codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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

The Hague
6 - 13 April 1987

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INTRODUCTION

1. The Codex Committee on Pesticide Residues held its nineteenth Session in The Hague, The Netherlands, from 6 - 13 April 1987. Mr. A.J. Pieters, Public Health Officer of the Ministry of Welfare, Health and Cultural Affairs, Foodstuffs Division, acted as Chairman. The Session was attended by Government delegates, experts, observers and advisers from the following 41 countries:

Algeria
Argentina
Australia
Austria
Belgium
Botswana
Brazil
Canada
Chile
China, People's Rep.of
Cuba
Czechoslovakia
Democratic People's Republic of Korea
Denmark
Egypt
Finland
France
Germany, Fed.Rep.of
Greece
Hungary
Ireland
Israel
Italy
Japan
Mali
Mexico
Morocco
Netherlands
New Zealand
Norway
Portugal
Republic of Korea
Senegal
Spain
Sweden
Switzerland
Thailand
Tunisia
United Kingdom
United States of America
Yugoslavia

The following International Organizations were also represented:

Association of Official Analytical Chemists (AOAC)
Conféderation Européenne du Commerce de Détail (CECD)
Council of Europe (CE)
European Economic Community (EEC)
European Plant Protection Organization (EPPO)
International Federation of National Associations of Pesticide Manufacturers (GIFAP)
International Organization for Standardization (ISO)
International Union of Pure and Applied Chemistry (IUPAC)

The list of participants, including officers from FAO and WHO is attached as APPENDIX I to this Report.

OPENING OF THE SESSION BY THE DEPUTY DIRECTOR-GENERAL

2. The Nineteenth Session was opened by Mr. R.J. Samsom, Deputy Director-General of the Ministry of Welfare, Health and Cultural Affairs of The Netherlands. The opening speech is attached as APPENDIX II.

The Chairman thanked Mr. Samsom for his introduction and supported the remarks on the necessity to maintain a critical approach which included a systematic screening of earlier decisions. The Committee had already started this screening which means extra work.

ADOPTION OF THE AGENDA

3. The agenda and the time schedule for the plenary session and for working groups was announced in CX/PR 87/1.

4. On the suggestion of the Chairman, it was agreed that matters coming forward from the last Session of the Codex Committee on General Principles would be dealt with under agenda item 13: Regulatory Principles. Agenda item 6 on acceptances would be discussed before agenda item 13.
The subject of classification, as well as comments at Step 6, could be dealt with under agenda item 8: Consideration of MRLs.

APPOINTMENT OF RAPPORTEURS

5. Ms. E. Campbell (United States of America) and Ms. J.K. Taylor (Canada) were appointed to act as rapporteurs to the Committee.

MATTERS OF INTEREST TO THE COMMITTEE

Matters Arising from Codex Committees

6. The Committee had before it document CX/PR 87/3 containing matters arising from Codex Committees. The following conclusions were reached:

(a) The use of arsenicals as a possible source of arsenic in fruit juices
The Secretariat was requested to include a request for information in a circular letter in order to determine whether arsenicals were used on fruits.

(b) Methods of analysis for organochlorine and organophosphorus pesticides and PCBs in milk and milk products (see paras 75-77, Appendix VI, Report of the 21st Session of the Committee of Government Experts on Milk and Milk Products). The Committee noted that the IDF/AOAC/ISO Analytical Group was developing methods for pesticides and PCBs of interest to it. The Secretariat was requested to ensure full coordination of this work with other work on methods of analysis and also to ensure that any methods developed by IDF/AOAC/ISO would be brought to the attention of the Working Group on Analysis of the CCPR.

(c) Health considerations concerning organohalogen compounds (see paras 133-137, APPENDIX IX, Report of the 21st Session of the 'Milk Committee'). The Committee noted that the Joint FAO/WHO Committee of Governments Experts on Milk and Milk Products had stressed the need to pay particular attention to milk and milk products as regards contaminants. A paper prepared by WHO (MDS 86/13-Add. 3) on organohalogen compounds in human milk was also noted. It was agreed to discuss it under the agenda item dealing with environmental contaminants.

(d) Use of DDT in the Region of Africa. The Committee noted the concern of the representative of the Region of Africa during the 33rd Session of the Executive Committee (see para 11, ALINORM 87/3) that DDT was still being used in Africa and the suggestion that the manufacture of DDT should be phased out. The delegation of Senegal pointed out that African countries could overcome the problem by enforcing appropriate regulations. The Committee did not consider itself to be in a position to deal with the questions of the manufacture and use of DDT.

(e) Definition of veterinary drug residues and possible overlap of responsibilities (see paras 89-102, 146-147, ALINORM 87/31). The Committee noted that the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF) had recognized that some veterinary drugs might also be pesticides and had suggested a pragmatic approach to handling these cases in order to avoid duplication of work. The Committee was informed that special sessions of the Joint FAO/WHO Expert Committee on Food Additives

would consider questions relating to these substances and their residues (e.g. methodology of testing and evaluation). The Committee noted that the use of pesticides to treat animals for ectoparsites would be an area of possible overlap. It was agreed that it should be informed when pesticides were being considered by the CCRVD. The Secretariat was requested to look into the question of possible overlap, in order to ensure that only one MRL be recommended for a residue in a given food.

Matters arising from International Organizations
European Economic Community (EEC)

7. The representative of the EEC drew the attention of the Committee to the adoption of the following directives since the last meeting.

(a) Council Directive 86/362/EEC on the establishment of maximum levels for pesticide residues in cereals OJ No L 221, 7.8.1986, p. 37;

(b) Council Directive 86/363/EEC on the establishment of maximum levels of pesticide residues in foodstuffs of animal origin. OJ No L 221, 7.8.1986, p. 43;

(c) Council Directive 86/355/EEC amending Directive 79/117/EEC prohibiting a number of plant protection products and phasing out use of ethylene oxide products. OJ No L. 212, 2.8.1986, p. 33;

(d) Further amendment of Directive 79/117/EEC prohibiting nitrofen, 1,2-dibromoethane and 1,2-dichloroethane (In Press).

European and Mediterranean Plant Protection Organization (EPPO)

8. The Committee was informed that, as a development of EPPO's current work on guidelines for biological evaluation of pesticides, EPPO's Working Party on Pesticides for Plant Protection would be organizing a workshop on Good Agricultural Practice, to be held on 2-4 June 1987 at Harpenden (UK).
The plant protection services of EPPO Member Countries had experience in GAP, and could define evaluation methods. This workshop would be limited to one model crop: apple. Some 12 to 15 European countries were likely to be represented at this meeting, which would consider and compare acceptable practices in the use of pesticides in apple orchards in European countries with differing climatic, agronomic and pest situations. The possibility of developing guidelines on a crop-by-crop basis through a series of such meetings would be considered.

Council of Europe

9. The Committee was informed that the Committee of Experts on Pesticides of the Council of Europe had elaborated guidelines for the evaluation of products for wood protection which would be published as a report. Two resolutions had been revised. One Resolution on pesticides used in the post-harvest protection of cereals and another concerning the use of pesticides in premises where foods were processed and stored.

10. The revision of the book "Pesticides" (6^{th} edition) will be started in June 1987. The book will be expanded by the inclusion of chapters on non-agricultural pesticides, pesticides in groundwater catchment areas, wood preserving pesticides and pesticides application.

International Union of Pure and Applied Chemistry (IUPAC)

11. The Committee was informed that the 2nd circular announcing the 7th International Congress of Pesticide Chemistry, sponsored by IUPAC had been made available. This Congress would be held from August 5-11, 1990, in Hamburg, Federal Republic of Germany.
The organizers wished to invite and encourage their professional colleagues the world over to participate in the preparations and to volunteer scientific contributions to the Congress.
The Congress would deal with all aspects of pesticide chemistry, as well as with problems associated with residues and their assessment, regulatory principles, the establishment of MRLs, registration requirements, and many other areas of direct or indirect interest to the CCPR.
For almost 20 years the IUPAC Pesticides Commission had played an integral part in the scientific design and organization of the IUPAC Congresses of Pesticide Chemistry. In addition, through a series of basic publications, the Commission had contributed to the knowledge of the effects of pesticides and their residues on man and his environment. The most recent publication (no. 22 in the series) was "Recommended Approaches to the Appraisal of Risks to Consumers from Pesticide Residues in Crops and Food Commodities"; J.A.R. Bates and S. Gorbach, Pure & Applied Chemistry 59, 611-627 (1987).

Consideration of the reports of the 1985 and 1986 Joint FAO/WHO Meetings on Pesticide Residues (JMPR).

12. The Committee had before it the Reports of the 1985 and 1986 JMPR. The Chairman congratulated the representatives of FAO and WHO on the early distribution of the Reports, and of Part 1 of the Evaluations of the 1986 JMPR.
In considering the Report of the 1985 JMPR, the WHO Joint Secretary drew attention to item 2.3. Issues Related to Testing for Carcinogenicity, and 2.4. Oncogenic Metabolites. He mentioned in relation to Section 5 that IPCS had taken a number of steps to implement recommendation 5.3 on the toxicological requirements for the estimation of ADIs.
WHO would be engaging a consultant to prepare a draft document on recent advances in the relevant methodology. Attention was drawn to recommendation 5.7 on the inclusion of haematology determinations in oncogenicity studies.
The FAO Joint Secretary recalled the corrections to the 1985 Report mentioned at the 18th Session of the CCPR, and noted that the evaluation of some compounds had had to be postponed owing to lack of data. He pointed out that account had been taken for the first time of the new Codex Classification, and that the new classification numbers were linked to their commodities in Annex I of the 1985 JMPR report.

13. The representative of the European Economic Community informed the Committee that, following the publication of the 1985 JMPR report, the Community had initiated a detailed re-evaluation of the toxicology of captafol. The Scientific Committee for Pesticides had concluded that, because of the carcinogenic effects of captafol on two animal species, no ADI could be estimated. On the basis of these findings, the Community would shortly consider a modification of the existing Community MRLs and the establishment of a new MRL for cereals. The levels in all cases would be at the limit of determination (0.05 mg/kg), meaning that captafol should not be used on food crops in such a manner so as to result in finite residues.

In view of the toxicological concerns regarding captafol, the Community strongly recommended to the CCPR that consideration be given to reducing the existing Codex MRLs for captafol to the limit of determination, 0.05 mg/kg, in order to reflect the changes in GAP. Owing to the toxicological properties of captafol, the Community was at present studying the extent of operator exposure resulting from the use of the compound.

14. The delegations of Austria and Sweden expressed support for the views of the EEC. The delegation of Brazil informed the Committee that its country had withdrawn registrations for the use of captafol.

15. At the invitation of the Chairman, the representative of the Chevron Chemical Company made the following statement:
"Many of the governments and other entities represented here have been told of Chevron's decision to withdraw from the captafol business. We are doing so because the cost of maintaining the product, both the manufacturing costs and the product defense costs, are increasing while at the same time the markets for captafol are shrinking.

Chevron is not currently manufacturing captafol and will not produce any in the future. We have advised the US-EPA that all of our stocks will be shipped by December 31, 1987. By December 31. 1988, we expect that all stocks should have moved through the channels of trade.

Based on extensive and occupational exposure data, and a 24 year history of safe use, we are convinced that captafol presents no significant risk to workers or consumers.
Chevron does not see the need for any action on MRLs today."

The representative of GIFAP added that Makhteshim (Israel) was not currently manufacturing captafol and would not produce any in the future. Makhteshim therefore did not see the need for any action on MRLs today.

16. After further discussion, in which the recommendation of the JMPR to withdraw the temporary MRLs for captafol was recalled, the Committee decided to delete the TMRLs. An explanatory note would be inserted in the Guide. 1/

17. In introducing the Report of the 1986 JMPR, the WHO Joint Secretary drew attention to certain changes in terminology. In the first (item 2.2) the term "No-Observed-Effect-Level" (NOEL) had been replaced by "No-Observed-Adverse-Effect-Level" (NOAEL).
The second change (item 2.5) was designed to clarify the meaning of the terms "Further work or information 'required' or 'desirable' ".
He also noted item 3.2, pointing out that it was the intention of WHO to appoint a spokesperson for each JMPR to amplify and explain aspects of the toxicological evaluations of the WHO if required. The Joint secretary noted that item 6, "Future Work", reflected the decision to establish priorities on a two-year basis.

18. In answer to a question, the WHO Joint Secretary confirmed that the ADI given for isofenphos, 0.001 mg/kg/bw, was correct. He pointed out that the safety factor involved in estimating an ADI depended upon the extent and nature of the information available. He further indicated that the change in terminology from NOEL to NOAEL would not necessitate re-evaluation of compounds reviewed previously.

1/ **Note by the Secretariat: the effect of this decision is that the Commission will be requested to withdraw the existing Codex temporary MRLs included in Volume XIII of the Codex Alimentarius.**

19. The FAO Joint Secretary called attention to the corrigenda to the 1986 Report listed in Part 1 of the 1986 Evaluations. He said that the evaluation of new compounds for residues but not toxicology or vice versa would be avoided in future. The Committee was informed that the Index of JMPR Reports and Evaluations would be included in the Report in alternate years.

20. In the course of general discussion the delegation of The Netherlands referred to item 2.3 of the 1986 Report and urged the JMPR to link the evaluations of compounds with similar mechanisms of toxicity. The examples of the related compounds captan (ADI 0.1 mg/kg) and folpet (TADI 0.01 mg/kg) and of PTU (ADI for its generator propineb withdrawn 1985) and ETU (TADI 0.002 mg/kg estimated 1986) suggested that captan and PTU should be reconsidered in the light of the evaluations of folpet and ETU respectively. A further example was provided by the organophosphorus insecticides. The change from NOEL to NOAEL implied that certain features, such as the inhibition of plasma cholinesterase, would no longer be treated as adverse effects. The ADIs for a number of organophosphorus pesticides which were based on plasma cholinesterase inhibition, especially those estimated before 1976, should therefore be reconsidered.
The delegation of Finland supported this view, pointing out that its country has proposed a joint evaluation of carbendazim generators.

21. The representative of the EEC made the following statement: "The toxicology of both captan and folpet have been recently studied in the Community.
According to the opinion of the Scientific Committee for Pesticides it has been concluded that both compounds are carcinogenic for the mouse, causing duodenal tumours at high dose levels. However, since the postulated mechanism of action for the compounds shows a threshold level, it is possible to estimate an ADI, and considering the similarity of the mechanisms of toxic action for the compounds, a joint ADI of 0.01 mg/kg/bw should apply. Due to these circumstances, it is the intention of the community to consider a substantial reduction of the present MRLs and the setting of joint MRLs.

The Community notes the re-evaluation of the toxicology for folpet carried out by the 1986 JMPR and the conclusion reached regarding the ADI. Taking into account the similarity of toxic action of folpet and captan, the Community invites the CCPR to request the JMPR to evaluate jointly the toxicology of captan and folpet. During the Community investigation of these compounds it was clear that the existing MRLs for captan and folpet should be reduced substantially in view of the current agronomic uses of the compounds. The Community hereby asks the CCPR to initiate a similar process, thereby enabling the JMPR to reassess as a matter of urgency the situation regarding captan and folpet in the light of the latest agronomic and toxicological data."

22. In the course of further discussion, the delegation of the UK urged caution in following the proposals of The Netherlands. There was a danger that insufficient attention would be paid to the toxicological differences between related compounds. The delegation of the USA agreed with this view, adding that its country could almost certainly not accept a joint ADI for captan and folpet.

The WHO Joint Secretary stated his opinion that each compound should be subject to independent evaluation. He reminded the Committee that ETU was due for re-evaluation in 1987 and folpet in 1989.

INTAKE OF PESTICIDE RESIDUES AND CERTAIN ENVIRONMENTAL CONTAMINANTS

(a) Report on pesticide residue and PCB intake studies through the Joint UNEP/FAO/WHO Food Contamination Monitoring Programme (JFCMP)

23. The summary and evaluation of dietary intake data collected under the JFCMP were made available to the Committee in two documents: (i) Summary of 1980-1983 Monitoring Data and (ii) Chemical Contaminants in Foods 1980-1983 (WHO/EHE/FOS 86.2 and 86.5 respectively). Dietary intake data of certain organochlorine and organophosphorus pesticides and PCBs had been submitted by only eight countries. Such a data base was therefore rather limited and included in most cases dietary intake data from countries where certain uses of these pesticides and PCBs had been curtailed or prohibited. Exposure to PCBs and pesticide residues in the diet should continue to be monitored and efforts made to increase the geographical coverage of the data. Several delegations pointed to difficulties in comparing the results from different countries because of a lack in standardization, especially of dietary factors.

24. Several different pesticides occurred simultaneously in total diet samples. Except for aldrin and dieldrin, dietary intakes of individual pesticides were usually well below the respective ADIs. In several countries intake of PCBs was in the range of 3 to 10 microgram/person/day. Dietary intakes of pesticide residues and PCBs per kg of body weight were higher for infants and young children than for adults. The reported levels of certain chlorinated pesticides, especially aldrin and dieldrin, in human milk resulted in intakes by the breast-fed infant that exceeded the respective ADIs. WHO was currently reviewing the consequences this might have for the health of the breast-fed infant.

(b) Reports on pesticide residue intake studies in various countries

25. The Committee was informed that Brazil participated in the JFCMP, and 1984-1986 data on levels of several pesticides and PCBs in 5 food commodities were presented to the Committee (Room document 14).

26. The Netherlands presented results of a recent market-basket study, in which it had been shown that residues of organochlorine compounds showed a continued decrease. A matter for further investigation was that of residues of PCBs. PCB residue levels, as determined by individual congeners were very much lower than those in previous studies (1976 and 1978), when an older method for total PCB determination had been used. The study indicated that chlorpropham and propham were also frequently found in the diet.

27. The United States presented, in Room document 11, information on dietary intake studies covering the period 1984-1986. The data included eight market basket samples and results were presented for different age and sex groups.

28. Senegal was planning to conduct market basket studies for five pesticides which were extensively used in that country. These were fenitrothion, malathion, chlorpyrifos, lindane and endosulfan.

29. The delegation of Czechoslavakia appreciated very much the work of the JFCMP. It had a large national data base of market basket

surveys for pesticides residues. The results had not yet been communicated to the JFCMP. In 80% of the samples, residues could not be detected, in 18-19% the residues found were well below legal limits and only in 1-2% were legal limits exceeded.

CONSIDERATION OF PROBLEMS ASSOCIATED WITH THE USE OF THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDSTUFFS

30. The Committee discussed Part III of Room Document 7 on the problems of reclassifying the commodities in Parts 2 and 3 of the Guide to Codex Recommendations concerning Pesticide Residues, according to the new Codex Classification of Foods and Animal Feedstuffs. The subject was introduced by Mr. A.F.H. Besemer, who identified nine areas (a-i) in which problems had occurred.

Broad groups of fruits and vegetables

31. Many limits had been set for the groups "Fruits" and/or "Vegetables", with or without specific exceptions. The alternative procedures appeared to be (1) to set a single limit valid for all of the six fruit and/or nine vegetable groups or (2) to request the JMPR to review the recommendations on a case-by-case basis with a view to replacing limits for broad groups by limits for specific commodities or restricted groups.

After discussion, the Committee agreed to refer such problems to the JMPR. The Secretariat would request the submission of appropriate data to the JMPR by means of a circular letter.

Brassicas, Brassica leafy vegetables and cole crops

32. Discussion centered on the proposed revision of the commodity descriptions given in the Table on page 12 of Room Document 7. The proposals were generally supported, but it was felt that time was needed for their adequate consideration. The Committee therefore agreed to reconsider the proposals at its next Session.

Meat

33. The Committee noted that in many cases MRLs for similar pesticides in mammalian meat differed considerably, and that the extent of extrapolation from one species to others also varied. The Committee agreed to refer the question of the harmonization of such MRLs to the JMPR.

Commodities with indefinite descriptions

34. The Committee recognized that the composition of certain commodities classified as "C" in the original classification (for example "breakfast cereals") was unclear. It concluded that clarification would require consultation of the original data and agreed to refer the problem to the JMPR.

Nut hulls used as animal feed

35. The Committee was informed that commodities such as almond hulls and peanut hulls were used as components of animal feed but had little or no movement in international trade, and had therefore not so far been included in the Classification. The Committee agreed to exclude such items from the classification, to delete their draft MRLs and to request the Commission to delete their CXLs. Consideration of residues in meat and milk would be handled on a case-by-case basis.

Assorted tropical and sub-tropical fruits with edible peel

36. The Committee noted that the MRL for deltamethrin in "Assorted fruits - edible peel" was based only on data on figs and olives, and was of the opinion that these commodities could not be considered as representative of such a diverse group. The Committee agreed to invite the JMPR to consider replacing the MRL by separate limits for figs and olives at the same level.

Kale and collards

37. The Committee was reminded that, although the commodity "kale" included the variety "collards", kale and collards were regarded as separate commodities in some countries, notably the United States of America. Attention was drawn to the widely different CXLs for malathion in kale (3 mg/kg) and collards (0.1 mg/kg). The Committee decided to request the JMPR to reconsider the limits with a view to their clarification.

Banana pulp as a commodity

38. The Committee was informed that fresh banana pulp was not a commodity in international trade and decided to delete MRLs for it. Attention was drawn to the MRLs for trichlorfon and ETU in banana pulp, without corresponding MRLs for the whole fruit. The Committee decided, exceptionally, to retain the MRLs. The delegation of the USA indicated that it would undertake to provide data on trichlorfon in whole bananas to the JMPR. The delegation of the Federal Republic of Germany stated that the manufacturer would also attempt to supply data on trichlorfon. The Secretariat would attempt to propose a limit for ETU in whole bananas on the basis of existing data.

Citrus fruit, except mandarins

39. Attention was drawn to the CXLs for methidathion in citrus fruit. The JMPR had recommended limits of 5 mg/kg for "mandarins" and 2 mg/kg for "citrus fruits (except mandarins)". The Committee was invited to endorse the proposal to delete the entry "citrus fruits (except mandarins)" and substitute the separate commodity groups FC0002 Lemons and Limes, (including Citron), FC0004 Oranges, Sweet, Sour and FC0005 Shaddocks or Pomelos. The Committee agreed to this proposal.

40. The Committee then considered individual commodity descriptions for each of the compounds in Part 2 of the Guide. The following items gave rise to general discussion.

Milk products

41. The Committee noted that, although a procedure had been devised for calculating MRLs of fat-soluble pesticides in milk products from their MRLs in milk, no such procedure existed for pesticides which were not fat-soluble. The opinion was expressed that MRLs for non-fat-soluble pesticides in milk products should be deleted, as data on a sufficiently wide range of products were unlikely to be available or obtainable. It was recalled however that the existence of Codex Standards for milk products was an argument against deletion. It was agreed that the Secretariat should discuss the problem with colleagues responsible for the Codex Standard for milk products and report to the next Session of the Committee.

Processed olives

42. The Committee noted that a single MRL existed for processed olives. Deletion was proposed, but the delegations of Spain and Greece pointed out that only processed olives moved in international trade, and MRLs for the processed product were

therefore more important than for unprocessed. It was decided that the Secretariat should establish a classification number for processed olives. Delegations were requested to provide data on which MRLs could be based.

Edible portions of fruit

43. The Committee noted the existence of a number of MRLs for the edible portions of fruit. The Committee recalled the discussion on banana pulp and decided that such MRLs should be deleted.

Nuts (whole in shell)

44. It was recognised that this description was not in accordance with the specification of the portion to be analysed. Only the kernels of nuts should be analysed. It was pointed out however that, in exceptional cases, post-harvest application of a pesticide might make it desirable to establish an MRL for the whole commodity. The Committee decided to take no action.

Cheese

45. Attention was drawn to the CXL for pirimiphos-methyl in cheese, a multi-ingredient processed product for which there was no classification number. It was pointed out that there were many different varieties of cheese with widely varying characteristics. The Committee agreed to retain the MRL and commodity description for the time being. The Secretariat was requested to prepare a paper for discussion at the next Session.

Sweet corn (kernels)

46. No classification number had been provided for this commodity. The Secretariat was requested to provide one.

Milled products from raw grains; dried foods

47. As CXLs exist for dichlorvos and hydrogen phosphide respectively in these commodities, the Secretariat was requested to examine the data on which they were based and make recommendations.

Kidney of cattle, goats, horses, pigs and sheep

48. The Committee noted that classification numbers had not been established for the individual species. The Secretariat was requested to provide appropriate numbers. The compounds involved are 057 paraquat and 109 fenbutatin oxide.

Forage crops (green) (disulfoton 074)

49. It was not clear which crops were included. The Committee agreed to refer the problem to the JMPR.

Chicory (thiometon 076)

50. The Secretariat was requested to attempt to establish which part of the chicory plant was meant.

Beans, French; beans, kidney (thiophanate-methyl 077)

51. The exact nature of the commodity was uncertain. The Secretariat was requested to attempt clarification.

CONSIDERATION OF MAXIMUM RESIDUE LIMITS

52. The Committee had before it the following documents:

- CX/PR 87/2-Add. 1 (Superceding CX/PR 87/2) containing MRLs at Steps 3 and 6;
- CX/PR 87/2-Add.2 containing changes proposed by the 1986 JMPR to Codex MRLs and Draft MRLs at Steps 5 and 8

- CAC/PR 2-1987 containing Part 2 of the "Guide to Codex Recommendations Concerning Pesticide Residues" in which MRLs are listed.
- CAC/PR 4-1986 containing Part 4 of the "Guide to Codex Recommendations concerning Pesticide Residues" - Codex Classification of Foods and Animal Feeds
- Room document 7 containing corrections, additions and clarifications of, and problems associated with, CAC/PR 4-1986
- CX/PR 87/6 containing government comments on CX/PR 87/2 and CX/PR 87/2 Add. 1.

53. The Committee, at its previous Session, had decided to subdivide Step 7 into 7A, 7B and 7C as follows:
- 7A is used for compounds with a temporary ADI. As soon as the JMPR has established a full ADI the Secretariat will submit the proposed MRLs to the Codex Alimentarius Commission at Step 8.
- 7B is used for compounds that cannot be dealt with until the JMPR has taken action on them. They will be returned to Step 6 by the Secretariat for government comments immediately after action by the JMPR.
- 7C is used for compounds or proposals on which action by the Committee is contingent upon further developments.
- "(a)" following Step numbers means that the MRL is a proposed amendment to a Codex MRL (CXL).

54. In the interest of economy the following paragraphs refer only to those MRLs and ERLs on which there was detailed discussion, where delegations expressed reservations, or where relevant information had to be recorded. The Step in the Codex Procedure to which the Committee advanced or returned individual MRLs or ERLs or at which limits were held is indicated for each pesticide.
Where the Committee decided to recommend to the Commission that Steps 6 and 7 be omitted, this decision is given under the appropriate pesticide as "at Step 5/8".

BROMOPHOS (004)

55. Status of MRLs
At Step 5/8: plums

CAPTAFOL (006)

56. For the discussion on this compound, see paras 13-16.

CAPTAN (007)

Cherries; Potatoes

57. Many delegations opposed the proposed MRLs because of serious doubts with regard to the toxicological properties of the compound and because it was doubted whether the compound was still used on potatoes. The delegate of the United States of America indicated that GAP data supporting 50 mg/kg on cherries were available both to the 1985 and 1986 JMPR and that further data were under development in the United States of America both for cherries and for seed potatoes. The uses on cherries and potatoes were still registered in the United States of America, although this pesticide was under re-evaluation.
It was decided to advance the proposals to Step 7C and to wait until the situation with regard to the toxicity of the compound and the actual GAP had been cleared up.

Kiwi fruit

58. In the absence of any registered use on Kiwi fruit, it was decided to delete the proposal.

Status of MRLs
At Step 7C: cherries, potatoes

CHLORDIMEFORM (013)
Definition of Residue

59. The Committee noted that the previous definitions were not entirely clear since they did not describe the metabolites of chlordimeform sufficiently precisely. After taking note of the US reservation, it was agreed that the following definition should be referred to the Commission as a non- substantive amendment:

"sum of chlordimeform and its metabolites, containing or hydrolysable to 4-chloro-o-toluidine, determined as 4-chloro-o-toluidine and expressed as chlordimeform".

CHLORFENVINPHOS (014)

60. Status of MRLs
At Step 5/8: citrus fruit

CHLORPYRIFOS (017)
Currants, Sultanas and Raisins (= dried grapes)

61. It was indicated that this commodity description covered what is called in French "raisins secs". The Committee agreed to change the commodity description to "Dried grapes (currants, sultanas and raisins)" to resolve the problem.
The delegation of the Federal Republic of Germany had reservations against the proposal, but it was pointed out that it was in line with the CXL for grapes.

Status of MRLs
At Step 5: dried grapes (currants, sultanas and raisins).

2,4-D (020)
Maize; Sorghum

62. The delegation of the United States of America indicated that their tolerances were 0.5 mg/kg to accommodate uses later in the growth stage and requested that the MRLs should not be advanced beyond Step 5. The delegation of The Netherlands preferred 0.05 mg/kg as a limit of determination. The Committee agreed to propose to the Commission the deletion of the CXL for raw cereals.

Status of MRLs
At Step 5: maize, rice, sorghum

DICHLORVOS (025)
Miscellaneous food items not otherwise specified (e.g. bread, cakes, cheese, cooked meat etc.)

63. The Committee agreed to ask the JMPR to determine what was intended.

DIMETHOATE (027)

64. The 1986 JMPR had reviewed both this compound and omethoate and, at the request of the Committee, had proposed separate MRLs for these compounds. Data reviewed at earlier Meetings of the JMPR had been re-assessed. No significant new data had been made available to this Meeting. The delegation of the USA reserved its position on all proposals pending a review of the new situation that had arisen from the 1986 JMPR. The delegation of France questioned whether several proposals were not based on data, which no longer represent GAP. It was indicated that only few countries had submitted information on current use patterns.
All countries which had not yet done so were invited to send information on their GAP. The JMPR was requested to review the additional data received.
The 1987 JMPR had scheduled the compound for toxicological review.

Apple; Apricot; Cherries; Grapes; Peach; Pear; Plums (including Prunes)

65. Several delegations opposed the proposals in relation to the relatively low TADI. The delegation of the USA said that a limit of 2 mg/kg for apples was necessary to accommodate GAP in its country. The delegation of Hungary said that their GAP needed a limit of 2 mg/kg for grapes and cherries. The delegation of Chile indicated that a limit of 1 mg/kg was sufficient to cover its GAP on grapes.

Beans; Broccoli; Brussels sprouts; Cabbages, Head; Lettuce, Head; Lettuce, Leaf

66. The delegation of the Netherlands was of the opinion that data in the Evaluations showed that 1 mg/kg was sufficient when observing a normal PHI.

Lettuce, Head; Lettuce, Leaf

67. The difference between these two types of lettuce was explained. Leaf lettuce was a variety that did not form a head and therefore could have a different residue behaviour.

Nectarines

68. The delegation of Chile requested that a separate MRL for nectarines be proposed, as nectarines often contained a lower residue than peaches. The delegation was invited to submit relevant data to the JMPR.

Witloof chicory (sprouts)

69. The delegation of France was of the opinion that for witloof chicory (in French: endive) a limit of 1 mg/kg was needed. The delegation was invited to provide the JMPR with data supporting its proposal.

Status of MRLs

At Step 5 : banana; cucumber; kale; lettuce, head; lettuce, leaf; onion, bulb; peas; spinach; turnip; witloof chicory (sprouts)

At Step 5(a): beans, except broad bean and soya bean; beetroot; broccoli; Brussels sprouts; cabbages, head; carrot; cauliflower; celery;

At Step 7B : all other proposals.

ENDOSULFAN (032)

70. The proposals were kept at Step 7B pending re-evaluation by the 1989 JMPR.

Status of MRLs

At step 7B: meat, milks.

FENITROTHION (037)

Wheat flour

71. Many delegations were opposed to the proposed limit, which was considered too high for a basic food commodity. Moreover, it was noted that data in the JMPR Evaluations indicated that about 90% of the residue was lost when wheat was milled to wheat flour and that therefore the proposed limit was not consistent with the CXL of 10 mg/kg for cereal grains.

The delegation of Australia said that it had previously provided information to the JMPR to justify the existing MRL. It undertook to provide further data from commercial scale application, including data on grain, grain fractions and cooked cereal products, to the JMPR for evaluation.

Status of MRLs

At Step 5/8: citrus fruits

At Step 7B : wheat flour

FENTIN (040)

72. The Committee accepted the revised residue definition. The Committee noted that this compound was under reevaluation in the USA and that continued uses would probably require inclusion of organotin metabolites which may be a major part of the residue.

HEPTACHLOR (043)

Pineapples

73. The Committee discussed a proposal to delete the words 'in the edible portion' from the description and agreed to reconsider the matter at the next Session in the light of comments.

INORGANIC BROMIDE (047)

Celery

74. The delegations of Finland, the Federal Republic of Germany and The Netherlands could not accept the proposal, the latter explaining that its country had modified its agricultural practices to meet the requirements of its trading partners.
The delegation of the United States of America recalled that the CCPR had reduced the original proposal of 300 mg/kg and expressed the opinion that the proposal should not be changed without reference to the residue data base and GAP. The delegation of the United Kingdom supported this view, adding that GAP in the United Kingdom was being reexamined and that the United Kingdom may have additional data in the future.

All Commodities

74A. At the suggestion of the Chairman of the 1986 JMPR supported by the delegation of Belgium, the Committee decided that the JMPR should be asked to review all the draft MRLs at its 1988 Meeting, when toxicological aspects were due for re-evaluation. The Committee noted that data on current GAP, and preferably also monitoring data would be essential for such a review.

Currants, sultanas and raisins

75. The same remarks apply as in para 61.

Cabbages, Head; Lettuce, Head

76. As these commodities had MRLs of 100 mg/kg at Step 8, the Committee agreed to return them to Step 7B to await review by the JMPR.

Status of MRLs
At Step 3 : celery
At Step 5 : cucumber, tomato
At Step 7B: cabbages, head; lettuce, head

OMETHOATE (055)

77. Several delegations expressed their reservations concerning proposed MRLs at a level of 2 mg/kg. The Committee therefore agreed to retain at Step 6 all the proposals which had reached that Step and to advance the other proposals to Step 5.

Hops, dry

78. The delegation of the Federal Republic of Germany informed the Committee that an MRL of 10 mg/kg was required for GAP in its country. It hoped to supply data to the JMPR.

Vegetables (not otherwise listed)

79. The Committee agreed to request the Commission to withdraw the CXL.

80. In response to a comment of the delegation of France the Committee agreed to revise the wording of footnote 1).

Status of MRLs
At Step 6 : apple; apricot; cherries; grapes; hops, dry; olives; peach; pear; plums (including prunes); potato; sugar beet; sugar beet leaves or tops
At Step 5(a): all other proposals

PARAQUAT (057)

81. The Committee decided to delete the MRL for sunflower meal, noting that ut was a processed animal feed.

Status of MRLs
At Step 7C: soya bean (dry)
At Step 8 : all other proposals.

CYHEXATIN (067)

82. The Chairman recalled that the 1985 JMPR had proposed a combined list of MRLs for cyhexatin and azocyclotin, and invited comments. The delegation of The Netherlands supported the proposal of the JMPR.

83. The Committee was informed that the Working Group on Regulatory Principles had briefly considered the question without reaching a conclusion. The Group was preparing a paper which would be available for discussion at the next CCPR. The Committee therefore agreed to postpone discussion of the proposals until its next Session (see also the discussion of 072 carbendazim, para 84 and 85).

Status of MRLs
At Step 5 : Kiwi fruit
At Step 6 : peach; plums (including prunes); strawberry
At Step 7B: common bean

CARBENDAZIM (072)

84. The delegation of The Netherlands, supported by the delegation of Finland, proposed that the CXLs for thiophanate-methyl and the proposals for carbendazim be combined in a single list under the entry carbendazim. Residues of thiophanate-methyl were determined as the sum of thiophanate-methyl and carbendazim and therefore it was hardly feasible to have separate MRLs. It was pointed out that not all CXLs for thiophanate-methyl were reflected in the list of proposals for carbendazim.

85. The delegation of the USA and the Chairman of the 1986 JMPR indicated that this matter was related to the general discussion on metabolites of pesticides which were also pesticides in their own right. The subject was currently being considered by the ad hoc Working Group on Regulatory Principles (see also para 294-296). It was decided to request the JMPR to consider the proposal from The Netherlands and to ask the opinion of the ad hoc Working Group on Methods of Analysis.

Status of MRLs
At Step 5: all proposals

PROPOXUR (075)
Cereal grains; Straw, fodder (dry) and hay of cereal grains and other grass-like plants

86. The manufacturer's representative indicated that the compound was no longer used on cereals. It was therefore decided to delete the proposal for cereal grains and the related proposal for straw. The Commission was requested to withdraw the existing CXLs for these commodities.

Status of MRLs
At Step 5/8: legume animal feeds

VAMIDOTHION (078)
Grapes; Peaches
87. The delegations of France, Italy and Sweden opposed the proposals because of the low ADI of the compound.

Pome fruit
88. The delegation of Austria, Italy, The Netherlands and the United Kingdom could not accept the proposal, which was considered too high in relation to the ADI. The delegation of The Netherlands indicated that it had changed its GAP to accommodate a limit of 0.5 mg/kg. The delegation of Spain supported the view that a longer PHI would result in a lower limit. The Chairman of the 1986 JMPR said that data available to the JMPR 1985 indicated the need for the proposed limit, including in some countries now opposing it. Countries were invited to provide relevant GAP information to the JMPR, in order to enable it to review its proposal.

Status of MRLs
At Step 5: all proposals

AMITROLE (079)
Raw agricultural commodities of plant origin
89. The Committee agreed that the Secretariat should replace this item by a sentence containing the same information i.e. that residues were not to be expected. Deletion of the CXL would be recommended to the Commission.

CHINOMETHIONAT (080)
90. The ADI had been withdrawn by the 1984 JMPR. The compound was scheduled for toxicological review by the 1987 JMPR.
It was decided to postpone further action until the next Session.

Status of MRLs
At Step 7B: all proposals

CHLOROTHALONIL (081)
91. Many delegations expressed their concern with regard to the toxicological problems, especially the possible carcinogenicity of this compound. It was indicated that the compound was scheduled for toxicological review by the 1987 JMPR and that part of the data identified as necessary by the 1985 JMPR had been made available by the manufacturer for this review. Not all data would be submitted however in time for the 1987 review.
It was indicated that on-going mechanistic studies, possibly giving an explanation for the demonstrated oncogenicity in rodents, could be of great value.

Grapes
92. A number of countries opposed the proposed MRL because of the toxicological properties of the compound. Moreover, the JMPR had indicated that additional data on GAP were still desired. Countries were encouraged to make such data available to the JMPR.

Status of MRLs
At Step 7A: banana; cereal grains
At Step 7B: grapes

PIRIMIPHOS-METHYL (086)
General
93. The delegation of the Federal Republic of Germany expressed the opinion that a higher safety factor should have been used for the ADI of this pesticide in view of certain toxicological concerns. The representative of WHO informed the Committee that the

1976 JMPR had considered all available data except a study on chicken, which might be regarded as of peripheral importance. Comments on the significance of brain cholinesterase inhibition would be useful for the JMPR. The delegation of the United States of America indicated that, following a 1986 re-evaluation of all data, United States experts had arrived at the same ADI as the JMPR.

Cereal grains

94. The delegation of the Netherlands noted that a high proportion (15%) of imported cereal grains had residues of pirimiphos- methyl.

Citrus fruits

95. The delegation of Italy indicated that an MRL of 2 mg/kg would not be acceptable and preferred to maintain the present Codex MRL of 0.5 mg/kg. This view was shared by the delegation of the Federal Republic of Germany.

Dried Fish

96. It was noted that the MRL for dried fish had been based on data from various African countries and was intended to cover local practices. The pesticide was applied to fresh fish to control blow fly. The delegation of France was of the opinion that it might be useful to study this practice further and generate appropriate residue data on the dried product, as the MRL seemed too high. It was noted that the data available to the JMPR was for dried fish from different countries in Africa. The Committee noted that 'Po'[1] should be entered in the Guide after the MRL for dried fish.

Milks

97. Considering the views of some delegations and the fact that the MRL referred only to the parent compound, the Committee decided to indicate that the procedure for calculating MRLs for fat soluble pesticides in milk and milk products would apply.

Peanut; Peanut, whole

98. The delegation of the Federal Republic of Germany was in favour of reducing the present Codex MRLs and also had reservations on the various other uses of pirimiphos-methyl in view of toxicological considerations. The Committee noted that the new classification provided for two entries, one covering peanut kernels and another for whole peanuts. This was considered to be necessary as both forms moved in international trade.

Peanut oil, crude

99. The delegation of France was of the opinion that the proposed increase to 15 mg/kg was excessive in view of the high MRL and an ADI of 0.01 mg/kg bw.

Status of MRLs

At Step 5 : dried fish
At Step 5(a) : citrus fruits; peanut oil (crude)
At Step 5/8(a) : peanut; peanut (whole)

METHOMYL (094)

Apple

100. The delegation of Italy expressed a general reservation pending results from a new toxicological examination currently underway in Italy and the publication of the WHO Evaluations of the 1986 JMPR.

[1]Po=Post-harvest use

Barley

101. The delegation of the United States of America indicated that it would check on GAP and the availability of residues data for evaluation by the JMPR supporting an increase in the proposed MRL to 1 mg/kg.

Hops, dry

102. The delegation of the Federal Republic of Germany required 5 mg/kg for hops and would provide data to the JMPR.

Revision of a number of MRLs

103. The delegation of The Netherlands, supported by the delegation of France, was of the opinion that a number of MRLs should be revised and indicated suitable MRLs which would be more in line with the data examined by the 1975 JMPR. The Committee noted that the data on which the MRLs had been based were at least 12 years old and that a review of the MRLs would be desirable. Governments were requested to submit residues data based on current GAP to the JMPR so that the MRLs could be reviewed.

Status of MRLs
At Step 5: all proposals

ACEPHATE (095)

104. Because the ADI was still temporary, the proposed MRLs for the commodities at Step 7A were held at that Step.

Status of MRLs
At Step 7A: all proposals

METHAMIDOPHOS (100)

105. A number of delegations expressed a general reservation because of the low ADI in relation to the broad spectrum of use and the number of MRLs. The proposed MRL for egg plant was advanced to Step 8.

Status of MRLs
At Step 5/8: tree tomato
At Step 8 : all other proposals

PHOSMET (103)
Maize; Maize fodder; Maize forage; Sweet corn

106. The delegation of The Netherlands considered the proposed MRLs too high based on the data reviewed by the JMPR. The delegation of the United States of America indicated that the residue data which had been available to the JMPR were limited, especially for maize. Countries were requested to provide further data to the JMPR.

Status of MRLs
At Step 5(a) : maize; sweet corn (corn-on-the-cob)
At Step 5/8 : alfalfa fodder; alfalfa forage (green)
At Step 5/8(a): peas; peas (dry)
At Step 8 : all other proposals

DITHIOCARBAMATES (105)

107. The delegation of Finland informed the Committee that, owing to the inadequacy of the toxicological data of many dithiocarbamate pesticides and the potential for mutagenicity, carcinogenicity and teratogenicity of dithiocarbamates and their degradation products, it was not in a position to accept the proposals at 3 mg/kg or more. They based their assessment especially on a recent evaluation by the Joint Nordic Body of Pesticide Registration Authorities. The delegation of Austria objected to MRLs greater than 2 mg/kg for toxicological reasons.

108. The delegation of the Federal Republic of Germany, which in the past had expressed its disagreement with the decision on PTU, expected that re-evaluation by the JMPR of ETU, scheduled for 1988, might result in a decision on ETU similar to that on PTU and recommended the Committee not to advance any proposal for dithiocarbamates before this re-evaluation had been completed.

Lettuce, Head

109. The delegation of Sweden opposed the proposed increased limit for head lettuce, because the methods of analysis could not distinguish between dithiocarbamates with different ADIs. The delegation of France was of the opinion that the new proposal should become a CXL at the earliest opportunity because of difficulties experienced in trade.

Status of MRLs
At Step 5: lettuce
At Step 8: all other proposals

ETU (108)

Bananas (pulp)

110. See para 38.

Tomatoes

111. The delegation of Hungary was of the opinion that a limit of 0.02 mg/kg was more appropriate than the proposed limit of 0.05 mg/kg. Some of the proposals had been based on relatively old data when no sensitive methods of analysis had been available. Any new data that would enable the JMPR to estimate more up-to-date proposals would be welcome.

Status of MRLs
At Step 5: all proposals

IMAZALIL (110)

112. The proposals arising from the 1984 and 1985 JMPR were based on post-harvest application of the compound. The delegation of the Federal Republic of Germany expressed a general reservation because the ADI would be exceeded based on proposed MRLs. It was indicated that post-harvest use was GAP in some countries only for citrus fruit. On other commodities the post-harvest use had been proposed but was not yet accepted. The Committee would reconsider these proposals at its next Session.

Bananas (pulp); Citrus fruit (without peel)

113. Deleted (See para 38).

Stone fruit

114. As the use on stone fruit was not GAP as yet and was not expected to be accepted as such, it was decided to delete this proposal.

Status of MRLs
At Step 5 : melons, except watermelon; peppers; Japanese persimmon; pome fruits; potato; raspberries, red, black; strawberry; tomato.
At Step 5(a): cucumber

PHORATE (112)

115. The Committee recalled its discussion at the previous Session (ALINORM 87/24, paras 129-132). No new developments since that Session had been reported.

Hops and other commodities

116. The Committee was informed by the manufacturer that it was not aware of any registered uses on hops or lettuce outside the United States of America. Cancellation of these uses plus a number of others had been requested by the manufacturer in the USA in connection with the re-registration process.
The Committee was not certain whether there were other manufacturers of phorate and noted a lack of adequate information on registered uses. The Secretariat was requested to obtain information from Governments on current registered uses and appropriate residue data (for evaluation by the JMPR)

Status of MRLs
At Step 5 : hops
At Step 7B: all other proposals

ALDICARB (117)

Citrus fruits

117. The delegation of Portugal, supported by the delegation of the United States of America and of the Federal Republic of Germany, proposed an MRL of 0.3 mg/kg. The delegation of the United States of America indicated that it had submitted residues data to the JMPR which fully supported 0.3 mg/kg. The delegation of Brazil supported an MRL of 0.2 mg/kg.
The Committee requested Portugal and other countries to submit residue data to the JMPR.

Maize forage

118. The delegation of the Federal Republic of Germany, supported by the delegation of The Netherlands, expressed the opinion that a level of 5 mg/kg in forage might be toxic to farm animals and could lead to significant residues in milk.
A number of delegations preferred expressing the MRL on a dry-weight basis. It was noted that the JMPR had originally proposed an MRL of 20 mg/kg on a dry-weight basis. This had been re-reviewed by the 1985 JMPR and changed to the current proposal as residues data had been available only on fresh fodder. There was no information on moisture content. The delegation of The Netherlands was of the opinion that information was needed on the fate of the residue during silage. The delegation of France was of the opinion that the JMPR could set an MRL on a dry-weight basis, as 5 mg/kg in fresh forage corresponded to 10 mg/kg in dry forage (see 1982 JMPR). The manufacturer undertook to provide information to the next Session of the Committee in order to resolve this question.
The Committee requested governments to provide information to the JMPR (residues in dry forage and other relevant information).

Status of MRLs
At Step 7B: citrus fruits, maize forage (fresh weight)
At Step 8 : maize

CYPERMETHRIN (118)

Berries and other small fruits

119. The delegation of the Federal Republic of Germany informed the Committee that the MRL of 0.5 mg/kg proposed by the JMPR was too low. The manufacturer agreed to conduct a new trial and to try to provide the data to the next meeting of the JMPR.

Milks

120. The delegation of The Netherlands informed the Committee that data presented in the 1986 Evaluations did not justify the proposed increase of the MRL from 0.01 to 0.05 mg/kg for cow's milk. There was also no indication that the residue in blended milk of other mammals could exceed 0.01 mg/kg.

The Committee noted that the 1986 JMPR had reviewed previous data as well as the new data derived from the veterinary use, namely the control of ectoparasites on cattle, in proposing the MRL of 0.05 mg/kg.

Status of MRLs
At Step 5(a): milks
At Step 7B : berries and other small fruits
At Step 5/8 : edible offal (mammalian); tea, green, black
At Step 8 : all other proposals

FENVALERATE (119)
Brussels Sprouts
121. The delegation of the United States of America informed the Committee that a national tolerance would shortly be established, and that GAP in the Unite States supported an MRL of 10 mg/kg. The delegation undertook to provide data to the JMPR through the registrant.

Cabbages, Head
122. The delegation of The Netherlands informed the Committee that data presented in the 1984 Evaluations would support an MRL of 2 mg/kg. The delegation of Hungary supported this position.
The Committee noted that new data were not available and that the old data appeared to support the proposed MRL of 5 mg/kg.
The delegation of the United States of America informed the Committee that the current national tolerance was 10 mg/kg. A 5 mg/kg limit could be considered but 2 mg/kg would definitely not be adequate for GAP in the United States of America.

Cereal grains; Wheat bran, unprocessed; Wheat flour
123. The delegation of The Netherlands informed the Committee that the data available to the 1984 JMPR did not support an increase of the MRL of 10 mg/kg for wheat bran and 0.5 mg/kg for wheat flour. The views of The Netherlands were shared by Italy, France and Australia.

124. The Committee reviewed the report of the 1984 JMPR and concluded that there was no justification to increase the MRLs of wheat bran and wheat flour. The Committee noted that the application rate recommended for cereal grains would support an MRL of 2 mg/kg especially in view of the problems of uneven distribution in grain. Since there appeared to be no likelihood of the generation of new data, the Committee recommended that the previously proposed MRLs for cereal grains, wheat bran and wheat flour, which would be more realistic and would be supported by the existing data, should be advanced to Step 8 for adoption by the Commission. The previously proposed MRLs were 2, 5 and 0.2 mg/kg for cereal grains, wheat bran, unprocessed and wheat flour respectively.

Edible offal (Mammalian)
125. The delegation of the United States of America believed a higher MRL was supported by data already provided to the JMPR, even without the use of 'worst-case' estimates.
It was decided to refer the subject to the JMPR for reconsideration.

Kale
126. In the view of the delegation of The Netherlands, data from various Evaluations would support an MRL of 5 mg/kg, at a PHI of 7 days. The delegation of Hungary supported 2 mg/kg. The national tolerance in the United States of America is 10 mg/kg and the Committee was informed that an MRL of 5 mg/kg would not be adequate even with a 7 day pre-harvest interval.

Peas, shelled

127. The delegation of the United States of America indicated that there is a national tolerance of 0.25 mg/kg for dried peas to accommodate pre-harvest uses, but no national tolerance for fresh shelled peas, as defined by the 1986 JMPR. The Committee noted that the data available to the 1986 JMPR were not adequate for dried peas and that additional data had been listed as 'desirable' by that meeting.

Status of MRLs

At Step 5 - cabbages (head), edible offal (mammalian), peas (shelled)
At Step 7B - Brussels sprouts
At Step 8 - all other proposals

PERMETHRIN(120)

Lettuce, Head

128. Many delegations supported a lower MRL of 1 or 2 mg/kg based on GAP in their countries. The national tolerance in the United States of America, however, is 20 mg/kg. This included the parent compound as well as the metabolites.
The Committee noted that the previous MRL of 20 mg/kg was lowered by the 1982 JMPR to 10 mg/kg on the basis of extensive data available to it from Europe and the United States. The 1982 JMPR excluded the data resulting from higher application rates in establishing the MRL of 10 mg/kg. The delegation of Mexico supported the need for the MRL of 20 mg/kg.

Sorghum straw and fodder (dry)

129. The delegation of the Federal Republic of Germany expressed a reservation since in its view the MRL was high enough to endanger the health of cattle.

Meat

130. The Committee agreed to delete the information in brackets and showed its preference for the commodity name to appear as "Meat".

Tomato

131. The Committee noted that additional information on GAP had been made available by Mexico to the JMPR for its consideration.

Wheat bran, unprocessed; Wheat flour; Wheat wholemeal

132. The Committee agreed to hold the TMRLs at Step 7C pending evaluation of data from commercial scale milling practice. The delegation of Australia indicated that, should the product enter commercial use, data would be generated and provided.

Status of MRLs

At Step 5 : sorghum straw and fodder (dry)
At Step 7B : tomato
At Step 7C : wheat bran, unprocessed; wheat flour; wheat wholemeal
At Step 5/8 : peanut; pistachio nut
At Step 5/8(a): edible offal (mammalian); meat
At Step 8 : all other proposals

ETRIMFOS (123)

Limit of determination

133. The limit of determination for the residue is 0.01 mg/kg.

This would comprise 3 components, the parent compound etrimfos, its oxygen analogue and 6-ethoxy-2-ethyl-4-hydroxypyrimidine, implying that each could be present in amounts of about 0.003 mg/kg. The Committee noted that the determination of such minute amounts would need very sophisticated equipment, not normally available to regulatory laboratories. It expressed the view that the limit of determination should be set at a level attainable by regulatory laboratories and agreed to refer this to JMPR for a reconsideration of the limit of determination and definition of the residue.

Apple; Lettuce, Head

134. The delegation of the Federal Republic of Germany informed the Committee that GAP in its country would support higher MRLs and undertook to make available supporting data to JMPR for review.

Apricots; Artichoke, globe; Brussel sprouts; Peach

135. The delegation of The Netherlands expressed reservation with respect to the proposed limits since data presented in the 1986 Evaluations were too limited.

Barley; Maize; Wheat; Wheat bran, unpressed; Wheat flour; Wheat wholemeal

136. The Committee recalled its discussion at its last Session and decided to keep the MRLs at Step 7C until data allowing reconsideration became available.

Kale; Onion, bulb; Potato

137. In the view of the delegation of The Netherlands, 1986 JMPR Evaluations would support an MRL of 0.5 mg/kg for kale, and 0.05 mg/kg for onions and potatoes to cover recommended usage. The Committee agreed to refer the matter to the JMPR.

Status of MRLs

At Step 7C: barley; maize; wheat; wheat bran, unprossed; wheat flour; wheat (wholemeal)

At Step 5 : all other proposals

MECARBAM (124)

Limit of determination

138. The delegation of The Netherlands proposed 0.02 mg/kg for the limit of determination for the residue which is much more realistic than the 0.005 mg/kg proposed by the 1986 JMPR. The Committee agreed to bring this to the attention of JMPR with a request for reconsideration of the proposed MRLs for cattle meat, edible offal of cattle and cattle milk.

Citrus fruits

139. The delegation of Finland informed the Committee that the national tolerance established in its country was 1 mg/kg and reserved its position with respect to the proposed limit of 2 mg/kg.

Status of MRLs

At Step 5 : cattle meat; edible offal of cattle; cattle milk

At Step 5/8: citrus fruit

METHACRIFOS (125)

General

140. The Committee agreed that the date for JMPR review of the TADI, in this case 1988, should be indicated in the Guide. A number of delegations had reservations concerning the proposed MRLs in view of the low TADI and the uncertainties relating to the toxicology of this compound. In this respect the MRLs for cereals and cereal products were considered to be of general concern. The delegation of

Italy indicated that registration of post-harvest treatment had been requested but not yet been granted pending further toxicological studies that the manufacturer had indicated to be in progress. The question was asked whether there were any registered post-harvest uses for this compound. The delegation of Australia informed the Committee that, while not in actual use in that country, methacrifos was a potentially valuable product, but which required relatively high application rates because of its instability to heat. The delegation of Australia also indicated that residues disappear quickly from flour and are almost completely lost on baking. Other delegations indicated that up to 10-20 % of the original residues in the raw cereals were still found in bread. The delegation of Hungary undertook to make data available to the JMPR.
The representative of the manufacturer informed the Committee that there were registered uses in some countries and that further registrations were pending. The toxicological results were expected to result in a higher ADI.

Status of MRLs
At Step 7B: all proposals

OXAMYL (126)
Beans, except broad bean and soya bean
141. The Committee noted that this use was registered only in The Netherlands and that an MRL of 0.2 mg/kg was appropriate. This was confirmed by the representative of the manufacturer. The Committee decided to refer this limit to the Commission for adoption.

Status of MRLs
At Step 5/8: coffee beans; onion, bulb; sugar cane
At Step 8 : all other proposals

PHENOTHRIN (127)
Cereal grains; Wheat bran, unprocessed
142. The Committee was informed by the delegation of Australia that residue data would be made available to the JMPR for evaluation in 1987.

Status of MRLs
At Step 7B: both proposals

AZOCYCLOTIN (129)
General
143. The Committee agreed to proceed in the same manner as in the case of cyhexatin (see para 82 and 83), noting however, that this approach was bound to cause delay.

Status of MRLs
At Step 5: common beans
At Step 6: all other proposals

DIFLUBENZURON (130)
Black currant
144. Noting that residue data would not be forthcoming, the Committee decided to delete this entry.

Status of MRLs
At Step 5/8 : tomato
At Step 8 : all other proposals

ISOFENPHOS (131)
145. Status of MRLs
At Step 8: all proposals

METHIOCARB (132)
Artichoke, globe; Hazelnuts
146. The delegation of the Federal Republic of Germany undertook to provide residue data to the 1988 or 1989 JMPR to support proposals for these commodities.

Broccoli; Brussels sprouts; Citrus fruits; Common bean; Lima bean; Plums (including Prunes); Rice (in the husk); Sorghum; Strawberry; Sweet corn (corn-on-the-cob); Tomato
147. The original manufacturer of the compound no longer supported these proposals and recommended their deletion. However, as the compound was also produced by other manufacturers, it was not certain that GAP worldwide would support the deletions. Countries and manufacturers would be invited by means of a Circular Letter to submit current GAP data and information regarding manufacture of methiocarb to the JMPR and to the Committee. If received in time, the 1987 JMPR could evaluate these data.
The Committee at its next Session, would decide upon the proposed deletion on the basis of the information available at that time.

Lettuce, Head
148. The delegations of the Federal Republic of Germany and The Netherlands said that based on current GAP in their countries, a limit of 1 mg/kg was more appropriate.

Maize; Rapeseed
149. The delegation of the Federal Republic of Germany undertook to provide new data on GAP and residues data to the 1987 JMPR.

Radish, Japanese
150. This commodity was previously called Chinese radish. The Secretariat was requested to ensure consistent nomenclature throughout the whole system. The delegations of The Netherlands and of the Federal Republic of Germany expressed reservations based on lack of residue data and information on GAP.

Rice (in the husk)
151. It was noted that rice (in the husk) was not a commodity in international trade. Data submitted to the JMPR did not enable a proposal on rice (husked), the commodity normally traded. Countries and manufacturers were invited to supply relevant data to the JMPR to enable them to make a new proposal.

States of MRLs
At Step 5 : Broccoli; Brussels sprouts; citrus fruits; common bean; lettuce, head; lima bean; maize; plums (including prunes); radish, Japanese; rice (in the husk); sorghum; strawberry; sweet corn (corn-on-the-cob); tomato
At Step 5/8: all other proposals

TRIADIMEFON (133)
152. The delegation of the United States of America confirmed its opinion expressed at an earlier Session that it could not accept the residue description as proposed by the JMPR. It was therefore decided not to advance any proposal beyond Step 5.

Sugar beet
153. The delegation of the United States of America considered a limit of 0.5 mg/kg, and perhaps eventually 0.2 mg/kg, more appropriate on the basis of its national GAP and the data already supplied to the JMPR.

Sugar beet leaves or tops; Fodder beet leaves or tops

154. The delegation of The Netherlands drew the attention of the Committee to a possible inconsistency between the proposals for these commodities. GAPs from different countries were the possible reason for these differences. The delegation of the United States of America had established a 3 mg/kg tolerance for sugar beet leaves based on the data available to the 1986 JMPR.
The delegation of The Netherlands requested that proposals for pro-ducts of animal origin be developed as a consequence of the proposals for animal feeds.

Status of MRLs
At Step 5 : all proposals

DELTAMETHRIN (135)

155. The delegation of the Federal Republic of Germany reserved its position for toxicological reasons.

Cereal grains; Wheat bran, unprocessed; Wheat flour; Wheat wholemeal

156. Information on GAP was to be re-evaluated by the 1987 JMPR. The manufacturer undertook to provide all available data for this re-evaluation.
The delegations of France and Italy said that their registered use required a limit of 1 mg/kg in cereals grains and 0.3 mg/kg in flour based on data provided by the manufacturer. The delegation of Australia was of the opinion that a limit of 2 mg/kg for cereal grains was appropriate.

Hops

157. The delegation of France had provided additional data on residues in hops and carry-over into beer to the 1987 JMPR.

Assorted fruits - edible peel; Fruiting vegetables - edible peel; Legume oilseeds

158. All of the above classification questions were referred to the Secretariat and the JMPR.

Status of MRLs
At Step 5 : brassica (cole or cabbage) vegetables; cabbages, head; flowerhead brassicas
At Step 7B : cereal grains; fruiting vegetables, edible peel; wheat bran, unprocessed; wheat flour; wheat wholemeal
At Step 8 : coffee beans; hops, dry; leafy vegetables

METALAXYL (138)

159. The delegation of the Federal Republic of Germany, supported by many other delegations, expressed a strong preference to base the proposals on the residue of metalaxyl parent compound alone. The delegation of the United States of America proposed the inclusion of a metabolite in addition to those included by the JMPR. It was agreed that the residue definition could have a major impact especially on the limits proposed for leafy vegetables.
It was decided to return to the expression of the residue as the parent compound only and to request the JMPR to develop new proposals for leafy vegetables.

Apples; Avocado; Broccoli; Cabbage; Cauliflower; Lettuce; Onion, bulb; Peas

160. The delegation of the United States of America would attempt to ensure that additional GAP and residue data, supporting higher limits to match national tolerances, would be made available to the JMPR.

Citrus fruits

161. The delegations of the United States of America, Italy, France, Finland and Spain opposed to the proposed limit, judging it too high. The delegation of Israel indicated that GAP in that country justified the proposal.

Cucumber; Gherkin; Melons, except Watermelon; Squash, Summer; Watermelon; Winter squash

162. The delegation of the United States of America preferred a 1 mg/kg limit for cucumbers and, on the basis of data already provided to the JMPR, proposed a group limit for cucurbits.

Grapes

163. The delegations of France, Finland, Italy and Spain thought that the proposal was not supported by the data and preferred a limit of 0.5 or 1 mg/kg. The proposal seemed to be based on data developed in the Federal Republic of Germany and the United States of America where the use was not registered. The proposal was referred to the JMPR. Countries were requested to send additional GAP and residue data.

Lettuce

164. The delegation of the United States of America said that information explaining some details of the data submitted at an earlier stage, would be made available to the JMPR.

Potato; Soya bean (dry)

165. The delegation of Hungary undertook to make data available justifying limits of 0.2 mg/kg to the JMPR. The delegation of the United States of America also supported higher limits.

Strawberry

166. The delegation of the United States of America indicated that the use was not yet GAP but that there was a proposal for a national tolerance of 5 mg/kg. The delegation of the Netherlands had provided residue data to the JMPR which showed residues of less than 0.2 mg/kg metalaxyl only, and metalaxyl plus metabolites.

Status of MRLs

At Step 5 : apple; Brussels sprouts; peppers; soya bean (dry); strawberry

At Step 5/8: cotton seed

At Step 7B : avocado; broccoli; cabbages, head; cauliflower; cucumber; gherkin; grapes; lettuce, head; melons (except watermelon); onion, bulb; peas; potato; spinach; squash, summer; watermelon; winter squash

At Step 8 : cereal grains; citrus fruits; hops (dry); sugar beet; sunflower seed; tomato

PHOXIM (141)

Lettuce, Head

167. The delegation of the Netherlands, supported by the delegation of Italy, was of the opinion that a figure of 0.05 mg/kg was supported by the Evaluations. The Spanish delegation, however, pointed out that the proposed figure was correct.

Milks

168. The delegation of The Netherlands found the proposed figure, at the limit of determination, not practible owing to the required withdrawal period; a figure of 0.05 mg/kg was supported by data which had been submitted to the JMPR. It was decided to ask the JMPR to reconsider the data regarding withdrawal.

Sheep meat, meat

169. The Chairman of the 1986 JMPR informed the Committee that the JMPR had requested additional data on sheep meat. The delegation of France was of the opinion that the figure did not conform to GAP in that country.
It was noted that the proposal for meat in the 1986 Evaluations should read 0.2 mg/kg instead of 0.02 mg/kg.

Tomato

170. The Committee was informed by the manufacturer that new results in relation to the use of the compound on this commodity could be expected in 1988 or 1989.

Status of MRLs
At Step 5 : cattle meat, lettuce, head, milks, sheep meat, tomato
At Step 5/8: all other proposals

PROCHLORAZ (142)

171. The delegation of Sweden informed the Committee that a toxicological clarification of the carcinogenicity of the compound was need and reserved its position on all commodities. The delegation of Finland was of the same opinion. The representative of WHO informed the Committee that the ADI had been established in 1983 and that new data had not been received which would change the findings of theJMPR.
The delegation of Italy reserved its position as data supplied by the manufacturer supported lower limits. The Chairman of the 1986 JMPR and the delegation of the United States of America were of the opinion that this could be an example of significantly different limits owing to a changed definition of the residue.

172. The delegation of Italy informed the Committee that the registrant had requested a limit of 2 mg/kg for various imported tropical fruits in that country, based on data provided in the registration dossier. It therefore reserved its position on several proposals. A similar reservation was expressed on stone fruits (0.1 mg/kg instead of 1) and cereals (0.1 mg/kg instead of 0.5).
The representative of the manufacturer informed the Committee that data submitted to Italy were representative of GAP in that country, whereas data submitted to the JMPR reflected a much wider GAP.
The Chairman reminded the representative of the manufacturer that international harmonisation had to start at the headquarters of the manufacturer in defining its policy of data submission in various countries.

173. The delegation of The Netherlands pointed out that the method of analysis for regulatory purposes for foodstuffs of plant origin should also be validated.

Barley straw and fodder, dry

174. It was pointed out that feeding studies on lactating ruminants and poultry were needed before taking a decision on the proposal for straws. The representative of the manufacturer informed the Committee that such a study would perhaps be available in 1988.

Mushrooms

175. The delegation of the Netherlands questioned the necessity of the use between flushes resulting in a PHI of 2 days.
It was confirmed that this practice was GAP within the United Kingdom.

DIMETHIPIN (151)

183. The toxicology of this compound was under re-evaluation in the Federal Republic of Germany. It was noted that 0.1 was the limit of determination in the trials submitted for potato but not for rapeseed. JMPR reports give an 80% recovery for plants but less for some watery plants. The data for potato and rape seed were supplied by different countries.

Status of MRLs
At Step 5: all proposals

FLUCYTHRINATE (152)

184. The delegation of the Federal Republic of Germany reserved its position on all proposals because of toxicological concerns. The Committee was informed that the manufacturer would carry out a new 90 day study on the rat to clarify effects on the thyroid. The representative of the WHO requested that the Federal Republic of Germany clarify whether its concerns arose from the same studies as those used in the JMPR Evaluations.

Beans (dry)

185. The delegation of the Netherlands was of the opinion that the data in the 1985 Evaluations would better support a figure of 0.05 mg/kg. The matter was referred to the JMPR.

Cabbages, Head; Flowerhead brassicas

186. The delegation of the United States of America proposed a 2 mg/kg tolerance based on data already provided to the JMPR. Pre-harvest interval in the United States of America was shorter and losses of residues from samples during storage were taken into consideration in providing an explanation for the much higher figure proposed by the United States of America. The matter was referred to the JMPR.

Cattle meat; Cattle Milk

187. Temporary MRLs for cattle meat and cattle milk were related to a 1985 JMPR request for data on residues resulting from the feeding of treated cotton seed meal. Review was scheduled for 1987.

Eggs

188. The Committee was informed by the manufacturer that it appeared that no new data were available.

Maize forage

189. The delegation of the United States of America supported a higher limit and would try to have the manufacturer supply the data developed, preferably on the basis of dry weight, to the JMPR.

Pome fruits; Tomato

190. On the basis of data available to the JMPR, the delegation of the United States of America indicated that the proposed limits were too low. GAP information from the United States of America that had not previously been available for pome fruits would be supplied to the JMPR.

Status of MRLs
At Step 5: all proposals

THIODICARB (154)

Cattle meat

191. The delegation of the United Kingdom was of the opinion that 0.02 mg/kg was probably not a real limit of determination.

Status of MRLs
At Step 5/8: rape seed
At Step 5 : all other proposals

TRIAZOPHOS (143)
Banana; Onion, bulb
176. There was no discussion on the proposal as the ADI was temporary.

Status of MRLs
At Step 5: all proposals

BITERTANOL (144)
177. The representative of the manufacturer informed the Committee that new data on some uses would be available in 1988.

Status of MRLs
At Step 5: all proposals

CARBOSULFAN (145)
178. As more agricultural data were needed, the proposal for citrus fruits was held at Step 5.

Status of MRLs
At Step 5: citrus fruits

CYHALOTHRIN (146)
Cabbages, Head
179. It was pointed out that the 1984 and 1986 reports had to be considered together.

Status of MRLs
At Step 5: all proposals

METHOPRENE (147)
180. Because of the temporary status of most of the proposed limits all were maintained at Step 5.

Status of MRLs
At Step 5: all proposals

PROPAMOCARB (148)
Cabbages, Head; Cauliflower
181. The delegation of the Netherlands indicated reservations with respect to the proposed limits which may be insufficient to cover current recommended uses. The Netherlands may be able to provide data on cauliflower to the JMPR.

Peppers
182. The delegation of the Netherlands considered the limit insufficient to cover modern application techniques. Data provided by the Netherlands to the JMPR were not included in the 1986 Evaluations.

Status of MRLs
At Step 5 : Brussels sprouts; cabbages, head; cauliflower; celery; lettuce, head; peppers; radish; tomato
At Step 5/8: beetroot; cucumber; strawberry

Cotton seed oil, edible; Soybean oil, refined

192. The Committee agreed that, as the residue would not be found in other than trace amounts because of the low fat solubility the MRLs could be deleted.

Maize fodder; Maize forage

193. The Committee enquired whether residue data existed on the dry commodities so that MRLs could be set on a dry weight basis. The representative of the manufacturer undertook to inform the Committee at the next Session.

Sweet corn (corn-on-the-cob)

194. The delegation of The Netherlands expressed the view that data in the JMPR Evaluations did not support a higher MRL than 1 mg/kg. The JMPR was requested to re-examine the matter.

General

195. The delegation of Italy was not in agreement with the choice of the "no-observed-effect level" in the estimation of the ADI by the JMPR. The delegation was invited to communicate its views directly to the JMPR. Regarding the definition of residue, the question arose whether 'methomyl oxime' should be deleted in order to be in line with the definition of the residue of methomyl. The delegation of Spain pointed out that this was not necessary since the analytical method measured the oxime anyway.
The Committee referred the matter to the JMPR.

Status of MRLs
At Step 5: all proposals (except cotton seed and soybean oils deleted)

CLOFENTEZINE (156)

196. The Committee noted that residue data to resolve temporary MRLs would be made available to the 1987 JMPR. The delegation of The Netherlands was of the opinion that GAP data were especially needed on citrus fruit, cucumber and stone fruit.

Status of MRLs
At Step 5: all proposals.

GLYPHOSATE (158)

Cattle meat

197. the Committee noted that the delegation of Hungary was of the opinion that 0.1-0.2 mg/kg would be a more appropriate limit of determination.

Oats

198. The delegation of Austria informed the Committee that GAP in that country would require an MRL of only 10 mg/kg for all cereals. The delegation of The Netherlands indicated that it was partly a question of preharvest interval and supported the view of Austria.

Soya bean

199. The delegation of the United States of America indicated that GAP in that country required an MRL of 6 mg/kg and would try to make data available to the JMPR.

Wheat

200. The delegation of Sweden considered the MRL of 20 mg/kg too high and suggested that it should be reconsidered by the JMPR. The delegation of The Netherlands considered a limit of 5 mg/kg to be more appropriate.

Status of MRLs
At Step 5: all proposals

VINCLOZOLIN (159)

201. The delegation of The Netherlands informed the Committee that its national MRLs were based upon residues of the parent compound only, and proposed that the Committee should define the residue in this way, as this would distinguish between residues of vinclozolin and those of related compounds. The delegation of the United Kingdom supported this proposal. Retention of the present definition was supported by the delegations of France and of the United States of America and by the representative of the manufacturer, on the grounds that the data examined by the JMPR were based on this definition. The Committee was informed that the IUPAC Commission on Pesticide Chemistry was studying the question of pesticides with common metabolites: its conclusions might be available to the next meeting of the JMPR.
It was pointed out that the JMPR would be unable to change its previous recommendations unless extensive residue data based on determination of the parent compound only were provided. The Committee decided that the Secretariat should ask countries to supply appropriate data to the JMPR.
The delegation of The Netherlands would be able to supply data for 5 commodities based on the parent compound only.

Cherries; Peaches; Lettuce

202. The delegation of the United States of America stated that GAP in its country would require higher MRLs. The United States would try to provide any data which it had not already supplied to the JMPR. The delegation of Austria could not accept the MRLs for cherries. Its national MRL was 0.5 mg/kg.

Peppers

203. The delegation of the United States of America stated that the data already supplied to the JMPR, considered together with data on tomatoes, justified a limit of 3 mg/kg.

Status of MRLs
At Step 5: all proposals

CONSIDERATION OF GUIDELINE LEVELS

204. The Committee had before it the Guide to Codex Maximum Limits for Pesticide Residues - Part 3, the Index of pesticide chemicals for which guideline levels have been or may be set and document CX/PR 87/8 containing government comments.

BINAPACRYL (003).

205. The Committee was informed by the manufacturer that dinoseb had been withdrawn from use in the United States of America in 1986 owing to new adverse toxicological findings and owing to its contamination of the environment. Dinoseb was a metabolite of binapacryl and other dinitro compounds. The present registration of binapacryl in the Federal Republic of Germany would expire by the end of 1987. The United Kingdom had suspended registration of a range of dinitro compounds. The manufacturer indicated that no problems were faced for applicators of the pesticide. However, very extensive animal testing would be required to support prolonged registration of the pesticide. The manufacture of binapacryl, dinoseb and dinoseb acetate was therefore discontinued and FAO and WHO had been informed accordingly.

206. The Committee proposed to advise the Commission that existing CXLs should be deleted. The Committee agreed that GLs should also be deleted.

CARBON DISULPHIDE (009), CARBON TETRACHLORIDE (010) 1,2-DIBROMOETHANE (023), 1,2-DICHLOROETHANE (024), METHYL BROMIDE (052).

207. The Committee noted that these fumigants continued to be used as grain protectants, some on a large scale.
Since they had no ADI, only guideline levels could be established.

208. The Committee was aware that some governments had already taken action on certain fumigants.
As a first step it agreed to seek information from Governments by means of a circular letter on i) Nature of fumigants used in their countries ii) Level of use iii) Residual levels of fumigants and iv) Interval between treatment and use. On the basis of information obtained, a paper should be prepared by the Secretariat on how the problem could be addressed. It would be discussed by the Committee at its next Session.
The observer from the EEC informed the Committee that the Community had issued a directive regulating MRLs as below for a number of fumigants used as grain protectants:

Fumigant	MRL mg/kg
1,2-dibromoethane	0.01
carbon disulphide	0.1
carbon tetrachloride	0.1
methyl bromide	0.1

With the exception of 1,2-dibromoethane for which the MRL applies at all stages of distribution, the levels apply at the milling stage.

COUMAPHOS (018)

209. It was noted that the compound was on the agenda of the 1987 JMPR.

AZINPHOS-ETHYL (068)

210. The Committee having heard that the manufacturer would not be in a position to provide any additional data for evaluation by JMPR, agreed to delete all the GLs from the system.

DEMETON-S-METHYL (073)

211. The Committee noted that additional chronic studies were in progress and that the results would be made available for evaluation in time for the 1989 JMPR.

CHINOMETHIONAT (080)

212. It was noted that the compound was on the agenda of the 1987 JMPR.

DINOCAP (087)

213. It was noted that the compound was on the tentative agenda of the 1988 JMPR. The representative of GIFAP indicated that every effort would be made to submit data in time for the 1988 JMPR.

SEC-BUTYLAMINE (089)

214. It was noted that there was limited use of the pesticide in the United States of America which had established some national tolerances. The pesticide also had small but important uses in Australia on citrus.
The Committee noted that neither the United States of America nor Australia sufficient toxicological data to establish an ADI for the pesticide.
The Commission would be advised to convert existing CXLs to GLs and the Committee agreed to postpone a decision with respect to GLs to its next Session pending availability of further data.

DEMETON (092)

215. Due to the very limited importance of the compound the delegation of Federal Republic of Germany informed the Committee that the manufacturer did not intend to conduct additional studies. The delegation of Canada informed the Committee that it had no further information to that provided to the last (18th) Session.
The Committee agreed to delete all the GLs from the system.

BIORESMETHRIN (093)

216. The representative of the manufacturer informed the Committee that toxicological studies to assess the compound were in progress and that the results would be available for evaluation by the JMPR in 1991.

DIALIFOS (098)

217. The manufacturer informed the Committee that toxicological investigations were in progress, but could not provide a firm date by which the results would be available for evaluation.
The GLs were maintained and the Committee agreed to postpone action to the next Session.

DAMINOZIDE (104)

218. The Committee noted that the chronic studies which were in progress would be completed by June 1988 and that the compound was on the agenda for the 1989 JMPR.

ETHEPHON (106)

219. The Committee noted that the current manufacturer was considering submission of the needed toxicological data and agreed to postpone action till its next Session. All proposals at Step 3 would remain there.

PROCYMIDONE (136)

220. It was noted that the compound was on the agenda for the 1989 JMPR. It was decided that all proposals would remain at Step 3.

BUTOCARBOXIM (139)

221. The Committee noted that the compound was on the agenda for the 1988 JMPR.

ETHOPROPHOS (149)

222. The compound was on the agenda for the 1987 JMPR.

PROPYLENETHIOUREA (PTU) (150)

223. The Committee agreed to await the evaluation of ETU by the 1988 JMPR before taking any action.

PYRAZOPHOS (153)

224. The Committee noted that the results of long term studies would be available in time for a re-evaluation by the JMPR in 1991.

BENALAXYL (155)

225. The Committee noted that the compound was on the agenda of the 1987 JMPR.

STATEMENTS REGARDING THE CLASSIFICATION AND THE GUIDE

226. On behalf of the Committee, the Chairman thanked Mr. Besemer for his excellent work in further developing the classification, which was originally created by Mr. Duggan. He included in his appreciation Ms. Hakkenbrak (The Netherlands) who had done a perfect job in typing and editing the very complex material of the classification and subsequently incorporating it into the Guide.

227. It was suggested that the next edition of the Guide might not list the commodities in English alphabetical order, but might instead group related commodities together. The Secretariat was requested to consider this.

REPORT ON ACCEPTANCES BY GOVERNMENTS OF CODEX MRLs

228. The Committee had before it document CX/PR 87/4 and room document 12, the latter submitted by the EEC.

229. The Committee was informed of the conclusions of the Codex Committee on General Principles (paras 28-39, ALINORM 87/33). It noted that a number of issues raised by delegations to that Committee had been considered by the Working Group on Regulatory Principles. The Committee proceeded to discuss the recommendations of the Codex Committee on General Principles (para 36(a)-(d)).

Good Agricultural Practices (GAP), Consumer Protection

230. The delegations of Austria and Finland pointed to the definition of GAP according to which resulting residues should be acceptable from a point of view of safety. The delegations wished to know how the WHO experts in the JMPR influenced the estimation of MRLs in order to ensure that health consideration would be taken fully into consideration (para 33, ALINORM 87/33). The delegation of Sweden was of the opinion that, in order to facilitate acceptances, Codex MRLs should be set as low as possible for foods of importance in the diet, especially those consumed raw. The toxicity of the residues should be taken into consideration. Not all GAPs in the various countries were necessarily acceptable practices to be used in estimating MRLs.

231. The delegation of the Federal Republic of Germany supported the view of the delegations of Austria and Finland and stressed that consumer protection should be given the greatest attention in setting MRLs. Information on exposure to residues was needed as well as a more widely understood mechanism for developing MRLs.
The delegation suggested the establishment of a Working Group to look into this question. The delegations of Finland and Austria supported the establishment of such a Working Group.

232. The delegation of The Netherlands indicated that a critical examination of GAP, both local and that of other countries, was carried out in that country. GAPs differing significantly should be re-examined by the JMPR. This was not to say that countries should not trust each other's GAP.

233. The delegation of Sweden was of the opinion that setting MRLs for groups of food commodities and using additional numerical values for MRLs (eg. 0.3, 3, etc.) would promote acceptances. The necessary resources should be given to the JMPR for the evaluation of old and new pesticides and the preparation of the various publications. An early evaluation of new pesticides would ensure that national tolerances would be set taking into account existing Codex MRLs. These views were shared by the delegation of Spain.

234. The representative of WHO indicated that the last two Sessions of the JMPR had discussed the question of acceptability of MRLs from a safety point of view and drew attention to the development of guidelines concerning estimating exposure to residues. The Chairman of the Working Group on Regulatory Principles also drew attention to the role of these guidelines in providing assurance concerning the acceptability of MRLs from a point of view of safety.

The representative of FAO was of the opinion that the JMPR was critical in its acceptance of residue data where there was doubt concerning GAP. In this respect the Committee noted that the 1986 JMPR report contained information on how MRLs were being established by the JMPR.

235. The Committee was reminded by the delegation of the United Kingdom about a workshop planned by EPPO in June 1987 on GAP (see para 8). The intention was to relate the efficacy of certain pesticides to residues found, i.e. to relate GAP to MRLs. The result of this workshop would be of interest to the Committee and should be awaited before considering the question of GAP any further. This view was shared by the delegation of Spain.
The delegation of the United States of America, supported by the delegation of Finland and Sweden and other delegations, suggested that a short seminar be held prior to the next Session of the Committee to discuss questions relating to the establishment of MRLs and other aspects of the work of the Committee. After discussion the Committee agreed that the first half of the first day of the new Session of the Committee be devoted to a series of lectures by invited speakers and discussions on topics which would clarify the work of the CCPR and the setting of MRLs in relation to GAP and consumer protection. Both JMPR members and representatives of GIFAP should be involved in the seminar.
As regards the question of developing guidelines on GAP as recommended by the Codex Committee on General Principles, the Committee decided to await the report of the EPPO workshop and the views of the JMPR on the question.

Reports by delegations

236. The delegation of Hungary informed the Committee that Hungary had informed the Secretariat concerning the acceptance of MRLs contained in Vol. XIII of the Codex Alimentarius. Hungary had given acceptance of one form or other to some 90% of the MRLs. In considering the Codex MRLs, the Recommended Regulatory Principles (CAC/PR 9-1985) were found to be very useful.

237. The delegation of Sweden wished to correct a wrong impression created by a statement in para 31 of the report of the Codex Committee on General Principles. The delegation indicated that Sweden's aim was to harmonize its national limits with those in the various exporting countries, the EEC and the Codex Alimentarius. Under Swedish law no differential treatment of imported and domestic products was possible. However, amendments to the regulations were envisaged aimed at harmonization. Where raising of a Swedish MRL was to be involved, this had to be justified toxicologically, taking into consideration the food consumption pattern in that country.

238. The delegation of Australia informed the Committee that progress had been made in introducing a uniform national food law. It was hoped that this would make it possible for Australia to respond to Codex MRLs on a national basis.

239. The delegation of Chile indicated that Chile relied on supervised trials in developing its own national limits. In order to ensure the smallest possible residues in food, maximum pre-harvest intervals were aimed at, generally resulting in lower national MRLs than those set by other countries or Codex.

240. The representative of the EEC drew the Committee's attention to the communication (Room document 12) of the Community concerning Codex MRLs contained in Volume XIII Ed II of the Codex Alimentarius. He stated that the Community response indicated their

position on 45 compounds as well as on 450 pesticide/crop combinations and was being made on the same basis as earlier submissions i.e. an indication of the extent of free circulation within the Community of products complying with Codex MRLs, for which Community provisions also exist. He also drew the Committee's attention to the fact that, in addition to fruit and vegetables, the Community was including references to cereals and products of animal origin following the recent adoption of directives on these groups of products; two directives would be applicable from 30 June 1988.

CONSIDERATION OF THE REPORT OF THE AD HOC WORKING GROUP ON METHODS OF ANALYSIS

241. The Committee had before it the report of the ad hoc Working Group on Methods of Analysis, which was introduced by its Chairman, Mr. P.A. Greve (The Netherlands). The report was distributed to the Committee, but is not appended to this report.

242. Mr. Greve informed the Committee that the Working Group had discussed the following points:
- recommendations for methods of analysis;
- the production of a questionnaire concerning the use of analytical methods recommended by the Group;
- the concept of Lower Practical Levels (LPLs) in the determination of pesticide residues;

Recommendations for Methods of Analysis

243. The Committee noted that the Working Group had reviewed and updated the recommendations for methods of analysis made at previous Sessions. The Committee asked the Secretariat to publish the revisions as an amendment to document CAC/PR 8-1986. The Committee noted that advice had been sought from GIFAP with respect to the difficulty of finding sufficient information on residue analytical methods for newer compounds in the open literature (criterion A in para 1.2 of document CAC/PR 8-1986). As a result, GIFAP had agreed to supply information on residue analytical methods developed by GIFAP members to bona fide scientists.

Questionnaire on use of analytical methods:

244. The Committee noted that the Working Group had felt a need for a feed-back from scientists with respect to its recommendations for methods of analysis. To this end, a questionnaire had been set up which would be sent during the next month to a large number of pesticide residue analytical laboratories. Information would be asked regarding:
- what (Codex) pesticides had been analysed during the last 5 years and in what main commodities;
- what methods had been used; whether or not they had been found satisfactory; details of difficulties encountered
- what criteria had been applied when checking the applicability of a method to a given problem.

245. The Committee agreed that reactions should also be sought from countries not represented in the Working Group. The Committee noted that answers received to the questionnaire would help the Working Group to make its recommendations in the future in such a way as to be most useful.
The Chairman of the Working Group undertook to send out the questionnaires.

The Concept of Lower Practical Levels (LPLs) for the determination of Pesticide Residues

246. The Committee noted that the continuing availability of improved clean-up systems and more sensitive and selective detectors had enabled residue chemists to measure smaller and smaller residues in many different samples. However, the measurement of very low levels of residues may not be essential in some circumstances.
The residue chemist is frequently involved in measuring residues in order to establish or to monitor maximum residue levels (MRLs) of chemicals present in or on commodities moving in international trade. The measurement of residues in soil and water to assess the environmental fate of chemicals is also frequently important. In these cases residue methods should be sufficiently sensitive to establish and monitor the MRL and to determine residues likely to be present in a crop or an environmental sample; they need not necessarily be sensitive enough to be able to determine residues two or more orders of magnitude lower than the MRL.
Methods developed to measure residues at very low levels are usually expensive and difficult to apply. They can also lead to technical problems in specifying precisely the limit of determination of the method.
However, it may be acceptable to define a lower practical level (LPL) to be determined in any sample. This would have the advantage of reducing the technical difficulty of obtaining the data and would also reduce costs.

247. The Committee endorsed the concept of the LPL, but agreed that for clarification the term should be changed to "Lower Practical Analytical Level". The abbreviation LPL should be retained however.

248. The Committee agreed that the revised version of the document prepared by GIFAP on minimal concentrations to be determined in samples for residue analysis, after minor changes, should be included in the Codex document on Grood Practice in Pesticide Residue Analysis (CAC/PR 7-1984) as a separate paragraph 4).

Appointment of an ad hoc Working Group on Methods of Analysis

249. The Committee thanked the Working Group and its chairman for the work done prior to and during the Session. It was decided to set up a new ad hoc Working Group under the Chairmanship of Mr. P.A. Greve (The Netherlands) with membership of Australia, Belgium, Canada, Finland, France, the Federal Republic of Germany, Ireland, Japan, Mexico, The Netherlands, Norway, Spain, Sweden, Switzerland, Thailand, the United Kingdom, the United States of America, AOAC, GIFAP and IUPAC.

CONSIDERATION OF THE REPORT OF THE AD HOC WORKING GROUP ON DEVELOPMENT OF RESIDUES DATA AND SAMPLING

250. The Committee had before it the report of the ad hoc Working Group on Development of Residues Data and Sampling. The report was introduced by the Chairman of the Group, Mr. J.A.R. Bates (United Kingdom). The report was distributed to the Committee, but is not appended to this report.

Guidelines on Pesticides Residues Trials for the Registration of Pesticides and the Establishment of MRLS

251. The Committee noted that FAO had re-published these Guidelines as a reference document cited in the FAO Code of Conduct. Following further study of the proposals for a revision of sample sizes from trials for residues analysis, the Committee agreed provisionally the revised guidance in ANNEX I of the report of the Working Group and recommended that publication should follow as soon as possible. The representative of FAO indicated that this publication would be given priority. There was some discussion on details in the revised guidelines. It was decided that comments could still be sent to Mr. Bates until June 30, 1987, for inclusion in the guidelines.

Recommended method of sampling for the determination of Pesticide Residues in meat and poultry products for control purposes

252. The Committee discussed a further draft, taking account of comments from several countries. It recommended that the sampling method should be published in Part 5 of the Codex Guidelines, together with a short text drawing attention to the approach used in the recommended method which is based on the principle that, unlike the procedure for most commodities, primary samples of meat may be analysed individually and the MRL applies to the residue concentration in the primary sample. The Working Group noted that there were five Codex documents at various stages which include reference to some aspect of sampling meat and poultry products. The Committee wished to ensure that there was consistency between these references and recommended that the Secretariat take the necessary action.
Attention was drawn to the valuable explanatory notes prepared by Ms. M. Cordle (USA) and recommended that it should be included in its entirety in a future Working Paper.

253. In the light of the discussion that followed, it was decided that the Chairman of the Working Group would prepare a Working Paper in which the above mentioned draft would be incorporated together with the existing Recommended Methods of Sampling for the Determination of Pesticide Residues (CAC/PR 5-1984) and the new recommended methods of sampling for meat and poultry. This Working Paper would be circulated to countries for comment. The comments received from delegates of the Committee would be discussed at the next Session with the aim of finalising the draft. Sampling instructions prepared by the Codex Committee on Methods of Analysis and Sampling should be taken into consideration. The Working Paper would also be presented to the Codex Committee on Residues of Veterinary Drugs in Foods which would meet in the autumn.

Guidelines on the Determination of the Effects of Processing and Cooking on Pesticide Residues

254. The Committee considered a draft paper on factors which could influence the amount of pesticide residues, present in commodities following treatment, that actually reached the consumer. It had been widely demonstrated that food preparative operations, such as washing, blanching and thermal treatments, could have a significant effect on pesticide residues. It was recommended that a revised draft be prepared for the next meeting based on comments which would be requested from member countries via a Circular Letter. The revised draft would emphasize the effects of different types of processing on commodities.

Sampling for Enforcement of MRLs

255. At the request of the delegation of Finland, the Committee discussed the problem that can arise in enforcement of MRLs if a consignment consists of lots from different sources which are inadequately labelled for identification. The analysis of primary samples gives conflicting results and combination of these samples results in a loss of information.

The Committee, noting that the Codex Recommended Method for Sampling for checking compliance with MRLs had not been reviewed for over 5 years, recommended that member countries should be requested via a Circular Letter to send comments based on experience in using the method to the Chairman of the Working Group by September 1987, so that a discussion paper could be prepared for the 1988 Session of the CCPR.

256. At the request of the delegation of Belgium it was indicated that more attention still had to be given to the sampling of low fat meat for fat soluble pesticide residues.

Establishment of a new Ad Hoc Working Group

257. The Committee thanked Mr. Bates and the Working Group for their work prior to and during the Session. It was decided to establish a new ad hoc Working Group under the Chairmanship of Mr. Bates and with the following members: Australia, Belgium, Canada, People's Republic of China, Finland, France, Federal Republic of Germany, Greece, Ireland, The Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Thailand, United Kingdom, United States of America, AOAC, EEC, FAO, GIFAP, IUPAC.

CONSIDERATION OF THE REPORT OF THE WORKING GROUP ON PESTICIDE RESIDUE PROBLEMS IN DEVELOPING COUNTRIES

258. The Committee had before it the report of the ad hoc Working Group on Pesticide Residue Problems in Developing Countries, which was introduced by its Chairman Dr. S. Deema (Thailand). The report was distributed to the Committee, but is not appended to this report.

Activities in the Various Codex Regions of Interest to the CCPR

(a) Report on activities in Asia

259. The Committee noted that the 3rd Regional Meeting for the Asian region would be held in Indonesia from 12-18 January, 1988. A meeting was held in Thailand during February 1986 to discuss pesticides and integrated pest management programmes in South East Asia. Twelve countries had attended. A questionnaire had been circulated within the region seeking information on pesticide residue problems, problems in respect to safe handling and use and details of legislative control measures. The response had been disappointing and therefore the questionnaire would again be circulated in the coming year. Efforts were underway to generate residue data on foods grown in the region for submission to JMPR.

260. The Institute of Agricultural Science of the Republic of Korea was preparing guidelines on the safe use of pesticides in an attempt to reduce pesticide residue problems. A meeting had been held in Manila to promote the harmonisation of pesticide registration requirements. It had been attended by 13 countries. Copies of the report of the meeting can be obtained from the RENPAF Secretariat in the Philippines.

(b) Report on acitivities in Africa

261. Pesticide registration requirements existed in Egypt and information on toxicology, chemistry and environmental fate was required. Residue data generated under local conditions were also necessary. Laboratories were monitoring pesticide residues and assisting with advice on good agricultural practice and registration requirements.

262. In Senegal most of the pesticides (mainly insecticides) were imported. A pesticide registration committee existed and a scientific council was being established. Senegal was attempting to study effects of pesticides on plants, soil and water and was considering conducting market basket surveys. There had been considerable support from sub-regional organisations.

263. Maximum residue limits were to be established in Algeria with heavy reliance upon Codex MRLs. There was no legislation in Mali to control pesticide residues but attempts were being made to set up adequately equipped laboratories and to conduct training courses. Inadequate laboratory facilities existed in Tunisia but with financial assistance from Belgium, monitoring of food commodities was being undertaken by Ghent University.

(c) Report on Activities in Latin America and the Caribbean

264. The Ministry of Agriculture in Mexico had 12 laboratories analysing pesticide formulations and residues in food. Training courses were conducted in cooperation with the Inter-American Centre for Agriculture while the promotion of safe use and handling procedures was an on-going exercise in cooperation with industry.

265. A meeting of countries in Latin America was convened to discuss the FAO Code of Conduct on the Distribution and Use of Pesticides. The Code had been reviewed in conjunction with registration procedures already in place or soon to be introduced by individual countries in the region. A training course on pesticides was being planned prior to the meeting of the 1989 Coordinating Committee for Latin America which was to be held in Costa Rica.

(d) Report on Activities in the South West Pacific

266. Within the South-West Pacific region there were a large number of pesticides available for both agricultural and quarantine purposes. Few countries had pesticides legislation or pesticide registration requirements and the technical expertise required for the assessment of pesticides was generally not available. Little attention was paid to the establishment of maximum residue limits with some countries preferring to adopt MRLs established by Australia, New Zealand or the USA. The monitoring of food commodities for residues was rare but laboratories did exist in the region which could, with some upgrading, undertake pesticide residue analyses. There was a possibility that some countries might in future be able to participate in the activities of the CCPR.

Fourth Questionnaire on Pesticide Residue Control Facilities (CL 1986/11-PR, CL 1986/46-PR).

267. The Committee noted that a total of 43 countries had now responded to the re-issue of the 3rd Questionnare of the Working Group which had been prepared by GIFAP and useful information was collected on manpower development and facilities for pesticide residue control in these countries.

The Committee encouraged the use of the information in some way so as to assist developing countries. In this way the gap between those countries with resources and those without could be bridged. A further questionnaire was not considered necessary at this stage.

268. A staff member of the Food Quality and Standards Service of FAO, Mr. G. Gheorghiev, brought to the attention of the Committee the work of this Unit. The service provides technical assistance to developing countries in establishing and strengthening comprehensive food quality and contamination control services. A short outline was presented of the generation, contents, implementation and impact of technical assistance projects and 2 model project outlines were provided which could be used as guides in formulating and implementing similar programmes.

269. Mr. Gheorghiev strongly urged the developing countries to endeavour to upgrade the priority ranking of the food quality and contamination control programmes in their development plans so that they could obtain adequate financial support. Until this shift in attitude was achieved he considered that no serious improvements could be expected in the control of pesticide residues and other food contaminants. This control was of vital importance for the protection of consumer health and the export of agricultural products as in many developing countries these products were the main source of foreign exchange earnings.

270. Ms. Gorchev (WHO) summarised details of the Joint FAO/WHO Food Contamination Monitoring Programme which now covered 33 countries, half of which were developing countries. Funding available for this programme is limited, however, all countries are free to participate. Interested countries should communicate with Ms. Gorchev of WHO. Mr. Kopisch-Obuch (FAO) highlighted FAO's activities in conducting training courses and noted that present efforts were mainly concerned with implementing, wherever possible, the FAO Code of Conduct on the Distribution and Use of Pesticides.

Recommendations of Working Group 3 contained in Annex 1, Appendix IV, ALINORM 85/24B

(a) Progress report on action taken on the recommendations

271. The Committee received a progress report on action taken on the recommendations of the Working Group (CX/PR 87/9). Considerable progress had been made in implementing the recommendations, however further effort was required. To encourage more widespread participation it was suggested that the scope of regional meetings, seminars etc. should be broadened so as not to be too specific and thus encourage wide participation. The Committee noted that the reports of the regional meetings would be discussed at the Regional Codex Coordinating Committees and also by CCPR under matters of interest.

272. The activities of the International Programme on Chemical Safety (IPCS) were outlined by Mr. J. Herrman (WHO). He also noted the Health and Safety Guides which were being prepared and which would summarise information on chemicals (including pesticides) useful to all countries.

273. A number of delegations considered that the recommendations required updating and in updating them it would be necessary to ensure that the true priorities of developing countries were recognised. The delegation of GIFAP reminded the Working Group of its terms of reference and suggested that consideration of pesticide residue problems should not be diluted by consideration of issues such as safe handling and use which were receiving attention in a number of countries with assistance from international organisations such as GIFAP.

274. The representative of GIFAP was of the opinion that the issue of crop protection was of great importance but so wide ranging that the tendency was to include all problems in the Working Group discussions. It was becoming more difficult to complete the work associated with residue problems in one afternoon. He wished to remind the Group that the CCPR priority was to facilitate international trade and to set MRLs.
The delegations of Senegal, Chile and Thailand, later supported by the delegations of Mexico, Algeria and Egypt agreed that the main subject for discussion by the Group was residues and MRLs but that other problems, related to residues also had to be considered. These included such items as safe use, product quality control, adequate laws and problems of storage and distribution. The representative of FAO outlined the work of the Plant Protection Service of FAO in some of these other areas.

(b) Recommendations of the Working Group for further action

275. The Committee agreed that the following recommendations should be considered for further action by the appropriate bodies or persons:

(i) An African Committee be established to oversee the implementation of the FAO Code in that region;
(ii) Efforts be made to improve regional coordination in Africa and other Codex regions at both the regional and sub-regional level;
(iii) Regional Chairmen undertake a detailed survey of their region, reporting on pesticide residue problems and also on such aspects as legislation, registration procedures, pesticides use and availability, residue monitoring and laboratory facilities;
(iv) Countries in the South West Pacific region be invited to attend meetings of the Coordinating Committee for Asia, at which questions relating to pesticide residues are discussed;
(v) A regional chairman be appointed to coordinate activities in the South West Pacific so as to encourage participation and awareness of CCPR activities;
(vi) Consideration be given to limited funding of travel for certain persons from developing countries (holding office in the CCPR) to facilitate their attendance at specific Codex meetings;
(vii) The recommendations of the Working Group be reviewed at a future session.

Appointment of Officers of Working Group

276. The following officers were elected as Chairman and regional Chairmen of the Working Group. The Committee noted that they would hold their position till the end of the 20th Session.
Chairman, Mr. Sakdiprayoon Deema (Thailand),
Regional Chairmen (Africa), Mr. El Attal (Egypt) (Northern Africa),
Mr. F.A. Abiola (Senegal) (Southern Africa),
Regional Chairman (Latin America), Ms. S. Conseco (Mexico),
Regional Chairman (Asia), Mr. Sakdiprayoon Deema (Thailand),
Regional Chairman (South West Pacific), Mr. G.N. Hooper, (Australia)

Appointment of an ad hoc Working Group on Pesticide Problems in Developing Countries

277. The Committee thanked the Working Group and its Chairman and regional Chairmen for the work done prior to and during the Session. The Committee noted that the ad hoc Working Group would continue its useful work under the continued Chairmanship of Mr. S. Deema (Thailand) with membership of Algeria, Australia, Belgium, Botswana, Canada, Chile Cuba, Egypt, Federal Republic of Germany, Finland, France, Japan, Mali, Mexico, Morocco, New Zealand, Republic of Korea, Senegal, Spain, Sweden, Switzerland, Thailand, The Netherlands, Tunisia, United Kingdom, United States of America and GIFAP.

Technical Cooperation in Rural Areas

278. The delegation of the Federal Republic of Germany brought to the attention of the Committee a publication "Technical Cooperation in Rural Areas, Plant and Post Harvest Protection - Facts and figures 1986", Published by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Federal Republic of Germany. The publication contained details of projects in progress in developing countries, that were supported by the Federal Republic of Germany.

International Code of Conduct on the Distribution and Use of Pesticides - Report on progress in implementation

279. The representative of FAO reported on progress in the implementation of the International Code of Conduct on the Distribution and Use of Pesticides. Special mention was made of the distribution of about 30.000 copies of the Code in the 5 official FAO languages, Arabic, Chinese, English, French and Spanish. A questionnaire had been sent to all FAO member countries to collect basic information on the various issues addressed by the Code. Information received was under evaluation. Implementation activities were concentrated in assistance to establish and/or strengthen national pesticide registration and control schemes, to implement and/or strengthen laboratory infrastructures, to control pesticide formulation quality and to conduct training courses in various aspects of pesticides. A number of training courses for trainers in the safe and efficient use of pesticides had been conducted in various developing countries.

CONSIDERATION OF THE REPORT OF THE AD-HOC WORKING GROUP ON REGULATORY PRINCIPLES

280. The Committee had before it the report of the ad hoc Working Group on Regulatory Principles. The report was introduced by the Chairman of the Group, Mr. J.R. Wessel (United States of America). The report was distributed to the Committee, but is not appended to this report.

281. Mr. Wessel informed the Committee that the Working Group had considered the following items.

a. Recommended national regulatory practices.
b. Guidelines for predicting potential dietary exposures to pesticide residues.
c. Codex MRLs for metabolites that are pesticides in their own right.

282. The Committee was informed that only a few countries had commented on the document "Recommended National Regulatory Practices" (CCAC/PR 9-1985). Because of this limited response, it was not possible to determine whether the recommendations on national regulatory practices in relation to acceptance of Codex MRLs were being utilized by governments.

283. It was noted that the 8th Session of the Codex Committee on General Principles (CCGP) had reported on problems that several countries had indicated were affecting the acceptance of Codex MRls (paras 28-39, ALINORM 87/33). The Committee generally agreed that the document on Regulatory Practices already contained useful information and advice for countries to follow in dealing with these problems. It was also pointed out that part of the problem seemed to be due to a general reluctance by some governments to accept and use Codex MRLs. Further Codex guidance would probably not help to overcome this problem, but rather the initiative had to be taken by governments, as had been done by Australia and Switzerland as stated in the CCGP report. Additionally, some countries had indicated that more emphasis should be given to consumer protection in determining GAP. The Committee supported this view.

284. The Committee also agreed that the other suggestions made by the CCGP (para 36 (b)-(d), ALINORM 87/33) should be given full consideration by the CCPR and the JMPR. In this regard, the Committee decided that the Working Group should circulate a brief questionnaire in the coming year to obtain from governments their view on the Regulatory Practices document and its usefulness at the national level and on other issues that needed to be considered to facilitate acceptance of Codex MRLs.

Guidelines for predicting Potential Dietary Exposures to Pesticide Residues

285. The Committee discussed the second draft of the above "Guidelines", the preparation of which was undertaken by WHO in response to the recommendation made by the Working Group at the 18th Session of the CCPR (para. 282 ALINORM 87/24). Mr. R. Schmitt, who had been engaged as a consultant by WHO, was the author of the draft.

286. The Committee noted that the Working Group had originally proposed such guidelines to enable national governments to make estimates for predicting possible intake of pestice residues for comparison with their ADIs. It was hoped that through these estimates governments would have a more objective basis for considering the acceptability of Codex MRLs from a consumer safety point of view. The Committee agreed that the draft guidelines were generally consistent with the intent of its proposal and the related principles outlined in the discussion paper on this topic (CX/PR 86/12).

287. The draft guidelines described a multi-tier approach based on certain assumptions for estimating possible exposure to pesticide residues. The Committee agreed that this, in principle, represented a satisfactory approach but that more flexibility was needed within the recommended procedure. The draft guidelines would be very useful in identifying those pesticides for which, even with exaggerated assumptions, there was no risk of exceeding the ADI, and other pesticides for which a more careful assessment of the possible intake was necessary. The Committee noted that the 1986 JMPR had also given its general approval to the draft document in the course of a useful discussion on the topic of MRLs and estimating dietary exposure to pesticides residues (para. 2.6, 1986 JMPR Report).

Recommendations

288. After consideration of the guidelines, the Committee decided to make a number of recommendations, which are listed below (289-293).

289. Guidelines should be finalized as soon as possible by a meeting of experts convened by FAO/WHO. It was noted that this recommendation is consistent with the recommendation made by the 1986 JMPR and by the Working Group at the 18th Session. The representative of WHO informed the Committee that this meeting was expected to be held in October or November 1987. The delegation of Spain asked whether the meeting would consider only the guidelines drafted by Mr. Schmitt, or whether other documented approaches would be discussed. The Chairman was of the opinion that the meeting of experts would surely take into account every relevant document. Mr. Wessel informed the Committee that a long discussion had taken place in the Working Group on the draft guidelines. It needed more time to consider the flexibility of the guidelines. The Group looked forward to receive additional comments.

290. The FAO/WHO expert meeting and the WHO consultant who prepared the draft should take into account the various written comments on the second draft that were submitted by Working Group members and were given to the WHO representative.

291. The final guidelines should be for use by national governments to carry out estimates covering use patterns of pesticides in their countries. Governments should also take into account residues in their imports, and should then assess what additive contribution the acceptance of Codex MRLs might have on these estimates in relation to the ADIs.

292. The final guidelines should be circulated for review and comment by Codex member countries prior to discussion and possible endorsement by the Committee at the next Session.

293. The FAO/WHO expert meeting should propose a similar FAO/WHO mechanism for performing within the framework of the guidelines international estimates of exposure as a point of information and reference for use by the JMPR and the CCPR.

Codex MRLs for Metabolites that are themselves Pesticides

294. In examining this topic, the Committee was informed that the Working Group had considered comments from several members, a paper by the Codex secretariat for the 14th Session of the CCPR (CX/PR 82/8), and a draft paper that Mr. N.F. Ives prepared for the Working Group.

295. The Committee agreed that these recommendations represented a practical approach for dealing with the complex problem of developing and expressing MRLs for metabolites that were also themselves pesticides. On the other hand, as explained in Mr. Ives's draft paper, this approach might not always result in MRLs which provide a means of determining whether GAP had been followed in the use of a particular pesticide.

296. Combining MRLs for parent compounds and metabolites might also be an obstacle to their acceptance by some countries, while in other countries separating them might hamper acceptance. The Committee was informed that these potential problem areas were only briefly discussed by the Working Group and it was agreed that further study was needed. Members of the Working Group were invited to send their observations to the Chairman of the Working Group by 31 May 1987.

On the basis of these observations Mr. Wessel would submit a first draft paper for consideration by the Working Group members and the JMPR in 1987, followed by further elaboration by the Working Group during the year and for consideration by the Committee at the next Session. The Committee agreed on that approach.

Appointment of an ad hoc Working Group on Regulatory Principles

297. The Committee thanked the members and the Chairman of the Working Group for their work. It was decided to set up a new ad hoc Working Group under the Chairmanship of Mr. J.R. Wessel (United States of America) with the following members: Australia, Austria, Belgium, Canada, Chile, Denmark, Federal Republic of Germany, Finland, France, Israel, Japan, New Zealand, Norway, Spain, Sweden, Switzerland, Thailand, The Netherlands, United Kingdom, United States of America, EEG, WHO, FAO and GIFAP.

CONSIDERATION OF THE REPORT OF THE AD HOC WORKING GROUP ON PRIORITIES

298. The Committee had before it a report of the Working Group, which was introduced by its Chairman Mr. B.B. Watts (New Zealand). The meetings of the Group had been attended by 53 participants. The report was distributed to the Committee but is not appended to this report.

Status of compounds proposed for the JMPR agendas of 1987 and 1988

299. The Group had reviewed CL 1986/67-PR, "Request for information on Pesticides to be evaluated by the 1987 and 1988 Joint FAO/WHO Meetings on Pesticide Residues". The following changes and comments were noted.

New compounds

300. BPMC, dalapon, IBP, isoprocarb, isoprothiolone - The Chairman of the Working Group had written to the countries which had proposed these pesticides requesting further information on use patterns and the nature of the problems in trade. To date there had been no replies. The manufacturers had confirmed either verbally or in writing that no data would be available on dalapon, IBP or isoprothiolane. The Group had noted the offer of GIFAP to obtain information from the manufacturers on the question of data availability for BPMC, isoprocarb and thiofanox. Thiofanox was first proposed in 1977.

301. Tolylfluanid - The manufacturer's representative confirmed that data would be available by July 1987. The JMPR would be able to evaluate tolylfluanid in 1988.

302. The representative of the manufacturer informed the Committee that the manufacture of thiofanox was now controlled by another company. Although the future scope of use of the compound was uncertain, it appeared that it would only be used on coffee. It might therefore not satisfy the criteria for evaluation.

303. The delegation of France enquired why BPMC, dalapon, IBP, isoprocarb and isoprothiolane were included if no data could be expected. The Chairman of the Working Group indicated that it was the intention to retain these compounds until the next Session. They would then be deleted if the position had not changed.

304. The representative of GIFAP enquired why dalapon was listed as it was understood to be used only on palm trees and sugar cane. It was pointed out that palm oil was an important item in international trade.

Re-evaluations

305. Permethrin - will be added to the list for toxicological evaluation in 1987 because of the need to evaluate a product with a different isomer ratio, namely 25/75. The Committee noted that this was essentially a new evaluation.

306. Propoxur - The manufacturer's representative indicated that data would not be available in time for a 1988 re-evaluation and requested that it be placed on the 1989 agenda of the JMPR.

307. Cyfluthrin, carbosulfan - The FAO representative indicated that residue data for cyfluthrin would be re-evaluated in 1989 and for carbosulfan in 1988 rather than both in 1987 as now appeared on the list.

308. Dimethoate - The deadline for the submission of the toxicological data required by the JMPR is 1987. Some of the new data had been submitted. It was not yet clear whether they were sufficient.

Consideration of 1987 proposals for the priority lists

309. The Group had reviewed the new pesticides submitted by countries for 1987. It was agreed that the compounds should be listed in the following order of priority.

Number	ISO Common Name	Country	Data Available	Manufacturer
87-01	paclobutrazol	New Zealand	1987	ICI
87-02	anilazine	Federal Rep. of Germany	1988	Bayer
87-03	triadimenol	Federal Rep. of Germany	1988	Bayer
87-04	chlorpropham	OECD	unknown	PPG
87-05	propham	Identified from list of post-harvest uses submitted by OECD	"	Pennwalt Bayer and others

310. The Chairman of the Working Group undertook to contact companies on the availability of data for chlorpropham and propham.

311. It was possible that paclobutrazol could be added to the list of new pesticides for evaluation by the JMPR in 1988 (depending on whether there are deletions from the current 1988 tentative list). Paclobutrazol is registered for use in New Zealand as a soil application and is under test in Australia and the USA.

Tentative list of pesticides to be evaluated by the 1989 JMPR

312. The WHO Joint Secretary provided the following tentative list for the 1989 JMPR.

New Pesticides	Re-evaluations
anilazine	propoxur
triadimenol	procymidone
	ethion
	folpet
	methomyl
	endosulfan
	ortho-phenylphenol

313. The representative of the manufacturer indicated that data on daminozide would be available in time for 1989 evaluation, and it was agreed it would be included for re-evaluation in that year.

Pesticides which were last evaluated toxicologically prior to 1976 and for which ADIs are still set

314. A total of 21 replies were received in response to the questionnaire. A Working Paper, WGP-1, which was distributed with the agenda, summarized the results of the first 16 replies.

315. Two of the 33 pesticides included in the questionnaire, propoxur and fenamiphos, were already on the JMPR agenda for re-evaluation.

316. Three countries, the Republic of Korea, the United States of America and the Federal Republic of Germany, indicated that new toxicological and residue data on some pesticides included in the questionnaire were available. The USA and FRG indicated that the availability of the data had been confirmed by manufacturers.

317. The merits of a regular schedule of re-evaluations as opposed to re-evaluations carried out only as a result of the identification of specific problems (other than those of gaps in the data base) were discussed. It was agreed that both approaches were valid. At this time however it was not possible to carry out re-evaluations on a regular schedule because of workload.

318. Two approaches to carrying out re-evaluations were briefly discussed: (1) reviewing the original data base plus any new data and identifying gaps and problems; (2) supplementing the original JMPR evaluation with new data that have become available since the original evaluation.

319. The Group agreed that a Circular Letter was now needed, requesting information on whether the pesticides on the list in WGP-1 were still used in ways which resulted in residues in commodities in international trade and whether countries had concerns about health and safety aspects of residues which might require re-evaluation by the JMPR. Countries which indicated that data were available would also be asked to provide information with respect to types of data and when they could be provided to JMPR.

320. The delegation of The Netherlands requested that lindane should be added to the compounds in WGP-1. Although the ADI was estimated in 1977, it was an old compound and new toxicological data were available. The Chairman of the Working Group indicated that the Group was always willing to consider additions to the list and asked that the new data should be sent to WHO.

OECD list of compounds

321. From the list of post-harvest-use pesticides provided by the OECD it was agreed that only chlorpropham and propham need to be considered. Others in the list either left no residues, were in limited use or were already in the Codex system. Chlorpropham and propham were already in the 1987 list of proposals from countries.

New questionnaire for priority request

322. A draft of a new questionnaire was distributed. It explained more fully the procedures for proposing chemicals for the priority list. Comments on the questionnaire may be provided to Ms. J. Taylor before June 1987.

Procedural guidelines for the preparation and review of working papers for the WHO Expert Group on Pesticide Residues ICS/86.29 Geneva, November 1986

323. The WHO representative announced that guidelines had been prepared on the toxicological data requirements of the WHO Expert Group on Pesticide Residues. Copies of this document could be obtained from the WHO Secretariat.

Pesticide/Commodity Combinations

324. The Working Group had discussed the issue of establishing priorities for pesticide/commodity combinations. It was reported that a JMPR review of commodity residue data was possible whenever this information was made available to the Joint Meeting. There did not appear to be any workload difficulties which would prevent consideration of any data on good agricultural practice submitted for a commodity and deemed to be of priority in a country.
The number of commodities moving in international trade was very large and varied significantly between countries. The current practice of establishing priorities for pesticides by the Working Group appearedto permit sufficient opportunity for commodity data to be considered as countries determined where there was a need.

325. The Working Group had noted that efforts were being made to ensure that JMPR evaluations of residue and toxicological data on new compounds should be conducted at the same meeting. The deadlines for submission of data to the FAO or WHO Secretariats were different and this should be considered by manufacturers or countries submitting data.

Appointment of an ad hoc Working Group on Priorities

326. The Committee thanked the Working Group and its Chairman their contribution to this Session. A new ad hoc Working Group was appointed under the Chairmanship of Mr. B.B. Watts (New Zealand) with the following members: Australia, Belgium, Canada, Finland, Federal Republic of Germany, Israel, Japan, The Netherlands, New Zealand, Sweden, Switzerland, Thailand, United Kingdom, United States of America, EEC, FAO, GIFAP, WHO.

CONSIDERATION OF THE REPORT OF THE AD HOC WORKING GROUP ON CONTAMINANTS

327. The Committee had before it the report of the ad hoc Working Group on Contaminants. The report was introduced by the Chairman of the Group, Mr. R.B. Maybury (Canada). The report was distributed to the Commitee but is not appended to this report.

Monitoring Data

328. The Chairman of the Working Group summarized the data submitted to the Joint UNEP/FAO/WHO Food Contamination Monitoring Programme (JFCMP) by eight countries: Cuba, Denmark, Finland, the Federal Republic of Germany, Ireland, Poland, Thailand, the United Kingdom and the United States of America. Additional data were being collected on a regular basis under the JFCMP. Some of those data were contained in document CX/PR 87/5. Only one country, the Federal Republic of Germany, had submitted data based on the analysis of individual PCB congeners. It was felt that, because of the relatively short time since the request for monitoring data had been sent out, countries might not have had sufficient opportunity to prepare responses.

329. Countries which had changed to individual congener analysis were not likely to be willing also to produce PCB data by packed column chromatography, making comparisons of residue levels within food monitoring programmes difficult. It was pointed out that extensive studies to this end had been made in the past.

Analytical Approach to PCB quantitation

330. A paper was presented by Finland which proposed the addition of two PCB congeners (8 and 18) to those specified in the recommended capillary method of analysis (ALINORM 87/24, APPENDIX VIII, ANNEX I). These congeners may be found in the case of a direct PCB spill but are not normally present in environmentally contaminated foods. It was decided that the Committee would continue to recommend reporting of the earlier agreed seven PCB congeners (28, 52, 101, 118, 138, 153, 180) in monitoring work. Any other congeners which might be demonstrated to have environmental or toxicological significance in the future could be added to the list.

331. The Working Group had discussed the interlaboratory testing of PCB congener analysis and it was indicated that, although a number of studies had been carried out, an international study might be desirable. A number of possible approaches to this question were discussed and specifically the involvement of AOAC was seen to be desirable. (See para 338).
A co-operative study in which laboratories followed their own procedures using individual congeners, rather than a strictly specified method, was suggested. Alternatively, a collaborative study where the conditions were fully standardised was proposed.

Gathering and consideration of further toxicological information

332. The representative of WHO informed the Committee that IPCS (WHO) was preparing a new Environmental Health Criteria document on PCBs but it was pointed out that such documents did not always contain estimates of 'provisional tolerable' intakes. A draft of this document was expected to be available for distribution in the fourth quarter of this year. Copies of this draft could be requested from IPCS. It was also hoped that information on the toxicity of individual congeners would be forthcoming.

333. It was generally agreed that neither results obtained by individual congener analysis nor those obtained by total residue methods would be easily related to the toxicology of PCBs which had been determined on commercial formulations. This was because the mixtures found in various foodstuffs had a composition differing from the commercial formulations, thus casting some doubt on the validity of any toxicological interpretation. The opinion was expressed that data on the toxicity of individual congeners would be helpful in overcoming some of the harmonisation problems.

334. The representative of WHO also informed the Committee on guidelines being prepared in the WHO Regional Office for Europe to control and prevent exposure to PCBs and dioxins in case of accidents and explosions and for the proper handling of PCBs waste. Instructions to reduce emissions from incinerators were being produced. Finally, contamination of human milk by PCBs and concurrent epidemiological studies on health effects in infants were at the planning stage.

Further action to be taken

335. It was agreed that, in order for any progress to be made by the Working Group towards the recommendation of Codex maximum limits for PCBs, more information must be obtained in the following areas:

a) monitoring data
b) toxicological evaluation
c) Inter-laboratory comparison of congener-specific analytical methods.

336. A renewed request for monitoring data based on PCB congener analysis to be submitted to the JFCMP would be sent out.

337. IPCS was conveyed the urgent need for the establishment of provisional tolerable intakes.

338. The delegation of Finland, highlighting the discussion of the Working Group, drew attention to the striking differences in the intake levels reported in document CX/PR 87/5, ranging from 0.0004 to about 1.3 ug/kg body weight, although most data came from industrialised countries where PCB contamination was known to exist. Only part of these differences could be explained by differences in the diet. Most of this variation had to be regarded as being caused by differences in analytical methodology. The delegation said that the most important question that had to be solved in order to reach agreement was to agree on the method of analysis.
The Committee requested the Secretariat to approach the members of the Inter-agency Meeting of international organisations concerned with analytical methodology, specifically IDF, ISO, AOAC and IUPAC, requesting them to obtain and review reports of any interlaboratory studies that have been carried out on the analysis of individual PCB congeners. The Inter-agency Meeting would also be asked to organize an international co-operative study using a congener specific method on primary food products of animal origin (ALINORM 87/24, Appendix VIII Annex I).

Contaminants work in the Codex Committee on Food Additives (CCFA)

339. The Secretariat informed the Committee about the progress that had been made in the development of limits for contaminants at the Session of the Codex Committee on Food Additives in March 1987. The CCFA had opted for a guideline level approach, i.e. a level below which countries were advised not to take action, but above which countries might wish to take action. For some contaminants, such guideline levels for a number of commodities had been proposed. The CCFA was also looking into questions of methodology and sampling plans for contaminants. Relevant parts of the report of CCFA would be distributed to members of the Working Group on Contaminants.

General Comment on Contaminants

340. The delegation of Finland, whilst recognising the continuous heavy workload of the Committee, which was not expected to decrease, pointed to the need of giving much more attention to the development of limits for contaminants within Codex. The number of chemicals in actual use (about 60.000), part of which might be relevant as contaminant of foodstuffs, as compared to the number of pesticides in use (about 300), showed the potentially additional heavy workload. So far, little had been done on mycotoxins, PCBs, PCDD's, PCDF's radionuclides etc. by the Commission. The delegation therefore suggested that environmental contaminants should be taken up by a separate Committee, giving the experts of the existing bodies the possibility to concentrate on matters related to their own work.

The Chairman recalled that this subject had already been discussed by the Executive Committee and the Codex Committee on General Principles and suggested that Finland should bring it up at the next meeting of the Commission.

Establishment of a new Ad Hoc Working Group on Contaminants

341. The Committee thanked the Chairman of the Working Group and its members. It was decided to establish a new ad hoc Working Group under the chairmanship of Mr. Maybury (Canada) with Australia, Austria, Belgium, Canada, Czechoslovakia, Finland, France, Ireland, Israel, Italy, The Netherlands, Sweden, Switzerland, Thailand, the United Kingdom, the United States of America and the AOAC as members.

OTHER BUSINESS

342. The delegation of Cuba stressed the need to receive documents early in order to enable consultations between interested authorities. The Secretariat undertook to do its best to ensure timely distribution of documents. The Chairman noted that with proposed MRLs Governments had more than one opportunity to consider these and send their comments.

TIME AND PLACE OF NEXT SESSION

343. The Chairman of the Committee indicated that the next (twentieth) Session of the CCPR and its Working Groups would be held in the Hague from 18 to 25 April 1988. The provisional schedule for the various meetings is as follows:

Plenary Session of the CCPR
Monday, 18 April 1988, 14.30 hours

Working Group on Regulatory Principles
Friday, 15 April 1988, 9.00 hours

Working Group on Priorities
Friday, 15 April 1988, 15.00 hours

Working Group on Contaminants
Saturday, 16 April 1988, 9.00 hours

Working Group on Methods of Analysis
Saturday, 16 April 1988, 14.00 hours

Working Group on Development of Residue Data and Sampling
Saturday, 16 April 1988, 9.00 hours

Seminar on Good Agricultural Practices
Monday, 18 April 1988, 9.30 hours

Working Group on Pesticide Residue problems in Developing Countries
Tuesday, 19 April 1988, 14.00 hours

CLOSURE OF THE SESSION

344. In closing the Session the Chairman referred to the continuing importance of matters of general principle in the work of the Committee, including problems which it had previously thought that it had solved. The Chairman believed that this re-examination of the Committee's previous decisions was salutary: he mentioned the questions of good agricultural practice in the use of pesticides and the estimation of the actual intake of pesticide residues as particularly important items. With regard to the latter, he wondered to what extent manufacturers might themselves be expected to provide estimates of the likely intakes of residues of their products. This would not only facilitate the harmonization of MRLs at an early stage, but would also give some indication of the extent of use and provide information on the fate of residues during the processing of treated food. The Chairman invited the Committee to give some thought to the suggestion.

In conclusion the Chairman thanked the participants and all who had provided facilities for the Session. He looked forward to welcoming the participants to the next Session of the CCPR.

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Opening speech by Drs. R.J. Samsom, Deputy Director-General of the Ministry of Welfare, Health and Cultural Affairs

Ladies and Gentlemen,

It is a pleasure for me to welcome you here in the Hague on behalf of the State Secretary of Welfare, Health and Culture. Last year, in his opening speech the Director-General of the Ministry of Health drew, among other things, attention to the particular way in which discussion on pesticides proceeds. On the one hand the professionals, the health workers, making use of the unique possibilities pesticides offer for the production of sufficient food and fibres, essential for human welfare and the protection of health. On the other side the public at large whose source of information mainly consists of data or press reports on deleterious effects attributed to pesticides. An exchange of information between the two sides hardly ever takes place and so it happened that more than twenty years of discussion has not resulted in a balanced view on the subject.
The Director General then drew attention to the existence of a program of the World Bank in cooperation with the University of Miami, in which a promising attempt was made to arrive at such a balanced view on the use of pesticides. The propagation of such a view could also contribute to the work of ministers and public servants, involved in the registration process of pesticides, who constantly have to reconcile diverging opinions.
A year passed since these thoughts were expressed. The question can be asked: Has the situation improved, have opinions been brought closer together? I am not able to give a clear-cut answer to these questions. Instead I want to make a few observations which may be of relevance in this context.

Observation 1

Recently a book was published by the OECD under the title: "Water Pollution by Fertilizers and Pesticides". The book directs attention to a number of problems needing, in the opinion of the writers, further investigation. One of them is the insufficient knowledge of the exact behaviour of pesticides in the soil and the subsoil, where metabolites could become more toxic than the mother compounds.
Pesticide residues and their metabolites can pollute water and under certain conditions cause fish kills but also contaminate drinking water. One of the research needs, indicated in the book, refers to the desirability of establishing maximum levels of pesticides in water on a "total pesticides" basis as well as "per active ingredient". They continue in stating that, whilst, "the ideal might be "no detectable residues", it must be recognised that this cannot be achieved in many situations".
Another interesting remark I wish to quote from this book is that "Our present knowledge suggests that methods of crop protection will continue, to a large extent, to be based on pesticides over the remaining years of the 20th century".
So pesticides are to stay with us.

Observation 2

A fire in a pesticides factory resulted in a serious case of contamination of the Rhine with pesticides not long ago. The incident reached, and for good reasons, the front pages of the international press.
Nevertheless I think that another case of water pollution was the more serious as it tends to show a much more structural problem in the use of pesticides. I mean the recent contamination in Italy of water by the continuous use of a number of herbicides in maize culture. The WHO called an emergency meeting of experts to arrive at an opinion on the toxicological implications of this case of water contamination. If may be that this kind of problem will become more frequent in the near future.

Observation 3

During the meeting of the Codex Committee on General Principles in November last year in Paris several delegations made critical remarks with regard to the working procedures of the Joint Meeting on Pesticides Residues and the CCPR. Apparently even in circles of public servants themselves the opinion exists that another balance between acceptability and non-acceptability of pesticide uses should be looked for. In other words: that GAP (Good Agricultural Practice) should be critically reconsidered by JMPR and CCPR.

Observation 4

The JMPR decided recently to withdraw the ADI for captafol on basis of demonstrated carcinogenic properties. Captafol is a much-used fungicide, dating back to the early sixties. This was not the first and only case of withdrawal of an ADI. Although it is reassuring that the existence of an ADI does not mean the definite endpoint of toxicological investigations has been reached, a deletion of an ADI may generate questions with regard to the value of other toxicological endpoints.

Observation 5

In the course of last year we have read in the papers about the threat for serious crop losses in Africa resulting from the build-up of an enormous locust population. Some time later this message was followed by the information that Dr. Brader of FAO had succeeded in coordinating actions resulting in a sufficient suppression of this threat. One of the important contributions hereto was the purchase and distribution of different types of pesticides from all over the world.
Again the dilemma of the public discussion and the discussion between experts.

So far my observations. They do not facilitate answering the question I posed. They demonstrate instead different aspects, inherent to pesticides.: their usefulness, their disadvantages. In that sense questions around the use of pesticides are not different however from a lot of other products and activities of the human community.
Our society is accustomed to living with risks and to a certain extent also prepared to accept them. Governments try to reduce these risks by adequate rule making. In principle risk-benefit margins should be as wide an possible.

I think that in view of what has been said before, widening of the margin between the benefits of pesticides and their disadvantages should have the continuous attention of the CCPR. In fact your committee's task has always been to protect the health of the consumer by limiting the risk inherent to the presence of pesticides residues, whilst widening the benefit in facilitating trade. You have reached these goals for example by not establishing maximum residue limits at the highest limit possible from a toxicological point of view but on basis of good agricultural practice.
Your Committee establishes the MRL at the farm gate, knowing that in almost all cases the residue reaching the consumer will be lower, often substantially lower. The ADI contains a number of safety factors, not only in the level of the safety factor applied, but in several other parts of the procedure leading to a no-effect-level.
Several countries check on the real pesticides intake of their population by total diet and comparable studies and usually conclude that only a small part of the ADI is consumed. This means that extra safety factors are present. It appears that no risks exist as long as GAPs are followed and that Codex MRL's can safely be accepted by the members of the Codex Alimentarius.
In spite of this and with a view to my earlier observations, I think that JMPR and CCPR should continue to be aware of the uncertainties that continue to exist and to establish limits at the lowest possible level. Good Agricultural Practices are not an arithmetic notion but a reflection of expert consensus. We have to be aware that this decision is based on a weighing of factors of benefit and risk and that the balance can differ in relation to circumstances.
One Codex-member has stated at the meeting of the Codex Committee on General Principles that his country cannot accept Codex MRL's higher than those in force in that country and that no separate limits for imported foods are possible. CCPR can not offer any reasonable solution for such a policy position. CCPR has the obligation to establish MRL's at levels that as far as toxicity allows are consistent with agricultural necessities. But CCPR and JMPR should also be aware of the uncertainties that continue to exist in addition to changing attitudes of the public and change in agricultural technology.
A body of the extent of the CCPR and the quality of its members offers an excellent, a unique forum for constant and critical testing of its own procedures. In so doing the CCPR will maintain its prestige in matters regarding pesticides and residues and continue to contribute to and even increase the acceptability of its proposals.
I think that such a continuous critical approach of your own work will contribute also to the readiness of the public to accept the uncertainties and risks inherent to pesticides, like they also accept the, often much greater, risks of many other features of modern civilisation.
In view of what has been stated in the earlier mentioned OECD report it appears that pesticides have yet many years to go and so, I trust, also your Committee. The Netherlands government hopes to be your host for many years to come yet. On behalf of the State Secretary of Health I wish you, ladies and gentlemen, a successfull meeting and I hope to meet you tonight at the reception.