, China)
	acephate (95) – rice (China)
	profenofos (171) – chilli pepper, chilli pepper (dry), (Thailand) – note retain 4 year rule
	spinosad (203) – cranberry, hops (USA)

2012 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds
Periodic re-evaluations	Periodic re-evaluations
amitraz (122)	amitraz (122) – [awaiting advice on commodities]
bentazone (172)	bentazone (172) – beans (green and dried), peas (green and dried), cereals, maize, sorghum, onion, peanuts, potato, linseed, meat, milk, eggs.
disulfoton (74)	disulfoton (74) –support from USA [awaiting advice on commodities]
fenvalerate (119)	fenvalerate (119) – support from USA [awaiting advice on commodities]
glufosinate-ammonium (175)	glufosinate-ammonium(175) –manufacturer will provide commodities in 2009
tecnazene (115)	tecnazene (115) – support unknown
aldicarb (117)	
	dichlorvos (025)
	fenpropathrin (185) – [awaiting advice on commodities]
	fenbutatin oxide (109) –tree nuts, pome fruit, banana, cherry, citrus fruit, cucumber, grapes, raisins, stone fruit, strawberry, tomato, meat, milk, eggs
	oxamyl (126) – residue definitions, methods
Evaluations	Evaluations

2013 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds

Periodic re-evaluations	Periodic re-evaluations
bromide ion (47) – support unknown	bromide ion (47) – support unknown
dichlofluanid (82) – no longer supported by the manufacturer	dichlofluanid (82) – not supported by the manufacturer
dinocap (87) – no longer supported by the manufacturer	dinocap (87) – not supported by the manufacturer
metalaxyl (138) – support from USA	metalaxyl (138) – support from USA – supervised trials (Thailand)
methidathion (51) – support unknown	methidathion (51) – support unknown
triforine (116)	triforine (116) – [awaiting advice on commodities]
	aldicarb (117) – [awaiting advice on commodities]

2014 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds
Periodic re-evaluations	Periodic re-evaluations
bromopropylate (70) – support unknown	bromopropylate (70) – support unknown
diazinon (22) – support unknown	diazinon (22) – support unknown
hydrogen phosphide (46) – support unknown	hydrogen phosphide (46) – support unknown
myclobutanil (181)	myclobutanil (181) – pome fruits, stone fruits, black currant, grapes, strawberry, banana, hops, tomato
penconazole (182)	penconazole (182) – brassica vegetables (broccoli, brussels sprouts, cauliflower, chinese cabbage), pome fruit, fruiting vegetables (tomato, pepper, aubergine), root and tuber vegetables (carrot, parsnip, turnip), cucurbit vegetables (cucumber, melon, watermelon, pumpkin, zucchini), berries (blackberry, blueberry, blackcurrant, gooseberry, raspberry, cranberry), stone fruit (apricot, cherry, peach, plum), legume vegetables (peas, beans), nuts (almond, pecan, cashew, jujube, pistachio, hazelnut, pine nut, macadamia, chestnut), soya, strawberry, loganberry, sugarbeet, tobacco, potato, clementine, grapefruit, nectarine, cumquat, mango, gherkin, loquat, asparagus, leek, banana, lambs lettuce, rocket, chicory, canola, parsley, mint, papaya, alfalfa, barley, rice, wheat, sweet corn, hops, lentil, persimmon, avocado, artichoke, grapes, onion, fennel
phosalone (60) – support unknown	phosalone (60) – support unknown
Evaluations	Evaluations

2015 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds
Periodic re-evaluations	Periodic re-evaluations

abamectin (177)	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
chlormequat (15)	chlormequat (15) – cereals, cottonseed, maize, rapeseed, maize fodder, cereals fodder/straw, meat, milk, eggs
clethodim (187)	clethodim (187) – bean, broccoli, cabbage, carrot, cranberry, cucurbits, hops, lettuce, pea, strawberry (USA)
ethephon (106)	ethephon (106) – [awaiting advice on commodities]
fenpropimorph (188)	fenpropimorph (188) – banana, cereals, sugar beet, cereals fodder/straw, meat, milk, eggs
Teflubenzuron (190)	Teflubenzuron (190)
Evaluations	Evaluations

2016 JMPR

Toxicological evaluations	Residue Evaluations
New Compounds	New Compounds
Periodic re-evaluations	Periodic re-evaluations
bioresmethrin(93)– not supported by manufacturer	bioresmethrin (93) – not supported by the manufacturer
iprodione (111)	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.
Permethrin (120) – no manufacturer responsible	permethrin (120) - no manufacturer responsible
tolclofos-methyl (191)	tolclofos-methyl (191) – [awaiting advice on commodities]
Evaluations	Evaluations