codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME Tel.: 57051 Telex: 625825-625853 FAO I E-mail: Codex@fao.org Facsimile: +39(6)5705.4593

ALINORM 99/24

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX ALIMENTARIUS COMMISSION
Twenty-Third Session
Rome, 28 June - 3 July 1999

REPORT OF THE THIRTIETH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES
The Hague, 20 - 25 April 1998

Note: This report includes Codex Circular Letter CL 1998/13-PR.

codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME Tel.: 57051 Telex: 625825-625853 FAO I E-mail: Codex@fao.org Facsimile: +39(6)5705.4593

CX 4/40.2

CL 1998/13-PR
May 1998

TO: - Codex Contact Points
- Interested International Organizations

FROM: Chief, Joint FAO/WHO Food Standards Programme, FAO
Viale delle Terme di Caracalla, 00100 Rome, Italy

SUBJECT: DISTRIBUTION OF THE REPORT OF THE THIRTIETH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES (ALINORM 99/24)

The report of the Thirtieth Session of the Codex Committee on Pesticide Residues will be considered by the 45th Session of the Executive Committee of the Codex Alimentarius Commission (Rome, 3 - 5 June 1998) and 23rd Session of the Codex Alimentarius Commission (Rome, 28 June - 3 July 1999).

PART A: MATTERS FOR ADOPTION BY THE 23RD SESSION OF THE CODEX ALIMENTARIUS COMMISSION

The following matters will be brought to the attention of the 22nd Session of the Codex Alimentarius Commission for adoption:

1. DRAFT MAXIMUM RESIDUE LIMITS AND DRAFT REVISED MAXIMUM RESIDUE LIMITS AT STEP 8 (ALINORM 99/24, APPENDIX II); AND

2. PROPOSED DRAFT MAXIMUM RESIDUE LIMITS AND PROPOSED REVISED DRAFT MAXIMUM RESIDUE AT STEP 5/8 (ALINORM 99/24, APPENDIX IV)

Governments wishing to propose amendments or to comment on the Draft MRLs and Proposed Draft MRLs, including revised MRLs, should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 of the Procedure for the Elaboration of Codex Standards Including Consideration of Any Statements Relating to Economic Impact (*Codex Alimentarius Procedural Manual*, Tenth Edition, pp. 24-25) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 57054593; e-mail, codex@fao.org), **not later than 31 March 1999**.

3. DRAFT REVISED RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS (ALINORM 99/24, APPENDIX III)

Governments wishing to propose amendments or to comment on the above Draft Revised Recommended Methods of Sampling should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 of the Procedure for the Elaboration of Codex Standards Including Consideration of Any Statements Relating to Economic Impact (*Codex Alimentarius Commission Procedural Manual*, Tenth Edition, pp. 24-25) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 57054593; e-mail, codex@fao.org), **not later than 31 March 1999**.

4. PROPOSED DRAFT MAXIMUM RESIDUE LIMITS AT STEP 5 (ALINORM 99/24, APPENDIX V)

Governments wishing to propose amendments or to submit comments regarding the implications which the Proposed Draft Maximum Residue Limits 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 (at Step 5) (*Codex Alimentarius Procedural Manual*, Tenth Edition, pp. 20-21) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 57054593; e-mail, codex@fao.org), **not later than 31 March 1999**.

5. REVOCATION OF CODEX MRLS (ALINORM 99/24, APPENDIX VI)

Governments wishing to comment on the proposed revocation (not including that of Codex MRLs replaced by the revised MRLs) should do so in writing to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 57054593; e-mail, codex@fao.org), **not later than 31 March 1999**.

PART B: REQUEST FOR INFORMATION AND DATA TO BE SENT TO JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES

RESIDUES AND TOXICOLOGICAL DATA REQUIRED BY JMPR FOR PESTICIDES SCHEDULED FOR EVALUATION OR PERIODIC RE-EVALUATION

Governments and interested international organizations are invited to send inventory of data for pesticides on the agenda of the JMPR. Inventories of information on use patterns or good agricultural practices, residue data, national MRLs, etc. should be sent to FAO Joint Secretary of the JMPR, Plant protection Service, AGP, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy, well before 30 November of a year before a JMPR meeting where a pesticide of concern is scheduled to be evaluated and, submission of residue data should be well before the end of February of the same year as the JMPR meeting. Toxicological data should be sent to Dr. J.L. Herrman, International Programme on Chemical Safety, WHO, CH-1211 Geneva 27, Switzerland not later than one year before the JMPR meeting (see Appendix VII of ALINORM 99/24).

Those countries specified under individual compounds concerning matters related to the FAO Panel of the JMPR (GAP, residue evaluation, etc.) on specific pesticide/commodity(ies) or concerning toxicological matters are invited to send information of data availability and/or toxicological data (for deadlines see the paragraph above).

SUMMARY AND CONCLUSIONS

The Thirtieth Session of the Codex Committee on Pesticide Residues reached the following conclusions:

MATTERS FOR CONSIDERATION BY THE COMMISSION

The Committee recommended to the Commission:

- a number of Draft MRLs for adoption at Step 8, Proposed Draft MRLs at Step 5/8 and Proposed Draft MRLs/EMRL at Step 5 (Appendices II, IV & V);
- Draft Revised Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs for adoption at Step 8 (Appendix III); and
- deletion of certain existing Codex MRLs (Appendix VI).

MATTERS FOR CONSIDERATION BY THE EXECUTIVE COMMITTEE

The Committee:

- agreed to forward comments on the Proposed Draft Code of Practice for Good Animal Feeding to the 45th Executive Committee for consideration (para. 9); and
- recommended the Priority List of Pesticides for new and periodic evaluations by the JMPR for endorsement (Appendix VII)

MATTERS OF INTEREST TO THE COMMISSION

The Committee:

- generally supported the relevant recommendations of the Joint FAO/WHO Expert Consultation on Risk Management and Food Safety and noted that it had been in a process of implementing risk analysis in its work and it would continue this practice not only in the area of long-term exposure but also of acute exposure (paras. 10-12);
- stressed the importance of harmonization within Codex and the need for further coordination at the levels of Codex Committees, expert committees and national governments, especially in the area of MRL setting for compounds used both as pesticides and as veterinary drugs; setting of maximum limits/levels for chemical contaminants; and methods of sampling (paras. 70, 88 & 92-93);
- requested Germany to prepare a paper on the need for elaborating an EMRL(s) for toxaphene in fish for consideration at the next Session taking into consideration the *FAO Manual on the Submission and Evaluation of Pesticide Residues Data for the Estimation of Maximum Residue Levels in Food and Feed* and CX/PR 98/8 (para. 7);
- took note of the brief verbal summary of a Joint FAO/WHO Expert Consultation on the Application of Risk Communication held in February 1998 (para. 13);
- noted the report on general considerations by the 1997 JMPR and agreed to solicit views of Member countries on the proposal to develop maximum residues limit for monitoring (MRLMs) and information on situations where extrapolation of residue data to minor crops was considered feasible at the national level (paras. 14-17);
- noted the executive summary of the Joint FAO/WHO Expert Consultation on Food Consumption and Exposure Assessment of Chemicals and agreed to consider at the next session its recommendations, particularly the procedures for acute hazard exposure assessment (paras. 20-22);

- agreed that (1) Codex MRLs confirmed by the JMPR under the Periodic Review should be included in future circular letters for comments; (2) the JMPR would continue to recommend MRLs for feedingstuffs if there were sufficient data to do so regardless of the adequacy of animal transfer studies, but these MRLs could not advance to Step 8 of the Codex Procedure unless there were adequate animal transfer studies on these commodities; (3) the issue on aggregated exposure was difficult to address at the international level and this issue was better dealt with at the national level; (4) the JMPR should be requested to consider common mechanisms of organophosphates and carbamates in connection with risk assessment; and (5) until a methodology for estimating acute exposure had been established, deliberation of MRLs should focus on chronic exposure (paras. 30-34);
- generally supported the suggested CCPR positions regarding potential elements for inclusion in a set of criteria for estimation of EMRLs and agreed that a concise paper should be prepared containing the compilation of the suggested CCPR positions, comparison of the approached of the CCPR and CCFAC, and government comments on outliers and violation rates and that it would not initiate a full exercise of criteria elaboration for the time being (paras. 85-89);
- agreed to bring the amended the Draft Revised Recommended Methods of Sampling for the Determination of Pesticides for Compliance with MRLs to the attention of the CCMAS and CCRVDF for consideration (para. 93);
- agreed to seek information on (1) which of the methods included in the List of Recommended Methods of Analysis were still commonly used; (2) national practices in testing abamectin, dicofol, captafol, captan and folpet for compliance with MRLs; and (3) the current national practices on the analysis and expression of residue data for fat soluble pesticides in milk and meat (paras. 95-98);
- decided to send the information on the analysis and expression of residue data for fat soluble pesticides in milk and meat and the relevant report section of the 1997 JMPR to the JECFA for consideration (para. 98);
- requested the Netherlands, Australia and the United Kingdom to prepare a discussion paper on the revision of the Guidelines on Good Laboratory Practice in Pesticide Residue Analysis for consideration at its next Session (para 99);
- recommended a number of actions regarding problems relative to pesticide residues in food in developing countries (paras. 106-111); and
- agreed to keep the document on regulatory practices to facilitate use of Codex MRLs for pesticides as a working paper and to request the International Toxicology Information Center and the Codex Secretariat to prepare a revised paper for consideration at its next Session (paras. 113-115).

TABLE OF CONTENTS

‡ Only in Annex II.

LIST OF ANNEXES

Pages

LIST OF APPENDICES

LIST OF ABBREVIATIONS
(Used in this Report)

CCFAC	Codex Committee on Food Additives and Contaminants
CCGP	Codex Committee on General Principles
CCMAS	Codex Committee on Methods of Analysis and Sampling
CCPR	Codex Committee on Pesticide Residues
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
FAO	Food and Agriculture Organization of the United Nations
IAEA	International Atomic Energy Agency
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meeting on Pesticide Residues
WHO	World Health Organization
WTO	World Trade Organization
Acute RfD	Acute Reference Dose
ADI	Acceptable Daily Intake
CXL	Codex Maximum Residue Limit for Pesticide
GAP	Good agricultural practice
EMRL	Extraneous Maximum Residue Limit
IEDI	International Estimated Daily Intake
MRL	Maximum Residue Limit
STMR	Supervised Trials Median Residue
TMDI	Theoretical Maximum Daily Intake
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
TBT Agreement	Agreement on Technical Barriers to Trade

REPORT OF THE THIRTIETH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES

INTRODUCTION

1. The Codex Committee on Pesticide Residues (CCPR) held its 30th Session in The Hague, The Netherlands, from 20-25 April 1998. Dr. W.H. van Eck of the Netherlands Ministry of Health, Welfare and Sport chaired the Session. The Session was attended by 49 Member countries and 15 international organizations. The list of participants is attached as Appendix I to this Report.

OPENING OF THE SESSION (Agenda Item 1)

2. The Session was opened by Mrs. Erica Terpstra, State Secretary of Health, Welfare and Sport. She welcomed the Committee to The Hague, and gave an overview of the changes in pesticide uses during the past 30 years influencing the work of the Committee since it had convened for the first time in 1966. She mentioned especially the growing role of risk analysis in establishing MRLs, and the progress which was recently made in this area following various Consultations which were held on this subject. In the coming years, acute dietary exposure would be an important item on the agendas of both JMPR and CCPR.

ADOPTION OF THE AGENDA (Agenda Item 2)

3. The Committee **agreed** to include the following items under Agenda Item 9 and further **agreed** to refer them to the *ad hoc* Working Group on Methods of Analysis:

- Analytical implications of certain residue definitions;
- Analytical implications of the definition of fat (for fat-soluble pesticides); and
- Guidelines for validation of analytical methods for monitoring trace organic components in foodstuffs and similar materials.

4. The Committee **adopted** the Agenda as contained in CX/PR 98/1 with the above amendment with the understanding that the issue on methods validation could be discussed only briefly as the report of a Joint FAO/IAEA Expert Consultation on Validation of Analytical Methods for Food Control had not yet been available to Member Countries; and the CCMAS would consider this issue at its next Session[1].

APPOINTMENT OF RAPPORTEURS (Agenda Item 3)

5. Mr. C.W. Cooper (USA) and Mr. J.R. Mascall (UK) were **appointed** as rapporteurs.

MATTERS REFERRED TO THE COMMITTEE[2] (Agenda Item 4)

6. The Committee received a report on matters referred to the Committee arising from the 22nd Codex Alimentarius Commission and other Codex Committees. It agreed to consider the following items under the relevant agenda items[3]:

- potential dietary intake implications of large variability of residue levels in certain commodities;
- MRLs for fenthion in virgin olive oil; and
- need for animal transfer studies for parathion-methyl.

MRLs/EMRLs for Fish

7. The Delegation of Germany expressed the view that as its monitoring demonstrated that the level of residues of toxaphene in the North Sea, Irish Sea and Baltic Sea had been increasing and toxaphene is a potential carcinogen for humans, it was desirable that an EMRL(s) should be elaborated for fish. Germany offered to provide its monitoring data and a new method of analysis. It was noted that the Committee

---

1 23-27 November 1998

2 CX/PR 98/2.

3 See paras. 21-22, 43 and 32 & 48.

would consider the need for criteria for setting EMRLs under agenda item 8(b) which might have certain implications on this issue. The Committee **requested** Germany to prepare a paper on the need for elaborating an EMRL(s) for toxaphene in fish for consideration at the next Session taking into consideration the *FAO Manual on the Submission and Evaluation of Pesticide Residues Data for the Estimation of Maximum Residue Levels in Food and Feed* and CX/PR 98/8 (see paras. 85-89).

Proposed Draft Code of Practice for Good Animal Feeding

8. The Committee noted that the elaboration of a Code was assigned to this Committee, among other committees, with coordinating role to be taken by the Executive Committee[4]. The Committee was informed about the discussions by the Codex Committees on Food Hygiene[5] and on Food Additives and Contaminants[6].

9. The Committee **agreed** to forward the following comments to the 45th Executive Committee for consideration:

- The scope of the Code should be clarified as it was not clear from the current draft whether feed items prepared at the farm level were to be covered by the code in addition to commercially available feeds; and
- The term "herbicides" should be deleted from Section 3.1 as the term "pesticides" covers herbicides.

APPLICATION OF RISK ANALYSIS PRINCIPLES IN CODEX: RECOMMENDATIONS OF THE JOINT FAO/WHO EXPERT CONSULTATIONS[7] (Agenda Item 5)

10. The Committee was informed that the Commission at its 22nd Session had adopted the Statements of Principle Relating to the Role of Food Safety Risk Assessment and the Definitions of Risk Analysis Terms Related to Food Safety[8] and that these texts were now included in the Tenth Edition of the *Procedural Manual*. The Commission had considered the recommendations of the Joint FAO/WHO Expert Consultation on Risk Management and requested those Codex Committees dealing with food safety to consider recommendations 2 to 6 of the Consultation[9] and to propose action as necessary[10].

11. The Committee considered recommendations 2-5[11] and generally **supported** these recommendations. It noted that it had been in a process of implementing risk analysis in its work and it would continue this practice. It was emphasized that in addition to long-term exposure, it would soon initiate work on risk analysis of acute exposure.

12. The Committee also noted that the Commission had agreed to an Action Plan to implement risk management in Codex, initial steps of which were the considerations of the definitions for risk assessment policy and risk profile, and the development of integrated principles for risk management and risk assessment policy setting to be undertaken by the Codex Committee on General Principles. The Committee **agreed** to take necessary actions once the principles had been established.

13. The Committee was informed that a Joint FAO/WHO Expert Consultation on the Application of Risk Communication was held 2-6 February 1998 at the Italian Ministry of Health in Rome. The Consultation was the third in a series of consultations examining the broad implications of risk analysis, particularly for the Commission. The objectives of the Consultation included the identification of elements and guiding principles, barriers and strategies for effective risk communication as well as the development of practical recommendations to FAO, WHO, Member Governments, the Codex Alimentarius

---

4 ALINORM 97/37, para. 129.
5 ALINORM 99/13, paras 96-99.
6 ALINORM 99/12, paras 89-91.
7 CX/PR 98/5.
8 ALINORM 97/37, paras. 26-31.
9 Appendix of CX/PR 98/5.
10 ALINORM 97/37, paras. 160-167.
11 Recommendation 6 addresses microbiological hazards.

Commission, other international and national organizations, industry and consumers to improve risk communication among risk assessers, managers and those affected by the risk, especially consumers. The report would be available to the next Session of the Committee.

REPORT ON GENERAL CONSIDERATIONS BY THE 1997 JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES[12] (Agenda Item 6)

14. The Committee took note of a number of general items in the 1997 JMPR report, including discussion of the *FAO Manual on the Submission and Evaluation of Pesticide Residues Data for Estimation of Maximum Residue Levels in Food and Feed*; advice on the submission of information for consideration by the FAO Panel; a proposal for the designation MRLM (maximum residues limit for monitoring) to be applied to pesticides for which JMPR estimates of dietary intake exceed the ADI; estimation of maximum residue and STMR levels for products of animal origin when residues are transferred from feed items; extrapolation of residue data to minor crops; the need for harmonizing recommendations from JMPR and JECFA for MRLs for pesticides with both agricultural and veterinary uses; the nature of fat samples in studies on fat-soluble compounds; and consideration of the assessment of the chronic dietary risk of dithiocarbamate pesticides.

15. Delegations welcomed the availability of this *FAO Manual* as it would enable future submissions to be more consistent and would facilitate the evaluation of the information provided.

16. The Committee **agreed** that the proposal of JMPR to develop MRLMs would require risk management decisions on how to deal with them when they got into the Codex system. A Circular Letter would be prepared requesting the views of Member countries and international organizations on the proposal.

17. The extrapolation of residue data to minor crops was of interest to all countries, especially to developing countries. The Committee **agreed** that a Circular Letter would be prepared requesting information on situations where extrapolation of residue data to minor crops was considered feasible at the national level, which would assist JMPR in further developing this activity.

18. Noting the very late availability of the 1997 JMPR Report, the Observer from the EC requested that the report along with the 1998 JMPR Report be included in the agenda of the next Session.

CONSIDERATION OF INTAKE OF PESTICIDE RESIDUES (Agenda Item 7)

(A) REPORT OF THE JOINT FAO/WHO EXPERT CONSULTATION ON FOOD CONSUMPTION AND EXPOSURE ASSESSMENT

19. The Committee had before it the Executive Summary[13] of the Joint FAO/WHO Consultation on Food Consumption and Exposure Assessment of Chemicals held in Geneva from 10-14 February 1997. Copies of the final report[14] were also made available at the Session. The WHO Representative recalled that, among other issues, the Consultation had reviewed the general principles for the determination of potential exposure to food additives, contaminants, residues of pesticides and veterinary drugs and certain nutrients and agreed that the principles outlined in *the Guidelines for Predicting Dietary Intake of Pesticide Residues* (WHO, 1997) were applicable to all food chemicals but that specific procedures might vary.

20. The Consultation had also recommended a procedure for expanding the number of GEMS/Food regional diets to make them more representative of countries in the regions. Following the Consultation, GEMS/Food had developed a proposal for 12 regional diets that would be circulated to Member Governments for comment in the near future. In regard to acute hazard exposure assessment, the

---

12 *Pesticide Residues in Food-1997* (FAO Plant Production and Protection Paper 145).

13 CX/PR 98/4.

14 WHO/FSF/FOS/97.3.

Consultation concurred with the York consultation[15] that the MRL or other appropriate high level for the residue be combined with a large portion weight. Exposure for each commodity should be compared to the acute RfD. However, the Consultation also acknowledged that for many commodities residues levels in individual units might exceed the MRL and proposed an approach which makes use of existing data on composite samples to estimate an appropriate high level.

21. The Delegation of the United Kingdom informed the Committee that further studies had confirmed that high unit-to-unit variability was a fairly widespread phenomenon and had been found in a variety of produce, from a variety of sources treated with a variety of pesticides. While the levels did not represent a public health hazard, in some cases the safety margins for consumers might be eroded. The United Kingdom would continue its research to investigate residues in individuals units and a report should be available in early 1999. The United Kingdom intended to host an international workshop on this subject in November 1998. The Chairperson also announced that the Netherlands Government intended to host a one-day symposium immediately prior to the next Session of the Committee to promote a better understanding of the problems of acute hazards and means for assessing and managing risks they pose.

22. In regard to large portion weight, the Consultation recommended that the 97.5 percentile daily consumption for individual food commodities for the general population as well as infants and children ages 6 and under be used for acute hazard exposure assessment. Food consumption should be expressed on a gram per kg body weight basis. As recommended by the 1997 JMPR, the Committee **agreed** that information on large portion weights would be requested by a Circular Letter from Member countries.

23. The Committee **agreed** that the report of the Consultation should be on the agendas of the next Sessions of the JMPR and CCPR to consider its recommendations, particularly the procedures for acute hazard exposure assessment.

24. WHO was invited to prepare a guidance document on procedures for estimating an acute reference dose for consideration by the JMPR and the next Session of the Committee.

(B) REPORT OF PESTICIDE RESIDUE INTAKE STUDIES AT INTERNATIONAL AND NATIONAL LEVEL BASED ON REVISED GUIDELINES FOR PREDICTING DIETARY INTAKE RESIDUES[16]

25. The WHO Representative presented the referenced papers related to exposure assessment. He noted that the revised *Guidelines for Predicting Dietary Intake of Pesticide Residues* had been published last year, with support of the Netherlands for promotion of the wider dissemination of the methodology, particularly in developing countries.

26. Exposure assessment calculations had been performed for pesticides evaluated by the 1997 JMPR except when no MRLs existed or were proposed, as was the case for amitrole and fipronil, or when no ADI existed, as was the case for guazatine. Of the 23 pesticides, 21 had TMDI and/or IEDI estimates that were below the ADI for the five GEMS/Food regional diets: abamectin, bifenthrin, captan, carbofuran, carbosulfan, chlormequat, chlorothalonil, clethodim, fenbuconazole, folpet, glyphosate (including AMPA[17]), malathion, methamidophos, mevinphos, mycobutanil, phosalone, phosmet, tebuconazole, tebufenozide, thiabendazole and triforine. For two pesticides, fenamiphos and lindane, the TMDI calculations exceeded the ADI in one or more of the regional diets but information was unavailable to calculate a more refined estimate of exposure. The Observer from Consumers International requested that future reports on intake studies be more balanced, to also explain those assumptions that tended to lead to an underestimate of risk, in the interest of solid risk communication.

27. At the last Session, an IEDI calculation for thiram and ziram had been presented based on a common mechanism of toxicity for all dithiocarbamates which used an ADI-adjustment approach. The Committee had agreed, in principle, with the approach but requested WHO to prepare a more detailed

---

15 Joint FAO/WHO Expert Consultation on Revision of the Guidelines for Predicting Dietary Intake of Pesticide Residues (York, UK, May 1995).

16 CX/PR 98/5 and CX/PR 98/5-Add.1.

17 Aminomethylphosphonic acid (198).

explanation for the approach for its 30th Session. Furthermore, the Committee had requested the JMPR to examine the question of common mechanism of toxicity for all dithiocarbamates.

28. In reviewing this issue, the 1997 JMPR had recommended that the risk assessment of dithiocarbamates should be performed for two groups that have two distinct mechanisms of toxicity, namely those that are thyroid toxic (mancozeb, maneb, metiram, probineb and zineb) and those that are not (ferbam, thiram and ziram) and that an ADI adjustment approach be used. Therefore, a revised IEDI calculation for only thiram and ziram (no MRLs are proposed for ferbam) had been performed to assess exposure to these pesticides and the ADI was not exceeded for any of the five GEMS/Food regional diets.

CONSIDERATION OF RESIDUES IN FOOD AND ANIMAL FEEDS[18] (Agenda Item 8)

29. The Committee considered matters of a general nature before the deliberations of MRLs.

Codex MRLs Confirmed by the JMPR under Periodic Review

30. The Committee considered whether an opportunity should be given to Member countries to comment on those existing Codex MRLs confirmed by the JMPR under the Periodic Review programme. The Committee **agreed** that Codex MRLs confirmed by the JMPR under the Periodic Review should be included in future circular letters for comments. This would be in addition to those changed and recommended for deletion, as the principle objective of the Periodic Review was to review all existing Codex MRLs which had been recommended more than 10 years ago in the light of the current scientific requirements.

New ADI/Acute RfD

31. The Committee noted that lowering ADIs might give rise to intake concerns and **agreed** to continue to consider this matter in relation to implications to MRL elaboration and risk analysis. However, on whether it would be appropriate to discuss toxicological aspects of ADIs at the sessions, the Committee was generally of the opinion that governments having comments on ADIs from a toxicological point of view could raise them at the sessions and should be prepared to transmit them in writing directly to the JMPR for further consideration.

Animal Transfer Studies

32. The Observer from the EC was of the opinion that where no adequate animal transfer studies were available, the JMPR should not recommend MRLs for major feed items except where residue levels in feed items were lower than 0.1 mg/kg, or when no residue transfer into edible tissues of animals was expected. The Committee was informed, however, that if no MRLs existed for feedingstuffs where residues could occur, it might cause trade problems. The Committee noted that it would be difficult for the JMPR to keep track of the evaluations of feedingstuffs and animal transfer studies if it could not recommend MRLs for feedingstuffs due to the lack of adequate animal transfer studies. The Committee **agreed** that the JMPR would continue to recommend MRLs for feedingstuffs if there were sufficient data to do so regardless of the adequacy of animal transfer studies. However, these MRLs could not advance to Step 8 of the Codex Procedure unless there were adequate animal transfer studies on these commodities.

Pesticides of Common Mechanisms/Aggregated Exposure to Pesticides

33. The Committee noted that the USA had initiated examinations of issues relating to pesticides with common mechanisms of action, aggregated exposure and the impact of exposure to pesticides on infants and children in the framework of Food Quality Protection Act. The Observer from Consumers International requested that these issues, especially in relation to organophosphates and carbamates, be also examined by the CCPR/JMPR and that MRLs for organophosphates not be advanced. The

---

[18] CPR/PR 98/6, CX/PR 98/6-Add.1 (CRD 1; summary of best possible estimates for dicofol, methidathion, chlorpyriphos-methyl and phorate), CX/PR 98/6-Add.2 (CRD 2; comments from Canada, Germany, the Netherlands, New Zealand, South Africa, United Kingdom, European Community and Consumers International), CX/PR 98/6-Add.3 (CRD 5; comments from India), CX/PR 98/6-Add.4 (CRD 6; comments from Japan), CRD 9 (comments from European Community)

Committee noted that the JMPR had considered the issue of interaction on several occasions. The Committee **concluded** that the issue on aggregated exposure was difficult to address at the international level and that this issue was better dealt with at the national level. It **requested** the JMPR to consider common mechanism of organophosphates and carbamates in connection with risk assessment.

Acute Intake Concerns

34. Several delegations expressed concerns about acute exposure relating to certain MRLs. However, the Committee **decided** that until a methodology for estimating acute exposure had been established, deliberation of MRLs should focus on chronic exposure. The Committee was hopeful that it could submit a progress report on the methodology and its implementation to the Commission at its 24th Session in 2001[19].

(A) DRAFT AND PROPOSED DRAFT MAXIMUM RESIDUE LIMITS AT STEPS 7 AND 4[20]

CARBARYL (008)

35. The Observer from the EC expressed concerns that the TMDIs for the regional diets ranged between 700 and 1420% of the ADI, as the ADI had been lowered, and asked for risk management measures to be considered. Written information on which uses would be supported and when data would be available was requested to be sent to the JMPR Secretaries well in advance of the next Session. If no information was received, the Committee would consider deletion of CXLs at its next Session.

CHLORFENVINPHOS (014)

36. The Committee noted that the proposals of the 1996 JMPR included in its Evaluations for several commodities were not included in its Report. This should be clarified by the JMPR Secretaries. The Committee noted that additional residue data on Brussels sprouts, cabbages, head, cauliflower and carrot would become available and residue data on onion, bulb, parsnip and rapeseed were currently available. The Committee should consider deletion of the CXLs for those commodities not being supported at its next Session.

CHLORMEQUAT (015)

37. The Committee noted that animal transfer studies in poultry and cattle would be available in late 1998. The Committee **advanced** all proposed draft MRLs to Step 5. Written confirmation was requested of the availability of residue data on pear and cereals.

CHLORPYRIFOS (017)

38. As proposed by the Delegations of USA[21] and Spain last year, and supported this year by the Delegation of South Africa, the Committee **amended** the draft MRL for citrus fruits from 2 mg/kg to 1 mg/kg and **advanced** it to Step 8.

DIAZINON (022)

39. The Committee noted that animal transfer studies would become available in 1999.

DICOFOL (026)

40. Since several delegations and the Observer from Consumers International had reservations about the way STMRs were estimated by the manufacturer, especially for pome fruits, and their uses in deliberations, the Committee **postponed** further discussion pending the outcome of the refined calculations by the manufacturer in consultation with JMPR experts.

---

19 See paras 19 - 23.

20 Status of MRLs/EMRLs considered is contained in Annex II of this report. Those MRLs/EMRLs advanced to Steps 8 and 5 for adoption are contained in Appendices II, IV and V of this report and those recommended for revocation are in Appendix VI.

21 CX/PR 97/9-Add.1-2, page 2.

DIMETHOATE (027)

41. The UK would submit summary data on residue and toxicology, which had been reviewed by the UK and the EC, to the 1998 JMPR. The residue data on the more toxic metabolite omethoate resulting from dimethoate use would also be evaluated by the 1998 JMPR.

DIQUAT (031)

42. Since the TMDI reached 170% of the ADI, it was proposed that the Committee rely on the observation that the STMR-approach generally reduce the exposure estimate by a factor of 3. The Committee noted that new residue trials were being carried out on asparagus, broad bean, runner bean, cabbages, cottonseed, cucumber, olives, strawberry, tomato and wheat. Diquat was also used on maize, rice, alfalfa and clover, but only for seed production. The Delegation of the UK stated that STMR data would be available soon. The Committee **advanced** all draft MRLs to Step 8.

FENTHION (039)

43. The 1997 JMPR estimated that ingestion of up to 200 ml of virgin olive oil containing residues at the MRL level would not lead to exposure exceeding the acute RfD of 0.01 mg/kg bw. The Committee noted that new GAP was being developed in the EC and consequently new data were to be expected. As fenthion was scheduled for evaluation by the 2000 JMPR, the data should be available in 1999. The Committee **returned** all MRLs to Step 6.

LINDANE (048)

44. The Committee **supported** scheduling lindane for a Periodic Review as the TMDI ranged from 300% to 1200% of the ADI. It would consider the deletion of the existing CXLs, except those accompanied by the letter "E", at its next Session if lindane was not supported. If this is the case, the Committee should consider transferring those CXLs annotated "E" to the EMRL section.

METHIDATHION (051)

45. Based on the refined intake estimation submitted in response to the request of the Committee made at the last Session[22], which demonstrated that the estimated intakes were below the ADI, the Committee **advanced** the draft MRLs for grapes and pear to Step 8.

MEVINPHOS (053)

46. The Committee should consider at its next Session deletion of those CXLs recommended by the 1997 JMPR for withdrawal, if no information became available on the availability of new data.

2-PHENYLPHENOL(056)

47. The Committee noted that supporting data for citrus fruits and pear had been submitted and the compound was scheduled for Periodic Review by the 1999 JMPR. It would consider deletion of the CXL for apple at its next Session if not supported.

PARATHION-METHYL (059)

48. The Committee **advanced** the draft MRLs for broccoli, cabbages, head, and rice, husked to Step 8. The Committee postponed discussion on the MRLs for feedingstuffs pending the review of animal feeding studies and Periodic Review (residues) by the 2000 JMPR.

PROPOXUR (075) (Annex II)

THIOMETON (076)

49. The Committee noted that thiometon would no longer be supported. The Committee should consider deletion of all CXLs at its next Session.

---

[22] ALINORM 97/24A, para. 42.

CHLOROTHALONIL (081)

50. The Committee **recommended** the deletion of the CXLs for blackberries, citrus fruits, lima bean (dry) and raspberries, red, black, as the period of "4 years" in accordance with the Periodic Review Procedure had expired.

DICLORAN (083)

51. The Committee noted that residue data for all crops in the CXL list would be available for the 1998 JMPR.

FENAMIPHOS (085)

52. The Committee noted that the TMDI only slightly exceeded the ADI.

CHLORPYRIFOS-METHYL (090)

53. Initial calculations by the manufacturer showed that the IEDIs exceeded the ADI for all regional diets. The Committee was informed that the use on maize would no longer be supported and that new processing studies on cereal commodities would be reviewed to refine the IEDI for consideration by the Committee at its next Session. The Committee **returned** the MRLs for barley, oats and rice to Step 6.

ACEPHATE (095)

54. It was noted that acephate was scheduled for a Periodic Review by the 2000 JMPR where an acute RfD would be established. The Committee **advanced** the proposed draft MRLs to Step 5 omitting Steps 6 and 7 for adoption at Step 8, as concerns were only on acute exposure. The EC would submit data to the JMPR for the establishment of the acute RfD.

CARBOFURAN (096)

55. The Committee noted that the 1997 JMPR had recommended withdrawal of a majority of existing CXLs. New residue data on field corn, sweet corn, oat, rice, soya bean, carrot, sugar beet, turnip, onion, pepper, sunflower, cotton, rapeseed, tomato, eggplant, grapes and peanut would be submitted to the JMPR, and an acute RfD should be established at the time of the next JMPR review.

METHAMIDOPHOS (100)

56. A Periodic Review (toxicology) was scheduled for 2000 and establishment of an acute RfD was **requested**. The Committee noted that data on tomato were available and would be submitted. The new data might support a lower limit.

MALEIC HYDRAZIDE (102)

57. The Committee noted that the 1996 JMPR lowered the ADI and that a Periodic Review (residues) was scheduled for 1998.

PHOSMET (103)

58. The Committee noted that the 1997 JMPR had recommended withdrawal of a majority of CXLs and that a toxicological review was scheduled for the 1998 JMPR. The Committee should consider deletion of MRLs at the next Session if phosmet was no longer supported.

DITHIOCARBAMATES (105)

59. The Committee noted that manufacturers had supplied a number of the STMR estimates requested by the 29th Session to address intake concern that the IEDIs in 3 out of the 5 regional diets had exceeded the ADI. The Committee **agreed** to use these estimates as a basis for a more refined intake calculation.

60. The Committee was informed of the methodology used for the IEDI calculations by the manufacturer, which was consistent with the procedure of the JMPR[23]. The Committee noted that all

[23] See para. 28.

calculations resulted in intakes significantly below the ADI for the 5 regional diets. However, concern was expressed that some processed products such as wine and processed apple products were not taken into account. It was recognized that their consumption data at the international level were currently lacking. Delegations were **requested** to submit national intake calculations for consideration at the next Session. The Observer from the Office international de la vigne et du vin (OIV) was **invited** to submit consumption data on wine. The manufacture would submit revised calculations taking into account the consumption data of wine and apple juice.

61. The Committee noted that it might be possible for the JMPR to establish MRLs for individual groups of dithiocarbamates.

62. The Committee noted that additional residue trials data on banana, barley, barley straw and fodder, cabbages, head, lettuce, maize fodder, papaya and pepper would be made available to the 1999 JMPR, and suggested that data on melons and cucumber could be used to support pumpkin. A complete list of the data to be submitted was requested to be sent to the JMPR.

63. The Committee **returned** all draft MRLs to Step 6 for consideration at the next Session, where the MRL for meat at the limit of determination could be aligned with the MRLs for other animal commodities at the limit of determination (0.05 mg/kg).

ETHEPHON (106)

64. Written information was requested to be sent to the JMPR Secretaries on when data would become available for JMPR review and what data might be anticipated. The Committee **returned** the draft MRLs at Step 7B to Step 6.

IPRODIONE (111)

65. The Committee **retained** the CXL for tomato as new residue data would become available in 1999.

PHORATE (112)

66. The refined intake estimates provided by the manufacturer in response to the request of the Committee made at the 29th Session demonstrated that the IEDIs were below the ADI. The Committee **advanced** the MRL for potato to Step 8. The Committee noted that the GAP for carrot in the UK had been revoked and those for barley, rapeseed and tomato in the USA withdrawn. The Committee should consider deletion of the CXLs of barley, rapeseed and tomato and the draft MRL for carrot at the next Session.

67. The Committee **requested** priority scheduling of a full review of the compound because of acute intake concern.

GUAZATINE (114)

68. The 1997 JMPR had withdrawn the ADI and recommended withdrawal of 5 CXLs. The Committee would consider their deletion at its next Session.

ALDICARB (117)

69. The Committee was informed that the compound was under review in the EC particularly in respect to dietary intake concerns. The Committee noted that new data on banana and potato, based on amended GAP, would become available for evaluation by the 2000 JMPR. The Committee was informed that an example of a probabilistic method for estimating acute dietary intake would be provided to the JMPR. The Committee **advanced** the MRL for potato to Step 5.

CYPERMETHRIN (118)

70. The Committee noted that the CCRVDF had been elaborating MRLs for cypermethrins arising from veterinary uses with different residue definitions, proposed levels and commodity definitions. It was recognized that further coordination would be needed between the JMPR and the JECFA and the CCPR and CCRVDF, as well as at the national level, for elaborating MRLs for compounds used as both

pesticides and veterinary drugs. The Committee requested the EC to send their comments on those MRLs arising from veterinary uses directly to the CCRVDF.

PERMETHRIN (120); DELTAMETHRIN (135); CYHALOTHRIN (146)

71. The Committee noted that these compounds were on the agenda of the 52nd JECFA (1999) and that permethrin also on the 1999 JMPR agenda for Periodic Review (toxicology).

PHENOTHRIN (127)

72. The Committee **recommended** deletion of all CXLs, as phenothrin was no longer supported.

PHENTHOATE (128)

73. The Committee should consider deletion of all CXLs at its next Session as phenthoate was no longer supported.

PHOXIM (141)

74. The Committee should consider deletion of the CXLs at its next Session as phoxim would not be supported.

CYFLUTHRIN (157)

75. The Committee noted that a number of MRLs for cyfluthrin arising from veterinary uses had been proposed by the JECFA for consideration by the CCRVDF. The Committee also noted that it might consider a new MRL for milk (0.04 mg/l) proposed by the JECFA at its next Session as the current CXL for milk was 0.01 mg/kg. (See para. 70)

BUPROFEZIN (173)

76. The Committee noted that buprofezin would be reviewed by the 1999 JMPR and that additional residue trials on oranges would be submitted.

ABAMECTIN(177)

77. The Committee noted that the CCRVDF, which had a different residue definition, would consider the MRLs for kidney, liver and fat of cattle.

BIFENTHRIN (178)

78. The Committee **advanced** the MRLs for barley and maize to Step 8 but **returned** those for cattle fat and cattle milk to Step 6, taking into account the observations of the 1997 JMPR on animal transfer studies and post-harvest uses on cereals. It decided to consider the latter MRLs, together with the other draft and proposed draft MRLs at the next Session. The Delegation of Australia informed the Committee that new residue data and processing studies on wheat would become available to the JMPR.

CLETHODIM (187)

79. Written information was requested to be sent to the JMPR Secretaries on: (1) what studies on which commodities were being conducted; and (2) when new data would be available to the 1999 JMPR.

FENPROPIMORPH (188)

80. The Committee noted that animal transfer studies would be available to the 1999 JMPR and that the draft MRL for sugar beet should be 0.05 mg/kg (*). The Committee postponed discussions, pending evaluation by the 1999 JMPR.

TEFLUBENZURON (190) (Annex II)

FENARIMOL (192)

81. The Committee **advanced** all draft MRLs to Step 8 and the proposed draft MRL for hops, dry, to Step 5, with omission of Steps 6 or 7, for adoption at Step 8.

HALOXYFOP (194)

82. The Delegation of Australia informed the Committee that new animal transfer studies would be available later this year. The Delegations of Germany, France and The Netherlands were **requested** to submit their detailed written comments to the Codex Secretariat for consideration by the Committee next year. The Committee **advanced** all proposed draft MRLs to Step 5.

FLUMETHRIN (195)

83. Although a maximum residue level for honey had been proposed by the 1996 JMPR, the Committee **agreed** that at present the establishment of an MRL for honey for flumethrin was of low priority.

TEBUFENOZIDE (196)

84. The Committee **advanced** the proposed draft MRL for grapes to Step 5 and **requested** the Delegation of Germany to send the JMPR its GAP for grapes. It also requested the Delegation of France and the manufacturer to submit data and written comments on processing studies of grapes into wine. The Committee **advanced** the MRLs for pome fruits, rice, husked, and walnuts to Step 5 with omission of Step 6 and 7 for adoption at Step 8.

(B) DRAFT AND PROPOSED DRAFT EXTRANEOUS MAXIMUM RESIDUE LIMITS AT STEPS 7 AND 4

Criteria for Setting EMRLs

85. The Delegation of the United States introduced document CX/PR 98/8 which had been prepared upon the request of the 29th Session of the Committee to examine the need for criteria and, if criteria were to be established, what needed to be considered.

86. The Committee considered the section on potential elements for inclusion in a set of criteria for estimation of EMRLs point by point. The Committee generally **supported** the suggested CCPR positions as contained in the document and was of the view that there should be flexibility in the application of criteria or potential elements. The Committee also generally **agreed** that EMRLs should be established only for those compounds whose registration for agricultural uses had been revoked and which were persistent in the environment with potential to result in residues in food and feed likely to cause problems in health and trade.

87. The Committee had an exchange of views regarding the use of monitoring data, whether they should be only random monitoring data or whether targeted monitoring data could also be used; treatment of outliers; and appropriate violation rate (2-5 % or 0.2-0.4%) in relation to cost and health implications and possible disputes caused by using different violation rates. The Committee **agreed** that the suggested position emphasizing the use of random monitoring data was adequately worded to accommodate exceptions.

88. The Committee was of the view that harmonization was necessary between the approaches of this Committee in the area of EMRL setting and of CCFAC in setting maximum levels for other contaminants. However, it was noted that the CCFAC had just started implementing the procedure and would gain experience in the future. The Committee received a brief report on the activity of the UNEP in the area of persistent organic pollutants. It was noted that among nine pesticides being considered by that organization, 6 compounds had been given Codex EMRLs and that the Committee would consider toxaphene in fish at its next Session[24]. This activity highlighted the need to develop clearly defined consistent approach for establishing maximum levels for chemical contaminants between the CCPR and CCFAC.

89. It was **decided** that comments should be sought from Member governments on their current practices in treating outliers and on what violation rates were used. The Committee **agreed** that a concise paper should be prepared, based on CX/PR 98/8, by the USA in collaboration with Australia, New Zealand, the Netherlands and South Africa with a coordination role by the Codex Secretariat. The paper

[24] See para. 7.

would contain the compilation of the suggested CCPR positions, comparison of the approaches of the CCPR and CCFAC, and government comments on outliers and violation rates. The Committee noted that Sections of the *FAO Manual* had already addressed certain issues relating to EMRL setting at the international level. It further **agreed** that it would not initiate a full exercise of criteria elaboration for the time being despite some delegations' proposals to do so.

Extraneous Maximum Residue Limits

DDT(21)

90. Many delegations supported the proposed draft EMRL for meat. Some other delegations expressed their reservation, proposing an EMRL of 1 mg/kg. The Committee **decided** to advance the EMRL to Step 5 and to discuss it again next year in view of the new approach for EMRLs.

RECOMMENDATIONS FOR METHODS OF ANALYSIS AND SAMPLING (Agenda Item 9)

(A) REVISION OF RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES[25]

91. The Committee considered the referenced documents with the assistance of the *ad hoc* Working Group on Methods of Analysis chaired by Dr. van Zoonen (The Netherlands), which had considered the government comments submitted at Step 6 on the Draft Revised Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs.

92. A number of delegations supported the advancement of the Draft Revised Methods to Step 8. However, the Delegation of New Zealand was strongly of the opinion that the text should not be advanced due to significant differences in how MRLs were set by the CCRVDF/JECFA and CCPR/JMPR, and requested that if the text was to be advanced, a statement be inserted to the effect that the text would not apply to compliance with EMRLs and veterinary drugs uses. The Committee **agreed** to amend the term "mixed" in Table 1 of the document to "well mixed".

93. The Committee **agreed** to advance the amended Draft Revised Methods[26] to Step 8 for adoption by the Commission noting the strong concern of New Zealand which reserved its position. To promote harmonization within Codex, it also **agreed** to bring the amended text to the attention of the CCMAS and CCRVDF for consideration. Being aware of the importance of harmonization, the Committee felt that in the future it might propose development by the Commission of a mechanism for ensuring harmonization, as appropriate, throughout Codex.

(B) REVISION OF THE LIST OF RECOMMENDED METHODS OF ANALYSIS FOR PESTICIDE RESIDUES AND OTHER MATTERS RELATED TO METHODS OF ANALYSIS FOR PESTICIDE RESIDUES[27]

Revision of the List of [Recommended] Methods of Analysis

94. The Committee generally **supported** the update of the list and **preferred** the title of the document being "List of Suitable Methods of Analysis" or omitting any adjective. The Committee was informed of the ongoing work by AOAC International on validation of methods for pesticide residues.

95. The chairperson of the Working Group offered to evaluate the current list against the Criteria contained in the *Procedural Manual* and the existing List[28]. It was **agreed** that information would be sought by means of a Circular Letter on which of the methods listed were still commonly used.

---

25 Appendix II of ALINORM 97/24A, CX/PR 98/9 (comments from Canada, Denmark, United Kingdom and Consumers International); CX/PR 98/9-Add.1 (CRD 3; comments from the USA and the EC) and CRD 11 (report of the *ad hoc* Working Group on Methods of Analysis).

26 Appendix III of this report.

27 CX 98/10, CRD 7 (comments from the EC) and CRD 11 (report of the *ad hoc* Working Group on Methods of Analysis).

28 Appendix III of ALINORM 95/24A, adopted by the Commission at its 21st Session.

Analytical implications of the residue definitions of abamectin (177) dicofol (26), captafol (6), captan (7) and folpet (41)

96. The Committee was informed of difficulties implied by the inclusion of the delta 8,9 isomer of abamectin B1b and its parent compound in the residue definition of abamectin due to the unavailability of analytical standards. For dicofol, captafol, captan and folpet, the Working Group expressed its preference for the inclusion of degradation products formed during the analytical procedures into the residue definitions. Several delegations expressed views on whether or not degradation products should be included in the residue definitions. The Committee **agreed** to seek information from government laboratories on national practices in testing these compounds for compliance with MRLs and recommended that these submissions on specific compounds be sent to the JMPR at the time of Periodic Review. The Committee noted that folpet was scheduled for Periodic Review by the 1998 JMPR.

Problems associated with the analysis and expression of residue data for fat soluble pesticides in milk and meat

97. In response to the referral of the JMPR[29], the Working Group recommended that MRLs for fat-soluble pesticides in meat should apply to the lipid portion of the fat from any part of the animal, unless otherwise indicated in the MRL description. Within this definition, the fat could include trimmable fat or fat obtained by rendering or extracting lean meat. The Committee noted that incorrect results would be obtained in analyzing milkfat and converting it into a whole milk basis using 4% fat content, if the actual fat content was very different from 4%.

98. The Committee **decided** to send this information to the JECFA along with the relevant report section of the 1997 JMPR for consideration; and to seek information from governments on their current practices for consideration by the JMPR.

Guidelines on in-house validation of analytical methods for monitoring pesticides in food stuffs

99. The Committee noted that due to accreditation requirements, in-house validation had gained great importance. Regarding the Working Group's recommendation that a section on validation of methods in the Guidelines on Good Laboratory Practice in Pesticide Residue Analysis[30] should be revised, the Committee **requested** the Delegations of the Netherlands, Australia and the United Kingdom to prepare a discussion paper on this issue for discussion at the next Session. Noting that a paper would be prepared for the next Session of the CCMAS on this issue, the Committee stressed the need for harmonization and coordination[31]. The Committee was informed of the AOAC guidelines for methods validation.

100. The Committee **agreed** that a working group should convene at its next Session under the chairship of Dr. van Zoonen.

ESTABLISHMENT OF CODEX PRIORITY LISTS OF PESTICIDES[32] (Agenda Item 10)

101. The Committee **agreed** to add one new compound to the priority list, spinosad (insecticide), which had been proposed by the United States. It was tentatively scheduled for toxicological and residue evaluations in 2001.

102. Phenthoate, phoxim, and thiometon were not supported for periodic reevaluation, although the veterinary uses of phoxim would be supported. DDT was tentatively scheduled for residue evaluation in 2000 for consideration of EMRLs in chicken meat. The Committee **agreed** to request national monitoring data by a Circular Letter to facilitate the establishment of an EMRL for this commodity.

103. The Committee noted that proposals for pesticides to be placed on the priority list generally arrive very late, often at the session itself. To facilitate the earlier submission of such proposals, the Committee

---

29 See para. 14.

30 *Codex Alimentarius*, Volume 2, Section 4.3.

31 See para. 4.

32 CL 1997/26-PR; CX/PR 98/11; CX/PR 98/11-Add.1 (CRD 4); CX/PR 98/11-Add.2 (CRD 12); CX/PR 98/6-Add.3 (CRD 5); CRD 7.

agreed to distribute a Circular Letter at the same time as issuing the report of the Committee. The Committee **requested** that the agendas of the JMPR be placed on the FAO's Plant Protection Division home page.

104. The number of pesticides to be reviewed by the JMPR, particularly the FAO Panel, was beyond its review capacity. The Committee **requested** the Delegation of Australia to develop a paper for the next Session outlining additional criteria that could be applied for prioritization of pesticides which would result in a better utilization of the resources available to the JMPR while meeting the needs of the Committee. The Committee **agreed** that indicative lists of studies be provided to the JMPR Secretaries by 1 March of one year before the scheduled evaluations.

105. The Committee thanked the informal group on priorities, under the chairship of Dr R. Eichner (Australia) for preparing the priority list[33].

PROBLEMS RELATIVE TO PESTICIDE RESIDUES IN FOOD IN DEVELOPING COUNTRIES[34] (Agenda Item 11)

106. The Report of the *ad hoc* Working Group on Problems Relative to Pesticide Residues in Food In Developing Countries was presented by its chairperson, Dr. Cheah Uan Boh (Malaysia); Mr. David Lunn (New Zealand) acted as rapporteur.

107. Dr. Cheah introduced the referenced documents pointing out that limited availability of resources and expertise were major difficulties faced by developing countries to generate information to support the establishment of Codex MRLs for many of the minor crops with residue-related trade problems (as identified from the GEMS/Food violation data base and the 1997 questionnaire).

108. The Committee noted that the working group had **welcomed** the recent work of the JMPR in defining the data requirements (as outlined in section 2.5 of the 1997 JMPR Report), and **agreed** that relevant criteria should be used by developing countries at both the national and regional level, to generate the necessary information for submission to the JMPR to support the elaboration of Codex MRLs for the pesticide/commodity combinations causing trade problems.

109. The Committee was informed about the recent activities of the ASEAN member countries in establishing an Expert Working Group to harmonize MRLs, with protocols and principles based on those adopted by Codex, with the aim of facilitating intra and extra regional trade. The Working Group had agreed that this, and other such regional initiatives, would be valuable in making the best use of limited resources to generate the necessary information to support the establishment of Codex MRLs.

110. Dr. Cheah referred to the information provided to the working group on a number of pesticide-related activities and programmes available to assist developing countries in resolving pesticide residue problems, including various regional IPM programmes, training provided by the Training and Reference Center of FAO/IAEA in pesticide-related activities and analytical laboratory quality assurance and control, the availability of information on pesticide-related topics on the Internet and a specific session on residue analysis problems in developing countries at the next IUPAC Congress of Pesticide Chemistry.

111. The Committee:

(a) **encouraged** developing countries to develop and submit, either individually or through regional cooperation, the data necessary for the JMPR to propose MRLs for commodities of importance in trade, and **recommended** that, where appropriate, the criteria established by the JMPR for extrapolating Codex MRLs to those minor crops be used as a basis for developing these data;

(b) **invited** GEMS/Food to analyze data base of residue violations in food imported into developed countries in order to extract information that could assist developing countries in identifying additional pesticide/commodity combinations for which data could be collected to support the establishment of Codex MRLs;

---

33 Appendix III

34 CX/PR 98/12, CX/PR 98/12-Add 1, CRD 14

(c) **agreed** to discontinue, for the time being, further uses of the questionnaire for information collection on pesticide/commodity combinations with pesticide residue problems in trade, as there would not be much information forthcoming in response to it from developing countries; and

(d) **encouraged** developing countries to approach FAO for technical assistance to be provided for the establishment of MRLs in view of many such requests from developing countries.

112. The Committee **agreed** that a Working Group should convene at its next Session under the chairship of Dr. Cheah.

REGULATORY PRACTICES TO FACILITATE USE OF CODEX MRLS FOR PESTICIDES[35] (Agenda Item 12)

113. Mr. J. Wessel (International Toxicology Information Center) introduced the referenced document, and recalled that at its 29th Session the Committee had discussed the relevance of the document "Recommended National Regulatory Practices to Facilitate Acceptance and Use of Codex Maximum Limits for Pesticide Residues in Foods"[36]. Delegations had stressed the usefulness of that document in the work of the CCPR, both for information and transparency. The Committee at its 29th Session had unanimously supported an updating of the document, which had been approved as new work by the Commission at its 22nd Session[37]. The referenced document was still based on the results of a 1980 questionnaire but reflected the many advances made by the JMPR in recent years, and included a number of recommendations on a range of JMPR assessment practices and policies. Information on newer CCPR-related activities (e.g., Periodic Review, and international dietary intake, WTO SPS Agreement) had been added and the document was intended to replace CAC/PR 9-1985.

114. The Committee expressed its appreciation to those involved in the drafting of this document. While unanimously pointing out the usefulness of the document, several delegations suggested that some improvements and expansions could be made in paragraphs 20, 30[38] and 59 (a) and (b).

115. Recognizing the importance of Codex texts under the SPS Agreement, the Committee **agreed** to keep the document as a working paper and to request the ITIC, together with the Codex Secretariat, to prepare a revised paper for consideration at its next Session. All interested countries and international organizations were invited to send their inputs to Mr. Wessel.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 13)

116. The Committee noted that some of the comments of the EC had been misplaced in Annex II of the report of the 29th Session.

117. The Committee expressed its deep appreciation to Mr. D.J. Hamilton, who had participated in the Committee for the last time, for his outstanding contribution to the work of the Committee as its participant and through his work in the JMPR as an expert.

DATE AND PLACE OF NEXT SESSION (Agenda Item 14)

118. The Thirty-first Session of the Committee was tentatively scheduled to be held in the Hague from 12-17 April 1999, subject to confirmation by the Netherlands and Codex Secretariats.

---

35 CX/PR 98/13.
36 CAC/PR 9-1985.
37 ALINORM 97/24, para. 189.
38 Paragraph on GAP.

ANNEX I

SUMMARY STATUS OF WORK

Subject	Step	Action by	Document Reference (ALINORM 99/24)
Draft MRLs	8	23rd CAC	Appendix II
Proposed Draft MRLs	5/8	23rd CAC	Appendix IV
Draft MRLs	6, 7	Governments 31st CCPR JMPR	Annex II CX/PR 98/6
Proposed Draft MRLs/EMRL	5	23rd CAC	Appendix V
Proposed Draft MRLs	3	Governments Secretariat 31st CCPR	Annex II CX/PR 98/6
Draft Revised Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs	8	23rd CAC	Appendix III paras. 91-93
Priority List of Pesticides (new pesticides and pesticides under periodic review)	1	45th CCEXEC JMPR CCPR Governments International organizations Secretariat Australia	Appendix III paras. 101-104
Methods of Analysis	-	Secretariat Governments The Netherlands 31st CCPR	paras. 94-98
Identification of pesticide/commodity combinations of interest to developing countries	-	Malaysia WHO 31st CCPR	paras. 106-112
“Criteria” for setting EMRLs	-	Secretariat USA, Australia, New Zealand, the Netherlands, South Africa 31st CCPR	paras. 85-89
Regulatory practices to Facilitate the Use of Codex Maximum Residue Limits for Pesticides	2	Secretariat International Toxicology Information Center 31st CCPR	paras. 113-115
Need for EMRL for toxaphene in fish (discussion paper)	-	Germany 31st CCPR	para. 7
Revision of the Guidelines on Good Laboratory Practice in Pesticide Residue Analysis (discussion paper)	-	The Netherlands, Australia, UK 31st CCPR	para. 99

Annex II

STATUS OF MRLS/EMRL CONSIDERED AT THE SESSION

Code	Commodity	MRL (mg/kg)	Step	Remarks
15	**CHLORMEQUAT**			
GC 640	Barley	0.5	5	EC: disagreement on residue evaluation
AS 640	Barley straw and fodder, Dry	20	5(a)	
SO 691	Cotton seed	0.5	5	
AF 647	Oat forage (green)	20	5	
AS 647	Oat straw and fodder, Dry	20	5(a)	
FP 230	Pear	10	5(a)	Canada: proposed to defer till new residue data become available, EC: data base insufficient
SO 495	Rape seed	5	5	
OC 495	Rape seed oil, Crude	0.1 (*)	5	
GC 650	Rye	3	5(a)	
CM 650	Rye bran, Unprocessed	10	5	EC: processing data insufficient
AF 650	Rye forage (green)	20	5	
AS 650	Rye straw and fodder, Dry	20	5(a)	
CF 1251	Rye wholemeal	3	5	
GC 654	Wheat	2	5(a)	
CM 654	Wheat bran, Unprocessed	5	5	EC: processing data insufficient
CF 1211	Wheat flour	0.5	5	EC: processing data insufficient
AS 654	Wheat straw and fodder, Dry	20	5(a)	
CF 1212	Wheat wholemeal	2	5	EC: processing data insufficient
EC: Extrapolation possible within the whole cereal group				
17	**CHLORPYRIFOS**			
FC 1	Citrus fruits	0.3	CXL-D	
FC 1	Citrus fruits	1	8(a)	
22	**DIAZINON**			
PE 840	Chicken eggs	0.02 (*)	5/8	
PM 840	Chicken meat	0.02 (*)	5/8	
PO 840	Chicken, Edible offal of	0.02 (*)	5/8	
MM 814	Goat meat	2 (fat) V	5	Canada: animal transfer studies required
MO 98	Kidney of cattle, goats, pigs & sheep	0.03 V	5	EC: MRL too low for offal with fat content higher than 4%
MO 99	Liver of cattle, goats, pigs & sheep	0.03 V	5	EC: MRL too low for offal with fat content higher than 4%
MM 97	Meat of cattle, pigs & sheep	2 (fat) V	5(a)	Canada: animal transfer studies required
31	**DIQUAT**			
AL 1020	Alfalfa fodder	100	8	France: reservation with regard to GAP Spain: reservation because of health effects in cattle
VD 71	Beans (dry)	0.2	8	France: reservation with regard to MRL
AL 1023	Clover	50	8	France: reservation with regard to GAP
OR 691	Cotton seed oil, Edible	0.1	CXL-D	
VD 533	Lentil (dry)	0.2	8	
GC 645	Maize	0.1	CXL-D	
GC 645	Maize	0.05 (*)	8(a)	
GC 647	Oats	2	8	EC: reservation because of intake concerns by infants/children
VD 72	Peas (dry)	0.2	8	
VR 589	Potato	0.2	CXL-D	
VR 589	Potato	0.05	8(a)	
PM 110	Poultry meat	0.05 (*)	8	
PO 111	Poultry, Edible offal of	0.05 (*)	8	
OR 495	Rapeseed oil, Edible	0.1	CXL-D	
GC 649	Rice	5	CXL-D	
GC 649	Rice	10	8(a)	
CM 649	Rice, Husked	0.2	CXL-D	
CM 649	Rice, Husked	1	8(a)	

Code	Commodity	MRL (mg/kg)	Step	Remarks
OR 700	Sesame seed oil, Edible	0.1	CXL-D	
VD 541	Soya bean (dry)	0.2	8	
SO 702	Sunflower seed	0.5	CXL-D	
SO 702	Sunflower seed	1	8(a)	
OR 702	Sunflower seed oil, Edible	0.1	CXL-D	
OC 172	Vegetable oils, Crude	0.05 (*)	8(a)	
CF 1211	Wheat flour	0.2	CXL-D	
CF 1211	Wheat flour	0.5	8(a)	EC: reservation because of intake concerns by infants/children

EC: over-summarization of data
Consumers International: opposed to making an assumption that the STMR approach generally reduce the exposure estimate as it did not accord with sound science and that other factors (e.g. children) needed to be taken into account.

39 FENTHION

FC 3	Mandarins	0.5	6(a)	EC: reservation insufficient trial data, new GAP
OC 305	Olive oil, Virgin	3	6(a)	Greece, Spain: want a lower MRL, will be a new GAP EC: reservation, dietary intake concern
FC 4	Oranges, Sweet, Sour	0.5	6(a)	EC: reservation insufficient data, new GAP

51 METHIDATHION

FB 269	Grapes	0.2	CXL-D	
FB 269	Grapes	1	8(a)	EC: concern on acute intake
FP 230	Pear	0.5	CXL-D	
FP 230	Pear	1	8(a)	EC: concern on acute intake

59 PARATHION-METHYL

AL 1030	Bean forage (green)	1	6	
VB 0040	Brassica vegetables	0.2	CXL-D	
VB 400	Broccoli	0.2	8(a)	
VB 41	Cabbages, Head	0.2	8(a)	EC: reservation, disagreement with evaluation
AL 1023	Clover	10	6	
AS 0162	Hay or fodder (dry) of grasses	5	6	
GC 0649	Rice	3	6	
AS 0649	Rice straw and fodder, Dry	10	6	
CM 649	Rice, Husked	1	8	
AV 0596	Sugar beet leaves or tops	0.05 (*)	6	
GC 0654	Wheat	5	6	
CM 0654	Wheat bran, Unprocessed	10	6	
AS 0654	Wheat straw and fodder, Dry	10	6	

75 PROPOXUR

VL 482	Lettuce, Head	3	CXL-D	
VL 482	Lettuce, Head	0.5	5/8(a)	
VR 589	Potato	0.1 (*)	CXL-D	
VR 589	Potato	0.02 (*)	5/8(a)	

81 CHLOROTHALONIL

FB 264	Blackberries	10	CXL-D	
FC 1	Citrus fruits	5	CXL-D	
VD 534	Lima bean (dry)	0.5	CXL-D	
FB 272	Raspberries, Red, Black	10	CXL-D	

90 CHLORPYRIFOS-METHYL

GC 640	Barley	10 Po	6	
GC 647	Oats	10 Po	6	
GC 649	Rice	10 Po	6(a)	

95 ACEPHATE

VB 400	Broccoli	2	5/8	Sweden, EC: concern on acute exposure
VB 41	Cabbages, Head	2	5/8	Sweden, EC: concern on acute exposure
VB 404	Cauliflower	2	5/8	Sweden, EC: concern on acute exposure

Code	Commodity	MRL (mg/kg)		Step	Remarks
VO 448	Tomato	1		5/8	Sweden, EC: concern on acute exposure
Sweden: reservation against fast track procedure					
100	**METHAMIDOPHOS**				
VB 41	Cabbages, Head	0.5		5/8	
VB 404	Cauliflower	0.5		5/8	
FS 247	Peach	1		5	EC: concern on acute exposure
FP 9	Pome fruits	0.5		6	
VO 448	Tomato	1		5	EC: concern on acute exposure
105	**DITHIOCARBAMATES**				
AM 660	Almond hulls	20	N,z	6	
TN 660	Almonds	0.1	(*) N, Z	6	
VS 621	Asparagus	0.1	c	6	
FI 327	Banana	2	c	6(a)	EC: limited database
GC 640	Barley	1	c	6	EC: limited database
AS 640	Barley straw and fodder, Dry	25	C, n	6	EC: limited database
VB 41	Cabbages, Head	5	c, N	6	EC: limited database
VR 577	Carrot	1	c	6(a)	EC: limited database
VP 526	Common bean (pods and/or immature seeds)	1	m	W	
VL 510	Cos lettuce	10	n	6	
FB 265	Cranberry	5	c	6	
VC 424	Cucumber	2	c, N	6(a)	
FB 21	Currants, Black, Red, White	10	C, m	6(a)	
MO 105	Edible offal (mammalian)	0.1	C, m	6	
PE 112	Eggs	0.05	(*) c	6	
VA 381	Garlic	0.5	c	6	
DH 1100	Hops, Dry	30	m	6	
VL 480	Kale	15	c, N	6	
VA 384	Leek	0.5	c	6	EC: classified as stem vegetable in the EC; requires higher MRL
VL 482	Lettuce, Head	10	C, N, m	6(a)	EC: limited database
AS 645	Maize fodder	2	c	6	EC: limited database
FC 3	Mandarins	10	c	6	
FI 345	Mango	2	c	6	
MM 95	Meat (from mammals other than marine mammals)	0.02	(*) c, m	6	
VC 46	Melons, except watermelon	0.5	C, p	6(a)	
ML 106	Milks	0.05	(*) c, m	6	
VA 385	Onion, Bulb	0.5	C, p	6	
FC 4	Oranges, Sweet, Sour	2	c	6	EC: requires higher MRL
FI 350	Papaya	5	c	6	EC: limited database
SO 697	Peanut	0.1	(*) c	6	
AL 697	Peanut fodder	5	c	6	EC: limited database
TN 672	Pecan	0.1	(*) T Z	5	
VO 445	Peppers, Sweet	1	c, n	6	EC: does not cover mancozeb use
FP 9	Pome fruits	5	C, M, p, H, Z	6(a)	
VR 589	Potato	0.2	c, m, n, p	6(a)	
PM 110	Poultry meat	0.1	c	6	EC: difference in the evaluation of the database
PO 111	Poultry, Edible offal of	0.1	c	6	EC: difference in the evaluation of the database
VC 429	Pumpkins	0.2	c	6	
VA 389	Spring onion	10	n	6	
VC 431	Squash, Summer	1	c	6	
FS 12	Stone fruits	7	T h, Z	5(a)	EC: poor database on plum
FB 275	Strawberry	5	H	5	
VR 596	Sugar beet	0.5	C, n	6	
AV 596	Sugar beet leaves or tops	20	C, n	6	
VO 447	Sweet corn (corn-on-the-cob)	0.1	(*) c	6	
VO 448	Tomato	5	C, m, n, p	6(a)	
VC 432	Watermelon	1	c, N	6	
GC 654	Wheat	1	C, n, m	6(a)	
AS 654	Wheat straw and fodder, Dry	25	C, n, m	6	

Code	Commodity	MRL (mg/kg)	Step	Remarks
VC 433	Winter squash	0.1 c	6	
106	**ETHEPHON**			
VC 4199	Cantaloupe	1	6	
FB 0269	Grapes	1	6	
VO 51	Peppers	30	6	
FI 353	Pineapple	1	6	
VO 448	Tomato	2	6	
112	**PHORATE**			
VR 577	Carrot	0.2	7C	
VR 589	Potato	0.2	8	
117	**ALDICARB**			
VR 589	Potato	0.5	5	EC: acute dietary intake concern
127	**PHENOTHRIN**			
GC 0640	Barley	2	CXL-D	
CM 0649	Rice, Husked	0.1	CXL-D	
GC 0651	Sorghum	2	CXL-D	
GC 0654	Wheat	2	CXL-D	
CM 0654	Wheat bran, Unprocessed	5	CXL-D	
CF 1211	Wheat flour	1	CXL-D	
CF 1210	Wheat germ	5	CXL-D`	
CF 1212	Wheat wholemeal	2	CXL-D	
178	**BIFENTHRIN**			
GC 640	Barley	0.05 (*)	8	
MF 812	Cattle fat	0.5	6	
ML 812	Cattle milk	0.05 (*)	6	
GC 645	Maize	0.05 (*)	8	
190	**TEFLUBENZURON**			
VB 402	Brussels sprouts	0.5	5/8	
VB 41	Cabbages, Head	0.2	5/8	
FS 14	Plums (including prunes)	0.1	5/8	
FP 9	Pome fruits	1	5/8	
VR 589	Potato	0.05 (*)	5/8	
Germany: metabolism studies needed				
192	**FENARIMOL**			
AB 226	Apple pomace, Dry	5	8	
MO 1280	Cattle kidney	0.02 (*)	8	
MO 1281	Cattle liver	0.05	8	
MM 812	Cattle meat	0.02 (*)	8	
DF 269	Dried grapes (=currants, raisins and sultanas)	0.2	8	
FB 269	Grapes	0.3	8	
DH 1100	Hops, Dry	5	5/8	
FS 247	Peach	0.5	8	
VO 445	Peppers, Sweet	0.5	8	
FP 9	Pome fruits	0.3	8	
194	**HALOXYFOP**			
FI 327	Banana	0.05 (*)	5	
PE 840	Chicken eggs	0.01 (*)	5	
PM 840	Chicken meat	0.01 (*)	5	
PO 840	Chicken, Edible offal of	0.1	5	
FC 1	Citrus fruits	0.05 (*)	5	
SO 691	Cotton seed	0.2	5	Germany: database insufficient
OC 691	Cotton seed oil, Crude	0.5	5	Germany: database insufficient

Code	Commodity	MRL (mg/kg)	Step	Remarks
				France: reservation related to concentration factor
AM 1051	Fodder beet	0.3	5	
FB 269	Grapes	0.05 (*)	5	
SO 697	Peanut	0.05	5	
VP 63	Peas (pods and succulent =immature seeds)	0.2	5	Germany: database insufficient
FP 9	Pome fruits	0.05 (*)	5	
VR 589	Potato	0.1	5	Germany: Processing studies required
VD 70	Pulses	0.2	5	France: trial data not clearly related to GAP
SO 495	Rape seed	2	5	
OC 495	Rape seed oil, Crude	5	5	France: reservations related to concentration factor
OR 495	Rapeseed oil, Edible	5	5	
CM 1206	Rice bran, Unprocessed	0.02 (*)	5	
CM 649	Rice, Husked	0.02 (*)	5	
CM 1205	Rice, Polished	0.02 (*)	5	
OC 541	Soya bean oil, Crude	0.2	5	France: reservation related to concentration factor
OR 541	Soya bean oil, Refined	0.2	5	France: reservation related to concentration factor
VR 596	Sugar beet	0.3	5	
SO 702	Sunflower seed	0.2	5	Germany: disagreement with evaluation

Germany: Not in favour of reciprocal use of residue data performed with the racemate or with the R-isomer for derivation of an MRL.

The Netherlands: (1) Regarding the residue definition: add that residue is partially fat-soluble; (2) Regarding LOD: for enforcement purposes prefer to set a limit of 0.05 mg/kg in general. For animal products like meat and eggs 0.02 mg/kg(*) is acceptable; and (3) Because of intake concern animal transfer studies are required.

195 FLUMETHRIN

MM 812	Cattle meat	0.2 (fat) V	5/8	
ML 812	Cattle milk	0.05 F V	5/8	

196 TEBUFENOZIDE

FB 269	Grapes	0.5	5	France: transfer studies from grape to wine not satisfactory
FP 9	Pome fruits	1	5/8	
CM 649	Rice, Husked	0.1	5/8	
TN 678	Walnuts	0.05	5/8	

Code	Commodity	EMRL (mg/kg)	Step	Remarks
21	**DDT**			
MM 95	Meat (from mammals other than marine mammals)	5 (fat)	5(a)	EC: database insufficient, disagrees residue evaluation

LIST OF PARTICIPANTS[39]
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

Chairman of the Session:
Président de la Session:
Presidente de la Reunión:

Dr W.H. VAN ECK
Ministry of Health, Welfare and Sport
Directorate of Public Health
Postbox 5406
2280 HK Rijswijk
The Netherlands
Tel.: +31 70 3406966
Fax: +31 70 3405554
E-mail: wh.v.eck@minvws.nl

ALGERIA
ALGERIE
ALGERIA

Mrs Dalila BOUGUELAS
Algerian Embassy

ARGENTINA
ARGENTINE

Dr Nora ANGELINI
Chemistry And Chemical Resedues Coordinator
Avenue Fleming 1653 (1640) Martinez
Senasa
Tel.: +54 1 798 1278
Fax.: +54 1 798 4786
E-mail: Gelab@Feedback.net.AR

AUSTRALIA
AUSTRALIE

Mr Stanford HARRISON
Agricultural and Veterinary Chemicals Policy Section
Department of Primary Industry and Energy
GPO Box 858
Canberra ACT 2601
Tel: +61 2 6272 5404
Fax: +61 2 6272 5899
E-mail: Stanford.harrison@dpie.gov.au

Dr Ronald D. EICHNER
Manager Chemistry Residues
National Registration Authority for Agricultural and Veterinairy Chemicals
P.O.Box E240
Kingston ACT 2604
Tel.: +61 2 6272 5248
Fax.: +61 2 6272 3551
E-mail: reichner@nra.gov.au

Mr Denis HAMILTON
Principal Scientific Officer
Animal and Plant Health Services
Department of Primary Industries
G P.O.Box 46
Brisbane
Queensland 4001
Tel.: +61 7 3239 3409
Fax: +61 7 3211 3293
E-mail: hamiltdj@dpi.qld.gov.au

Dr Angelo VALOIS
Section Head Chemical Residues
Policy and International Division
Australian Quarantine and Inspection Service
GPO Box 858
Canberra ACT 2601
Tel.: +61 2 6272 5566
Fax: +61 2 6271 6522
E-mail: angelo.valois@dpie.gov.au

[39] Participants are listed in alphabetical order, Heads of delegations are listed first.

Mr Geoffrey A. MacALPINE
Technical Director
Avcare Limited
Level 11,
53 Walker street
North Sydney NSW 2060
Tel.: +61 2 9922 2199
Fax. +61 2 9954 0588
E-mail: macalpine@compuserve.com

Mr Graham S. ROBERTS
Leader Organic Chemistry Unit
State Chemistry Laboratory
Cnr Sneydes and South Roads
Werribee Victoria 3030
Tel.: +61 03 9742 8714
Fax: +61 03 9742 8700
E-mail: robertsg@slim.agvic.gov.au

Dr Terry L. SPENCER
Deputy Australian Government Analyst, AGAL
GPO Box 1844
Canberra ACT 2601
Tel.: +61 2 6275 8714
Fax. +61 2 6275 3565
E-mail: terry.spencer@agal.gov.au

AUSTRIA
AUSTRICHE
AUSTRIA

Dipl Ing Hermine REICH
Analytical Chemist
Bundesamt und Forschungszentrum für Landwirtschaft
Spargelfeldstraße 191
1220 Vienna
Tel.: +43 1 28816 5130
Fax: +43 1 28816 5194
E-mail: hreich@bfl.at

Dipl Ing Christian PROHASKA
Registration of Plant Protection Products, Residues
Radetzkystrasse 2
A-1030 Vienna
Tel.: +43 1 71172 4601

BELGIUM
BELGIQUE
BELGICA

Ir L. MOHIMONT
Ministère des Classes Moyennes et de l'Agriculture
Inspection générale Matières premières et Produits transformés
WTC 3 - 8 étage
Bd S. Bolivar 30
B-1000 Bruxelles
Tel.: +32 2 208 38 42
Fax: +32 2 208 38 66

Prof dr ir W.P.E. DEJONCKHEERE
Department Crop Protection Chemistry
Faculty Agricultural Science
University Gent
Coupure Links 653
B-9000 Gent
Tel.: +32 9 264 60 09
Fax: +32 9 264 62 47
E-mail: willy.dejonckheere@rug.ac.be

Ir Oliveir N.M.G. PIGEON
Chemist Ingineer / Assistant
Agricultural Research Centre
Phytopharmacy Department
Rue du Bordia 11
B-5030 Gembloux
Tel.: +32 81 625262
Fax: +32 81 62 52 72
E-mail: pigeon@cragx.fgov.be

Dr Christine VINKX
Food Inspector
Ministry of Health
Food Inspection Services
RAC Esplanade, 11th floor
Pachecolaan 19, B5
B-1010 Brussel
Tel.: +32 2 210 48 43
Fax: +32 2 210 48 16
E-mail: christine.vinkx@health.fgov.be

BRAZIL
BRESIL
BRASIL

Mrs. Cleide M. OLIVEIRA
BASF S.A.
Registration Manager
Estrada Samuel Aizemberg, 1707
Sao Bernardo Do Campo – SP 09851-550
Tel.: +55 11 751 2350
Fax: +55 11 751 2285
E-mail: olcleide@basf.sa.com.br

Mrs Heloisa H.B. de TOLEDO
Director Technical Subjects
GARP/IAL - Associação Grupo de Analistas de Residuos de Pesticidas
Instituto Adolfo Lutz
Av. Dr Arnaldo, 355
01246-902-Sao Paulo-SP
Tel.: +55 11 3064 1527
Fax: +55 11 3064 1527

Mrs Rosemarie De SOUZA OLIVEIRA RODRIGUES
GARP - Associação Grupo de Analistas de Residuos de Pesticidas
Av. Dr Arnaldo, 355
SAO PAULO-SP
Tel.: +55 11 306 41527/5327219
Fax: +55 11 306 41527/5327226

Mr Flavio RODRIGUES PUGA
Director of the Animal Biology Division
Instituto Biologico
Av.Cons Rodrigues Alves 1252
CEP 04014.020 - Sao Paulo
Tel.: +55 11 57 00300

Mr Raul DA CAMARA COSTA FILHO
Director of Toxicological Evaluacion
Ministry of Health
Esplanada dos Ministerios - BLOCO G
9 Andar - Sala 958
Tel.: +55 613152619
Fax: +55 613152440

CANADA

Mr Bill MURRAY
Health Evaluation Division
Pest Management Regulatory Agency
Health Canada
2250 Riverside Drive Rm D.749
PST Loc. 6607D
Ottawa, Ontario K1A OK9
Tel.: +1 61 3 736 3671
Fax: +1 61 3 736 3659/99
E-mail: bmurray@pmra.hwc.ca

Ms Donna GRANT
Pesticide Residue Chemist,
Canadian Food Inspection Agency
3650 - 36th Street NW
Calgary, Alberta T2L 2L1
Tel.: +1 403 299 7636
Fax: +1 403 221 3293
E-mail: grantd@em.agr.ca

CHILE
CHILI

Dr Roberto H. GONZALEZ
Professor of Pesticide Science
University of Chile, College of Agriculture
P.O. Box 1004
Santiago
Tel.: +56 2 678 5714
Fax: +56 2 541 7055
E-mail: rgonzale@abello.dic.uchile.cl

Mrs. Jimena LÓPEZ
Ingeniero Agrónomo
Chilean Export Association
Cruz del Sur 133 - 2 p.
Las Condes
Santiago
Tel.: +56 2 2066604
Fax: +56 2 2064163

Mrs Marcela RUIZ
Ingeniero Agrónomo
Plant Protection Department
Pesticides Unit SAG
Av. Bulnes 140
Santiago
Tel.: +56 2 698 22 44 Anexo 291
Fax: +56 2 696 64 80
E-mail: protagri@sag.minagri.gob.cl

Mrs Antonieta URRUTIA-ANABALON
International Affairs, SAG
Ministry of Agriculture
Av. Bulnes 140
Santiago
Tel.:+56 2 672 3635/+56 2 688 3811
Fax: +56 2 671 7419
E-mail: rrii@sag.minagri.gob.cl

CONGO, DEMOCRATIC REPUBLIC OF
CONGO, REPUBLIQUE DEMOCRATIQUE
CONGO, REPUBLICA DEMOCRATICA

Mr Mukuta KAMANGU
Ministère de la Santé
Conseiller Pharmaceutique
Boulevard du 30 Juin
Kinshasa
Tel.: +223 8802499

CZECH REPUBLIC
REPUBLIQUE TCHEQUE
REPUBLICA CHECA

Mr Helena MALOÑOVA
Head of the National Reference Centre of Pesticides
National Institute of Public Health
Srobarova 48
10000 Praha 10
Tel.: +420 2 6708 2377
Fax: +420 2 6731 0298

DENMARK
DANEMARK
DINAMARCA

Mr Arne BüCHERT
Head of division
Danish Veterinary and Food Administration
Morkhoj Bygade 19
DK-2860 Soborg
Tel.: +45 339 56461
Fax: +45 33956696
E-mail: ab@vfd.dk

Mr Milter Green LAURIDSEN, M.Sc.
Senior Officer
Danish Veterinary and Food Administration
Morkhoj Bygade 19
DK-2860 Soborg
Tel.: +45 339 56464
Fax: +45 339 56696
email: mgl@vfd.dk

Dr Hanne BOETTE
Scientific Advisor
Danish Veterinary and Food Administration
Morktroj Bygade 19
DK-2860 Soborg
Tel.: +45 339 56000
Fax: +45 339 56696
E-mail: hfb@vfd.dk

EGYPT
EGYPTE
EGIPTO

Dr Sohair Ahmed GAD ALLA
Senior Research
Agricultural Research Centre
Ministry of Agriculture
Central Lab of Analysis of Pesticide Residues and Heavy Metals in Food
6 Nady El Sald St. Dokki, Giza
Tel.: +20 2 360 1395
Fax: +20 2 361 1216
E-mail: gcap@intouch.com

FINLAND
FINLANDE
FINLANDIA

Mr Vesa TUOMAALA
Senior Adviser
Ministry of Trade and Industry
Box 230
00171 Helsinki
Tel.: +358 9 160 3553
Fax: +358 9 160 2648
E-mail: vesa.tuomaala@ktm.vt.mailnet.fi

Mr Pekka RAVIO
Chemist
Finnish Customs Laboratory
Tekniikantie 13
SF-02150 Espoo
Tel.: +358 9 614 3276
Fax: +358 9 463 383
E-mail: pakka.ravo@tulli.fi

Mr. Pekka PAKKALA
Deputy Director
National Food Administration
Box 5
00531 Helsinki
Tel.: +358 9 7726 7621
Fax: +358 9 7726 7666

FRANCE
FRANCE
FRANCIA

Mr Jean-Pierre CUGIER
Ministère de l'Agriculture, de la Pêche et de l'Alimentation
DGAL/SDPV
GRAPPA/INRA
Site Agroparc
Domaine Saint Paul
84914 Avignon Cedex 9
Tel.: +33 4 9031 6058
Fax: +33 4 9089 6905
E-mail: cugier@avignon.inra.fr

Mr Bernard DECLERCQ
Ministère de l'Economie et des Finances
Laboratoire interrégional de la DGCCRF
25, avenue de la République
91305 Massy Cedex
Tel.: +33 1 6953 8750
Fax: +33 1 6953 8725
E-mail: bdeclercq@softel.fr

Mrs Sylvie COULON
Ministère de l'Agriculture et de la Pêche
Direction Générale de l'Alimentation
SDSPA Bureau Pharmacie Vetérinaire
251, rue du Vaugirard
75015 Paris Cedex
Tel.: +33 1 4955 8121
Fax: +33 1 4955 4398

Mr Gerard P. DE CACQUERAY
Agronomist
UIPP - Union des Industries de la Protection des Plantes
2, rue Denfert-Rochereau
92100 Boulogne-Billancourt
Tel.: +33 1 4002 5321
Fax: +33 1 4345 2819

Mr Michel L'HOTELLIER
Agronomist
UIPP - Union des Industries de la Protection des Plantes
2, rue Denfert-Rochereau
92100 Boulogne
Tel.: +33 1 3081 7381
Fax: +33 1 3081 7251

GABON

Mr Jean Hubert OLLOMO ELLA
Ministère de l'Agriculture
Inspection General de l'Agriculture
B.P. 189 Libreville
Tel.: +241 76 38 36

GERMANY
ALLEMAGNE
ALEMANIA

Dr Michael WINTER
Regierungsdirektor
Bundesministerium für Gesundheit
Am Propsthof 78a
D-53121 Bonn
Tel.: +49 228 941 4151
Fax: +49 228 941 4943
E-mail: winter@hausii.bmg.bund400.de

Dr Jutta SCHAUB
Oberregierungsrätin
Bundesministerium für Ernährung, Landwirtschaft und Forsten
Rochusstrasse 1
D-53123 Bonn
Tel.: 0228 529 3329
Fax: 0228 529 4404

Dr Karsten HOHGARDT
Wissenschaftlicher Oberrat,
Biologische Bundesanstalt für Land- und Forstwirtschaft
Messeweg 11/12
D-38104 Braunschweig
Tel.: +49 531 2993503
Fax: +49 531 2993004
E-mail: k.hohgardt@bba.de

Dr Renate HANS
Dir.u.Prof., Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinärmedizin
Thielallee 88-92
D-14195 Berlin
Tel.: +49 30 8412 3383
Fax: +49 30 8412 3894

Dr Lutz ALDER
Wissenschaftlicher Oberrat Bundesinstitut für gesundheitlichen
Verbraucherschutz und Veterinärmedizin
Postfach 330013, FG 704
D-14195 Berlin
Tel.: +49 30 8412 3377
Fax: +49 30 8412 3685
E-mail: l.alder@bgvv.de

Dr Ursula BANASIAK
Wissenschaftliche Oberrätin
Biolosche Bundesanstalt für Land- und Forstwirtschaft
Stahnsdorfer Damm 81
D-14532 Kleinmachnow
Tel.: +49 33203 48338
Fax: +49 33203 48425
E-mail: u.banasiak@bba.de

Dr Gabriele TIMME
Bayer AG
Senior Registration Expert
Business Group Crop Protection
Development /Registration
Agrochemical Centre Monheim
D-51368 Leverkussen
Tel.: 00 49 2173 383882
Fax: 00 49 2173 383516
E-mail: gabriele.timme.gt.@bayer.ag.de

Dr. Martin SCHÄFER
Industrieverband Agrar E.V.
Karlstrasse 21
D-60329 Frankfurt/Main
Tel.: +49 69 2556 1599
Fax: +49 69 236702

Dr Gudrun OETKEN
Advisor Pesticide Actions Netwerk
Nernstweg 32-34
D-22765 Hamburg
Tel.: +40 39919100
Fax: +40 3907520
E-mail: pan-germany@umwelt.ecolink.org

GREECE
GRECE
GRECIA

Dr. Chaido LENTZA-RIZOS
Head of Pesticide Residue Laboratory
Ministry of Agriculture
NAGREF, 1,S, Venizelou Str.
GR-14123, Lycovrissi, Athens
Tel.: +30 1 2819019 / 2819728
Fax: +30 1 2818735

HUNGARY
HONGRIE
HUNGRIA

Dr Katalin MATYASOVSZKY
Head of the Pesticide Residue Department
National Institute for Food-Hygiene and Nutrition
Gyali ut 3-a
1097 Budapest
Tel.: +361 215 4130
Fax: +361 215 1545

Dr László GYÖRFI
Deputy Director of Plant Hygiene and Soil Conservation Station of Budapest
Ministry of Agriculture
Budaörsi ùt 141-145
H-1118 Budapest
Tel.: +36 1 309 1020
Fax: +36 1 1246 2960 / +36 1246 2956
E-mail: novved@bendeguz.elender.hu

INDIA
INDE

Dr. C.R. SIVADASAN
Senior Scientist (Quality Control)
Ministry of Commerce
Spices Board
Sugandha Bhavan
P.B. No. 2277
Palarivattom P.O.
Cochin - 682025
Tel.: +91 0484 333610 616
Fax: + 91 0484 331429/334429
E-mail: sbhochn@glasmd01.vsnl.net.ln
mail@indianspices.com.

INDONESIA
INDONESIE

Mr. Sumpeno PUTRO
Agricultural Attache
Permanent Mission of the Republic of Indonesia
to the European Communities
Boulevard de la Woluwe 38
B-1200 Brussel
Belgium
Tel.: +32 2 772 8072
Fax: +32 2 772 8190
E-mail: soempeno@compuserve.com

Mrs. Retno MARSUDI
First Secretary
Indonesian Embassy
Tobias Asserlaan 8
2517 KC The Hague
The Netherlands
Tel.: +31 70 310 8123
Fax: +31 70 364 3331

Mr. Andi RAHADIAN
Attache (Economic)
Indonesian Embassy
Tobias Asserlaan 8
2517 KC The Hague
The Netherlands
Tel.: +31 70 310 8122
Fax: +31 70 364 3331
E-mail: Rahadianz@Hotman.Com

IRAN (ISLAMIC REPUBLIC OF)
IRAN (REPUBLIQUE ISLAMIQUE D')
IRAN (REPUBLICA ISLAMICA DEL)

Dr Linda YADEGARIAN HAJI ABADI
Pesicide Residue Laboratory
Pesticide Research Department
Plant, Health and Diseases Research Institute
Chamran Highway, Tabnak Ave., No.1
Teheran
Tel.: +98 21 2402839
Fax: +98 21 2403691

IRELAND
IRLANDE
IRLANDA

Dr Dan O'SULLIVAN
Agricultural Inspector
Pesticide Control Service
Department of Agriculture and Food
Abbotstown, Castleknock
Dublin 15
Tel.: +353 1 607 2614
Fax: +353 1 820 4260

Mr J. QUIGLEY
Senior Chemist
State Laboratory
Abbotstown, Castleknock
Dublin 15
Tel.: +353 1 821 7700
Fax: +353 1 821 7320

ISRAEL
ISRAEL
ISRAEL

Ms Rina ASHKENAZY
Head of Pesticide Registration Division
Ministry of Agriculture
Plant Protection and Inspection Services
P.O Box 78
Bet-Dagan, 50250
Tel.: +972 3 968 1562
Fax: +972 3 968 1507

Dr Rina VARSANO
Head Food Contaminants Section
Ministry of Health
Food Control Administration
P.O. Box 20301
Tel-Aviv 61203
Tel.: +972 3 563 4782 / +972 3 5634837
Fax: +972 3 561 954
E-mail: rtvrina@matat.health.gov.il

ITALY
ITALIE
ITALIA

Mr. Ciro IMPAGNATIELLO
Ministry of Agriculture
Via XX Settembre, 20
I-00187 Roma
Tel.: +39 6 46656510
Fax: +39 6 4880273

JAPAN
JAPON

Mr Toshiro NAKAGAKI
Deputy Director
Food Chemistry Division
Ministry of Health and Welfare
1-2-2, Kasumigaseki, Chiyoda-ku
Tokyo 100-45
Tel.: +81 3 3595 2341
Fax: +81 3 3501 4868
E-mail: TN-UYS@mhw.go.jp

Mr. Hiroki KONDO
Chief, Standards and Labelling Division
Ministry of Agriculture, Forestry and Fisheries
1-2-1, Kasumigaseki
Chiyoda-ku
Tokyo 100
Tel.: +81 3 3501 4094
Fax: +81 3 3502 0438

Mr Tsuyoshi SAKAMOTO
Head of Technical Research Section
Ministry of Agriculture, Forestry and Fisheries
Agricultural Chemicals Inspection Station
2-772 Suzuki-cho
Kodaira / Tokyo
Tel.: +81 4 2383 2151
Fax: +81 4 2385 3361
E-mail: jr2t-skmt@asahi-net.or.jp

Mr Makoto HIROSE
Deputy Director
Soil and Agricultural Chemicals Division
Waterquality Bureau, Environment Agency
1-2-2, Kasumigaseki
Chiyoda-ku
Tokyo 100-8975
Tel.: +81 3 3580 3173
Fax: +81 3 3593 1438

Mr Toshikazu MIYAKAWA
General Manager
International Japan Grop Protection Association
Nihonbashi Club. 5-8, 1-Chome
Muromachi, Nihonbashi, Chuo-Ku
Tokyo
Tel.: +81 3 3241 0230
Fax: +81 3 3241 3149
E-mail: jcpamiya@so-net.or.jp

KENYA

Mr. Richard Otieno SIKUKU
Principal Pesticide analyst
Pesticide Control Products Board
P.O. Box 14733
Nairobi
Tel.: +00 254 2 444388
Fax: +00 254 2 446115

LATVIA
LETTONIE
LETONIA

Mr. Vitalij TITAEVS
National Veterinary Laboratory
3 Lejupes Street
LV-1076 Riga
Latvia
Tel.: +37 176 20526
Fax: +37 176 20526

Dr. Viktors VOLSKIS
National Environmental Health Center
7L Klijánu Street
LV - 1212 Riga
Latvia
Tel.: +3 71 7370611
Fax: +3 71 7339006
E-mail: volskis@nvvc.org.lv

LIBYAN ARAB JAMAHIRIYA
JAMAHIRIYA ARABE LIBYENNE
JAMAHIRIYA ARABE LIBIA

Mr. Nage Saleh TELISI
Engineer
Technical Department
Universa Inspectorate and Services
20 Via Tripoli
Rome 00199
Italy
Tel.: +39 6 86 21 3651
Fax : +39 6 86 21 3724

MALAYSIA
MALAISIE
MALASIA

Dr Uan Boh CHEAH
Senior Research Officer
Strategic, Environment & Natural Resources Research Centre
Malaysian Agriculture Research Development Institute (MARDI)
P.O. Box 12301
50774 Kuala Lumpur
Tel.: +603 9437528
Fax: +603 9487639
E-mail: ubcheah@mardi.my

Mr Mohammad Jaafar AHMAD
PORIM Europe
Brickendonbury, Hertford
Herts. SG13 8NL
United Kingdom
Tel.: +44 1992 554347
Fax: +44 1992 500564
E-mail: porimuk@porim.demon.co.uk

Mr Abu Samah ABDUL GHANI
Food Technologist
Food Quality Control Laboratory (Selangor)
Food Division, Ministry of Health
Blok F, Damansara, Jalan Dungon
Kuala Lumpur
Tel.: +603 2540088

MEXICO
MEXIQUE

Mrs Amada VELEZ
Directora de Servicios y Apoyo Tecnico
Guillermo Perez Valenzuela #127
Col. del carmen Coyoacán
Mexico D.F.
Tel.: +525 658 28 28
Fax: +525 658 74 02

MOROCCO
MAROC
MARRUECOS

Mr Mostafa TARHY
Chef de Service Pesticides (LOARC)
Laboratoire Officiel d'Analyses et de Recherches Chemiques
25 Rue Nichakra Rahal (Ex-Rue de Tours)
Casablanca
Tel.: +212 2 302007 / 302196 / 302198
Fax: +212 2 30 1972
E-mail: loarc@casanet.net.ma

Mr. Mohamed AMESKANE
Chef du service de la Répression des Fraudes de Cassablanca
Ministère de l'Agriculture, des Développements Rural et des Pêches Maritimes
63, Boulevard Lalla Yalout
Casablanca
Tel.: +212 2 310841
Fax: +212 2 310841

NETHERLANDS
PAYS-BAS
PAISES BAJOS

Dr.ir. Henry DE HEER
Senior Official International Phytopharmaceutical Coordinator
Ministry of Agriculture, Nature Management and Fisheries
Department of Agriculture
P.O. Box 20401
2500 EK Den Haag
Tel.: +31 70 378 5685
Fax: +31 70 378 6157
E-mail: h.de.heer@DL.Agro.NL

Dr ir Abraham BOEKESTEIN
Ministry of Agriculture, Nature Management and Fisheries
RIKILT-DLO
P.O. Box 230
6700 AE Wageningen
Tel.: +31 317 475473
Fax: +31 317 417717
E-mail: a.boekestein@rikilt.dlo.nl

Mrs Jossie A. GARTHOFF
Toxicologist (CTB)
Stadsbrink 5
Wageningen
Tel.: 0317 471853

Mrs drs Paula H. VAN HOEVEN-ARENTZEN
Toxicologist,
National Institute of Public
Health and Environment
P.O. Box 1
3720 BA Bilthoven
Tel.: +31 30 2743263
E-mail: paula.van.hoeven@rivm.nl

Drs M.A.T. KERKHOFF
P.O. Box 114
3130 AC Vlaardingen
Tel.: +31 10 4605098/5659
Fax: +31 10 4605671
E-mail: mia.kerkhoff@unilever.com

Dr ir Gijs KLETER
Ministery of Health, Welfare and Sport
Inspector for Health Protection
P.O. Box 5406
2280 HK Rijswijk
Tel.: +31 70 340 6933
Fax: +31 70 340 5435

Drs David G. KLOET
Food Safety Adviser
Ministry of Agriculture, Nature Management
and Fisheries
RIKILT-DLO
P.O. Box 230
6700 AE Wageningen
Tel.: +31 317 475 562
Fax: +31 317 417 717
E-mail: d.kloet@rikilt.dlo.nl

Ir Johan VAN DER LEER
The Greenery / VTGFP
Specialist Product Safety
P.O Box 70588
5201 CZ Den Bosch
Tel.: +31 73 649 9999
Fax: +31 73 649 4400

Mrs ir Monique MELLEMA
Product Board for Horticulture
P.O. Box 90403
2509 LK Den Haag
Tel.: +31 70 304 1234
Fax: +31 70 347 8181

Mrs ir Erica MULLER
Consultant Phytopharmacy,
Ministry of Agriculture, Nature
Management and Fisheries
Plant Protection Service
P.O. Box 9102
6700 HC Wageningen
Tel.: +31 317 496 881
Fax: +31 317 421 701
E-mail: e.muller@pd.agro.nl

Ir Doeke A. VAN DER SCHAAF
Regulatory Affairs Manager
Pro Agro B.V.
P.O. Box 1180
3600 BD Maarssen
Tel.: +31 3465 52400
Fax: +31 3465 52274
E-mail: vanderschaaf@proagro.com

Dr Piet VAN ZOONEN
Head of Laboratory
National Institute of Public Health
and the Environment
P.O. Box 1
3720 BA Bilthoven
Tel.: +31 30 274 2876
Fax: +31 30 274 4424
E-mail: piet.van.zoonen@rivm.nl

NEW ZEALAND
NOUVELLE-ZELANDE
NUEVA ZELANDIA

Mr Bob A. MARTIN
Market Access Manager
Kiwifruit New Zealand
P.O. BOX 9906
Auckland
Tel.: +64 9 367 7538
Fax : +64 9 367 0222
E-mail: martinb@zespri.co.nz

Mr David W. LUNN
National Advisor-Residue Standards
Ministry of Agriculture and Forestry
P.O. Box 2526
Wellington
Tel.: +64 4 474 4100
Fax : +64 4 474 4257
E-mail: lunnd@maf.govt.nz

Dr W.T. William JOLLY
Counsellor (Veterinary Services)
37 Observatory Circle
Washington DC 20084
Tel.: +1 202 328 4861
Fax : +1 202 332 4309
E-mail: Jolly.wt@juno.com

NORWAY
NORVEGE
NORUEGA

Mr Joralf PAULSEN
Senior executive officer
P.O.Box 8187.Dep
N-0034 Oslo
Tel.: +47 222 4 6650
Fax : +47 222 4 6699
E-mail: joralf.paulsen@Snt.dep.telemax.no

Mr Borge HOLEN
Lab Manager
Osloveilen 1
N-1430 As
Tel.: +47 64 97 0390
Fax : +47 64 97 0387
E-mail: borge.holen@planteforsk.no

POLAND
POLOGNE
POLONIA

Prof. Jan K. LUDWICKI
Head, Toxicology Department
National Institute of Hygiene
Chocimska str. 24
00-791 Warsaw
Tel.: +48 22 79 7084
Fax: +48 22 49 7484

Ms M.B. Bozena MARTINEK
Pesticide Residue Quality Manager
Institute of Plant Protection
Department of Pesticide Residue Research
Miczurina str. 20
60-824 Pozna?
Tel.: +48 61 86 74841
Fax: +48 61 86 76301

Dr Alicja NIEWIADOWSKA
National Veterinary Research Institute
Department of Pharmacology and Toxicology
Al. Partyzantow 57
24-100 Pukawy
Tel.: +48 81 88 63051 ext. 109
Fax: +48 81 88 62595
E-mail: niewiado@piwet.pulawy.pl

Mr Wojciech MARTINEK
Chief of laboratory
Agricultural and Food Inspection
Zurawia 32/34
P.O. Box No.25
00-950 Warsaw
Tel.: +48 61 867 90 34

PORTUGAL

Mr Edwin FERNANDES
Head of Residue Evaluation Team
Ministerio de Agricultura
Quinta do Marquês
2780 Oeiras
Tel.: +351 1 441 2822
Fax: +351 1 442 0616

PHILIPPINES
FILIPINAS

Dr Virginia T.D. PACABA
Chief Agriculturist
Laboratory Services Division
Bureau of Plant Industry
692 San Andres, Malate M.M.
Tel. : +63 524 0708
Fax : +63 525 1388
E-mail: viging@pworld.net.ph

REPUBLIC OF KOREA
REPUBLIQUE DE COREE
REPUBLICA DE COREA

Mr Hee Sung AHN
G. Manager
Cosp. Kyung Nong
Dong Oh Bldg
13317-4 Seocho-Dong Seocho-Gu
Seoul 1317-0172
Tel.: +82 2 34174 0670 79
Fax: +82 2 3474 42217

Mr. Young Pyo LEE
Manager
Dongbu Hannong Chemical Co., Ltd
6-13 Nonhyun-Dong Kangnam-Gu
Seoul, 135-010
Tel.: +82 2 3449 2494
Fax: +82 2 548 6181
E-mail: pro1@dongbuchem.com

Mr. Kunsang PARK
Researcher
Korea Food and Drug Administration
5 Nokbun Dong, Eungpyng Ku
Seoul 122-704
Tel.: +82 2 380 1674/1675
Fax: +82 2 382 4892
E-mail: 550704@hanmail.net

Mr Chin-Chan LEE
Deputy director
Ministery of Agriculture and Forest chungang-don, Kwacho, Kyonggi
Tel.: +82 2 504 7284
Fax: +82 2 509 2306
E-mail: chanlee@muf.90.kr

Mr Joong Keun LEE
Senior Researcher
Korea Institute of Food Hygiene
57-1, Noryangjin-Dong, Dongjak-Ku
Seoul, Korea, 156-050
Tel.: +82 2 826 2100 ext. 230
Fax: +82 2 824 1762
E-mail: leejk@foodnet.re.kr

Mr Geon Jae IM
Pesticide Safety Division
National Institute of Agricultural Science and Technology
RDA
249 Seodun-dong Suweon 441-100
Tel.: +82 331 290 0504
Fax: +82 331 290 0521
E-mail: gjim@niast.go.kr

Mr Jun Yil YANG
Dong Bu Han-Nong Chem.
6-13 Non Hyeon Dong Gang Nam Gu, Seoul, Korea
Tel.: +82 2 3449 2119/+82 2 544 9317
Fax: +82 2 548 6181

Dr Yun Hyun YU
Researcher
Project leader of Ginseng Protection
Korea Ginseng & Tobacco Research Inst.
Suwon P.O. Box 59, Kyunggi
Tel.: +82 345 419 4131
Fax : +82 345 419 9434

SLOVAK REPUBLIC
REPUBLICA SLOVAQUE
REPUBLICA ESLOVACA

Dr Jana KOVACICOVÁ
Head of Quality department
Institute of Preventive and Clinical Medicine
Limbová 14
833 01 Bratislava
tel.: 421 7 4379332
fax: 421 7 373906
E-mail: kovacic@upkm.sanet.sk

SLOVENIA
SLOVENIE
ESLOVENIA

Dr med Marusa ADAMIC
Head Department of Food and Nutrition
Institute of Public Health of Slovenia
CC Point
Trubarjeva 2
1000 Ljubljana
Tel.: +386 61 1323 245
Fax: +386 61 323 955

SOUTH AFRICA
AFRIQUE DU SUD
SUDAFRICA

Dr J.B. VERMEULEN
Senior Agricultural Management Advisor
Directorate: Agricultural Production Imputs
National Department of Agriculture
Private Bag X343
Pretoria 0001
Tel.: +27 12 319 7303
Fax : +27 12 319 7179
E-mail: johan@hoof2.agric.2a

Mrs. Wilma JANSEN VAN RIJSSEN
Deputy Director Foodcontrol
Dept. of Health
Private Bag X828
Pretoria 0001
Tel.: +27 12 312 0509
Fax : +27 12 326/4374
E-mail: vrijsw@hlthrsa2.pwv.gov.za

Mr ANDREW R. RICHARDSON
Manager Techinal Services
Farnham House
Farnham Royal
Slough Sl2 3RQ
Tel.: +44 1753 712360
Fax : +44 1753 818800
E-mail: Richard@capespan.co.uk

SPAIN
ESPAGNE
ESPAÑA

Dr Angel YAGUE MARTINEZ DE TEJADA
Jefe del Servicio de Residuos de la
Subdirección General de Sanidad Vegetal
Ministerio de Agricultura, Pesca y Alimentación
Velázquez 147
28002 Madrid
Tel.: 34 91 34 78273
Fax: 34 91 34 78316

Dr Josefina LOMBARDERO VEGA
Jefa del Departamento de Residuos
de la Subdirección General de Análisis
Ministerio de Agricultura, Pesca y Alimentación
Paseo Infanta Isabel 1
28071 Madrid
Tel.: 34 91 34 74978
Fax: 34 91 34 74968

Dr Santiago GUTIERREZ DEL ARROYO
Técnico Superior de la Subdirección General
de Higiene de los Alimentos
Ministerio de Sanidad y Consumo
Paseo del Prado 18-20
28014 Madrid
Tel.: 34 91 5969996

Dr Enrique CELMA
Technical Manager AEPLA
Zeneca Agro
Costa Brava 13
28034 Madrid
Tel.: +34 91 734 4011
Fax : +34 91 735 0180

SWEDEN
SUEDE
SUECIA

Mr Arne ANDERSSON
Chief Government Inspector
National Food Administration
P.O. Box 622
S-751 26 Uppsala
Tel.: +46 18 175641
Fax: +46 18 693321
E-mail: aran@slv.se

Mr Bengt-Göran ERICSSON
Toxicologist
National Food Administration
P.O. Box 622
S-751 26 Uppsala
Tel.: +46 18 171458
Fax: +46 18 105848
E-mail: bger@slv.se

Mrs. Ingegärd BERGMAN
Principal Administrative Officer
National Food Administration
Food Standards Division
P.O. Box 622
S-751 26 Uppsala
Tel.: +46 18 175500
Fax: +46 18 105848
E-mail: inbe@slv.se

SWITZERLAND
SUISSE
SUIZA

Dr Claude WÜTHRICH
Head of Section
Federal Office of Public Health
Division of Food Control
Schwarzenburgstrasse 165
CH-3003 Bern
Tel.: +41 31 322 95 69
Fax: +41 31 322 95 74
E-mail: claude.wuethrich@bag.admin.ch

Dr Werner KOBEL
Swiss Society of Chemical Industry
c/o Novartis Crop Protection AG
R1058-7.48
Postfach
CH-4002 Basel
Tel.: +41 61 697 6239
Fax: +41 61 697 5334
E-mail: werner.kobel@cp.novartis.com

Mrs P. Danièle MAGNOLATO
Regulatory Affairs Manager
Nestec ltd
55 Av Nestlé
CH-1800 Vevey
Tel.: +41 21 924 44 41
Fax: 41 21 924 45 47
E-mail: daniele.magnolato@nestle.com

Mr Tjakko STIJVE
Head of Contaminants Section
Nestlé/Nestec Ltd
1000 Lausanne 26
Tel.: +41 21 785 8250
Fax: +41 21 785 8553
E-mail: tjakko.stije@chlsnr.nestra.ch

THAILAND
THAÏLANDE
TAILANDIA

Mrs Dr Nuansri TAYAPUTCH
Director
Agricultural Toxic Substances Division
Department of Agriculture
Jatuchak, Bangkok 10900
Tel.: +662 579 3579/662 940 5390
Fax: +662 561 4695

Mr WANCHAI SOMCHIT
Executive Manager
Thai Food Processors Association
170/22 Ocean Tower 1, 9th Floor
New-Rachadapisek Rd, Klontoey
Bangkok 10110
Tel.: +662 261 2684-6
Fax: +662 261 2996-7

Mr Pisan PONGSAPITCH
Standards Officer
Thai Industrial Standards Institute
Ministry of Industry
Rama VI Road
Bangkok 10400
tel.: +66 2 2023348
fax: +66 2 2487987
E-mail: pisanp@tisi.go.th

UNITED ARAB EMIRATES
EMIRATS ARABES UNIS
EMIRATOS ARABES UNIDOS

Dr. Mohamed Osman EL-OBEID
Head of Central Food Control Laboratory
Central Food Quality Control Lab.
Al-Ain Municipality
Al-Ain P.O. Box 1003
Tel.: +971 3 624666
Fax : +971 3 636338

Mr Rashed Saleh AL-MEHREZI
Director of Central Lab.
P.O. Box 16054
Al-Ain
Tel.: +971 3 832255
Fax: +971 3 832075

UNITED KINGDOM
ROYAUME-UNI
REINO UNIDO

Mr J.R. MASCALL
Ministry of Agriculture, Fisheries and Food
International Policy Unit
Pesticides Safety Directorate
Mallard House
Kings Pool
3 Peasholme Green
York YO1 2 PX
Tel.: +44 1904 455 759
Fax: +44 1904 455 733
E-mail: r.mascall@psd.maff.gov.uk

Mr. J.A. BAINTON
Ministry of Agriculture, Fisheries and Food
Pesticides Safety Directorate
Mallard House,Kings Pool
3 Peasholme Green
York YO31 7JX
Tel.: +44 1904 455 921
Fax: +44 1904 455 733

Miss L.J.E. Holmes
Ministry of Agriculture, Fisheries and Food
Pesticide Safety Directorate
Mallard House, Kings Pool
3 Peasholme Green
York YO3 7JX
Tel.: +44 1904 455907
Fax: +44 1904 455711
E-mail: l.j.e.holmes@psd.maff.gon.uk

Mr Alan R.C. HILL
Sand Hutton
York Y041 ILZ
Tel.: +44 1904 462560
Fax: +44 1904 462111
E-mail: alan.hill@csl.gov.uk

Ms S. O'HAGAN
Senior Scienist
Department of Health
HEF(M) 2 Division
Skipton House
80 London Road
Elephant and Castle
London SE1 6LW
Tel.: +44 171 972 5305
Fax: +44 171 972 5134
E-mail: SOhagan@demon.uk

Mr G.M. TELLING
Food and Drink Federation
c/o Green Endfarm House
Pertenhall
Beds MK44 2AX
Tel.: +44 1480 860 439
Fax: +44 1480 861 739

Mr J.R. COX
Principal Scientist
National Resources Institute
Central Avenue
Chatham Maritime
Kent ME4 4TB
Tel.: +44 1634 88 3896
Fax: +44 1634 88 3232
E-mail: john.cox@nri.org

Mr R.R. ROWE
Regulatory Manager
Dow Agro Sciences
Letcombe Laboratory
Letcombe Regis
Wantage
Oxon OX12 9JT
Tel.: +44 1235 77 4734
Fax: +44 1235 77 4749
E-mail: rrowe@dow.com

UNITED STATES OF AMERICA
ETATS-UNIS D'AMERIQUE
ESTADOS UNIDOS D'AMERICA

Mr Fred N. IVES
Health Effects Division (H509C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M ST S.W.
Washington D.C. 20460
Tel.: +1 703 305 6378
Fax.: +1 703 305 5147
E-mail: ives.fred@epamail.gov

Dr Richard M. PARRY
Assistant Administrator
Agricultural Research Service
U.S. Department of Agriculture
Room 358-A, Administration Bldg.
1400 Independence Ave, SW
Washington DC 20250-0302
Tel.: +1 202 720 3973
Fax: +1 202 720 7549
E-mail: rparry@ars.usda.90v

Dr Robert L. Epstein
Associate Deputy Administrator
USDA/AMS Science & Technology
P.O Box 96456
Washington, DC 20090
Tel.: +1 202 720 2158
Fax: +1 202 720 1484
E-mail: robert_l_epstein@usda.gov

Mr Louis J. CARSON
Chemical Contaminants Specialist
FDA/HFS-32
200C Street SW
Washington, DC 20204
Tel.: +1 202 260 3740
Fax: +1 202 260 9653
E-mail: lcarson@bangate.fda.gov

Mr Charles W. COOPER
Director, International Activities Staff
(HFS- 585)
Center for Food Safety FDA
200 C Street, S.W.
Washington, D.C. 20204
Tel.: +1 202 205 5042
Fax: +1 202 401 7739

Mrs Carolyn Fillmore WILSON
International Trade Specialist
U.S. Dept. of Agriculture
Foreign Agricultural Service
Food Safety & Technical Services Div.
1400 Independence Ave
Stop 1027
Washington DC 20250
Tel.: +1 202 720 2239
Fax: +1 202 690 0677
E-mail: wilsonc@fas.usda.gov

Dr Stephen R. FUNK, Chemist
Health Effects Division (7509C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M. Street, S.W.
Washington D.C. 20460
Tel.: +1 703 305 5430
Fax.: +1 703 305 5147
E-mail: funk.steve@epamail.epa.gov

Ms Ellen Y. MATTEN
Staff Officier
U.S. Codex Office
Food Safety and Inspection Service
US Department of Agriculture
Room 4861 South Building
1400 Independence Ave. S.W.
Washington, DC 20250-3700
Tel.:+1 202 205 7760
Fax: + 1 202 720 3157
E-mail: ellen.matten@usda.gov

Dr. Whang PHANG
Toxicologist
Health Effects Division (7509C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M. Street, S.W.
Washington D.C. 20460
Tel.: +1 703 308 2723
Fax.: +1 703 305 5147
E-mail: phang.whang@epamail.epa.gov

Mr Paul B. ENGLER
California Citrus Quality Council
3191 Temple Avenue Suite 115
Pomona, California 91768
Tel.: +1 909 595 4549
Fax: +1 909 595 7102
E-mail: ccqc@ix.netcom.com

Dr Richard D. COSTLOW
Product Development Manager
Rohm and Haas Company
727 Norristown Road
Spring Hoose PA 19477
Tel.: +1 215 641 7331
Fax: +1 215 619 1614
E-mail: richard_d_costlow@rohmhaas.com

Dr John P. FRAWLEY
President, Health & Environment International Ltd
400 W. 9th Street, Suite 401
Wilmington, Delaware 19809
Tel.: +1 302 426 1717
Fax: +1 302 426 1716

Dr Hugh W. EWART
Vice President, Sci. Affairs
Northwest Horticultural Council
Box 570
Yakima, WA 98907
Tel.: +1 509 453 3193
Fax: +1 509 457 7615
E-mail: ewart@nwhort.org

Dr Pat BASU
Director, Chemistry & Toxicology Division
Department of Agriculture
Food Safety and Inspection Service
Office of Public Health & Science
Room 6912, Franklin Court Suite
1400 Independence Ave. SW
Washington, DC 20250-3700
Tel.: +202 501 7319
Fax: +202 501 7639

URUGUAY

Dr Ramiro PEDRETTI
Ministerio de Salud Publica
Asesor del Vice-Ministro
Charrva 1873.cp.11.200
Montevideo
Tel.: +598 2 400 4428
Fax : +598 2 409 0431
E-mail: pedretti@adinet.com.uy

Ing Jorge AGULLA MENONI
Ministerio Salud Pública
Asesor Director General De Salud
P.ASILO 2446 ap.205
Montevideo
Tel.: +598 2 481 41 11
Fax : +598 2 401 38 70
E-mail: mspat@adinet.com.uy
agulla@hotmail.com.uy

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

AOAC INTERNATIONAL

Mr Alan R.C. HILL
Sand Hutton
York YO41 ILZ
United Kingdom
Tel.: +44 1904 462560
Fax : +44 1904 462111
E-mail: alan.hill@csl.gov.uk

CONSUMERS INTERNATIONAL (CI)

Ms Lisa Y. LEFFERTS
Codex Consultant Consumers International
5280 Rockfish Valley Highway
Faber, VA 22938-4001
USA
Tel.: +1 804 361 2420
Fax: +1 804 361 2421
E-mail: lefferts@sprynet.com

Dr Ronald LUIJK
Project Officier
Consumentenbond
PO Box 1000
2500 BA 's-Gravenhage
The Netherlands
Tel.: +31 70 445 4366
Fax: +31 70 445 4595
E-mail: rluijk@consumentenbond.nl

EUROPEAN COMMUNITY (EC)
COMMUNAUTE EUROPEENNE
COMUNIDAD EUROPEA

COMMISSION OF THE EUROPEAN COMMUNITY

Mr Ch. Frank HINSLEY
Principal Administrator
European Commission
Directorate General VI - Agriculture
200 Rue de la Loi
B-1049 Bruxelles
Bureau LOI 86-1/38
Belgium
Tel: +32 2 29 65779
Fax: +32 2 29 65963
E-mail: charles-francis.hinsley@dg6.cec.be

Dr Leo F. HAGEDOORN
Codex Coordinator European Commission
Rond Point Schuman 11 3/69
Rue de la Loi, 200
B-1049 Brussels
Belgium
Tel: +32 2 29 93149
Fax: +32 2 29 51735
E-mail: leo-frans.hagedoorn@dg3.cec.be

COUNCIL OF THE EUROPEAN UNION

Mrs. Christina STÅHLE AGRI B II
General Secretariat of the Council of the
European Union
Rue de la Loi 175
B-1048 Brussels
Belgium
Tel.: +32 2 285 83 57
Fax : +32 2 285 79 28
E-mail: christina.stahle@concilium.eu.int

GLOBAL CROP PROTECTION FEDERATION (GCPF)

P. ADRIAN
FMC Europe
Registration Manager
Avenue Louise 480 B9
1050 Brussels
Belgium
Tel.: +32 2 645 9552
Fax : +32 2 640 6286

Dr M. BLISS
Manager, International Registrations
ISK Biosciences Corporation
5966 Heisley Road
P.O. Box 8000
Mentor, Ohio 44061-8000
USA
Tel.: +1 440 357 4152
Fax: +1 440 357 4692
E-mail: blissm@iskbc.com

Mr M. BUYS
Scientific Advisor
Rhône-Poulenc Agro
Box 9163
FG 9263 Lyon Cedex 09
France
Tel.: +33 472 85 2647
Fax : +33 472 85 2942

Dr Desmond BYRNE
Director, Registror & Registry Affrs.
Tomen Agro Inc.
100 first Street
San Francisco, CA 94115
USA
Tel.: +1 415 536 3465
Fax: +1 415 284 9884

Dr A. DYKSTRA
Registration Manager
Uniroyal Chemical BV
Ankerweg 18
1041 AT Amsterdam
The Netherlands
Tel.: +31 20 587 1860
Fax: +31 20 587 1868

Mr Hirotaka SAKAKIBARA
Rhone-Poulenc Yuka Agro
Rappongi First Bild. 15F
1-9-9 Roppongi Minato-Ku
Tokyo
Tel.: +81 3 5570 6064
Fax : +81 3 5570 6070

Dr George GARDINER
Technial Director
c/o ECPA
6, Ave E. van Nieuwenhuyse
1160 Brussels
Belgium
Tel.: +32 2 663 1559
Fax: +32 2 663 1560
E-mail: g.ron.gardiner@ecpa.be

Dr R.R. GAUGHAN
Rohm & Haas
Product Regulatory Manager
Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106
USA
Tel.: +1 215 592 3936
Fax : +1 215 592 3414
E-mail: rsrxrg@rohmhaas.com

Mr William GRAHAM
Registration Manager
Monsanto
270-272 AVE De Tervuren
1150 Brussels
Belgium
Tel.: +32 2 776 4533
Fax : +44 1 386 710143
E-mail: William.Graham@Monsanto.com

Dr Bruce G. JULIN
Manager
Du Pont-Belgium
BLDG 3
A. Spinoystraat 6
B-2800 Mechelen
Belgium
Tel.: +32 15 441378
Fax: +32 15 441398
E-mail: bruce.g.julin-1@usa.dupont.com

Dr M. KAETHNER
Head Dietary Safety Assessment
Novartis Crop Protection
R 1058.800
CH-4002 Basel
Switzerland
Tel.: +41 61 69 72849
Fax: +41 61 69 74966
E-mail: michael.Kaethner@cp.novartis.com

Mr Masaki KUDO
Agriculture Div.
NISSAN Chemical Industries, Ldt.
Manager, Product Safety Evaluations
17-1, 3-chome, Kanda-Nishiki-chd
Chiyoda-Ku, Tokyo
Japan 101-0054
Tel.: +1 81 3 3296 8151
Fax: +1 81 3 3296 8016

Dr James Lee KUNSTMAN
Registration Manager
8400 Hawthorne Road
Kansas City, MO 64120
USA
Tel.: +1 81 6 242 2838
Fax: +1 81 6 242 2738
E-mail: Jim.Kunstman.b@BAYER.COM

Mr Shigeru MARUYAMA
Sumitomo Chemical Co. Ltd.
5-33 Kitahama, 4-Chome
Chuo-Ku, Osaka
541-8550 Japan
Tel.: +81 6 220 3685
Fax: +81 6 220 3350

Dr Richard J. NIELSSON
Director, Strategic Regulatory Issues
American Cyanamid Company
P.O. Box 400
Princeton, N.J. 08543-0400
USA
Tel.: +1 609 716 2354
Fax: +1 609 716 2333
E-mail: nielssonr@pt.cyanamid.com

Ms Yuko OKAMOTO
Manager Reg. & Env. Safety
AGR DuPont K.K.
1-8-1, Shimomegro, Meguro
Tokyo, Japan
Tel.: +81 3 5434 6119
Fax: +81 3 5434 6187
E-mail: Yuko.OKAMOTO@jpn.dupont.com

Dr. Gerhard KEUCK
Documentation
AGREVO
D-65926 Frankfurt/Main
Germany
Tel.: +49 69 305 3785
Fax: +49 69 305 17290
E-mail: Gerhard.keuck@agrevo.com

Mr David J. OSBORN
Registration Specialist
Uniroyal Chemical Limited
Kennet House
4 Langley Quay
Slough Berkshire SL3 6GEH UK
Tel.: +44 1753 603000
Fax : +44 1753 603077

Dr Ernst-Dieter PICK
Industrieverband Agrar E.V.
Karlstraße 21
D-60329 Frankfurt/M.
Germany
Tel.: +49 69 2556 1283
Fax : +49 69 2367 02
E-mail: pick.iva@vci.de

Mr Frederick John RAVENEY
Director
Agrilex (UK) LTD
P.O. Box 31
Uckfield TN22 4ZI
England
Tel.: +44 1825 830 332
Fax: +44 1825 830 332
E-mail: auk@lineone.net

Dr Falk R. RITTIG
Manager, Int.l Affairs
BASF
P.O. Box 120
D-67114 Limburgerhof
Germany
Tel.: +49 621 60 27377
Fax: +49 621 60 27701
E-mail: falk.rittig@Apd.X400.basf-ag.de

Mr Shigeo T. TAMAGAWA
Assistant Director
3-2-5 Kasumigaseki
Chiyoda-Ku, Tokyo
100-6070 Japan
Tel.: +81 3 3592 4457
Fax: +81 3 3592 4252

Mr Shigeji SUGIMOTO
Assistant Director, Regulatory Affairs
Nippon Soda Co., Ltd.
2-1, 2-Chome, Ohtemachi
Chiyoda-Ku,
100-8165 Tokyo
Tel.: +81 3 3245 6285
Fax : +81 3 3245 6289

Dr David R. TENANT
Principal TAS Environ
31 Dover Street
London W1X 3RA
Tel.: +44 171 629 1955
Fax: +44 171 629 1975
E-mail: dtennant@environcorp.com

Dr Thomas SKRIPSKY
Head Insect Coutrol/Animal Health
R-1058.54
Postfach Novartis AG
CH 4002 Basel
Switzerland
Tel.: +41 61 697 6600
Fax : +41 61 697 5334
E-mail: thomas.skrisky@apnovartis.com

Dr Janet OLLINGER
Registration Manager
Rohm and Haas
100 Independence Mall West
Philadelphia, PA 19106
USA
Tel.: +1 215 592 3058
Fax: +1 215 592 3414
E-mail: janetollinger@Rohmhaas.com

Mr Masao SHIGEMURA
Assistant Manager, Regulatory Affairs Department,
Nihon Nohyaku Co., Ltd.
2-5 Nihonbashi 1-Chome, Chuo-Ku
Tokyo 103-8236
Japan
Tel.: +81 3 3274 3383
Fax : +81 3 3281 2443

Mr Robert J. HISLOP
Representing International Federation of Fruit Juice Producers
Procter and Gamble Gmbh
Sulzbacher Strasse 40
65823 Schwalbach
Germany
Tel.: +49 6196 89 4962
Fax : +49 6196 89 4476
E-mail: Hislop.ir@pg.com

Mr Nobuyuki HASHIZUME
Manager, SDS Biotech
12-7, Higashi Shimbashi 2-Chome
Minato-ku, Tokyo 105
Japan
Tel.: +81 3 3436 7446
Fax : +81 3 3436 0989

Mr Yukiharu TANAKA
Manager, Registration & Regulatory Affairs Group
Tomen Corporation
14-27, Akasaka 2 Chome, Minato-Ku,
Tokyo 107-8677
Tel.: +81 3 3588 7481
Fax: +81 3 3588 9930
E-mail: tanaka@tokyo6.tomen.co.jp

INTERNATIONAL CO-OPERATIVE ALLIANCE (ICA)

Mr Hiroshi SUZUKI
Japanese Consumers' Cooperative Union
5th Floor, Myojo Building, 3-5-11
Sendagaya, Shibuya, Tokyo
Japan
Tel.: + 81 3 3497 9136
Fax: + 81 3 5474 5542

Mr Yoshikazu NAKAGAWA
Consumers Co-operative Kobe
1-3-23 Okamoto, Higashinada-Ku
Kobe, Japan
Tel.: +81 78 453 0116
Fax: +81 78 453 0185

INSTITUTE OF FOOD TECHNOLOGISTS (IFT)

Dr Chad B. SANDUSKY
Director, Safety and Exposure Assessment
RAS-ENVIRON
4350 North Fairfax Drive
Suite 300
Arlington, VA 22203
Tel.: +703 516 2490
Fax.: +703 516 2590
E-mail: csandusk@tasinc.com

INTERNATIONAL DAIRY FEDERATION (IDF)
FEDERATION INTERNATIONALE DE LAITERIE (FIL)

Ir Louis G.M.Th. TUINSTRA
Representative IDF
Square Vergote
B-1030 Brussels
Belgium
Tel.: +32 2 733 9888
Fax : +32 2 733 0413
E-mail: fil-idf@mail.interpac.be

INTERNATIONAL LIFE SCIENCES INSTITUTE (ILSI)

Mr W. Martin STRAUSS
Director Int. Reg. Org.
Monsanto Company
Suite 105
3025 Winward Plaza
Alpharetta, GA 3005
USA
Tel.: +1 770 667 8600
Fax : +1 770 521 9419
E-mail: warren.m.strauss@monsanto.com

INTERNATIONAL TOXICOLOGY INFORMATION CENTRE (ITIC)

Dr G. VETTORAZZI
Paseo Ramón Maria de Lili, 1, 4-D
E-20002 San Sebastian
Spain
Tel: +34 943 32 0455
Fax: +34 943 32 0487
E-mail: itic@lander.es

John R. WESSEL
Vice President
Health & Environment International, Ltd.
4101 Flintlock Court, Suite 100
Glenelg, Maryland 21737
USA
Tel.: +1 301 854 5161
Fax: +1 301 854 5162
E-mail: jwessel@erols.com

Dr Steve SAUNDERS
Frito-Lay Technology Center
7701 Legacy Drive
Plano, Texas 75024-4099
USA
Tel.: +1 972 334 4149
Fax : +1 972 334 6830
E-mail: steve.saunders@fritolay.com

Dr J. Barbara PETERSEN
Novigen Sciences, Inc.
1730 Rhode Island Atve NW # 1100
Washington, DC 20036
Tel.: +1 202 293 5374
Fax : +1 202 293 5377
E-mail: petersen@novigensci.com

INTERNATIONAL UNION OF PURE AND APPLIED CHEMICSTRY (IUPAC)

Mr Ken RACKE
Global Regulatory Leader
Dow Agrosciences
9330 Zionsville Road
BLDG 308/2B
Indianapolis, IN 46268
USA
Tel.: +1 317 337 4654
Fax : +1 317 337 4966
E-mail: kracke@dowagro.com

Ms Sue-Sun WONG
Senior Specialist
11 Kung-Ming Rd, Wufeng
Tachung Hsien
Taiwan
Tel.: +886 4 330 2101/401
Fax : +886 4 332 4738
E-mail: sswong@tactri.gov.tw

OFFICE INTERNATIONAL DE LA VIGNE ET DU VIN (OIV)

Dr A.P. Dominique TUSSEAU
Scientific secretary-Oenological Commission
Office International de la Vigne et du Vin
c/o CIVC, PB 135
51204 Epernay Cedex
France
Tel.: +33 3 26 511930
Fax: +33 3 26 511957

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

Dr. A. AMBRUS
FAO Consultant for Joint Secretary to the JMPR
FAO/IAEA Joint Division
Wagramer Strasse 5, P.O. Box 100
A-1400 Vienna, Austria
Tel.: +43 1 20602 6059
Fax: +43 1 20607
E-mail: a.ambrus@1aea.org
Correspondence should be addressed to: Joint FAO Secretary to the JMPR
c/o AGPP, FAO
Viale delle Terme di Caracalla
Rome 00100
Italy
Tel.: +39 6 570 53222 / 570 55757
Fax: +39 6 570 56347
E-mail: brenda.jones@fao.org

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

Dr John L. HERRMAN
Joint Secretary of JMPR
International Programme on Chemical Safety
World Health Organization
1211 Geneva 27
Switzerland
Tel: +41 22 791 3569
Fax: +41 22 791 4848
E-mail: herrmanj@who.ch

Dr Gerald G. Moy
GEMS/Food Coordination Programme of Food Safety and Food Aid
IZII Geneva 27
Switzerland
Tel.: +41 22 791 3698
Fax: +41 22 791 4807
E-mail: moyg@who.ch

Mrs S.A. Stella DENLOYE
WHO Intern
P.O. Box 1
3720 BA Bilthoven
The Netherlands
Tel.: +31 30 274 2876
E-mail: stelladenloye@rivm.nl

JOINT FAO/WHO SECRETARIAT

Dr Y. YAMADA
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO
Via delle Terme di Caracalla
00100 Rome, Italy
Tel.: +39 6 5705 5443
Fax: +39 6 5705 4593
E-mail: yukiko.yamada@fao.org

Dr. J. MASKELIUNAS
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO
Via delle Terme di Caracalla
00100 Rome, Italy
Tel.: +39 6570 53967
Fax: +39 6570 54593
E-mail: jeronimas.maskeliunas@fao.org

NETHERLANDS SECRETARIAT
SECRETARIAT PAYS-BAS
SECRETARIA PAISES-BAJOS

Drs J.W. DORNSEIFFEN
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands
Tel.: +31 70 3406961
Fax: +31 70 3405177
E-mail: k.a.schenkveld@minvws.nl

Drs R. HITTENHAUSEN-GELDERBLOM
Ministry of Health, Welfare and Sport
Inspectorate for Health Protection
Hoogte Kadijk 401
1018 BK Amsterdam
The Netherlands
Tel.: 020-6237525
E-mail: hit@am.igb.nl

Drs N.B. LUCAS LUIJCKX
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands

ir R. TOP
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands

Ms Sue BAKER
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands

Mr W. BUITENWEG
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5850
2280 HW Rijswijk
The Netherlands

Ms Anneke CORTENBACH
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands

ir P.D.A. OLTHOF
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands
Tel.: +31 70 3406955
Fax: +31 70 3405177
E-mail: pd.olthof@minvws.nl

Mrs. T.P. POEPON
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands

Mrs. K.A. SCHENKEVELD
Ministry of Health, Welfare and Sport
Directorate of Public Health
P.O. Box 5406
2280 HK Rijswijk
The Netherlands
Tel.: +31 70 3405188
Fax: +31 70 3405177
E-mail: k.a.schenkveld@minvws.nl

DRAFT AND DRAFT REVISED MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Advanced to Step 8 of the Codex Procedure)

	Commodity	MRL (mg/kg)		
17	**CHLORPYRIFOS**			
FC 1	Citrus fruits	2		(a)
31	**DIQUAT**			
AL 1020	Alfalfa fodder	100		
VD 71	Beans (dry)	0.2		
AL 1023	Clover	50		
VD 533	Lentil (dry)	0.2		
GC 645	Maize	0.05	(*)	(a)
GC 647	Oats	2		
VD 72	Peas (dry)	0.2		
VR 589	Potato	0.05		(a)
PM 110	Poultry meat	0.05	(*)	
PO 111	Poultry, Edible offal of	0.05	(*)	
GC 649	Rice	10		(a)
CM 649	Rice, Husked	1		(a)
VD 541	Soya bean (dry)	0.2		
SO 702	Sunflower seed	1		(a)
OC 172	Vegetable oils, Crude	0.05	(*)	(a)
CF 1211	Wheat flour	0.5		(a)
51	**METHIDATHION**			
FB 269	Grapes	1		(a)
FP 230	Pear	1		(a)
59	**PARATHION-METHYL**			
VB 400	Broccoli	0.2		(a)
VB 41	Cabbages, Head	0.2		(a)
CM 649	Rice, Husked	1		
112	**PHORATE**			
VR 589	Potato	0.2		
178	**BIFENTHRIN**			
GC 640	Barley	0.05	(*)	
GC 645	Maize	0.05	(*)	
192	**FENARIMOL**			
AB 226	Apple pomace, Dry	5		
MO 1280	Cattle kidney	0.02	(*)	
MO 1281	Cattle liver	0.05		
MM 812	Cattle meat	0.02	(*)	
DF 269	Dried grapes (=currants, raisins and sultanas)	0.2		
FB 269	Grapes	0.3		
FS 247	Peach	0.5		
VO 445	Peppers, Sweet	0.5		

(*) At or about the limit of determination; and
(a) Draft Revised Maximum Residue Limit.

FP	9	Pome fruits	0.3

DRAFT REVISED RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS
(Advanced to Step 8 of the Codex Procedure)

CONTENTS

DRAFT REVISED RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS

1. OBJECTIVE

The objective of these sampling procedures is to enable a representative sample to be obtained from a lot, for analysis to determine compliance with Codex Maximum Residue Limits (MRLs).

2. PRINCIPLES

2.1 Codex MRLs are intended to ensure good agricultural practices in the use of pesticides and are set at the appropriate levels required to minimize exposure of consumers and animals and to protect crops, food or feeding stuffs.

2.2 A Codex MRL for a plant, egg or dairy product takes into account the maximum level expected to occur in a composite sample, which has been derived from multiple units of the treated product and which is intended to represent the average residue level in a lot. A Codex MRL for meat and

(*) At or about the limit of determination; and
(a) Draft Revised Maximum Residue Limit.

other poultry products takes into account the maximum level expected to occur in the tissues of individual treated animals or birds.

2.3 In consequence, MRLs for meat and poultry products apply to a bulk sample derived from a single primary sample, whereas MRLs for plant products, eggs and dairy products apply to a composite bulk sample derived from 1-10 primary samples.

3. SAMPLING PROCEDURES

Notes. (a) The terms used are defined in Annex I and the procedures are shown schematically in Annex II.

(b) ISO recommendations for sampling of grain[1], or other commodities shipped in bulk may be adopted, if required.

3.1 Precautions to be taken

Contamination and deterioration of samples must be prevented at all stages, because they may affect the analytical results. Each lot to be checked for compliance must be sampled separately.

3.2 Collection of primary samples

The minimum number of primary samples to be taken from a lot is determined from Table 1. Each primary sample should be taken from a randomly chosen position in the lot, as far as practicable. The primary samples must consist of sufficient material to provide the laboratory sample(s) required from the lot.

Notes. (a) Sampling devices required for grain[1], pulses[2] and tea[3] are described in ISO recommendations and those required for dairy products[4] are described by the IDF.

3.3 Preparation of the bulk sample

3.3.1 Procedure for meat and poultry products (Table 3)

Each primary sample is considered to be a separate bulk sample and it should be mixed well, if practicable.

3.3.2 Procedure for plant products, eggs or dairy products (Tables 4 and 5)

The primary samples should be combined and mixed well, if practicable, to form the bulk sample.

3.3.3 Alternative procedure where mixing to form the bulk sample is inappropriate or impractical

Where units may be damaged (and thus residues may be affected) by the processes of mixing or sub-division of the bulk sample, or where large units cannot be mixed to produce a more uniform residue distribution, the units should be allocated randomly to replicate laboratory samples at the time of taking the primary samples. In this case, the bulk sample is considered to be the sum of the laboratory samples analyzed.

3.4 Preparation of the laboratory sample

Where the bulk sample is larger than is required for a laboratory sample, it should be divided to provide a representative portion. A sampling device, quartering, or other appropriate size reduction process may be used but units of fresh plant products or whole eggs should not be cut or broken. Where required, replicate laboratory samples should be withdrawn at this stage or they may be prepared as in 3.3.3, above. The minimum sizes required for laboratory samples are given in Tables 3 and 4.

3.5 Sampling record

The sampling officer must record the nature and origin of the lot; the owner, supplier or carrier of it; the date and place of sampling; and any other relevant information. Any departure from the recommended method of sampling must be recorded. A signed copy of the record must

accompany each replicate laboratory sample and a copy should be retained by the sampling officer.

3.6 **Packaging and transmission of the laboratory sample**

The laboratory sample must be placed in a clean, inert container which provides secure protection from contamination, damage and leakage. The container should be sealed, the sampling record must be attached and the sample delivered to the laboratory as soon as practicable. Spoilage in transit must be avoided, e.g. fresh samples should be kept cool and frozen samples must remain frozen. Samples of meat and poultry products should be frozen prior to despatch, unless transported to the laboratory before spoilage can occur.

3.7 **Preparation of the analytical sample**

The laboratory sample should be given a unique identifier which, together with the date of receipt and the sample size, should be added to the sample record. The part of the commodity to be analysed[5,6], i.e. the analytical sample, should be separated as soon as practicable. Where the residue level must be calculated to include parts which are not analysed, the weights of the separated parts must be recorded.

3.8 **Preparation and storage of the analytical portion**

The analytical sample should be comminuted, if appropriate, and mixed well, to enable representative analytical portions to be withdrawn. The size of the analytical portion should be determined by the analytical method and the efficiency of mixing. The methods for comminution and mixing should not affect the residues present in the analytical sample. Where appropriate, the analytical sample should be processed under special conditions, e.g. at sub-zero temperature, to minimize adverse effects. Where processing could affect residues and where practical alternative procedures are not available, the analytical portion may consist of whole units, or segments removed from whole units. If the analytical portion thus consists of few units or segments, it is unlikely to be representative of the analytical sample and sufficient replicate portions must be analysed, to indicate the uncertainty of the mean value. If analytical portions are to be stored before analysis, the method and length of time of storage should be such that they do not affect the level of residues present. Additional portions must be withdrawn for replicate and confirmatory analyses, as required.

4. CRITERIA FOR DETERMINING COMPLIANCE

4.1 Analytical results must be derived from samples which were in a fit state for analysis and they must be supported by acceptable quality control data (e.g. for instrument calibration and pesticide recovery - refer to Codex Alimentarius, Volume 2, Section 4.2, "Guidelines on good laboratory practice in pesticide residue analysis"). Results should not be corrected for recovery. Where a residue is found to exceed an MRL, its identity should be confirmed and its concentration must be verified by analysis of one or more additional analytical portions.

4.2 The Codex MRL applies to the bulk sample.

4.3 The lot complies with a Codex MRL where the MRL is not exceeded by the analytical result(s).

4.4 Where results for the bulk sample exceed the MRL, a decision that the lot is non-compliant must take into account: (i) the range of results obtained from replicate laboratory samples and/or replicate analytical portions, as applicable; and (ii) the accuracy and precision of analysis, as indicated by the supporting quality control data.

Table 1. Minimum number of primary samples to be taken from a lot

	Minimum number of primary samples to be taken from the lot	
(a) Meat and poultry products		
a non-suspect lot	1	
a suspect lot	approximately 6-30	(see note(i) , below)
(b) Plant products, eggs and dairy products		
(i) Products, packaged or in bulk, which can be assumed to be well mixed or homogeneous	1	see note (d) under definition of a lot, Annex 1
(ii) Products, packaged or in bulk, which may not be well mixed or homogeneous		see note (ii), below
either:		
Weight of lot, kg		
<50	3	
50-500	5	
>500	10	
or		
Number of cans, cartons or other containers in the lot		
1-25	1	
26-100	5	
>100	10	

Notes. (i) If the location of contaminated units within a lot of a meat, dairy or poultry product cannot be determined by visual inspection, the number of samples to be taken from a suspect lot will depend on the degree of confidence required (see Table 2).

(ii) For products comprised of large units, in class A only, the minimum number of primary samples should comply with the minimum number of units required for the laboratory sample (see Table 4).

Table 2. Number of randomly selected primary samples required for a given probability of detecting at least one non-compliance in a lot of meat or poultry product

Incidence of violative residues in the lot	Minimum number of samples (n_o) required to detect a violative residue with a probability of:		
%	*90%*	*95%*	*99%*
90	*1*	*-*	*2*
80	*-*	*2*	*3*
70	*2*	*3*	*4*
60	*3*	*4*	*5*
50	*4*	*5*	*7*
40	*5*	*6*	*9*
35	*6*	*7*	*11*
30	*7*	*9*	*13*
25	*9*	*11*	*17*
20	*11*	*14*	*21*
15	*15*	*19*	*29*
10	*22*	*29*	*44*
5	*45*	*59*	*90*
1	*231*	*299*	*459*
0.5	*460*	*598*	*919*
0.1	*2302*	*2995*	*4603*

Notes. (a) The Table assumes random sampling.

(b) Where number of primary samples indicated in Table 2 is more than about 10% of units in the total lot, the number of primary samples taken may be fewer and should be calculated as follows:

$$n = \frac{n_0}{1 + (n_0 - 1) / N}$$

where n *= minimum number of primary samples to be taken*
n_o *= number of primary samples given in Table 2*
N *= number units, capable of yielding a primary sample, in the lot.*

(c) Where a single primary sample is taken, the probability of detecting a violation is similar to the incidence of violative residues.

(d) This Table should not be used to determine the probability of detecting a violation in a lot of a plant product. As composite samples are prepared for plant products, the statistical distribution of residues in the lot must be known, to determine the probability.

Table 3. Meat and poultry products: description of primary samples and minimum size of laboratory samples

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
Class B, primary food commodities of animal origin				
1.	**Mammalian meats**, type 06, group 030 Note: for enforcement of MRLs for fat soluble pesticides samples must be taken according to section 2 below.			
1.1	**Large mammals**, whole or half carcass, usually 10 kg or more	cattle sheep pigs	whole or part of diaphragm, supplemented by cervical muscle, if necessary	**0.5 kg**
1.2	**Small mammals** whole carcass	rabbits	whole carcass or hind quarters	**0.5 kg,** after removal of skin and bone
1.3	**Mammal meat parts, loose fresh/chilled/frozen** packaged or otherwise	quarters chops steaks shoulders	whole unit(s), or a portion of a large unit	**0.5 kg,** after removal of bone
1.4	**Mammal meat parts, bulk frozen**	quarters chops	**either** a frozen cross-section of a container **or** the whole (or portions) of individual meat parts	**0.5 kg,** after removal of bone
2.	**Mammalian fats, including carcass fat**, type 06, group 031 Note: samples of fat taken as described in 2.1, 2.2 and 2.3 may be used to determine compliance of the fat or the whole product, with the corresponding MRLs			
2.1	**Large mammals, at slaughter, whole or half carcass** usually 10 kg or more	cattle sheep pigs	kidney, abdominal or subcutaneous fat cut from one animal	**0.5 kg**
2.2	**Small mammals, at slaughter, whole or half carcass** <10 kg		abdominal or subcutaneous fat from one or more animals	**0.5 kg**
2.3	**Mammal meat parts**	legs chops steaks	**either** visible fat, trimmed from unit(s)	**0.5 kg**
			or whole unit(s) or portions of whole unit(s), where fat is not trimmable	**2 kg**
2.4	**Mammal bulk fat tissue**	-	units taken with a sampling device from at least 3 positions	**0.5 kg**
Class B, primary food commodities of animal origin				
3.	**Mammalian offals**, type 06, group 032			
3.1	**Mammal liver**, fresh/chilled/frozen	-	whole liver(s), or part of liver	**0.4 kg**
3.2	**Mammal kidney**, fresh/chilled/frozen	-	1 or both kidneys from 1 or more animal	**0.2 kg**

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
3.3	**Mammal heart**, fresh/chilled/frozen	-	Whole heart(s), or ventricle portion only, if large	**0.4 kg**
3.4	**Other mammal offal,** fresh/chilled/frozen	intestines brains	Part or whole unit from 1 or more animals, or a cross-section taken from bulk frozen product	**0.5 kg**
4.	**Poultry meats**, type 07, group 036 Note: for enforcement of MRLs for fat soluble pesticides samples must be taken according to section 5 below.			
4.1	**Bird, large-sized carcass** >2 kg	turkey goose mature chicken	thighs, legs and other dark meat	**0.5 kg** after removal of skin and bone
4.2	**Birds, medium-sized carcass** 500 g-2 kg	duckling guinea fowl young chicken	thighs, legs or other dark meat from at least 3 birds	**0.5 kg** after removal of skin and bone
4.3	**Birds, small-sized carcass** <500 g carcass	quail pigeon	carcasses from at least 6 birds	**0.2 kg** of muscle tissue
4.4	**Bird parts** fresh/chilled/frozen, retail or wholesale packaged	legs quarters	packaged units, or individual parts	**0.5 kg** (after removal of skin and bone)
Class B, primary food commodities of animal origin				
5.	**Poultry fats**, including carcass fat, type 07, group 037 Note: samples of fat taken as described in 5.1 and 5.2 may be used to determine compliance of the fat or the whole product, with the corresponding MRLs			
5.1	**Birds, at slaughter, whole or part-carcass**	chickens turkeys	units of abdominal fat from at least 3 birds	**0.5 kg**
5.2	**Bird meat parts**	legs breast muscle	**either** visible fat, trimmed from unit(s)	**0.5 kg**
			or whole unit(s) or portions of whole unit(s), where fat is not trimmable	**2 kg**
5.3	**Bird fat tissue in bulk**	-	units taken with a sampling device from at least 3 positions	**0.5 kg**
6.	**Poultry offals**, type 07, group 038			
6.1	**Edible bird offal, except goose and duck fat liver and similar high value products**		units from at least 6 birds, or a cross-section from a container	**0.2 kg**
6.2	**Goose and duck fat liver and similar high value products**		unit from 1 birds or container	**0.05 kg**
Class E, processed foods of animal origin				
7.	**Secondary food commodities of animal origin**, type 16, group 080 dried meats **Derived edible products of animal origin**, type 17, group 085 processed animal fats **Manufactured food (single ingredient) of animal origin**, type 18 **Manufactured food (multi-ingredient) of animal origin**, type 19			

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
7.1	**Mammal or bird, comminuted, cooked canned, dried, rendered, or otherwise processed products,** including multi-ingredient products	ham sausage minced beef chicken paste	packaged units, **or** a representative cross-section from a container, **or** units (including juices, if any) taken with a sampling device	**0.5 kg** or **2 kg** if fat content <5%

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Table 4. Plant products: description of primary samples and minimum size of laboratory samples

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
Class A, primary food commodities of plant origin				
1.	**All fresh fruits**, type 1, groups 001-008 **All fresh vegetables**, type 2, groups 009-019, **except** group 015 (dry pulses)			
1.1	**small sized fresh products** units generally < 25 g	berries peas olives	whole units, or packages, or units taken with a sampling device	**1 kg**
1.2	**medium sized fresh products** units generally 25-250 g	apples oranges	whole units,	**1 kg** **(at least 10 units)**
1.3	**large sized fresh products** units generally > 250 g	cabbages cucumbers grapes(bunches)	whole units	**2 kg** **(at least 5 units)**
2.	**Pulses**, type 2, group 015 **Cereal grains**, type 3, group 020 **Tree nuts**, type 4, group 022 **Oilseeds**, type 4, group 023 **Seeds for beverages and sweets**, type 4, group 024	soya beans rice, wheat except coconuts coconuts peanuts coffee beans		**1 kg** **1 kg** **1 kg** **5 units** **500 g** **500 g**
3.	**Herbs**, type 5, group 027 *(for dried herbs see: Class D, type 12, in section 5 of this Table)* **Spices**, type 5, group 028	fresh parsley others, fresh dried	whole units whole units or taken with a sampling device	**0.5 kg** **0.2 kg** **0.1 kg**
Class C, primary animal feed commodities				
4.	**Primary feed commodities of plant origin**, type 11			
4.1	**Legume animal feeds, and other forages and fodders**		whole units, or units taken with a sampling device	**1 kg** **(at least 10 units)**
4.2	**Straw, hay and other dried products**		units taken with a sampling device	**0.5 kg** **(at least 10 units)**
Class D, processed foods of plant origin				
5.	**Secondary food commodities of plant origin**, type 12, dried fruits, vegetables, herbs, milled cereal products **Derived products of plant origin**, type 13, teas, vegetable oils, juices, by-products for animal feed and miscellaneous products **Manufactured foods (single ingredient) of plant origin**, type 14 **Manufactured foods (multi-ingredient) of plant origin**, type 15, including products with ingredients of animal origin where the ingredient(s) of plant origin predominate(s), and group 078, breads			
5.1	**Products of high unit value**		packages or units taken with a sampling device	**0.1 kg***

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
5.2	**Solid products of low bulk density**	hops tea	packaged units, or units taken with a sampling device	**0.2 kg**
5.3	**Other solid products**	bread flour apple pomace dried fruit	packages or other whole units, or units taken with a sampling device	**0.5 kg**
5.4	**Liquid products**	vegetable oils juices	packaged units, or units taken with a sampling device	**0.5 l or 0.5 kg**

* A smaller laboratory sample may be taken from a product of exceptionally high value but the reason for doing so should be noted in the sampling record.

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Table 5. Egg and dairy products: description of primary samples and minimum size of laboratory samples

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
Class B, primary food commodities of animal origin				
1.	**Poultry eggs,** type 7, group 039			
1.1	**Eggs, except quail and similar, whole or otherwise**		whole eggs, or units taken with a sampling device	**12 whole chicken eggs, 6 whole goose or duck eggs**
1.2	**Eggs, quail and similar**		whole eggs	**24 whole eggs**
Class E, processed foods of animal origin				
2.	**Secondary food commodities of animal origin**, type 16, group 082 skimmed milks, evaporated milks and milk powders **Derived edible products of animal origin**, type 17, group 086 milkfats, group 087 butters, butteroils, creams, cream powders, caseins, etc. **Manufactured food (single ingredient) of animal origin**, type 18, group 090 **Manufactured food (multi-ingredient) of animal origin**, type 19, group 092 (including products with ingredients of plant origin where the ingredient(s) of animal origin predominates(s))			
2.1	**Liquid milks, milk powders, evaporated milks and creams, creams, dairy ice creams, yoghurts**		packaged units, or units taken with a sampling device	**0.5 l** (liquid) or **0.5 kg** (solid)
Notes.	*(i) Evaporated milks and evaporated creams in bulk must be mixed thoroughly before sampling, scraping adhering material from the sides and bottom of containers and stirring well. About 2-3 l should be removed and again stirred well before removing the laboratory sample.* *(ii) Milk powders in bulk should be sampled by passing a dry borer tube through the powder at an even rate.* *(iii) Creams in bulk should be mixed thoroughly with a plunger before sampling but foaming, whipping and churning must be avoided.*			
2.2	**Butter and butteroils**	butter, whey butter, low fat spreads containing butter fat, anhydrous butteroil, anhydrous milkfat	whole or parts of packaged units, **or** units taken with a sampling device	**0.2 kg or 0.2 l**
Note.	*Butter in bulk should be sampled with a minimum of 2 cores. Pats or rolls >250g should be quartered and opposite quarters taken as units.*			
2.3	**Cheeses, including processed cheeses**			
	units 0.3 kg or greater		whole units, or units cut with a sampling device	**0.5 kg**
	units < 0.3 kg		whole units, or units cut with a sampling device	**0.3 kg**
Note.	*Cheeses with a circular base should be sampled by making two cuts radiating from the centre. Cheeses with a rectangular base should be sampled by making two cuts parallel to the sides.*			
2.4	**Liquid, frozen or dried egg products**		units taken aseptically with a sampling device	**0.5 kg**

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Annex I. **DEFINITION OF TERMS**

Analytical portion

A representative quantity of material removed from the analytical sample, of proper size for measurement of the residue concentration.

Note. A sampling device may be used to withdraw the analytical portion.

Analytical sample

The material prepared for analysis from the laboratory sample, by separation of the portion of the product to be analysed[5,6] and then by mixing, grinding, fine chopping, etc., for the removal of analytical portions with minimal sampling error.

Note. Preparation of the analytical sample must reflect the procedure used in setting Codex MRLs and thus the portion of the product to be analysed may include parts that are not normally consumed.

Bulk sample

For plant products, the combined and well mixed aggregate of the primary samples taken from a lot. For meat, dairy and poultry products, the well mixed primary sample.

Notes. (a) The primary samples must contribute sufficient material to enable all laboratory samples to be withdrawn from the bulk sample.

(b) Where separate laboratory samples are prepared during collection of the primary sample(s), the bulk sample is the conceptual sum of the laboratory samples, at the time of taking the samples from the lot.

Laboratory sample

The sample sent to, or received by, the laboratory. A representative quantity of material removed from the bulk sample.

Notes. (a) The laboratory sample may be the whole or a part of the bulk sample.

(b) Units should not be cut or broken to produce the laboratory sample(s), except where sub-division of units is specified in Table 3.

(c) Replicate laboratory samples may be prepared.

Lot

A quantity of a food material delivered at one time and known, or presumed, by the sampling officer to have uniform characteristics such as origin, producer, variety, packer, type of packing, markings, consignor, etc. A suspect lot is one which, for any reason, is suspected to contain an excessive residue. A non-suspect lot is one for which there is no reason to suspect that it may contain an excessive residue.

Notes. (a) Where a consignment is comprised of lots which can be identified as originating from different growers, etc., each lot should be considered separately.

(b) A consignment may consist of one or more lots.

(c) Where the size or boundary of each lot in a large consignment is not readily established, each one of a series of wagons, lorries, ship's bays, etc., may be considered to be a separate lot.

(d) A lot may be mixed by grading or manufacturing processes, for example.

Primary sample

One or more units taken from one position in a lot.

Notes. *(a) The position from which a primary sample is taken in the lot should preferably be chosen randomly but, where this is physically impractical, it should be a random position in the accessible parts of the lot.*
(b) The number of units required for a primary sample should be determined by the number of primary samples to be taken from the lot and by the minimum size and number of laboratory samples required.
(c) For plant, egg and dairy products, where more than one primary sample is taken from a lot, each should contribute an approximately similar proportion to the bulk sample.
(d) Units may be allocated randomly to replicate laboratory samples at the time of collecting the primary sample(s), in cases where the units are of medium or large size and mixing the bulk sample would not make the laboratory sample(s) more representative, or where the units (e.g. eggs, soft fruit) could be damaged by mixing.
(e) Where primary samples are taken at intervals during loading or unloading of a lot, the sampling "position" is a point in time.
(f) Units should not be cut or broken to produce the primary sample(s), except where sub-division of units is specified in Table 3.

Sample

One or more units selected from a population of units, or a portion of material selected from a larger quantity of material.

Sampling

The procedure used to draw and constitute a sample.

Sampling device

(i) A tool such as a scoop, dipper, borer, knife or spear, used to remove a unit from bulk material, from packages (such as drums, large cheeses) or from units of meat or poultry products which are too large to be taken as primary samples. (ii) A tool such as a riffle box, used to prepare a laboratory sample from a bulk sample, or to prepare an analytical portion from an analytical sample.

Notes. *(a) Specific sampling devices are described by ISO[1,2,3] and IDF[4] standards.*
(b) For materials such as loose straw or leaves, the hand of the sampling officer may be considered to be a sampling device.

Sampling officer

A person trained in sampling procedures and, where required, authorised by the appropriate authorities to take samples.

Note. The sampling officer is responsible for all procedures leading to and including preparation, packing and shipping of the laboratory sample(s). The officer must understand that consistent adherence to the specified sampling procedures is necessary, must provide complete documentation for samples, and should collaborate closely with the laboratory.

Sample size

The number of units, or quantity of material, constituting the sample.

Unit

The smallest discrete portion in a lot, which should be withdrawn to form the whole or part of a primary sample.

Note. *Units should be identified as follows.*

(a) ***Fresh fruit and vegetables****. Each whole fruit, vegetable or natural bunch of them (e.g. grapes) should form a unit, except where these are small. Units of packaged small products may be identified as in (d), below. Where a sampling device may be used without damaging the material, units may be created by this means. Individual fresh fruit or vegetables must not be cut or broken to produce units.*

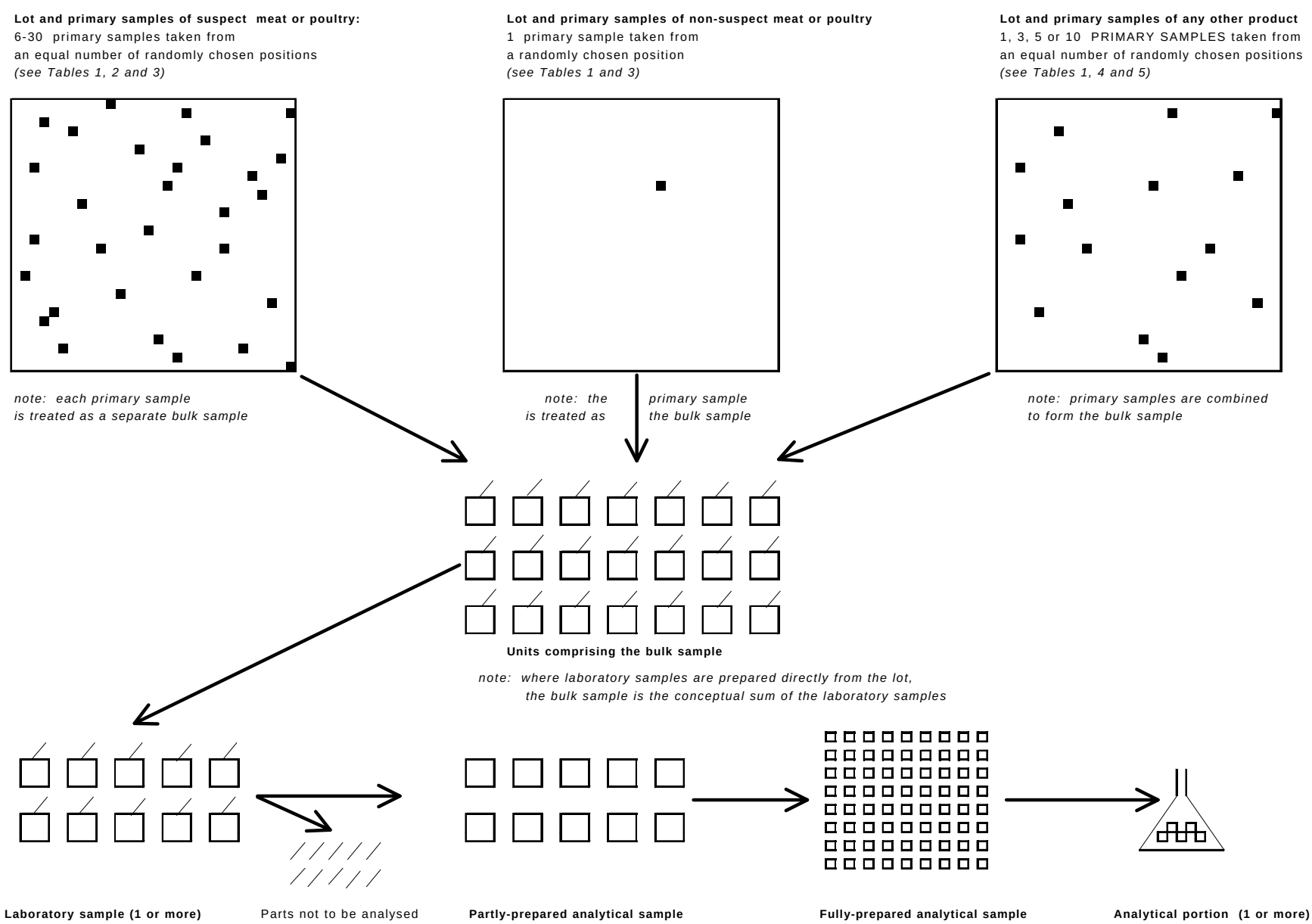
(b) ***Large animals or parts or organs of them****. A portion, or the whole, of a specified part or organ should form a unit. Parts or organs may be cut to form units.*

(c) ***Small animals or parts or organs of them****. Each whole animal or complete animal part or organ present may form a unit. Where packaged, units may be identified as in (d), below. Where a sampling device may be used without affecting residues, units may be created by this means.*

(d) ***Packaged materials****. The smallest discrete packages should be taken as units. Where the smallest packages are very large, they should be sampled as bulk, as in (e), below. Where the smallest packages are very small, a pack of packages may form the unit.*

(e) ***Bulk materials and large packages*** *(such as drums, cheeses, etc.) which are individually too large to be taken as primary samples. The units are created with a sampling device.*

Annex II. SCHEMATIC REPRESENTATION OF SAMPLING



REFERENCES

1. **International Organisation for Standardization**, 1979. International Standard ISO 950: Cereals - Sampling (as grain).

2. **International Organisation for Standardization**, 1979. International Standard ISO 951: Pulses in bags - Sampling.

3. **International Organisation for Standardization**, 1980. International Standard ISO 1839: Sampling - Tea.

4. **International Dairy Federation**, 1985. International IDF Standard 50B: Milk and milk products - methods of sampling.

5. **Joint FAO/WHO Food Standards Programme** (1993). "Portion of commodities to which Codex Maximum Residue Limits apply and which is analysed". *Codex Alimentarius*, Volume 2, Section 4.1, 389-404. FAO Rome. ISBN: 92-5-103271-8.

6. **Joint FAO/WHO Food Standards Programme** (1993). "Codex classification of foods and animal feeds". *Codex Alimentarius*, Volume 2, Section 2, 147-366. FAO Rome. ISBN: 92-5-103271-8.

PROPOSED DRAFT AND PROPOSED DRAFT REVISED MAXIMUM RESIDUE LIMITS FOR PESTICIDES

(Advanced to Step 5 of the Codex Procedure with omission of Steps 6 and 7 for Adoption at Step 8)

Code	Commodity	MRL (mg/kg)		
22	**DIAZINON**			
PE 840	Chicken eggs	0.02	(*)	
PM 840	Chicken meat	0.02	(*)	
PO 840	Chicken, Edible offal of	0.02	(*)	
75	**PROPOXUR**			
VL 482	Lettuce, Head	0.5		(a)
VR 589	Potato	0.02	(*)	(a)
95	**ACEPHATE**			
VB 400	Broccoli	2		
VB 41	Cabbages, Head	2		
VB 404	Cauliflower	2		
VO 448	Tomato	1		
100	**METHAMIDOPHOS**			
VB 41	Cabbages, Head	0.5		
VB 404	Cauliflower	0.5		
190	**TEFLUBENZURON**			
VB 402	Brussels sprouts	0.5		
VB 41	Cabbages, Head	0.2		
FS 14	Plums (including prunes)	0.1		
FP 9	Pome fruits	1		
VR 589	Potato	0.05	(*)	
192	**FENARIMOL**			
DH 1100	Hops, Dry	5		
195	**FLUMETHRIN**			
MM 812	Cattle meat	0.2	(fat) V	
ML 812	Cattle milk	0.05	F V	
196	**TEBUFENOZIDE**			
FP 9	Pome fruits	1		
CM 649	Rice, Husked	0.1		
TN 678	Walnuts	0.05		

(*) At or about the limit of determination;
(fat) The MRL applies to the fat of meat;
F The residue is fat soluble and MRLs for milk products are derived as explained in the Explanatory Notes of the *Codex Alimentarius* Volume 2B;
V The MRL accommodates veterinary uses; and
(a) Draft Revised Maximum Residue Limit.

PROPOSED DRAFT AND PROPOSED DRAFT REVISED MAXIMUM RESIDUE LIMITS FOR PESTICIDES AND PROPOSED DRAFT REVISED EXTRANEOUS MAXIMUM RESIDUE LIMIT

(Advanced to Step 5 of the Codex Procedure)

Code	Commodity	MRL (mg/kg)		
15	**CHLORMEQUAT**			
GC 640	Barley	0.5		
AS 640	Barley straw and fodder, Dry	20		(a)
SO 691	Cotton seed	0.5		
AF 647	Oat forage (green)	20		
AS 647	Oat straw and fodder, Dry	20		(a)
FP 230	Pear	10		(a)
SO 495	Rape seed	5		
OC 495	Rape seed oil, Crude	0.1	(*)	
GC 650	Rye	3		(a)
CM 650	Rye bran, Unprocessed	10		
AF 650	Rye forage (green)	20		
AS 650	Rye straw and fodder, Dry	20		(a)
CF 1251	Rye wholemeal	3		
GC 654	Wheat	2		(a)
CM 654	Wheat bran, Unprocessed	5		
CF 1211	Wheat flour	0.5		
AS 654	Wheat straw and fodder, Dry	20		(a)
CF 1212	Wheat wholemeal	2		
22	**DIAZINON**			
MM 814	Goat meat	2	(fat) V	
MO 98	Kidney of cattle, goats, pigs & sheep	0.03	V	
MO 99	Liver of cattle, goats, pigs & sheep	0.03	V	
MM 97	Meat of cattle, pigs & sheep	2	(fat) V	(a)
100	**METHAMIDOPHOS**			
FS 247	Peach	1		
VO 448	Tomato	1		
105	**DITHIOCARBAMATES**			
TN 672	Pecan	0.1	(*) T Z	
FS 12	Stone fruits	7	T h, Z	
FB 275	Strawberry	5	H	
117	**ALDICARB**			
VR..589	Potato	0.5		

(*) At or about the limit of determination;
(fat) The MRL applies to the fat of meat;
V The MRL accommodates veterinary uses;
T The MRL is temporary, irrespective of the status of the ADI, until required information has been provided and evaluated;
z, h Based on trials with: z, ziram; and h, thiram. Compound in upper case is that on which the MRL is mainly based; and
(a) Proposed Draft Revised Maximum Residue Limit or Proposed Draft Revised Extraneous Residue Limit.

Code	Commodity	MRL (mg/kg)	
194	**HALOXYFOP**		
FI 327	Banana	0.05	(*)
PE 840	Chicken eggs	0.01	(*)
PM 840	Chicken meat	0.01	(*)
PO 840	Chicken, Edible offal of	0.1	
FC 1	Citrus fruits	0.05	(*)
SO 691	Cotton seed	0.2	
OC 691	Cotton seed oil, Crude	0.5	
AM 1051	Fodder beet	0.3	
FB 269	Grapes	0.05	(*)
SO 697	Peanut	0.05	
VP 63	Peas (pods and succulent=immature seeds)	0.2	
FP 9	Pome fruits	0.05	(*)
VR 589	Potato	0.1	
VD 70	Pulses	0.2	
SO 495	Rape seed	2	
OC 495	Rape seed oil, Crude	5	
OR 495	Rapeseed oil, Edible	5	
CM 1206	Rice bran, Unprocessed	0.02	(*)
CM 649	Rice, Husked	0.02	(*)
CM 1205	Rice, Polished	0.02	(*)
OC 541	Soya bean oil, Crude	0.2	
OR 541	Soya bean oil, Refined	0.2	
VR 596	Sugar beet	0.3	
SO 702	Sunflower seed	0.2	
196	**TEBUFENOZIDE**		
FB 269	Grapes	0.5	

Code	Commodity	EMRL (mg/kg)		
21	**DDT**			
MM 95	Meat (from mammals other than marine mammals)	5	(fat)	(a)

(*) At or about the limit of determination;
(fat) The MRL applies to the fat of meat;
V The MRL accommodates veterinary uses;
T The MRL is temporary, irrespective of the status of the ADI, until required information has been provided and evaluated;
z, h Based on trials with: z, ziram; and h, thiram. Compound in upper case is that on which the MRL is mainly based; and
(a) Proposed Draft Revised Maximum Residue Limit or Proposed Draft Revised Extraneous Residue Limit.

CODEX MAXIMUM RESIDUE LIMITS RECOMMENDED FOR REVOCATION

Code	Commodity	MRL (mg/kg)	
81	**CHLOROTHALONIL**		
FB 264	Blackberries	10	
FC 1	Citrus fruits	5	
VD 534	Lima bean (dry)	0.5	
FB 272	Raspberries, Red, Black	10	
127	**PHENOTHRIN**		
GC 0640	Barley	2	
CM 0649	Rice, Husked	0.1	
GC 0651	Sorghum	2	
GC 0654	Wheat	2	
CM 0654	Wheat bran, Unprocessed	5	
CF 1211	Wheat flour	1	
CF 1210	Wheat germ	5	
CF 1212	Wheat wholemeal	2	

CODEX MAXIMUM RESIDUE LIMITS TO BE REPLACED BY REVISED MAXIMUM RESIDUE LIMITS

17	**CHLORPYRIFOS**		
FC 1	Citrus fruits	0.3	
31	**DIQUAT**		
OR 691	Cotton seed oil, Edible	0.1	
GC 645	Maize	0.1	
VR 589	Potato	0.2	
OR 495	Rapeseed oil, Edible	0.1	
GC 649	Rice	5	
CM 649	Rice, Husked	0.2	
OR 700	Sesame seed oil, Edible	0.1	
SO 702	Sunflower seed	0.5	
OR 702	Sunflower seed oil, Edible	0.1	
CF 1211	Wheat flour	0.2	
51	**METHIDATHION**		
FB 269	Grapes	0.2	
FP 230	Pear	0.5	
59	**PARATHION-METHYL**		
VB 0040	Brassica vegetables	0.2	
75	**PROPOXUR**		
VL 482	Lettuce, Head	3	
VR 589	Potato	0.1	(*)

(*) At or about the limit of determination.

(*) At or about the limit of determination.

PRIORITY LIST OF COMPOUNDS SCHEDULED FOR EVALUATION OR REEVALUATION BY JMPR

The lists of compounds to be considered by the FAO/WHO Joint Meeting on Pesticide Residues (JMPR) from 1998 - 2004 follow:

AGENDA OF THE 1998 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	**NEW COMPOUNDS**
kresoxim-methyl	kresoxim-methyl
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
amitraz (122)	amitrole (079)
	benomyl (069) / carbendazim (072) / thiophanate-methyl (077)
bitertanol (144)	2,4-D (020)
	demeton-S-methyl (073) / oxydemeton-methyl (166)
dicloran (083)	dicloran (083)
	dimethoate (027) / omethoate (055) / formothion (042)
diphenylamine (030)	
endosulfan (032)	
ethoxyquin (035)	
	folpet (041)
	maleic hydrazide (102)
methiocarb (132)	
EVALUATIONS	**EVALUATIONS**
bentazone (172)	bentazone (172)
dinocap (087)	dinocap (087)
	disulfoton (074)
	glufosinate-ammonium (175)
	hexythiazox (176)
	myclobutanil (181)
phosmet (103)	procymidone (136)
	quintozene (064)
	tebufenozide (196)
thiophanate-methyl (077)	

April 1998

TENTATIVE AGENDA OF THE 1999 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	**NEW COMPOUNDS**
pyrifenox pyriproxyfen	pyrifenox pyriproxyfen
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
	bitertanol (144)
chlorpyrifos (017)	
	diflubenzuron (130)
dimethipin (151) ethoprophos (149)	
	ethoxyquin (035) fenamiphos (085)
imazalil (110)	
	malathion (049) methiocarb (132)
permethrin (120) 2-phenylphenol (056) propargite (113) pyrethrins (063)	2-phenylphenol (056)
EVALUATIONS	**EVALUATIONS**
	buprofezin (173) clethodim (187) ethephon (106) ethion (034) fenpropimorph (188) fenpyroxymate (193) phosalone (060)
PTU (150)	

April 1998

TENTATIVE AGENDA OF THE 2000 JMPR

Toxicological evaluations	**Residue evaluations**
NEW COMPOUNDS	**NEW COMPOUNDS**
chlorpropham	fipronil
imidacloprid	
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
acephate (95)	amitraz (122)
	captan (007)*
	chlorpyriphos (017)
	cypermethrin (118)
deltamethrin (135)	diphenylamine (030)
dodine (084)	endosulfan (032)
fenitrothion (037)	
methamidiphos (100)	methomyl (094) / thiodicarb (154)
	parathion (058)
	parathion-methyl (059)
	piperonyl butoxide (62)
	pyrethrins (063)
thiodicarb (154)	
vamidothion (078)	
EVALUATIONS	**EVALUATIONS**
	aldicarb (117)
	chlorfenvinphos (14)
	chlormequat (15)
	DDT (21)
	fenthion (39)
fipronil	

*Availability of data to be confirmed

April 1998

TENTATIVE AGENDA OF THE 2001 JMPR

Toxicological evaluations	**Residue evaluations**
NEW COMPOUNDS	**NEW COMPOUNDS**
	chlorpropham
esfenvalerate*	
	imidacloprid
spinosad	spinosad
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
	carbaryl (8)
	dimethipin (151)
	dodine (084)
	ethoprophos (149)
	fenitrothion (037)
	imazalil (110)
mecarbam (124)	
methoprene (147)	
oxamyl (126)	
	permethrin (120)
prochloraz (142)	
	propargite (113)
triazophos (143)	
EVALUATIONS	**EVALUATIONS**
	diquat (31)
lindane (48)	

*Replacement chemical for fenvalerate. April 1998

TENTATIVE AGENDA OF THE 2002 JMPR

Toxicological Evaluations	Residue Evaluations
NEW COMPOUNDS	**NEW COMPOUNDS**
	esfenvalerate*
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
	acephate (095)
cyhexatin (67)	
	deltamethrin (135)
	methamidophos (100)
	oxamyl (126)
	pirimiphos-methyl (086)
	procloraz (142)
propamocarb (148)	
	triazophos (143)
	vamidothion (078)
EVALUATIONS	**EVALUATIONS**
tolylfluanid (162)	tolylfluanid (162)

*Replacement chemical for fenvalerate

April 1998

TENTATIVE AGENDA OF THE 2003 JMPR

Toxicological Evaluations	Residue Evaluations
NEW COMPOUNDS	**NEW COMPOUNDS**
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
bendiocarb (137)	
	cyhexatin (67)
	lindane (48)
	mecarbam (124)
	methoprene (147)
	propamocarb (148)
	propineb

April 1998

TENTATIVE AGENDA OF THE 2004 JMPR

Toxicological Evaluations	Residue Evaluations
NEW COMPOUNDS	**NEW COMPOUNDS**
PERIODIC REEVALUATIONS	**PERIODIC REEVALUATIONS**
	bendiocarb (137)

April 1998

ANNEX

CANDIDATE COMPOUNDS FOR PERIODIC REVIEW NOT YET SCHEDULED

azocyclotin[1]
chinomethionat[2]
clofentazine[1]
cyhalothrin[3]
fenvalerate[3]
flucythrinate[4]
glyphosate[1]
metalaxyl[3]
phorate[1]
pirimicarb[4]
phosphamidon[1]
triadimefon[5]
triforine (residues)[4]
paraquat[2]

April 1998

1 Availability of adequate data package to be confirmed.
2 New candidate compound for periodic review.
3 Not supported for periodic reevaluation. However, there is support for MRLs based on the use of specific enantiomers/isomers.
4 Awaiting scheduling date for review in the European Community.
5 Is supported for periodic review.