

# codex alimentarius commission

FOOD AND AGRICULTURE  
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ORGANIZATION

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION  
Sixteenth Session  
Geneva, 1-12 July 1985

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

The Hague  
28 May-4 June 1984

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX ALIMENTARIUS COMMISSION  
Sixteenth Session 1985

REPORT OF THE SIXTEENTH SESSION OF  
THE CODEX COMMITTEE ON PESTICIDE RESIDUES  
The Hague, 28 May-4 June 1984

INTRODUCTION

1. The Codex Committee on Pesticide Residues held its sixteenth Session in The Hague, The Netherlands, from 28 May - 4 June 1984. 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 46 countries:

Algeria	German Democratic	Mozambique
Argentina	Rep. (observer)	Netherlands
Australia	Germany, Fed.Rep.of	New Zealand
Austria	Greece	Norway
Belgium	Hungary	Philippines
Brazil	India	Poland
Cameroon	Indonesia	South Africa
Canada	Ireland	Rep. of (observer)
Chile	Israel	Spain
Cuba	Italy	Sweden
Czechoslovakia	Japan	Switzerland
Denmark	Korea, Rep. of	Thailand
Egypt	Kuwait	Tunisia
Finland	Libya	United Kingdom
France	Malaysia	United States of
Gabon	Mexico	America
		Yugoslavia

The following International Organizations were also represented:

- Council of Europe (CE)
- European Economic Community (EEC)
- Economic Benelux Union
- International Union of Pure and Applied Chemistry (IUPAC)
- International Federation of National Associations of Pesticide Manufacturers (GIFAP)
- International Dairy Federation (IDF)
- Association of Official Analytical Chemists (AOAC)
- European Plant Protection Organization (EPPO)

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

OPENING OF THE SESSION BY THE CHIEF DIRECTOR OF HEALTH PROTECTION

2. The Sixteenth Session was opened by Mr. R.J. Samsom, Chief Director of Health Protection of the Ministry of Welfare, Health and Cultural Affairs of The Netherlands.

Mr. Samsom welcomed the participants and reminded them of the terms of reference of the CCPR as expanded by the decision of the Codex Alimentarius Commission's 14th Session in 1981.

At that time the group of "environmental and industrial contaminants showing chemical or other similarity to pesticides", was added to the terms of reference. Other organizations such as OECD and UNEP had also dealt with these subjects, particularly with PCBs, in recent meetings also held in The Netherlands.

Mr. Samsom drew the participants' attention also to the recent publication of Volume XIII of the Codex Alimentarius, which summarizes the outcome of the work of this Committee, enumerates a total of 1644 Codex Maximum Residue Limits for pesticides, distributed over 84 compounds, and contains extensive information on general aspects of developing residue limits.

Referring to PCBs, Mr. Samsom stressed that the CCPR could further stimulate the participation and cooperation of other international organizations in efforts to look for a coordinated solution to the problems enumerated in the conclusions of the OECD seminar on PCBs. In creating a unique data base on pesticides, in combination with other activities of FAO and WHO in the field of pesticide use and management, the CCPR had directly or indirectly contributed significantly to the harmonization of pesticide registration requirements. Also the draft "Code of Conduct" for pesticides, although not directly an item on the agenda for this session, could be mentioned as a useful initiative in this field.

Mr. Samsom trusted that the Committee, in conjunction with Regional Coordinating Committees, would continue to make its expertise available to further promote the responsible use of pesticides.

#### ADOPTION OF THE AGENDA

3. The Committee agreed to add two extra items to the agenda under 4(b): the booklet "A Directory of National Authorities and International Organizations", issued by the Swedish National Food Administration, and a statement from the Council of Europe.

4. In response to the suggestion of the delegation of the Federal Republic of Germany that agenda item 16, "Report on Environmental Contaminants with Special Reference to PCBs", should be discussed in connection with the Report of the Working Group on Methods of Analysis, the Committee decided to discuss only the analytical problems concerning PCBs at that point of the agenda.

5. The delegation of the Federal Republic of Germany drew attention to the problem of several documents of the Ad Hoc Working Groups not reaching the Codex Contact Points. It requested inclusion of the Codex Contact Points in the lists of participants of all Ad Hoc Working Groups (for the Federal Republic of Germany: Prof. Eckert). It was indicated that these documents were sent to participants by the Chairmen of the Working Groups, without the Codex Secretariat being involved. The Chairmen of the Working Groups were requested to send copies of all documents to the Secretariat which would distribute them to the Codex Contact Points.

#### APPOINTMENT OF RAPPORTEURS

6. Ms. E. Campbell (United States of America) and Mr. A.F. Machin (United Kingdom) were appointed to act as rapporteurs to the Committee.

MATTERS OF INTEREST TO THE COMMITTEE

(a) Matters arising from Codex Sessions

7. The Committee had before it documents CX/PR 84/2 and CX/PR 84/2-Add.1 containing matters arising from meetings of the Coordinating Committees for Africa, Asia and Latin America and a meeting of a Group of Developing Countries in Asia Concerning Pesticides (ALINORM 85/31). The latter meeting had been organized by Dr. Prayoon Deema, vice-chairman of the Codex Working Group on Pesticide Residue Problems in Developing Countries and was hosted by courtesy of the Government of Thailand.

8. The working papers were introduced by the Secretariat. The Committee noted that the points highlighted by the Secretariat would be considered under various later items on the agenda. The following points, however, were discussed.

(a) A proposal by China that for meat and meat products with a fat content below 10%, MRLs for fat-soluble pesticides should be set on a whole-product basis (para 142, ALINORM 85/15).

During the discussion of this proposal, some delegations supported the proposal of China, while others were of the opinion that current sampling procedures involved the examination of carcass fat and that changing this system would cause difficulties. The point was made that the Codex MRL set on a fat basis may be unnecessarily low for low-fat meats, because even when a residue in the fat exceeded the MRL the total amount of residue in the food might be very low.

Furthermore, taking carcass fat from such meats was not practical. The Committee agreed that the Chinese proposal should be seen as a special problem relating to low-fat meats such as rabbit meat and should be considered in relation to setting appropriate MRLs for such products and in relation also to analytical considerations. It was agreed to request the Working Groups on Methods of Analysis and on Development of Residues Data and Sampling to consider this question and to return to the subject later in the agenda (see para 282).

(b) Establishment of Codex MRLs on the edible portions of commodities (see paras 190, 191, ALINORM 85/36).

The Committee was informed by the delegation of Spain that Spain had recently agreed, as a matter of principle, to follow the Codex procedure in setting MRLs on the whole commodity rather than on the edible portion. It was also noted that the information in para 191, ALINORM 85/36 was not accurate since the Codex Committee on Pesticide Residues was not developing an increasing number of international maximum limits applicable to the edible portion of food commodities.

(c) The Committee also considered a proposal presented at the Coordinating Committee for Latin America by the delegation of Cuba, that Codex should establish MRLs for tropical products (para 188, ALINORM 85/36). In this connection the Secretariat pointed out that the Codex procedures assessed only pesticides (as distinct from pesticide/commodity combinations) for priority consideration and that a mechanism was needed for identifying food/pesticide combinations which should be considered by Codex as a matter of priority for evaluation by the JMPR and CCPR. The Committee agreed to refer this question to the Working Group on Priorities, noting that the Coordinating Committee for Latin America had recommended that a consultant should also examine this question. The Working Group on Priorities took the view that the matter might be more appropriate to the Working Group on Pesticide Residue Problems in Developing Countries.

(d) The Committee noted that the Codex Committee on Food Additives had set up a Working Group to consider contaminants in food, but that there would be no overlap of work between the Codex Committee on Food Additives and the CCPR in the field of contaminants (see ALINORM 85/12).

(b) Matters arising from International Organizations

9. The representative of the Council of Europe informed the Committee about the progress of their activities in the field of pesticides, which aimed at a proper handling of these compounds at all stages of production, use and disposal.

The 6th edition of the well-known booklet "Pesticides" would probably appear by the end of 1984. This up-dated version took into account recent scientific developments in the various aspects covered. Several chapters had undergone major revision. The chapter on environmental effects had been completed, with a section on integrated pest control. The chapter on efficacy data had been completely revised and now included the results of work by EPPD on the harmonization of protocols for trials (see para 10).

The chapter on classification and labelling of formulated products now followed the indications of GIFAP in its booklet of 1983 on this subject. The Committee was also informed about the progress on draft resolutions of the Council of Europe regarding wood preservatives, aerial spraying of pesticides and guidelines on avoiding the contamination of food of animal origin as a result of the use of pesticides on animals and in livestock premises.

10. The representative of the European Plant Protection Organisation (EPPD) drew attention to the progress made in the establishment of internationally agreed methods for testing efficacy. Guidelines on GAP were meant to encourage the use of more effective and, where appropriate, less persistent pesticides. Efficacy data were needed to reduce the risk of sales of unsatisfactory pesticides. After 14 years of studies by international expert panels including GIFAP, 74 harmonized guidelines for the biological evaluation of pests, diseases and weeds could now be published. In several countries national standards for evaluations of efficacy had been established. Furthermore, the 5th edition of the Council of Europe's publication "Pesticides" provided a valuable general background of recommendations for the conduct of efficacy trials programmes. The lay-out of individual trials as adopted by EPPD had been approved by FAO and this could also be appropriate to other regions.

11. The work of Sweden on the Directory of National Authorities and International Organizations was briefly introduced. The Committee noted that Sweden intended to up-date the document in the light of information to be supplied by Governments and information regarding Codex to be supplied by the Codex Secretariat. The Committee thanked Sweden for undertaking this useful work, which was undertaken in response to recommendation 10 of the Working Group on Pesticide Problems in Developing Countries. The Codex Secretariat offered to issue another circular requesting information to be sent to Sweden, to facilitate the up-dating of the publication. The Committee also recalled that suggestions for identifying persons as contact points on pesticide residue matters, as recommended at previous sessions, could be a useful follow-up to the publication by Sweden.

CONSIDERATION OF THE REPORTS OF THE 1982 AND 1983 JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES (JMPR)

12. The Committee had before it the Reports of the 1982 and 1983 JMPRs (FAO Plant Production and Protection Papers 46 and 56). The reports were introduced by the Joint Secretaries of the JMPR.

13. The delegation of The Netherlands drew attention to paragraph 3.2 in the 1982 Report, dealing with the significance of plasma as compared with erythrocyte cholinesterase inhibition. It emphasized the importance of dealing with this matter at one of the forthcoming JMPRs.

The WHO Joint Secretary indicated that this was of particular relevance to carbamate compounds (see 1983 JMPR Report, para 3.3). He informed the Committee that it was intended to include this subject in the exercise of updating methodology for the toxicological evaluation of pesticide residues (see also 1983 JMPR Report, para 2.2.1). The principles for this methodology had been established by the 1967 JMPR and amended on an ad hoc basis by subsequent JMPRs. A systematic review of the methodology was considered important to promote a consistent approach by JMPRs of varying membership.

14. Attention was drawn to two printing errors in the 1982 Evaluations. In the section on phoxim the ADI on p. 380 should read 0.0005 instead of 0.005 mg/kg body weight. In the evaluation of bendiocarb, the no-effect level in the dog (p. 71) should read 0.7 instead of 0.07 mg/kg body weight. Both figures were correct in the 1982 Report.

15. It was noted that the 1982 JMPR had explicitly re-emphasized the importance of full information on good agricultural practice. This information had often been insufficient or even been completely lacking. Both the Committee and the Secretariat should make every possible effort to improve the situation.

16. In introducing the report of the 1983 JMPR, the FAO Joint Secretary drew attention to errors on pages 1 and 59. On page 1, section 2.1, the pesticide ethiofencarb was incorrectly spelt ethiocarb. On page 59 the proposed MRLs for triazophos in cereal grains and potatoes should read 0.05(\*) mg/kg, not 0.5(\*) mg/kg.

17. The FAO Joint Secretary mentioned the sections in the 1982 and 1983 reports calling attention to the use of English as the working language of the JMPR. In reply to a question of the delegation of France he explained that FAO had other working languages and if necessary documents could be translated. There were however considerable difficulties in translating extensive reports, particularly on toxicology, in time for their review. The representative of FAO stated that the data sent to the JMPR by France on dithiocarbamates in lettuce would be discussed this year.

18. The delegation of the United States of America stressed the importance of the timely availability of JMPR Reports and Evaluations. This view was endorsed by the FAO Joint Secretary, who hoped both the Report and the Evaluations of the 1984 JMPR would be available in time for the 1985 Session of the CCPR.



19. Because of the large amount of work involved in supplying monitoring data to the JMPR as requested in circular letters, the delegation of the United States of America asked whether these data were really useful in establishing MRLs (as distinct from ERLs) and questioned how the data would be used. It was concluded that monitoring data were valuable for assessing intake, and hence the safety of residues encountered in practice, but that they were not of direct use for establishing MRLs.

20. The delegation of Belgium drew attention to the discussion in the 1983 JMPR Report regarding bromide ion (4.6), in which reference was made to data from "surveys of commercial crops". Using monitoring data in this case could give rise to difficulties because of the effects of several factors, for example the composition of soil, on the magnitude of the residue. The delegation of the United Kingdom explained that the data were not obtained from monitoring but from trials and selective surveys in which the history of the samples was recorded.

21. From section 2.1 of the 1983 JMPR Report it could be seen that reviews of several compounds on the agenda had been postponed or deleted. However, it was not clear whether evaluations of these compounds could be expected in the future on the basis of additional data to be provided. The WHO Joint Secretary agreed to make available for the next Session a list of such compounds. Cyanofenphos had been withdrawn because it is no longer produced.

22. In response to a question from the delegation of the Federal Republic of Germany it was stated that bitertanol would be considered by the FAO panel this year. According to the WHO Joint Secretary toxicological data on butocarboxim had been received from the manufacturer and the compound was on the agenda of the 1984 JMPR.

23. On page 27 of the 1983 JMPR Report it was stated that all dithiocarbamate MRLs were considered temporary. This was because the current method of analysis does not distinguish between the different dithiocarbamates, some of which had been allocated only temporary ADIs.

24. The Committee noted that the 1983 JMPR had again discussed the definition of the term ADI. It was made clear that the definition of the ADI as established by the 1975 JMPR would normally apply. If exceptionally the ADI did not apply to a sub-group of the population, the JMPR would clearly indicate the nature of the sub-group.

25. The 1983 JMPR had made some important remarks on the evaluation of carcinogenicity and mutagenicity data (paras 2.4-2.6). The delegation of The Netherlands stressed the importance of trying to avoid discrepancies between the approaches of the JMPR and the IARC. The WHO Joint Secretary pointed out that IARC used only data from the open literature whereas the JMPR also used unpublished information. The delegation of The Netherlands spoke of examples where these bodies had reached different conclusions on the basis of the same set of data.

26. The delegation of The Netherlands asked what the policy of the JMPR was for compounds where carcinogenicity was involved. It pointed to the example of nitrofen, for which an ADI had not been estimated owing to the evidence of carcinogenicity and the lack of a no-observable-effect level (NOEL) for teratology and post-natal effects. To the delegation's surprise, however, Guideline Levels had been recommended for this compound. On the other hand, the sodium salt of 2-phenylphenol (SOPP) had been established as a bladder carcinogen in the rat. The previously allocated ADI for 2-phenylphenol had been converted to a TADI at one-fiftieth of the previous level, pending the outcome of further studies. The report however did not mention any possible consequences this might have for the MRLs.

27. The WHO Joint Secretary explained that there was no general policy for such situations and that every judgment was an individual interpretation by specialists on the basis of all the available data. It was therefore not possible to make a simple comparison between the treatment of the two compounds. A member of the delegation of the United States of America who had been a temporary adviser to the 1983 JMPR clarified the interpretation of the SOPP situation by the JMPR and hoped that it would be explained in detail in the Evaluations.

28. The Chairman added that the Guideline Levels for nitrofen were at the limit of determination.

29. In answer to a question by the delegation of the Federal Republic of Germany, it was explained that the chlorothalonil used in toxicological testing contained less than 0.05% of hexachlorobenzene (HCB). This information would be given in the Evaluations.

30. On page 25 of the 1983 report it was stated that the need for a review of the toxicology of DDT should be brought to the urgent attention of the Directors-General of FAO and WHO as well as those of other interested organizations. A consultant had been appointed to summarize all data and the next JMPR will be informed of the progress made in implementing the recommendations of the 1983 JMPR on this matter. The Committee expected that DDT would be on the agenda of the 1984 JMPR.

#### REPORT ON ACCEPTANCES BY GOVERNMENTS OF CODEX MAXIMUM RESIDUE LIMITS

31. The Committee had before it the Codex Alimentarius' Summary of Acceptances, Part II, summarizing government reactions to Codex MRLs as of September 1983. It was noted that this document, together with Volume XIII of the Codex Alimentarius containing Codex MRLs, constituted the "Codex Alimentarius" as regards recommendations in the field of pesticides. As more MRLs are developed and more government acceptances received, this material was likely to grow into a series of volumes. Considering the number of existing MRLs and the number of countries which could theoretically notify their acceptance (or otherwise) of Codex MRLs, a document consisting of some 5000 pages might be envisaged, clearly requiring computerization of the information involved. The Secretariat informed the Committee that such computerization is indeed being considered.

32. The Committee was informed of government replies since September 1983 on the basis of a document prepared for the 1984 Session of the Executive Committee (CX/EC 84/31/3). It was noted that a number of countries had indicated their interest in the work of Codex on pesticide residues as a basis for establishing or revising their regulations on pesticide residues. Other countries had indicated their intention of notifying the Secretariat of their position with regard to their acceptance of Codex MRLs.

33. The Secretariat drew the Committee's attention to the resolution in the Report of the Group of Developing Countries in Asia Concerning Pesticide Residues (App.V, ALINORM 85/31), inviting all members of the Codex Alimentarius Commission to review the lists of commodities contained in Volume XIII of the Codex Alimentarius in order to determine which of them are imported into their countries. Following this exercise, countries should give favourable consideration to the possibility of accepting Codex MRLs for the food products imported into their countries.

34. The Secretariat informed the Committee that a suitable acceptance form had been developed, which would be prepared and distributed in the near future. The form would include all MRLs in Volume XIII and would identify those Codex MRLs previously sent out for acceptance as part of the first six series of Recommended International MRLs, the series having now been replaced by Volume XIII. The acceptance form would also identify Codex MRLs which had been amended since the last issue of the series.

35. The Committee was informed that the EEC was in the process of comparing Codex MRLs with MRLs in force in the various EEC member states. Results of this comparative study would be included in the Codex publication on acceptances. While this did not represent statements of acceptance of Codex MRLs by the EEC, the information would be useful for those intending to export food to EEC member states. The delegation of The Netherlands indicated that a large number of their national MRLs had been brought into line with Codex MRLs and that the information in the EEC study at present included in document CAC/ACCEPTANCES PART II was no longer up-to-date.

36. The delegation of Czechoslovakia informed the Committee that its country was in the process of examining the question of giving acceptance to Codex MRLs and would communicate the position of Czechoslovakia in due course. The delegation of Spain informed the Committee that Spain would, in principle, give acceptance to as many Codex MRLs as possible, considering also its obligations as a prospective member of the European Community. The delegation of Brazil indicated that a new agricultural research centre had been established in Brazil, which would be fully operational towards the end of 1985. Brazilian legislation concerning pesticides was under review and Codex recommendations would be taken into account. The delegation of Cuba indicated that a national committee had been set up to consider national regulations concerning pesticides. Codex recommendations were considered very useful in developing Cuban MRLs. The delegation of Cuba urged governments to accept Codex MRLs in the interest of facilitating trade in food. The delegation of India stressed the need

to pay more attention to aspects of consumer protection. It informed the Committee that the approach followed in India was based on the establishment of tolerances related to ADIs and food consumption factors. These tolerances were usually lower than Codex MRLs.

#### INTAKE OF PESTICIDE RESIDUES AND CERTAIN ENVIRONMENTAL CONTAMINANTS

##### Guidelines for the study of dietary intakes of chemical contaminants:

37. The Committee had before it document WHO-EFP/83.53; FAO-ESN/MISC/83.2 containing the Guidelines for the Study of Dietary Intakes of Chemical Contaminants, prepared under the joint sponsorship of UNEP, FAO and WHO.

38. The CCPR and CCFA had discussed the above Guidelines at earlier meetings. They had expressed the opinion that the Guidelines would prove useful in their work on estimating dietary intakes of chemical contaminants (including pesticides) and food additives and recommended their use by Governments in estimating the exposure of their populations to such chemicals in the diet. The Guidelines had been edited and it was expected that the publication would be issued in its final form in July 1984.

39. As suggested by the CCPR at its 15th Session (ALINORM 85/24, para 47), the Guidelines had been amended to give more precise guidance for a minimum programme that would be required for a study of the dietary intake of contaminants, especially in circumstances where resources and capabilities were limited. While total diet (i.e. market basket) studies are rather costly and complex, the selective study of individual foodstuffs or duplicate diet studies may represent a minimum programme in these circumstances.

40. The Committee expressed the hope that countries would apply the Guidelines and report their experiences at future meetings of the CCPR.

##### Report on Pesticide Residue and PCB Intake Studies through the Joint FAO/WHO/UNEP Food Contamination Monitoring Programme

41. The Committee had before it document CX/PR 84/3 on dietary intakes of certain pesticides and PCBs, a review of the data received from the FAO/WHO collaborating centres of the Food Contamination Monitoring Programme.

Data were received from ten of twenty-two collaborating countries. Most of the data were from developed countries, where uses of the organochlorine pesticides and PCBs had been curtailed. A summary of the data obtained would therefore not correctly reflect the situation in developing countries where the use of organochlorine pesticides was known to be extensive.

Comparison of intakes among different countries was generally difficult because of wide variations reported in i) the amounts of food consumed ii) the preparation of food for consumption and iii) the body weights of the consumers. Also the intake of alcoholic beverages and drinking water had been taken into consideration in some countries but not in others. Despite these drawbacks, the study had yielded significant results which could be summarized as follows.

#### Aldrin and Dieldrin

42. The intake of these pesticides in Canada showed a decrease during the period studied, which might have resulted from restrictions in the use pattern of the pesticides in that country. In Guatemala the median intakes were relatively high, amounting to 44% of the ADI. The intakes of the pesticides in urban areas were much higher than in rural areas, perhaps owing to the higher consumption of animal products in the former.

In Japan, the UK and the USA the median intakes amounted to about 15% of the ADI. A surprising observation was that in New Zealand the 90th percentile intake of the pesticides approached the ADI. The high intakes reported from New Zealand could have been due partly to high consumption and partly to the fact that the food was analysed in the raw state rather than after cooking.

#### DDT

43. The intake of DDT in Australia (90th percentile) was 30% of the ADI in infants and children and 10% in adults. The high infant intake may be due to the high consumption of dairy products. The intake of DDT in Canada and in the USA was as low as 1-3% of the ADI while in the other countries the median and 90th percentile values of the intakes were between 10 and 30%.

#### Lindane

44. Dietary intakes of lindane reported by Guatemala, Japan, New Zealand, the UK and the USA were generally below 1% of the ADI, even at the 90th percentile level.

#### Other organochlorine pesticides

45. No assessment of the toxicological significance of the intakes of other pesticides, HCB or HCH isomers other than gamma could be made owing to the absence of data on acceptable daily intakes.

#### Organophosphorus pesticides

46. In all cases the intakes of the organophosphorus pesticides diazinon, malathion, parathion and parathion-methyl were very low, amounting to less than 2.2% of the ADI.

#### Polychlorinated Biphenyls

47. The intakes varied from 0.06 to 0.12 µg/kg body weight. Japan showed higher dietary intakes of PCBs than other countries. This could be due to the high consumption in Japan of fish, in which PCBs accumulate.

48. The Committee noted that the exercise on dietary intakes of chemical contaminants currently being carried out by the Food Contamination Monitoring Programme was of extreme value in relation to the health of the consumer.

49. In reply to comments of the Committee, the representative of the JFCMP indicated that some improvement in the quality of the reported data should be possible in the future.

Reports on pesticide residue intake studies in various countries

Australia

50. Australia had carried out pesticide residue intake studies since 1969. The results of the "Market Basket (Noxious Substances) Survey of Foods 1982" were made available to the Committee as room document 6. The study revealed that the intakes of dieldrin, DDT, and a number of organophosphorus pesticides were well below the ADIs.

Thailand

51. Actual meals consumed by a 20-year-old male in Bangkok were collected for 30 consecutive days and analysed for pesticide residues. The intake of dieldrin approached the ADI while those of DDT and endrin were 30% and 16% respectively of the ADIs. A summary of the study published in the Bulletin of the Department of Medical Sciences, B.E. 2526 25(3) 131-141 was made available to the Committee as room document 7.

Federal Republic of Germany

52. Data on the levels of organochlorine compounds in human milk were provided to the Committee as room document 8, as an indication of the body burden of pesticides. Several pesticides such as technical HCH, aldrin, dieldrin and DDT had been banned for use in the Federal Republic of Germany and as a result low median levels were found in human milk. Considerably higher 98th percentile and maximum values were recorded, indicating a highly exposed minor segment of the population. The high median levels of PCBs and HCB found in human milk were ascribed to environmental contamination resulting from industrial sources.

United States of America

53. The delegation of the United States of America presented data on pesticide residue levels in about 76000 items of food and feed covering a 7-year period (1969-1976). Total diet studies carried out during the period showed that the intake of pesticides was well below the ADIs.

United Kingdom

54. The delegation of the United Kingdom reported on pesticide residue levels in foods during the period 1977-1981. The results confirmed the generally reassuring picture of steadily decreasing levels of pesticide residues in the food supply. Total diet studies were carried out in 1980-1981. The United Kingdom is about to commence a further total diet study covering 20 different food groups and a wide variety of pesticides. The detailed study of the different food groups would allow the identification of any components of the diet containing unusually high amounts of pesticide residues.

GIFAP

55. The representative of GIFAP informed the Committee of the availability of a publication "Pesticide Residues in Food", (March 1984) summarizing official monitoring data obtained from different countries.

CONSIDERATION OF DRAFT CODEX MAXIMUM RESIDUE LIMITS IN THE LIGHT OF COMMENTS AND RECONSIDERATION OF MAXIMUM RESIDUE LIMITS HELD AT STEP 7.

56. The Committee had before it the following documents:  
(a) CX/PR 84/4 containing MRLs and ERLs at Steps 3, 4, 6 and 7 and at Step 5 (on which advance comments had been sought) and proposed amendments to Codex MRLs;  
(b) CX/PR 84/5 and Add. 1, 2, 3 and Room Documents containing government comments on the above.

57. It was agreed to consider the MRL proposals (including proposed amendments), contained in the 1983 JMPR Report at the 1985 Session. In addition it was agreed to consider those Codex MRLs where the JMPR had recommended withdrawal of ADIs. The Committee also discussed, in the light of advance comments, MRLs which had been submitted to the Commission at Step 5 of the Procedure at the last Session. Where these Step 5 MRLs were advanced to Step 8, held at Step 7 or returned for further comments, the Commission was requested to consider these MRLs as having been considered at Steps 6 and 7.

58. In the interest of economy the following paragraphs refer only to those MRLs and ERLs on which there was detailed discussion, where delegates expressed reservations, or where the Committee recommended the omission of Steps 6 and 7. The Steps in the Codex Procedure to which the Committee advanced or returned individual MRLs or ERLs or at which these limits were held are indicated in the Guide to Codex Recommendations concerning Pesticide Residues Part 2 (Ref. CAC/PR 2-1984). For convenience Part 2 of the Guide lists all existing Codex MRLs and ERLs and draft Codex MRLs and ERLs, together with proposed amendments to Codex MRLs and ERLs. In addition to Part 2 of the Guide, the Codex Secretariat will issue such other documents as will be necessary for the consideration of maximum limits by the Commission or by governments for the purpose of commenting on the proposed limits.

59. The delegation of the United States of America expressed concern at the continued tendency of some countries not to accept the good agricultural practices of other countries. The JMPR had repeatedly requested information on good agricultural practices from countries so that this information could be taken into account in the estimation of MRLs. If countries believed the agricultural practices of other countries to be unacceptable on toxicological grounds they should submit data to the JMPR in support of their views. Neither the JMPR nor the CCPR had the necessary information or experience to judge the appropriateness of the agricultural practices of all countries in the light of their circumstances.

60. The delegation of Switzerland informed the Committee that the revision of the Swiss legislation on foreign substances in food was nearing completion. The delegation had to reserve its position on most of the MRLs discussed until the revision is officially accepted in its country.

61. The Chairman drew attention to the various forms of acceptance, notably limited acceptance and other forms of control of imports in the light of Codex MRLs, which serve to facilitate international trade.

BINAPACRYL (003)

62. The Committee noted that the 1982 JMPR had withdrawn the ADI for this compound. During the discussion it emerged that binapacryl still had limited application in some countries. The Netherlands had withdrawn its use of the compound. No uses were registered in the USA and no maximum limits existed for binapacryl in that country. The representative of GIFAP indicated that a new study on the dog was available and, together with information on existing registered uses, would be submitted to the JMPR. He reported that the results of the dog study appeared to be favourable.

63. The Committee agreed to propose to the Commission that the Codex MRLs be converted to "Guideline Levels" until the JMPR could establish an ADI on the basis of toxicological data to be supplied by the manufacturer. Governments would be requested to indicate existing uses of binapacryl and also to indicate foods on which Codex MRLs (or Guideline Levels at present) should be established (on the basis of residue data to be supplied to the JMPR).

BROMOPHOS (004)

Apples

64. The delegation of the Federal Republic of Germany, supported by the delegation of The Netherlands, was of the opinion that the Codex MRL of 2 mg/kg was more appropriate and should not be increased to 5 mg/kg as proposed. The delegation pointed out that the proposal was based on data from its country, but on a shorter pre-harvest interval than that in current use.

65. The Committee decided to request the JMPR to re-examine the proposed new MRL of 5 mg/kg in light of the above comments. The Commission should be advised not to accept the amendment pending the JMPR review.

Carrots

66. The delegation of Finland reserved its position on the new proposed MRL of 2 mg/kg in the light of residues resulting from good agricultural practices in its country.

Kale

67. The delegation of the Federal Republic of Germany indicated that it would ask the manufacturer to submit residue data to the JMPR justifying raising the MRL to 1 mg/kg. The Committee requested the JMPR to consider the data.

Lettuce

68. The delegations of France and Italy reserved their position on the proposed new MRL of 2 mg/kg since residue data from Good Agricultural Practice did not support this value. At the suggestion of the delegation of The Netherlands the Committee requested the JMPR to reevaluate the data, considering a limit of 1 mg/kg.

Pea Fodder

69. It was noted that the commodity should be pea straw as originally recommended by the 1982 JMPR. As doubt existed on the exact nature of the commodity covered by the MRL, it was agreed to refer the matter to the JMPR for clarification.



Plums

70. The delegation of The Netherlands believed an MRL of 1 mg/kg was sufficient on the basis of the GAP recorded in the JMPR Evaluations. The delegations of France, Spain, Italy and the Federal Republic of Germany were of the opinion that the new proposed MRL of 5 mg/kg was too high in the light of their good agricultural practices. The delegation of the United Kingdom pointed out that the JMPR examines a range of residue data from various good agricultural practices. MRLs should be seen in this light rather than only in relation to residue data from individual agricultural practices. It was agreed to return the proposed new MRL to the JMPR for reconsideration.

Spinach

71. For reasons similar to those for plums, the new proposed MRL was referred to the JMPR for reconsideration.

Barley straw; Cherries; Oat straw; Onions; Peaches; Raspberries; Sugar beet leaves; Tomatoes

72. The Committee decided to request the Commission to omit Steps 6 and 7 of the Procedure.

CAPTAN (007)

73. The delegation of the United States of America informed the Committee that United States tolerances and the definition of the residue for captan were under review. Noting that the JMPR intended to review the compound the Committee decided not to discuss this pesticide pending further advice from the JMPR.

CHLORDANE (012)

74. The delegation of the Federal Republic of Germany informed the Committee of a survey involving the analysis of several thousand samples of products of plant and animal origin during 1978-1982. None of the samples had revealed a residue of chlordane above 0.01 mg/kg. The delegation of Finland indicated a similar experience. The delegation of the United States of America informed the Committee that monitoring data had been submitted as requested.

75. The Committee noted that the MRLs were temporary and would remain at Step 7 until the temporary nature of the ADI was changed.

CHLORPYRIFOS (017)

76. The Committee advanced the MRL for kiwi fruit and the amendment to the Codex MRL for milk and milk products (involving deletion of the MRL for milk products) in the Codex Procedure.

2,4-D (020)

77. The Committee advanced the MRLs in the Codex Procedure noting that the delegation of the United States of America would check whether residue data were available on 2,4,-D in flour and the possibility of providing it to the JMPR.

FENITROTHION (037)

78. The Committee noted that the definition of the residue had been changed by the 1983 JMPR. This change would be subject to discussion at the next Session.

Wheat flour (white)

79. The delegations of India, The Netherlands, Sweden and the Federal Republic of Germany expressed their concern about the high residues resulting from direct admixture with grain in relation to the toxicity of the compound. It was agreed to postpone discussion on this item until the JMPR has reviewed the ADI as scheduled for 1984. The proposal was retained at Step 7.

METHIDATHION (051)

80. The delegation of the Federal Republic of Germany drew attention to its reservations with regard to the toxicology already expressed in para 98 of ALINORM 83/24 A.

Mandarins

81. The delegations of Hungary, France and Italy were of the opinion that an MRL of 5 mg/kg was too high in relation to the ADI. The delegation of Australia drew attention to their information sent to the 1979 JMPR from which it is clear that residues up to 2-5 mg/kg could be expected under GAP conditions. Most of the residue, however, was in the peel so there would be no intake problem. This view was shared by the delegation of Israel who asked for an MRL of 5 mg/kg or more for all citrus fruits.

It was pointed out that there is already an MRL for citrus (except mandarins) of 2 mg/kg at Step 8.

82. The Committee was informed by the delegation of Switzerland that new data on chronic toxicity in mice and rats would be made available early in 1986. The representative of WHO said that IBT data were only marginally involved for this compound. The toxicology was due for review when the data referred to by the Swiss delegation became available. The proposal was advanced in the procedure.

PARAQUAT (057)

Soybeans

83. The delegation of The Netherlands was of the opinion that the data presented in the 1981 JMPR Evaluation supported an MRL of 0.1 mg/kg on the basis of GAP in the countries where the compound was used. The delegation of the United States of America informed the Committee that a tolerance of 0.2 mg/kg had been similarly proposed in the United States of America but that the use was not yet accepted as GAP in its country.

CYHEXATIN (067)

84. The Committee noted that the footnote in CX/PR 84/4 on beans stating that the MRL referred to the total residue arising from the use of cyhexatin and/or azocyclotin also applied to apples and strawberries. At the request of the delegation of the United States of America comment on the definition of the residue was deferred until azocyclotin was discussed (see paras 210-211).

CARBENDAZIM (072)

85. The delegations of Finland and the Federal Republic of Germany were of the opinion that the MRLs for thiophanate-methyl, carbendazim and benomyl should be incorporated in this entry (see also para 273). Although the proposals for thiophanate-methyl are already Codex Limits it was decided to ask the JMPR to review this matter.

Several delegations wished to consider the proposals for the three compounds together in order to harmonize them. Discussion was postponed until the next Session when the 1983 JMPR Evaluations would be available.

#### DEMETON-S-METHYL (073)

86. The 1982 JMPR had withdrawn the ADI for this compound and its metabolites oxydemeton-methyl (demeton-S-methyl sulphoxide) and demeton-S-methyl sulphone which were pesticides in their own right. The reasons for this decision were clearly stated in the Report of that meeting. The toxicology of this group of compounds would be reconsidered by the 1984 JMPR. So far, no data had been received for re-evaluation by the FAO panel of the JMPR. The problems caused by this group of compounds were very complex, partly owing to confusion caused by the nomenclature. It was explained that demeton and disulfoton, being diethyl esters, did not belong to this group which consisted of dimethyl esters.

87. After a long discussion the Committee decided to await the outcome of the discussion in the 1984 JMPR before taking any action. Information on the actual use pattern of the different members of the group would however be of great value. Oxydemeton-methyl was nowadays probably the most widely used of the substances.

88. The delegation of France supported the written comment of The Netherlands opposing the proposals because they represented levels which might affect the health of animals when fed according to current practices.

#### THIOMETON (076)

89. The delegation of the Federal Republic of Germany reserved its position on this compound for toxicological reasons (see also ALINORM 85/24 para 121).

#### Maizé (leaves, stalks and cobs)

90. The proposal was advanced to Step 5, with the recommendation that Step 6 and 7 be omitted.

#### VAMIDOTHION (078)

91. The most recent evaluation of the agricultural aspects of the compound had taken place in 1973. Some delegations questioned whether the information on use patterns recorded in the 1973 Evaluations was still accurate. Several delegations objected to the proposed MRLs, which were considered high in relation to the low TADI.

92. The delegation of the Federal Republic of Germany preferred not to include the sulphone of vamidothion in the definition of the residue. It was explained that this had been done for practical analytical reasons. The Secretariat would request information on GAP from Governments.

#### CHINOMETHIONAT (080)

##### Tomatoes

93. The 1983 JMPR, in response to a request from the delegation of The Netherlands for an MRL for tomatoes, had not been able to recommend one because of deficiencies in the data.

CHLOROTHALONIL (081)

94. The delegations of the Federal Republic of Germany and of The Netherlands reserved their position on this compound owing to uncertainties regarding the toxicology. The compound was scheduled for toxicological review by the 1985 JMPR.

95. It was noted that the 1983 JMPR had changed the definition of the residue, no longer including the 4-hydroxy metabolite, which would contribute a maximum of 10% of the total residue. It was decided to defer discussion of this proposed change until the next Session.

DICHLORFLUANID (082)

Cereal grains

96. The delegation of the United States of America did not support replacement of the individual MRLs for barley, oats, rye and wheat by a group MRL of 0.1 mg/kg for cereal grains. It was of the opinion that in general, data on at least wheat, sorghum, rice and both fresh and dried corn were needed before a group MRL for cereal grains could be established. In this case, it was thought that only data on wheat had been available.

It was decided to refer this question to the JMPR as it was important to reach agreement on the basis for a group MRL.

Hops (dried)

97. The delegation of the Federal Republic of Germany undertook to make data available to the JMPR justifying an increase of the MRL to 100 or 150 mg/kg on the basis of GAP in central Europe.

CYANOFENPHOS (091)

98. As the TADI of the compound had been withdrawn by the 1983 JMPR and manufacture of the compound had ceased, it was decided to delete all proposals and to recommend the Commission to withdraw its Codex Limits.

DEMETON (092)

99. Although this compound did not belong to the group of demeton-S-methyl and related compounds (see para 86) it was included in the 1984 JMPR review scheduled for those compounds. See also paras 130 and 131 of ALINORM 85/24. It was agreed to postpone discussion until the results of the JMPR review were available.

ACEPHATE (095)

100. The Committee noted that acephate would be reviewed by the JMPR in 1984. The delegation of the United States of America informed the Committee that toxicological information requested by the 1983 CCPR and required for the JMPR review had been provided.

101. Since acephate had a temporary ADI, the Committee agreed to defer discussion on the proposed MRLs, all of which were at Step 7, until the next Session of the CCPR when it was hoped that the 1984 JMPR review of the pesticide would be available.

102. Because the United States of America and the CCPR use different definitions of the residues of acephate and methamidophos, the delegaton of the United States of America reserved its position on the acceptance of the proposed MRLs until such time as the United States had considered the use of the Codex definitions (see also para 105).

DIALIFOS (098)

103. The Committee noted that the ADI of dialifos had been withdrawn by the 1982 JMPR, since the toxicological assessment had been based on IBT studies which required validation and there seemed to be no prospect of replacement studies in the near future. The Committee was informed by the representative of GIFAP that there was no interest in the industry in carrying out further toxicological studies and that current supplies of the pesticide were being depleted.

104. Since none of the delegations had shown any interest in the use of dialifos, the Committee agreed to propose to the Commission that all proposed MRLs be deleted.

METHAMIDOPHOS (100)

105. Some delegations expressed the opinion that since methamidophos was a metabolite of acephate, the two compounds should be considered at the same time for review by the JMPR. While acephate is on the agenda for review by the 1984 JMPR, methamidophos is not. The Committee noted, however, that the JMPR for good reasons (see report of the 1979 JMPR) had considered methamidophos and acephate separately and had proposed separate MRLs. The Committee expressed the opinion that the JMPR in a future review should propose MRLs for methamidophos and acephate which were appropriate to all situations where either compound was applied.

Eggplants

106. The delegation of the United States of America expected the U.S. registrant of the compound to provide data to the JMPR in support of an MRL of 1 mg/kg.

PIRIMICARB (101)

107. The delegation of Italy recalled the discussion the Committee had had at its last Session (ALINORM 85/24, para 139) and expressed reservations on all MRLs until such time as the question of carcinogenicity of the compound raised by the delegation of the Federal Republic of Germany was cleared beyond doubt. The Committee noted that pirimicarb had been reviewed by the 1982 JMPR, which recommended that the temporary ADI should be replaced by an ADI at a higher level because of the absence of positive findings in mutagenicity and carcinogenicity studies. This had resolved the concern previously expressed.

108. The delegation of Spain informed the Committee that a study was in progress in its country that might result in a revision of the MRL for pirimicarb in oranges. The delegation agreed to make the data available to the JMPR. For this reason the Committee agreed to advance the MRL for oranges from Step 5 only to Step 7.

MALEIC HYDRAZIDE (102)

109. Following the discussions at the 15th Session of the CCPR (ALINORM 85/24, para 143), the Secretariat had taken action concerning a review of specifications for maleic hydrazide and brought the matter to the attention of the Plant Production and Protection division of FAO. The subject would be considered at a meeting on specifications to be convened by FAO in Rome during October 1984.

110. There was considerable discussion on the hydrazine content of the pesticide. While technical maleic hydrazide contains 15 mg of hydrazine per kg, the hydrazine content is only 1.5 mg/kg or less in the sodium or potassium salt since conditions during salt formation cause a considerable reduction in the hydrazine content. Maleic hydrazide is commercially available as a pesticide in two formulations, one a liquid containing 16% maleic hydrazide and the other a granular formulation containing 80% maleic hydrazide, in both cases as the sodium or potassium salt. Both formulations contain less than 1 mg of hydrazine per kg.

111. The Committee noted that information available to it as contained in the above paragraph would necessitate a modification in the title of the pesticide. The Committee also noted that the ADI of the pesticide which had been allocated by the 1980 JMPR (see 1980 Evaluations, page 285) applied only to products which contained less than 1.5 mg of hydrazine per kg.

112. The Committee agreed to change the title to read "Maleic Hydrazide (Na and K salts)" and the ADI to read: "Temporary Acceptable Daily Intake (until 1984): 1 mg/kg body weight (based on Na or K salt containing less than 1.5 mg hydrazine/kg)".

113. The Committee agreed with the suggestion of the delegation of the Federal Republic of Germany to change the definition of the residue to read: "Sum of free and bound maleic hydrazide expressed as maleic hydrazide", and agreed to bring this change to the attention of the JMPR and request their advice.

#### Onions

114. The present MRL of 15 mg/kg was supported by the delegations of the United States of America and of Canada. The figure was not acceptable to the delegation of The Netherlands, which proposed a figure of 10 mg/kg and which made reference to a later series of residue trials carried out in 1976 in which a more reliable method of analysis had been used. This showed clearly that an MRL of 10 mg/kg was sufficient, even when the onions were stored for a relatively short period. The figure of 10 mg/kg for onions proposed by The Netherlands was supported by the delegations of France and the Federal Republic of Germany. The delegation of the United States of America agreed to check whether additional data were available for submission to the JMPR.

#### Potatoes

115. The delegation of the Federal Republic of Germany expressed a reservation because of toxicological concern since maleic hydrazide is relatively stable during the processing of potatoes.

#### PHOSMET (103)

116. The delegation of the United States of America informed the Committee that it had provided new GAP data on forage crops that could be considered by the JMPR for a review of the pesticide in 1984.

DITHIOCARBAMATES (105)

117. The Committee was informed that this group of pesticides would be reviewed by the 1984 JMPR and agreed not to take any action pending this review.

ETHIOFENCARB (107)

Beans (with pod)

118. The Committee noted that the proposal for beans (with pod) was new, the 1983 JMPR having changed it from 0.5 to 2 mg/kg.

Brassicas (except Chinese cabbage); Cabbage, Chinese

119. The Committee advanced the MRLs to Step 5 with the recommendation to the Commission that Steps 6 and 7 be omitted.

PHORATE (112)

120. The Committee noted that the present definition of the residue was based on a recommendation by the 1982 CCPR. The 1982 CCPR had requested the JMPR to consider whether the oxygen analogue could be deleted from the definition. The delegation of the United States of America expressed the opinion that reference to the oxygen analogue should not be deleted (1977 JMPR Evaluations page 379).

121. The delegation of the United Kingdom expressed concern at the inclusion of "fat-soluble residue" in the definition since, while the parent compound was fat-soluble, the other components of the residue were not. The Committee noted, however, that the term "fat-soluble residue" was included to indicate that the temporary MRL for milk was to be interpreted in the sense which had been agreed for fat-soluble residues. The Secretariat undertook to consider alternative ways of conveying this information.

122. The Committee was informed that the limit of determination was 0.05 mg/kg for products of animal origin but was lower for those of vegetable origin.

Alfalfa; Barley; Beets, fodder; Carcase meat; Cottonseed; Eggs; Grapes; Hops (dried); Maize (green); Sorghum; Soybeans; Wheat

123. The Committee advanced the existing MRLs to Step 5 with the recommendation to the Commission that Step 6 and 7 should be omitted.

124. The delegation of the United States of America informed the Committee that, in its opinion, neither the analytical method used nor the data made available to the 1977 JMPR supported an MRL of 0.1 mg/kg on dried hops.

125. The delegation also requested that the term "maize (green)" should be clarified by the JMPR to determine whether it referred to maize, sweet corn or maize fodder.

Beans; Carrots; Celery; Cow peas; Eggplants; Lettuce; Milk; Peanuts; Potatoes; Rapeseed; Sugar beets; Sugar beet tops; Tomatoes

126. The delegations of The Netherlands, the Federal Republic of Germany, the United States of America, France and Spain reserved their position on accepting the MRLs for all or some of the above commodities.

The reservations of the delegations of The Netherlands and the Federal Republic of Germany were based on the low ADI of the pesticide.

Peanuts

127. The MRL for peanuts was referred to the JMPR for review, since it was based on the same data as the United States tolerance of 0.1 mg/kg.

Lettuce

128. The delegation of the United States of America expressed the opinion that available data did not support an MRL of 0.2 mg/kg for lettuce since the data resulted from application at twice the level considered by the 1977 JMPR to be good agricultural practice. The Committee referred the matter to the JMPR.

Milk

129. The delegation of the United States of America was of the opinion that a level of 0.02 mg/kg rather than 0.05 mg/kg was supported by the data that had been evaluated by the JMPR. Tolerances in the United States of America for milk were also 0.02 mg/kg. The Committee agreed to refer the matter to the JMPR. The delegation of the Federal Republic of Germany considered that an implied MRL of 1.25 mg/kg on a fat basis for milk products with more than 2% of fat was not justified (see also para 121 and Appendix to CX/PR 84/4).

Potatoes

130. The delegation of the United States of America did not support the TMRL of 0.05 mg/kg proposed by the 1977 JMPR. In its opinion the proposal appeared to be based primarily on limited data from two countries and a 120-day pre-harvest interval. The United States of America had sent data to the same JMPR which supported an MRL of 0.5 mg/kg. The Committee agreed to await re-evaluation by the JMPR.

Sugar beet tops

131. The delegation of Spain had a reservation regarding the MRL for sugar beet tops, since in its opinion the consumption of sugar beet tops with such high levels would result in increased pesticide residues in milk. The Committee however noted that this was not the case, and that the carry-over of pesticide was minimal (see the 1977 JMPR Evaluations).

PROPARGITE (113)

Tea

132. The attention of the Committee was drawn to an error in the Guide (CAC/PR 2-1984). The proposal for tea should read "10 mg/kg" and the reference "para 156", as correctly recorded in CX/PR 84/4.

GUAZATINE (114)

133. The delegation of Finland withdrew its written comment on the method of analysis recommended by the Ad Hoc Working Group on Methods of Analysis, as the recommendation had subsequently been changed.



TECNAZENE (115)

Potatoes

134. The delegations of Sweden, the Federal Republic of Germany and France reserved their positions on the proposed MRL.

ALDICARB (117)

135. The delegation of the Federal Republic of Germany informed the Committee that it was unable to accept the proposals for bananas because of the very low ADI for the compound. The delegation noted that it had considered an MRL of 0.3 mg/kg for citrus fruit and potatoes to be acceptable at the 14th Session of the Committee (ALINORM 83/24 A, paras 164, 165), but these MRLs had not been accepted by the Federal Council of that country.

Citrus fruit

136. The delegation of the United States of America supported an MRL of 0.3 mg/kg on the basis of data available to the JMPR. It was anticipated that additional data would be available by the middle of 1984 and could be provided.

Maize; Maize fodder; Maize forage

137. The proposals of 20 mg/kg for maize forage and 2 mg/kg for maize fodder caused some confusion. The delegation of The Netherlands explained that the MRL for forage applied to immature plants for which pre-harvest intervals were short. Fodder referred to mature plants for which pre-harvest intervals were longer. The figure of 20 mg/kg for forage was considered by several delegations to be too high.

138. The delegation of the United States of America drew attention to the potential toxicity to livestock of maize fodder containing residues at the proposed limit. The delegation of The Netherlands was of the opinion that the normal proportion of maize fodder in the total ration would not be hazardous.

139. It was decided to refer the proposals to the JMPR for clarification.

Milk

140. Clarification was sought from the Working Group on Methods of Analysis on the limit of determination for aldicarb in milk. It was decided not to decrease the MRL from 0.01\* to 0.002\* mg/kg, pending reconsideration by the Working Group on Analysis at the next Session.

Potatoes

141. The delegation of the United States of America was of the opinion that according to the residue data, GAP and analytical practice an MRL of 1 mg/kg was necessary. It invited other countries to send data to the JMPR to show why an MRL of 1 mg/kg should not be acceptable from a safety point of view. Several other delegations, however, were not prepared to accept 1 mg/kg and the Committee decided to retain the proposal of 0.5 mg/kg.

Pecans; Sorghum; Sorghum fodder; Sweet potatoes

142. It was agreed to advance these proposals to Step 5 with the recommendation to the Commission that Steps 6 and 7 be omitted.

SYNTHETIC PYRETHROIDS AND FENVALERATE

143. The delegation of the Federal Republic of Germany reserved its position on these compounds as the toxicological aspects of all of them were under review in its country. This applied to cypermethrin (118), fenvalerate (119), permethrin (120), phenothrin (127) and Deltamethrin (135).

CYPERMETHRIN (118)

144. The delegations of Finland and Italy informed the Committee that they could not accept an MRL for any fruit exceeding 1 mg/kg with the exception, in the case of Finland, of citrus fruit. This exception was made because the residue is concentrated largely in the peel.

Alfalfa; Maize fodder; Sorghum fodder

145. The representative of FAO informed the Committee that the 1983 JMPR had reviewed the proposals without changing its conclusions.

Barley; Carcase meat; Meat by-products; Poultry meat

146. It was decided to refer the proposals to the JMPR for review on the basis of new data to be provided by Australia.

Eggs

147. The delegation of The Netherlands was of the opinion that the proposal was based on data from toxicity feeding trials which were inappropriate as a basis for the proposed MRL.

Grapes

148. Several delegations were of the opinion that according to the data presented in the 1979 Evaluations on GAP, recommended dosage and PHI, an MRL of 0.5 mg/kg would suffice. It was agreed to ask the JMPR to review the proposed figure.

Lettuce

149. The Committee decided to ask the JMPR for a review as the delegations of The Netherlands and Finland stated that according to the available data an MRL of 1 mg/kg would be sufficient. On the other hand, the delegation of France promised to make data available showing that residue levels above 1 mg/kg occurred.

Nectarines; Peaches; Pome fruit

150. Several delegations were of the opinion that the data supported an MRL of only 1 mg/kg. The JMPR would be asked to reconsider the matter.

Wheat

151. According to the delegation of Australia the MRL was based on data that did not take post-harvest uses of the compound into account. It promised to send data to the JMPR.

Oilseeds

152. The delegation of the United States of America informed the Committee that they were considering 0.5 mg/kg as a tolerance for cottonseed oil and 0.1 mg/kg for soybean oil, and that if possible data would be made available to the JMPR.

Currants (black, red and white); Edible vegetable oils;  
Gooseberries; Kidney beans (in pod); Leeks; Mushrooms; Onions;  
Peanuts; Root and tuber vegetables

153. It was agreed to advance these proposals to Step 5 with the recommendation that Steps 6 and 7 be omitted.

FENVALERATE (119)

154. The delegation of the United Kingdom informed the Committee that the residue of the pesticide should be noted as being fat-soluble.

Animal fats

155. The proposal of the MRL of 0.2 mg/kg for animal fats was not acceptable to the delegation of the United States of America. This delegation informed the Committee that it had submitted data to the JMPR in March 1984 to support its view that the MRL of 0.2 mg/kg was too low to accommodate good agricultural practices in its country.

156. The Committee requested the JMPR to review the subject in the light of the new data submitted by the United States of America.

Brassica leafy vegetables

157. The delegation of France expressed a reservation on accepting the MRL while the delegation of Italy informed the Committee that an MRL of 1 mg/kg would be acceptable. The delegation of the United States of America informed the Committee that it had submitted data and information on good agricultural practice to the JMPR to support its view that the proposed MRL of 2 mg/kg was inappropriate. It stated that a level of 10 mg/kg may be more appropriate for cabbage.

158. The Committee requested the JMPR to review the subject in the light of the new data submitted by the United States of America.

Celery

159. The delegation of France expressed a reservation and informed the Committee that its evaluation of the data considered by the JMPR showed that the MRL was too high.

Cereal grains

160. The delegation of The Netherlands was of the opinion that the data evaluated by the 1979 JMPR, which increased the MRL from 1 to 5 mg/kg, did not support such an increase. The 1981 Evaluations which maintained the MRL did not encompass sufficient additional information on large-scale trials asked for by the 1979 JMPR. Furthermore the residue was stable during the baking process. In view of these considerations the delegation opposed further advancement of the MRL in the Step procedure and proposed that the subject be reviewed again by the JMPR before action was taken by the Committee. The delegation of Australia informed the Committee that data were being generated in its country which could be made available.

161. The delegation of the United Kingdom pointed out a general problem about the use of insecticides admixed with cereals, or applied to the crop for protection of the food commodity during storage. Admixture would normally result in higher residues while

application on the growing crop would result in lower residues. To a question raised as to how the type of application could be identified from the MRL for cereal grains, the Secretariat informed the Committee that this type of information, if available, could be covered by a note.

#### Cucumbers

162. The delegation of the United States of America informed the Committee that it had submitted data and information on GAP to support its view that an MRL of 0.5 mg/kg was more appropriate than the MRL of 0.2 g/kg proposed. The Committee requested the JMPR to review the MRL for cucumbers in the light of the new data.

#### Milk

163. The delegation of the United States of America informed the Committee that it had submitted data and information on GAP to support its view that the proposed MRL of 0.01 mg/kg was too low. The United States of America believed an MRL of 7 mg/kg in milk fat (corresponding to 0.3 mg/kg in whole milk) was supported. The Committee requested the JMPR to review the MRL for milk in the light of the data submitted by the United States of America.

#### Peaches

164. The delegation of The Netherlands informed the Committee that the proposed MRL of 5 mg/kg was based on applications at three times the recommended dosage in the trials evaluated by the 1981 JMPR, and expressed the opinion that an MRL of 2 mg/kg would cover good agricultural practice. The delegation of France considered that an MRL of 5 mg/kg was high and that lower MRLs would be acceptable. The delegation of the United States of America informed the Committee that GAP in its country would support an MRL of 10 mg/kg and undertook to provide the information to the JMPR for a future review.

#### Peanuts (whole)

165. The Committee noted that there was considerable international trade in peanut kernels and agreed to collect information on residue levels for peanut kernels resulting from GAP from member governments and make the data available for evaluation by the JMPR.

#### Bell peppers

166. The delegation of the United States of America informed the Committee that it had submitted information on GAP to the JMPR in support of its view that the MRL of 2 mg/kg was higher than necessary. The Committee requested the JMPR to review the MRL for bell peppers in the light of the data submitted by the United States of America.

#### Pome fruit

167. The delegation of The Netherlands informed the Committee that the data which were evaluated by the JMPR and from which an MRL of 2 mg/kg was derived were based on field trials in which rates of application higher than GAP were used. It expressed the opinion that a lower MRL of 1 mg/kg would be acceptable. This was supported by the delegation of Italy. The delegation of the United States of America supported the opinion expressed by The Netherlands that the situation with regard to GAP was not clear and agreed to provide information on their GAP.

The Committee requested other countries also to provide information on GAP which, together with the information that would be made available by the United States of America, could be conveyed to the JMPR for review. The delegation of France informed the Committee that it had information which was confidential but would try to make it available.

Wheat bran; Wheat flour (white); Wheat flour (wholemeal)

168. The attention of the Committee was drawn to the fact that the proposed MRL for wheat bran was the same as that for cereal grains. In addition, usually grain and wholemeal flour have the same limit and bran has an MRL of double that level. The Committee noted that MRLs for this compound would be considered by the 1984 JMPR (Report of the 1983 JMPR, para 3.1.).

PERMETHRIN (120)

169. The delegation of the United States of America informed the Committee that while Codex MRLs include only permethrin (sum of isomers), the United States of America tolerances also include the metabolites 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane-carboxylic acid (DCVA) and (3-phenoxyphenyl)methanol (3-PBA) for plant commodities (except parent only for cottonseed) and an additional metabolite (3-phenoxybenzoic acid) for animal products. The delegation of the United States of America was of the opinion that unless these metabolites were included, there would not be compatibility between the United States' and Codex tolerances. The delegation of the United States of America informed the Committee that the decision of the JMPR to base MRLs on a single indicator species was intended to make it easier for regulatory agencies to enforce action to regulate GAP. The concept of the JMPR would make analysis easier. The delegation of the United States of America could support the concept on a case-by-case basis and emphasized that there are disadvantages which had to be considered.

Alfalfa fodder; Dewberries; Gooseberries; Kohlrabi

170. The delegation of France expressed a reservation on these MRLs.

Almonds

171. The delegation of the United States of America informed the Committee that current uses in the United States of America did not require an MRL greater than 0.05 mg/kg, even when metabolites were included.

Cabbage; Cabbage, Chinese; Cabbage, Savoy

172. The delegation of The Netherlands was of the opinion that data presented in the 1979 Evaluations would support an MRL of 2 mg/kg. Information in the 1980/81 Evaluations would not support MRLs higher than 2 mg/kg. Residues exceeding 2 mg/kg were only found when short preharvest intervals (3 days) were observed. This interval was much shorter than the pre-harvest intervals recommended in most countries for the crops. The Committee was informed that insecticides were used for cleaning the crop of pests shortly before harvest, but this practice was not considered GAP by all countries. The Committee noted, however, that GAP on a world-wide basis was considered in JMPR evaluations.

The delegation of the United States of America informed the Committee that it has an MRL of 6 mg/kg for cabbage and could not support an MRL of less than 5 mg/kg.

Fruits and vegetables

173. The delegation of Italy could not support any MRL above 1 mg/kg for these commodities.

Carcase meat of cattle, pig and sheep

174. The delegation of The Netherlands doubted whether the proposed MRL of 1 mg/kg was based on a realistic ration of animal feed or residue level. In its opinion an MRL of 0.05 mg/kg would suffice. The tolerance of the United States of America was 2 mg/kg and the Committee noted that the difference between this figure and the proposed MRL could be accounted for by the difference in the definition of the residue.

Celery

175. The delegation of The Netherlands informed the Committee that the residue data presented in the 1979 JMPR Evaluations showed no residues exceeding 2 mg/kg in trials when permethrin was applied at recommended rates. The MRLs which exceeded 2 mg/kg were derived from trials in which permethrin was used at an excessive dosage. An MRL of 2 mg/kg would be acceptable in the opinion of the delegation.

176. The Committee requested the JMPR to review the subject in the light of the observations.

Citrus fruit

177. The delegation of Spain informed the Committee that an MRL of 0.5 mg/kg would be applicable only to oranges whereas 2 mg/kg would be needed for lemons (the same level as for stone fruits). An MRL of 2 mg/kg was tolerated in Finland, to avoid rejections in international trade.

The delegation of Spain agreed to make all their data available to the JMPR for a review of the MRL.

Lettuce

178. The delegation of France, supported by Switzerland and Belgium, expressed the opinion that the application pattern on which the Evaluations were based was not appropriate to the crop. This resulted in high MRLs which were not acceptable. The delegation of the United Kingdom informed the Committee that the original proposal of the JMPR was 20 mg/kg which was later reduced to 10 mg/kg.

The delegation of The Netherlands informed the Committee that in its country lettuce was mainly grown under glass and that at the moment they were not in a position to give an opinion since the matter of the residues of pyrethroids on leafy vegetables (grown under glass as well as outdoors) was under review in its country. The delegation of the United States of America supported an MRL of 20 mg/kg on the basis of GAP.

179. The Committee requested all those countries which were in a position to do so to provide information on GAP and MRLs for the JMPR review.

Milk

180. The delegation of the Federal Republic of Germany doubted whether an MRL of 2.5 mg/kg for milk products calculated on a fat basis was justified, especially as this level significantly exceeded the proposed MRL for carcass meat on a fat basis. The Committee was of the opinion that these should be the same. This would need to be explained and the Committee requested the JMPR to clarify the matter. The Committee expressed the opinion that residue levels for milk would not need re-evaluation.

Mushrooms

181. In the United States of America a tolerance of 6 mg/kg is established. The delegation could provide information to the JMPR on GAP and, if available, other data to support this tolerance level.

Spring onions

182. The delegations of The Netherlands and France were of the opinion that normal application rates would result in MRLs not exceeding 1 mg/kg. The residues in spring onions are usually higher than those observed in bulb onions because of the higher surface area to weight ratio in the former due to their foliage. The delegations of The Netherlands agreed to supply new data on their experience with GAP to the JMPR for review.

Peas

183. The Committee noted that the JMPR Evaluations referred to peas (shelled) and amended the text accordingly.

Pome fruit

184. The delegation of Switzerland informed the Committee that in its country not more than two applications of permethrin per year were allowed to avoid the possible development of resistance. It believed that it would be of general assistance to the JMPR and the Committee in assessing GAP if information were provided on resistance to pyrethroids, since this would require higher application rates and hence higher MRLs. The Secretariat agreed to bring this problem to the attention of the division of FAO concerned.

Poultry meat

185. The delegation of the Federal Republic of Germany drew the attention of the Committee to the different MRLs for cattle meat, poultry meat and pig meat and wished to know the reasons for the significant differences. The Committee agreed to refer this matter to the JMPR for clarification.

Cattle, pig and Sheep meat by-products

186. The delegation of the United States of America informed the Committee that national tolerances for cattle, pig and sheep meat by-products were 1 mg/kg. The Committee asked this delegation to provide data to the JMPR for review.

Soybeans

187. The delegation of the United States of America informed the Committee that current uses in its country did not require an MRL greater than 0.05 mg/kg in spite of the fact that tolerances in the United States of America include permethrin, DCVA and 3-PBA.

In its opinion the data examined by the 1979 JMPR, which mainly originated from the United States of America, should not result in the establishment of an MRL of more than 0.05 mg/kg.

The Committee requested the JMPR to clarify this matter.

Spinach

188. The delegation of the United States of America informed the Committee that the tolerance level in its country was 20 mg/kg and agreed to provide information on GAP and other data for review by the JMPR.

Tea

189. The delegation of The Netherlands was of the opinion that according to the data in the 1979 JMPR Evaluations no higher MRLs than 10 mg/kg would be necessary. The Committee noted that the carry-over of the pesticide into the tea infusion (1981 JMPR Evaluations, page 419) was not significant.

Tomatoes

190. In the opinion of the delegation of The Netherlands, the proposed limit was not supported by the data presented in the 1979 Evaluations, and an MRL of 0.5-1 mg/kg would be more realistic even when short pre-harvest intervals were observed. The Committee requested the JMPR to review the subject and asked countries to make available any additional information they might have on the subject to the JMPR.

Wheat bran; Wheat flour (white); Wheat flour (wholemeal)

191. The Committee noted that the MRLs for the above commodities were temporary, pending evaluation by the JMPR of data from commercial-scale milling practice. The delegation of Australia agreed to collect the required data and submit them to the JMPR and also to the Codex Secretariat.

Asparagus; Horseradish; Olives; Sunflowerseed; Sunflowerseed oil (crude and refined)

192. The Committee advanced the MRLs of the above commodities to Step 5 with the recommendation to the Commission that Steps 6 and 7 be omitted.

2,4,5-T (121)

193. The Committee agreed to follow a similar approach to that adopted for maleic hydrazide (see para 112) and to change the ADI to read:

Acceptable Daily Intake:

0.03 mg/kg Body Weight (based on 2,4,5-T containing not more than 0.01 mg TCDD/kg).

AMITRAZ (122)

194. The delegation of the Federal Republic of Germany repeated its previously expressed concern with regard to the toxicological properties of the compound, especially with regard to possible carcinogenicity, and reported that all national MRLs for this compound had been withdrawn. Similar concerns were expressed by the delegation of Finland. The delegation of Switzerland indicated that the compound was currently under review in its country. This delegation reserved its position on most of the proposed MRLs.



Cherries; Oranges; Peaches

195. The delegation of The Netherlands reserved its position on these proposals. While GAP information in the Evaluations supported the proposals, the delegation was of the opinion that, in view of the low TADI, MRLs should be as low as possible, adapting GAP where necessary to allow lower MRLs.

The delegation of Italy reserved its position pending a toxicological review of the compound, which might result in lowering the national tolerance of 0.4 mg/kg for cherries. Whereas the delegation of France questioned the use on cherries and citrus, the delegation of Spain indicated that the product was registered in its country for use on these commodities.

196. It was decided to retain the proposals at Step 5, inviting all interested bodies to provide additional information to the JMPR.

Cottonseed oil

197. The Committee agreed that this entry should read "cottonseed oil (crude)". See also para 184 of ALINORM 85/24.

Cucumbers

198. The proposal had been questioned by the delegation of The Netherlands but the 1983 JMPR had confirmed the previous assessment.

Pig meat by-products

199. The Committee agreed to add this proposal of the 1980 JMPR to the list at the same Step as cattle meat by-products, as it had been erroneously omitted.

ETRIMFOS (123)

Barley; Maize; Wheat; Wheat bran (unprocessed); Wheat flour (white); Wheat flour (wholemeal)

200. The delegations of the Federal Republic of Germany, Finland, France, Italy, The Netherlands and Sweden expressed strong reservations against these proposals in view of the very low ADI, the persistence of the residue when preparing cooked or baked foodstuffs and the high consumption of cereal products in their countries.

The delegation of Australia undertook to provide additional information on residues occurring under practical conditions of use as soon as these were available.

The Secretariat was requested to ensure that a consistent terminology was used for these commodities.

Milk

201. The Committee considered a suggestion that the residue should be considered as fat-soluble for the purpose of the application to milk products, but noted that the residue as defined also included metabolites which were not fat-soluble. The Committee concluded that, for this reason and because the proposal was at the limit of determination, it was unnecessary to qualify the proposed MRL for milk.

Rapeseed

202. The delegation of the Federal Republic of Germany reserved its position on this proposal.

METHACRIFOS (125)

203. The delegation of The Netherlands, referring to its written comments, indicated that in view of the low ADI it was not prepared to accept MRLs above the limit of determination (0.01 mg/kg) unless it was shown that the residues could disappear almost completely when preparing the food for consumption. This applied especially to cereal products.

Several delegations had expressed similar reservations in their written comments.

It was decided not to take action on the proposals until the toxicology had been reviewed by the JMPR.

OXAMYL (126)

204. It was noted that some of the MRLs were temporary owing to the lack of certain residue data. The compound was scheduled for review by the 1984 JMPR. The delegation of the Federal Republic of Germany reserved its position because certain toxicological information was not available to its country.

Apples; Celery; Citrus fruit

205. The delegation of The Netherlands reserved its position on these proposals, because it was not clear whether they were based on GAP. The delegation of the United States of America informed the Committee that the United States tolerance on apples is 2 mg/kg. The JMPR would be requested to include this matter in their 1984 review of the compound.

Beans, kidney; Beans, kidney (dry)

206. The delegation of Australia regretfully informed the Committee that it was unable to provide the residue data previously promised.

Melons; Peppers; Summer squash; Tomatoes; Watermelons

207. The delegation of The Netherlands opposed the proposals as in its opinion they were based on excessive dosage rates. It proposed MRLs of 1 mg/kg for these commodities, except peppers for which 2 mg/kg seemed adequate. The JMPR would be requested to take note of these proposals in its 1984 review.

The delegation of the United States of America undertook to provide data on GAP for the above commodities to the JMPR.

PHENOTHRIN (127)

208. The delegation of The Netherlands was of the opinion that MRLs should be established for wholemeal flour and white flour. The Committee decided to invite governments to provide the necessary residue data on the basis of which the JMPR could establish such limits.

209. It also agreed to consider the MRLs for cereals again together with any new proposals for cereal products.

AZOCYCLOTIN (129)

210. The Committee noted that the use of azocyclotin resulted also in residues of cyhexatin, which was a pesticide in its own right. In practice it was not possible to distinguish between cyhexatin arising from the use of cyhexatin, azocyclotin or a mixture of these two. Some delegations were, therefore, of the opinion that a

single list of MRLs should be drawn up covering both azocyclotin and cyhexatin. It was pointed out that this would create difficulties since cyhexatin and azocyclotin had some different registered uses and that MRLs could not be set for azocyclotin based on GAP data for cyhexatin or vice-versa. Data from uses of mixtures were also lacking. Furthermore, two separate ADIs existed for these two pesticides. The Secretariat pointed out that this matter had already been considered previously (see para 201, ALINORM 85/24). The delegation of the United States of America expressed reservations and preferred separate lists.

211. The Committee decided to postpone consideration of the MRLs for azocyclotin, and requested the JMPR to reconsider combining the MRLs for cyhexatin and azocyclotin under the heading cyhexatin. The delegation of Sweden reserved its position regarding MRLs of 2 mg/kg in view of the low ADI.

#### DIFLUBENZURON (130)

212. The Committee decided not to advance the proposal for Brussels sprouts because the 1982 Evaluations had omitted the residue data for this commodity. These would be published in the 1983 Evaluations.

#### ISOFENPHOS (131)

213. The delegation of the United States of America informed the Committee that tolerances of the United States of America for the pesticide included two cholinesterase-inhibiting metabolites, des-N-isopropyl-isofenphos (DNI) and its oxygen analogue (DNIOA), which were not included in the proposed MRLs under consideration. The two additional metabolites, which had similar toxic properties to the parent compound, occurred in significant amounts in residues. Also crop rotation metabolism studies suggested that residues of DNIOA sometimes exceeded those of isofenphos or its oxygen analogue in some crops.

The Committee noted that methods were available for the determination of the cholinesterase-inhibiting metabolites and requested the JMPR to consider whether the metabolites should be included in the definition of the residue.

#### Citrus fruit

214. The delegations of The Netherlands, France and Italy informed the Committee that the proposal was based on the results of a single experiment with two replicates. They supported the view of the JMPR (1982 Evaluations) that further information on the residue in different varieties of citrus and on the distribution of residues in the peel and pulp was desirable.

215. The Committee requested the manufacturer to provide the information requested by the JMPR.

#### Maize fodder; Sweet corn fodder

216. The Committee was informed by the delegation of The Netherlands that data presented in the 1981 JMPR Evaluations indicated that residues in the dry forages did not exceed 0.2 mg/kg. The Committee requested the JMPR to reconsider the subject and retained the MRLs for both the commodities at Step 5.

Meat by-products

217. The United States of America had a higher tolerance of 0.1 mg/kg. The Committee expressed the opinion that the discrepancy between the United States and Codex limits would be resolved if the differences between the United States of America and Codex definitions of the residue were eliminated and advanced the MRL to Step 7.

Pears

218. The delegation of The Netherlands informed the Committee that the data evaluated by the JMPR were generated in Italy. That country had established an MRL of 0.1 mg/kg on the basis of a pre-harvest interval of 45 days. The delegation of the Federal Republic of Germany expressed a reservation and took the view that an MRL of 0.1 mg/kg would be appropriate. The Committee advanced the MRL to Step 5.

Bananas

219. The Committee advanced the MRL to Step 5 with a recommendation to the Commission to omit Step 6.

METHIOCARB (132), TRIADIMEFON (133)

220. The Committee recalled its decision at its last Session (ALINORM 85/24, paras 214 and 218) and postponed discussion of the MRLs until the next Session since the Evaluations of the 1983 JMPR were not yet available.

DELTAMETHRIN (135)

221. The Committee recalled its decision at the Fifteenth Session (ALINORM 85/24 paras 220, 221) to refer the compound to the JMPR and await further developments. At the request of the Chairman the representative of FAO explained that deltamethrin was not on the agenda of the 1984 JMPR. The delegation of France stated on behalf of the manufacturer that the proposed MRLs were considered to be adequate to cover the present use pattern of the compound. In view of the reservations of the delegations of both Hungary and the Federal Republic of Germany however, additional data would be made available to the JMPR with the aim of allowing these reservations to be lifted. The Committee agreed to request the JMPR to evaluate any new available data.

BENDIOCARB (137)

Rice (in the husk); Rice straw

222. The delegation of The Netherlands stated in its written comment that the 1982 Evaluations indicated that no information on GAP concerning rice (in the husk) and rice straw was available. The vast majority of data indicated that residues did not normally exceed 0.02 mg/kg, a level at or about the limit of determination. Governments were requested to send data on GAP concerning this compound to the JMPR. The delegation of South Korea promised to make such data available.

223. The delegation of the Federal Republic of Germany was of the opinion that residue data on husked or polished rice were needed before they could express their opinion on the proposal. Governments were requested to make any such data available to the JMPR.

Cattle, kidney

224. In reply to a question of the delegation of The Netherlands it was stated that it was correct that 0.2 mg/kg was the limit of determination in this commodity.

Poultry, by-products

225. The qualification "except kidney" in CAC/PR 2-1984 was thought to be a typing error. The description of the commodity would be corrected.

METALAXYL (138)

Definition of the residue

226. The delegations of Canada and the United States of America noted that the proposed MRLs were based on the parent compound alone and that if all the components were included the measured residues would be much higher. The delegation of the United States of America suggested that all metabolites should be included in the definition which, in its opinion, would also identify possible illegal uses.

227. The delegations of Denmark and the United Kingdom stated that the inclusion of all the components in the residue definition would impose undue analytical problems. Analytical methods suitable for regulatory purposes were available for the parent compound.

Citrus fruit; Grapes

228. The delegations of Italy and France reserved their positions concerning these MRLs since the compound was not used on citrus fruit in its country. The delegation of the Federal Republic of Germany also expressed its reservation. Both delegations stated that 1 mg/kg was sufficient. According to monitoring data in Sweden and GAP in France residues up to 5 mg/kg could be expected. The delegation of Israel said that metalaxyl was occasionally used to control phytophthora infestation.

Onions

229. It was agreed that 0.05 mg/kg was the limit of determination for this commodity.

The delegation of the United States of America stated that 0.05 mg/kg was too low to accommodate GAP in its country. For green onions 10 mg/kg and for bulb (dry) onions 3 mg/kg was needed. Data on GAP would be made available to the JMPR.

Potatoes

230. The delegation of The Netherlands noted that in the one case in the Evaluations where residues exceeded 0.05 mg/kg the metabolite 2,6-dimethylaniline was included. Since this metabolite is normally not included there seemed to be no justification for an MRL exceeding 0.05 mg/kg. The matter was referred to the JMPR.

Spinach

231. The delegation of The Netherlands had noted that only excessive applications of the compound led to residues of more than 0.5 mg/kg. The JMPR was requested to clarify the matter.

Squash; Melons; Cucumbers

232. The delegation of the United States of America stated that according to their GAP an MRL of 1 mg/kg was necessary. Data would be supplied to the JMPR.

#### CONSIDERATION OF GUIDELINE LEVELS AT STEP 4

233. The Committee had before it document CX/PR 84/6 containing Guideline Levels for discussion in the light of the comments in document CX/PR 84/7. The Chairman directed discussion particularly to (a) the reason for the fact that no ADI or temporary ADI existed, (b) the prospect of toxicological information being made available to the JMPR and (c) the registered uses of the pesticides and their future availability and use.

234. The following paragraphs represent the discussions which took place on the individual compounds. Some of the compounds and Guideline Levels were referred to the JMPR for re-evaluation as indicated. All Guideline Levels are held at Step 4 of the Procedure in conformity with the decision of the 14th Session of the Committee (ALINORM 83/24 A, paras 46-47).

#### FUMIGANTS

235. The delegations of Canada, France, The Federal Republic of Germany, The Netherlands and Switzerland informed the Committee that the use of one or more of the fumigants as pesticides is banned or restricted in their countries and/or that national levels for food at the lower limit of determination have been set because of health concern.

#### CARBON DISULPHIDE (009)

236. The Committee noted that full toxicological data were not likely to be made available for this or other fumigants not protected by patent. However, the IRPTC files might contain some relevant information. The Committee noted that the JMPR had concluded that the setting of ADIs for fumigants was not necessary since the compounds would be used in such a way that residues would effectively disappear before treated food reached the consumer. The suggestion was made by the Secretariat that carbon disulphide and other volatile fumigants should be referred to the JMPR with the request that an approach such as that adopted by the JMPR for hydrogen phosphide in cereals might be considered and data from food additive uses, where available, taken into account. It pointed to FAO's interest in post-harvest grain protectants and ways of preventing post-harvest food losses. It was pointed out that carbon disulphide was more reactive than hydrogen phosphide although the latter compound was more toxic. It was also noted that carbon disulphide had not been evaluated since 1971, since when there had been substantial improvements in analytical methods. This was another reason to refer carbon disulphide to the JMPR.

237. From statements by various delegations it appeared that carbon disulphide was still used in some countries, alone or mixed with other fumigants, on stored cereal grains. The Committee, noting the above points, decided to refer carbon disulphide to the JMPR for re-evaluation and also envisaged a discussion of the possible conversion of the present Guideline Levels into Codex MRLs on the basis of a consideration of the very low residue levels resulting in food as consumed. The delegation of Australia pointed out that cereal grains and other produce were fumigated before entering into trade channels and that in connection with the establishing of MRLs the possibility of the product being sampled soon after fumigation had to be taken into account.

CARBON TETRACHLORIDE (010)

238. The Committee noted that this compound was still in use alone or in combination with other fumigants on stored food grains. In reply to a question concerning the possible carcinogenicity of carbon tetrachloride, the Committee was informed that IARC had collected information on the carcinogenicity of this compound, but that their conclusions might not necessarily apply to residues consumed in food grains and on milled products.

239. The Committee was informed that carbon tetrachloride residues were less readily removed from cereal grains by ventilation than those of hydrogen phosphide.

240. The Committee decided to proceed as in the case of carbon disulphide.

1,2-DIBROMOETHANE (EDB) (023)

241. The delegation of India indicated that EDB was used as an alternative fumigant for stored food grains and that tests had been carried out to determine organic bromide residues. Using normal methods no residues of organic bromine had been detected. Referring to recent action in the United States of America concerning EDB, the delegation asked for information on the relationship of the Codex MRLs for inorganic bromide and organic bromide residues and for information on the level at which EDB residues in food grains and milled products might be considered to represent a carcinogenic risk. The representative of WHO referred to the 1979 JMPR report and also expressed the opinion that the JMPR could perhaps discuss EDB in 1985, together with other fumigants.

242. It was noted that EDB was used to a limited extent as a post-harvest grain protectant and for the treatment of fruit to comply with plant quarantine regulations. The Committee decided to refer EDB to the JMPR for reconsideration. Governments were requested to send information on current uses of EDB with appropriate data to the JMPR and also to indicate the foods subject to plant quarantine regulations, requiring fumigation. The delegation of Australia again noted the need to establish MRLs or GLs appropriate to sampling soon after treatment.

1,2-DICHLOROETHANE (024)

243. The Committee agreed to proceed in the same way as with EDB.

HEXACHLOROBENZENE (044)

244. The Committee noted that there appeared to be difficulties in trade owing to the presence of HCB in certain food products which complied with Codex GLs. Although there seemed to be no use of HCB as a pesticide per se, even as a seed dressing, HCB was ubiquitous because of its presence as an impurity in some pesticides. The Committee also noted that HCB had had a conditional ADI in the past, but that this had been withdrawn by the JMPR.

245. The point was made that it might be more appropriate to cover HCB by means of extraneous residue limits (ERLs) and that it would be useful to examine whether the existing Guideline Levels were still appropriate.

246. The Committee agreed that there was a need to review the GLs for HCB in the light of residue data from recent monitoring programmes and other (e.g., toxicological) information, not only on the foods for which GLs existed, but also for other food products including rabbit meat. The Committee would request the JMPR to review any information received and to consider setting ERLs for food products.

METHYL BROMIDE (052)

247. The Committee was informed of a 90-day oral toxicity study in The Netherlands published in Food and Chemicals Toxicology, and of a 2-year inhalation study. Work had also been done on inorganic bromide with human volunteers. The opinion was expressed that in addition to toxicological data, information on the products of interaction with food was required. The Committee noted that there was extensive information in the literature on interaction products. It appeared that bromination of unsaturated bonds in fats was unlikely; most interaction with food involved the methylation of primary amino groups.

The Committee decided to proceed as in the case of EDB.

AZINPHOS-ETHYL (068)

248. The Committee was informed by GIFAP that information on the toxicology of azinphos-ethyl had accumulated since 1973 when this compound had been evaluated. This information would be made available to the JMPR for evaluation in 1985 or 1986. The Committee noted that the methyl analogue was less toxic and that azinphos-ethyl was used only to a limited extent.

CAMPHECHLOR (071)

249. The Committee was informed that there was extensive production of camphechlor and that its use seemed to be increasing. GIFAP informed the Committee that the original manufacturer had no intention of continuing the production of camphechlor, and consequently would not provide further toxicological information to the JMPR. A number of delegations were of the opinion that, since camphechlor was being manufactured by companies other than the original manufacturer, the Guideline Levels should be withdrawn in the absence of information on the material being manufactured.

250. The Committee was informed that camphechlor was a suspected carcinogen. Noting that camphechlor still had a number of registered uses, including the control of ectoparasites on food animals, it was agreed to postpone consideration of the Guideline Levels on the basis of current registered uses and other appropriate information until the next Session.

DINOCAP (087)

251. The Committee was informed by the delegations of the Federal Republic of Germany and The Netherlands that the product was still registered in their countries. They were, however, awaiting some toxicological information from the manufacturer. The representative of the manufacturer undertook to attempt to satisfy the deficiencies.

Apples

252. The delegation of The Netherlands was of the opinion that a Guideline Level of 0.1\* mg/kg was not enough to cover the use of the compound on apples against red spider mites. It promised to send data to the JMPR.



BIORESMETHRIN (093)

253. The Committee noted that the compound is used as a grain protectant in Australia. No ADI could be established by the 1976 JMPR because of the lack of long-term toxicity studies. The representative of the manufacturer informed the Committee that as there was no extensive trade in the compound these studies would not be conducted.

METHOMYL (094)

254. The 1978 JMPR, which had evaluated the toxicology of methomyl, had available to it only the results of a published study on mutagenicity, with the result that it could not establish an ADI for the compound. The representative of the manufacturer informed the Committee that the compound was registered for use in a number of countries on the basis of comprehensive toxicity data provided by the manufacturer. The Committee expressed concern at situations where toxicological data available to the manufacturer were not provided to the JMPR.

The delegation of Mexico took the view that there should be complete international harmony in the use of pesticides, and that countries should refuse to register a compound if the manufacturer would not provide the toxicological data for international evaluation.

The representative of GIFAP informed the Committee that some manufacturers were still concerned at the practice of some governments to register pesticides on the basis of JMPR Evaluations, which are based on data provided by specific manufacturers, on specific products without requiring the same toxicological and residue data from other manufacturers who apply for registration of the same chemical from a different manufacturing source.

The delegation of Egypt informed the Committee that methomyl was widely used in its country on cotton and that no residues of the pesticide could be found in the seed.

In The Netherlands, a tentative ADI of 0.01-0.02 mg/kg body weight had been considered but no final decision had been taken. The delegation of The Netherlands informed the Committee that it had established national tolerances for certain commodities and agreed to make the information on GAP and other data available to the JMPR.

DAMINOZIDE (104)

255. The representative of WHO informed the Committee that although there was a fairly good toxicological data base, the JMPR could not establish an ADI because the long-term toxicity study was inadequate. The representative of the manufacturer informed the Committee that additional toxicity data were being generated and would be sent to the JMPR.

It was explained that the Guideline Levels applied to daminozide manufactured by certain specified processes. This should be indicated in an appropriate footnote to the heading of the column "Guideline Level".

Apples, Pears

256. The delegation of The Netherlands was of the opinion that when using this compound residues up to 5 mg/kg or even 10 mg/kg could occur. However, such high figures would only be acceptable if the toxicological situation was satisfactory.

Tomatoes

257. The delegations of the Federal Republic of Germany and The Netherlands questioned the data base on which the GL was proposed. It was decided to ask the Joint Meeting to consider the matter.

ETHEPHON (106)

258. The Committee noted that the toxicology of ethephon had been evaluated by the 1978 JMPR. The data base on toxicology consisted only of short-term studies and the Joint Meeting had not cleared the pesticide. The representative of the manufacturer informed the Committee that extensive toxicological data on the compound were available to the manufacturer, on the basis of which certain national authorities had registered the compound for use in their countries. The manufacturer could not promise to provide the data to the JMPR for evaluation.

259. The Committee noted that the compound was registered for use in a number of countries. The Netherlands had established an ADI of 0.02 mg/kg body weight on the basis of data available to it and also had established national tolerances for certain commodities. Some of the proposed MRLs were acceptable. The MRLs for cherries, grapes and peppers were not acceptable, since they did not reflect GAP. The proposals were based on a zero day post-harvest interval, which was not realistic for a product which was used for uniform ripening and fruit loosening. The process of fruit loosening would normally require a few days and a zero-day application could not be considered to reflect GAP.

260. Ethephon is registered in certain countries for use on cereals such as wheat, barley and rye and fruits such as apples, cherries and pineapples. Some countries took the view that MRLs should be established for cereals. The delegation of the United Kingdom informed the Committee that the 1983 JMPR had evaluated the data on cereals which it had submitted but had not been able to establish MRLs. It believed that it might be possible for the JMPR to establish MRLs if additional data available from The Netherlands and Belgium could be supplied. The delegation of the Federal Republic of Germany informed the Committee that it would be difficult for it to provide residue data for cereals and suggested that the manufacturer should be approached to provide data to the JMPR.

ETHYLENETHIOUREA (ETU) (108)

261. The representative of WHO stated that no ADI for this compound was to be expected. However, he was inclined to agree with the written comments of the delegation of The Netherlands that in view of the toxicity evaluations of the ethylenebisdithiocarbamates (1981 Evaluations, p. 26 suppl.) an ADI for ETU had indirectly been allocated. However, he could not give a final opinion without referring to the JMPR.

The delegations of The Federal Republic of Germany, France and the United Kingdom opposed the proposed GLs; ETU was not a pesticide as such and GLs for this compound would introduce an impurity as a compound into the Codex system, whereas impurities are not normally included. They stressed the fact that ETU was formed during cooking and were of the opinion that it would therefore not be useful to set MRLs on raw agricultural commodities. The delegation of the United Kingdom added that ETU could be formed in vivo and that the proposed GLs only covered a fraction of the commodities for which dithiocarbamate MRLs had been proposed.

262. It was agreed to refer ETU to the JMPR for evaluation in the light of new data on dithiocarbamates and for consideration of the possible indirect ADI.

263. The delegation of The Netherlands stated that the proposed GL for beans (in the pod) was not acceptable. In the residue studies beans had been sprayed frequently and at short intervals. It was agreed that the JMPR would be requested to re-evaluate the proposal.

#### AMINOCARB (134)

264. The Committee noted that the toxicology of aminocarb had been evaluated by the 1979 JMPR. Although the data base was extensive, the long-term toxicity studies were considered defective since they had not been carried out according to currently accepted protocols, with the result that no ADI could be allocated.

The representative of the manufacturer informed the Committee that the compound was used in the United States of America and Canada in forestry, and in New Zealand and Australia on pome fruit. The use of the compound was very limited, and restricted to certain areas in the world. The Committee was informed that additional toxicological data required for JMPR evaluation would not be generated in the foreseeable future.

The delegation of The Netherlands informed the Committee that lower GLs of 1 mg/kg for pears and apples would be acceptable. In its view, the recommended post-harvest interval of only 3 days was not needed for adequate control of the target organisms; 2 weeks would suffice.

265. The Committee agreed to postpone consideration of the Guideline Levels until the next Session, when it could delete them if countries had no registered food uses for the compound.

#### PROCYMIDONE (136)

266. The Committee learned that toxicity studies on the compound had been carried out by IBT and had not been validated. The manufacturer had submitted validation data but the validation had not been accepted by the JMPR since it had not been carried out by an independent party. However, the validation data had been accepted by some countries, where the compound was registered for use.

In The Netherlands an ADI of 0.05 mg/kg body weight and national tolerances for strawberries, fruiting vegetables, kidney beans and onions had been established.

The delegation of Italy informed the Committee that validation of IBT data was adequate and the compound was registered for use on certain fruits and vegetables. A national tolerance level of 1.5 mg/kg had also been established for some fruits and vegetables.

The Committee was informed that the compound was registered for use in France for grapes and tomatoes and in the Federal Republic of Germany for grapes, beans, lettuce and strawberries. In Switzerland the compound had been registered for grapes and strawberries but was at present under review for toxicological reasons.

#### General remarks

267. The delegation of Ireland suggested that where Guideline Levels had been proposed at the limit of determination the Committee should consider the setting of MRLs rather than GLs. This was because a level at the limit of determination implied that there should be no residue.

The Chairman also recalled the earlier proposal that MRLs rather than GLs might be set for certain fumigants even though ADIs had not been estimated, since only very low residues, if any, would be expected at the point of consumption (para 235).

The delegation of Libya expressed concern that the developing countries did not contribute more extensively to the deliberations of the Committee on proposed MRLs. It expressed the hope that in the future they might contribute more actively to the work of the Committee, if their governments took appropriate action as indicated in para 292 of the report.

268. The Secretariat was requested to prepare a paper for the next Session of the Committee, setting out the problem and indicating where the setting of MRLs instead of GLs, in the absence of an ADI, might be possible.

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

269. The Committee considered the report of the Ad Hoc Working Group on Methods of Analysis (see Appendix II to this report). It was introduced by the Chairman of the Working Group, Mr. P.A. Greve (The Netherlands).

#### Recommendations for methods of analysis

270. The Chairman of the Working Group commented that up-dating the recommended methods of analysis was an ongoing task of the group, ensuring that these methods were consistent both with the definition of the residue and current analytical practice.

#### Expression of Residues

271. The 1983 JMPR had discussed certain proposals of the Working Group made at the 14th Session of the Committee on simplification and harmonization of the definitions of certain residues. Agreement had been reached on a number of compounds whereas for several others further discussion in the JMPR had been needed. In some cases, the consequences of proposed changes might have to be discussed by the Committee in the future.

272. The representative of FAO said that it would probably be again possible to engage a consultant to examine the original residue data submitted to the JMPR and determine whether changes in the definition of residues would be appropriate, and what consequences such changes would have on proposed MRLs.

273. The delegation of the Federal Republic of Germany requested that thiophanate-methyl should be included in the residue definition of benomyl/carbendazim, because residues of thiophanate-methyl are determined as carbendazim (see para 85). Mr. Greve replied that specific methods were available if it was considered necessary to determine the compounds separately. Since residues of thiophanate-methyl were mainly present in the form of carbendazim and the MRLs of all three compounds were expressed as carbendazim, the delegation of the Federal Republic repeated its request that the MRLs should be combined.

#### Analysis of PCBs

274. The Working Group had made an inventory of the main analytical approaches currently used. They had not drawn any conclusions and would include relevant questions in a questionnaire to the members of the Working Group which would form the basis for a new discussion.

#### Recommendations for simplified methods

275. The Working Group discussed the desirability of simplified approaches to residue analysis; which would take into account laboratory facilities available in many situations, including those in developing countries. Such methods were mainly intended for screening purposes, rather than as a basis for legal action.

276. The delegation of Libya reminded the Committee of a remark made at its 11th Session (ALINORM 79/24A, para 177), where it was said that FAO assisted developing countries in setting up food control and monitoring facilities. The lack of any follow-up to this in its country might have negative bearings on the acceptance of foodstuffs intended to be imported by Libya. The delegation insisted that such recommendations of the Committee should be adequately implemented. The Chairman replied that this Committee was entrusted with the task of reaching agreement on methods of analysis which would be of help to all countries. Providing laboratory facilities was, however, outside its scope.

#### Establishment of an Ad Hoc Working Group on Methods of Analysis

277. The Committee thanked the members and the Chairman of the Working Group 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 the same membership as before.

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

278. The Committee considered the report of the Ad Hoc Working Group on Development of Residues Data and Sampling (see Appendix III to this report), which was introduced by Mr. J.A.R. Bates (United Kingdom), Chairman of the Working Group.

#### Guidelines on pesticide residue trials and sampling

279. Several member countries and many major companies had in principle adopted or taken into account the guidelines. The Working Group was pleased at their apparent value and expressed the hope that further harmonization of procedures for carrying out residue trials and presenting results, by adopting the guidelines, would be accomplished. As yet no proposals had been made for modification of the guidelines.

#### Guidelines on studies to provide data on the nature and amount of pesticide residues in products of animal origin

280. The first draft of these guidelines was considered at this Session. Comments on the draft were welcome and would be taken into account. It was noted that it was the goal of the Working Group to submit the final draft to the next (17th) plenary session of the CCPR.

Guidelines on sampling food for the determination of pesticide residues for regulatory purposes

281. No comments on the use of these guidelines had been made by the member countries. It was agreed that similar guidelines for meat and meat products in international trade should be elaborated.

Rabbit

282. In relation to the proposal of the Peoples Republic of China recorded in document CX/PR 84/2 and mentioned in para 8(a) of this report, the Working Group concluded that rabbit meat could not be included in the categories of carcass meat or poultry. It was agreed to define rabbit meat as a separate Codex commodity.

In answer to a question from the delegation of the Federal Republic of Germany, the Chairman of the Working Group stated that neither the expression of residues nor MRL values for rabbit meat had been considered by the Working Group.

Appointment of an Ad Hoc Working Group on Development of Residues Data and Sampling

283. The Committee thanked the Working Group and its Chairman for their contribution to this Session. A new Ad Hoc Working Group was appointed under the Chairmanship of Mr. J.A.R. Bates (United Kingdom) with the same membership as the outgoing group.

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

284. The Committee considered the Report of the Ad Hoc Working Group on Pesticide Residue Problems in Developing Countries (see Appendix IV to this report). The report was introduced by Mr. A.F. Rahde (Brazil) Chairman of the Working Group.

285. The Chairman highlighted various matters that had been brought to the attention of the Working Group by the Coordinating Committees for Africa, Latin America and Asia. They had all stressed the need for the active participation of developing countries in the establishment of Codex MRLs in order to ensure that the particular situations prevailing in these countries were adequately reflected. Strong support had been expressed for the development by FAO of a Code of Conduct on the Distribution and Use of Pesticides.

286. The Coordinating Committee for Africa had requested the preparation by FAO and WHO of a manual on pesticides providing information of particular relevance to developing countries. The Coordinating Committee for Latin America had pointed to the need for holding a workshop on pesticide residues and it had also emphasized that Codex MRLs for certain tropical products were required. The Coordinating Committee for Asia had held a meeting in Thailand in conjunction with the Group of Developing Countries in Asia. Matters such as setting up regional pesticide residue laboratories, supervised field trials specific to the region, inadequate laboratory facilities and the shortage of trained personnel had been reviewed. At this meeting proposals had also been developed for financial assistance from Industry. This matter had since been further discussed and this had led to an offer from Industry to provide assistance in kind, notably technical expertise, for certain activities.

287. The difficulty for developing countries of meeting the stringent residue requirements of developed countries had been raised. It had been emphasized that cooperation through regional organizations was needed, in order to study problems of common interest including the registration and labelling of pesticides, as well as confidentiality of data. The Working Group had been informed that FAO would continue the organization of training courses for the safe and effective use of pesticides, and the provision of technical assistance for infrastructure improvement. WHO had reported on the activities of the Joint FAO/WHO Food Contamination Monitoring Programme and the publication of environmental health criteria documents for certain pesticides.

288. The Chairman of the Working Group introduced in detail the various modifications made to the recommendations adopted at the last Session of the CCPR. These modifications illustrated the dynamic character of the recommendations.

289. The delegation of India, on behalf of a number of developing countries, emphasized the following matters: (a) the need for follow-up action on the recommendations, including the establishment of national Codex Committees, (b) the provision of funds by Industry to generate the data necessary for pesticide registration in the countries themselves, (c) the need for support from FAO and WHO for the organization of regional meetings and (d) the identification of a contact point (person or office) responsible for Codex matters.

290. The matter of financial support by Industry to carry out toxicological and field research under local conditions was further emphasized by the delegations of Cuba, Malaysia, Egypt and Thailand. It was stressed that technical and/or financial support by Industry should be coordinated by FAO and WHO in consultation with the countries concerned. The representative of GIFAP drew attention to the statement made at the meeting of the Working Group. He noted that the matter of financial support was complex, requiring high-level management decisions of individual companies independently of GIFAP, since it may concern long-term commitments as well as other complications.

291. The delegation of Argentina noted that better coordination in the Region could be achieved by designating and properly equipping existing laboratories. The delegation of Libya drew the attention of the Committee to the UN Resolution on international trade in toxic substances as well as to the activities of the International Programme on Chemical Safety (IPCS).

The delegation of Libya made a strong appeal to International Organizations, UN specialized Agencies, the Industry and others for appropriate information to be made available to developing countries on various matters concerning the use of pesticides in accordance with good agricultural practice, and also information relating to their safe and effective use. The delegation also stressed that developing countries very often lacked the necessary infrastructures for the investigation of pesticides from the point of view of their safe and

effective use under the prevailing local conditions. It was imperative that assistance be given to developing countries to enable them to participate more effectively in the work of the CCPR and to protect their economic interests as regards their export and import trade in food. For example, Libya imported large quantities of both foods and pesticides without being able to ensure adequately the quality of some of these imports. In particular it requested that these imports should be accompanied by the present regulatory specifications in relation to the health of the consumer.

292. The representatives of FAO and WHO stressed that the financial and technical support provided to developing countries depended in the first place on the priorities established by the governments themselves and by the governing bodies of the United Nations agencies concerned. Consequently the Committee strongly recommended the Secretariat to inform these governments on the work of the CCPR and the need for establishing the necessary infrastructures for the control of pesticides. The Committee noted that an appropriate amendment would have to be made to the report of the Working Group to stress this point.

The delegation of Egypt stated that it should be borne in mind that chemical safety was relevant not only to public health but also to occupational health and to the environment in general. FAO, WHO and ILO should therefore promote training, initiate appropriate surveys and direct programmes to establish national focal points related to chemical safety with proper attention to the demands of current scientific standards.

293. The Committee endorsed the recommendations of the Working Group. It appreciated the work done by the members and the Chairman of the Working Group during the year and decided to set up a new Ad Hoc Working Group under the chairmanship of Mr. A.F. Rahde (Brazil). Mr. Prayoon Deema (Thailand), Mrs. Salwa H. Dogheim (Egypt) and Mr. Toloza Victoriano (Argentina) were appointed as Vice-Chairmen for the regions of Asia, Africa and Latin America respectively.

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

294. The Committee considered the Report of the Ad Hoc Working Group on Regulatory Principles (see Appendix V to this report) and document CX/PR 84/8. The report was introduced by Mr. J.R. Wessel (United States of America), Chairman of the Working Group.

#### Questionnaire on National Pesticide Regulatory Systems

295. The Chairman of the Working Group informed the Committee that up till now 59 countries had responded to the questionnaire. The United Kingdom agreed to circulate to member countries the information received during the past year.

The Working Group concluded that issuance of the questionnaire, scheduled to precede the 18th Session, was not likely to improve the current information. It proposed instead to seek information from member countries regarding the use of and experience with the Recommended National Regulatory Practices (CX/PR 84/8). The Committee endorsed this proposal.



Recommended National Regulatory Practices (CX/PR 84/8)

296. The Working Group had conducted a final review of this document, and had agreed that wide distribution should be given to it after finalization of the text.

The Chairman of the Working Group further stressed that the document should help to overcome problems in accepting Codex MRLs. He proposed to up-date the document regularly at future meetings of the CCPR. The Committee adopted these proposals. It concluded that no major additions were necessary. Several member countries, as well as the representative of WHO, underlined the importance of distributing document CX/PR 84/8 as widely as possible. The Secretariat will undertake this task.

The Chairman of the Committee expressed his appreciation to the Working Group and especially to its Chairman for preparing this very useful document.

Acceptability of Codex Limits in the Light of Possible Dietary Exposure

297. The Working Group proposed to prepare a working document for the next Session to give guidance to those member countries who have difficulties in determining the acceptability of some Codex limits from a consumer safety point of view.

In discussing this subject the representative of WHO pointed out that this item had been discussed earlier, but not solved, and welcomed the proposal.

The delegation of the United Kingdom also favoured the proposal, indicating that the JMPR should study this problem at its next meeting and clarify its view of the relationship between Codex limits and ADIs.

The delegation of the United Kingdom explained that in estimating MRLs and ADIs no account was taken of any mathematical relationship between the two, which were developed from totally different data bases. It was more appropriate to compare ADIs with dietary intake data.

298. The delegation of the United Kingdom asked for clarification of the meaning of "conducting a prospective assessment of possible dietary exposure" (see para 9 of the Working Group's report).

In attempting to clarify the phrase the following rewording of the sentence in which it occurred was agreed.

"However, the Group believed that it would be useful both for the JMPR to explain how it estimates a proposed MRL and evaluates its safety, and for guidance to be provided on how an MRL might be related to a realistic estimate of the potential dietary exposure of a population group to a pesticide before the acceptance of a Codex Limit.

A working paper on such guidance could be prepared by the Working Group for the next Session."

299. The delegation of Ireland stressed the point that the generally limited resources available for intake studies should not be directed to total diet studies but could be better used for monitoring raw agricultural commodities.

300. The delegation of India pointed out that differences in GAP between regions could cause problems with the acceptance of MRLs, particularly in the case of the use of grain protectants. This aspect, as well as some points raised by other delegations, would be dealt with in the working paper. The Chairman of the Working Group will take the initiative in preparing a draft to be circulated to the members of the Group.

Establishment of an Ad Hoc Working Group on Regulatory Principles

301. The Committee thanked the members and the Chairman of the Working Group for their work prior to and during the Session. 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 same membership as before.

REPORT OF THE AD HOC WORKING GROUP ON PRIORITIES

302. The Committee considered the Report of the Ad Hoc Working Group on Priorities, (see Appendix VI to this report), which was introduced by Mr. A.F.H. Besemer (The Netherlands), Chairman of the Working Group.

303. Several compounds which had been on the agenda of the 1983 JMPR but which had not been considered were studied again by the Working Group. Provided they still met the criteria mentioned in document CX/PR 84/8, para 16, they were retained in list I. This was the case for dimethipin and flucythrinate.

304. The Chairman of the Working Group regretted that vinclozolin and glyphosate had had to be removed from the priority list as there was no indication that data would be received for them. It was noted that these compounds still had a high priority and the Committee should remain aware of the situation with regard to the availability of data. It would, however, be against the rules established by the Committee to keep them on the priority list.

305. The Group considered the proposal of The Netherlands concerning the re-evaluation of inorganic bromide. Review of the data would be given priority for the 1985 JMPR.

306. The delegation of the Federal Republic of Germany drew attention to the fact that carbofuran was the main metabolite of carbosulfan, which is scheduled for evaluation by the 1984 JMPR, and suggested that the JMPR be requested to study both compounds together, aiming at establishing a combined list of MRLs. Mr. Besemer replied that the rules did not permit changing the list as adopted in 1983, but that the JMPR would be made aware of the situation.

307. The delegation of Italy expressed its surprise that benalaxyl was not on the priority list as supporting data had been sent to Canada. However, no data had been received in Canada or in The Netherlands and the Working Group was not aware of the proposal. Benalaxyl, however, could be included in next year's priority list if data are made available in time.

308. The representative of WHO drew attention to the fact that both lists I and II are candidates for the 1985 and 1986 Joint Meetings. He undertook to contact the manufacturers as soon as possible to check on the availability of data. This would enable the JMPR to evaluate alternative compounds in case data on scheduled compounds were not available.

309. The Committee thanked the Chairman and members of the Ad Hoc Working Group. It was decided to set up a new Ad Hoc Working Group

with the same membership. Mr. B. Watts (New Zealand) agreed to act as the new Chairman, as Mr. Besemer was going to retire in the forthcoming year. The Committee was informed that Ms. Stalker (Canada) had expressed her willingness to continue to provide secretariat assistance as in the past.

#### REPORT ON ENVIRONMENTAL CONTAMINANTS WITH SPECIAL REFERENCE TO PCBs

310. The Committee had before it document CX/PR 84/10, Consideration of a Codex Approach to Contamination of Foodstuff with Polychlorinated Biphenyls (PCBs). Mr. J. van der Kolk, who had prepared this paper as an FAO consultant, introduced the background to the document and its main conclusions and recommendations.

311. Many delegations expressed their appreciation of Mr. van der Kolk's preparation of this valuable document and supported the basic procedural approach that was proposed to deal with problems caused by contaminants such as PCBs. It was generally understood that the contamination of foodstuffs by substances such as PCBs could best be reduced by measures to control environmental pollution. Measures to control use and disposal were however beyond the scope of the Committee. The Committee had the duty to deal with the effects pollution had on foodstuffs, aiming at the protection of the consumer and avoiding negative effects on trade. The Committee agreed that PCBs fitted well into its recently expanded terms of reference (ALINORM 81/39, para 210)

#### Methods of Analysis

312. It was generally recognized that because PCBs are a complex mixture of many isomers and congeners, analysis of residues was a problem that needed guidance from the Ad Hoc Working Group on Methods of Analysis. This Working Group had already had preliminary discussions on methodology and had proposed action before the next Session.

The aim was to agree on a practical method that would be widely applicable and would make the data generated by different laboratories comparable.

#### Monitoring data

313. Many monitoring data had been assembled so far, especially by the Joint FAO/WHO Food and Animal Feed Monitoring Programme (JFCMP). For several reasons, however, these data were not yet sufficiently reliable to serve as a basis for regulatory action. One of the objectives of JFCMP was to provide Codex with suitable data. The proposed Working Group on Contaminants might assist JFCMP in this respect by developing methods for obtaining internationally comparable data on levels occurring in foodstuffs.

#### Provisional limits

314. Considering the problems mentioned above in assembling reliable and comparable data on PCB levels in the near future, the proposed Working Group on Contaminants should consider the need for, and possibility of, recommending provisional limits for international trade in food. These eventual provisional limits would have to be based on the existing data.

### Toxicity

315. It was recognized that a full toxicological evaluation of PCBs would probably not be possible in the near future. The IPCS was reported to be willing to up-date the toxicological assessment presented in Health Criteria Document no. 2 (1976). The representative of WHO said that the JMPR had rightly been excluded from this toxicological evaluation. He suggested that the JECFA might be the most appropriate body to deal with this matter and to give specific advice on food-related toxicological problems with contaminants in general. The Committee agreed that this might be a wise suggestion but referred the decision to WHO and FAO.

Because of the complexity of the situation, several delegations stressed the need to refrain from action until such time as a full toxicological evaluation becomes possible.

### Impurities

316. Several delegations stressed that the toxicology of PCBs was very complicated, partly because of impurities such as polychlorinated dibenzodioxins and dibenzofurans present in varying, mostly unknown, amounts in technical mixtures. Moreover, man was exposed to biologically filtered mixtures whose compositions were different from technical mixtures. An assessment of the available toxicological data should take these facts into account.

It was agreed that these impurities could not at present be included in monitoring activities because of serious analytical problems. Nor were data available to allow a toxicological assessment of levels of these impurities if reported.

### Ad Hoc Working Group on Contaminants

317. The proposal to establish an Ad Hoc Working Group on contaminants received unanimous support. The terms of reference of this Working Group would be those proposed in document 84/10 para 75(a) and (b). In addition, the Working Group was assigned the task of proposing to the Committee the inclusion of contaminants other than PCBs if this was considered appropriate. Therefore, there was no need to expand the existing terms of reference of the Ad Hoc Working Group on Priorities. The Committee also concluded that it was not necessary to ask the Ad Hoc Working Group on Regulatory Principles to consider certain aspects of the contaminants problem.

At the suggestion of the delegation of the United Kingdom the terms of reference in para 75(b), first line, were amended as follows: "To consider the need and to recommend, if possible...."

318. To avoid any duplication of work, the Working Group should collaborate with all international bodies which could usefully contribute to its work, especially JFCMP and other relevant FAO or WHO structures.

319. The draft recommendation in Appendix I of CX/PR 84/10 would have to be discussed by the Ad Hoc Working Group on Contaminants who would advise the Committee at the next Session.

320. The Committee unanimously supported the election of Mr. K. Voldum-Clausen (Denmark) as chairman of this Ad Hoc Working Group.

321. The following countries indicated their willingness to participate in the newly established Working Group: Australia, Austria, Belgium, Denmark, Egypt, The Federal Republic of Germany, Finland, France, Ireland, The Netherlands, Sweden, Switzerland, the United Kingdom and the United States of America. The Secretariat was instructed to invite interested international organizations to participate. The representative of GIFAP asked to receive documents from the Group at the GIFAP office in Brussels.

#### Developing Countries

322. The delegations of several developing countries expressed the opinion that the contaminant problem might also have a bearing on their own situations. It should not be concluded that PCB-containing equipment was not already present in several of these countries, and in some cases pollution had already spread into the environment. Also, the amounts of PCBs in breast milk found in developed countries, which had given rise to public alarm, might counteract the campaign to stimulate breast feeding and encourage the use and promotion of breast-milk substitutes. It was added that care should be taken to ensure that pollution would not be further exported.

#### OTHER BUSINESS

##### MRLs for Inorganic Bromide

323. The delegation of the United Kingdom pointed out that a number of Codex MRLs for inorganic bromide had been withdrawn by the JMPR some time ago and that action would have been taken on this withdrawal. The Secretariat was requested to consider the matter and to initiate appropriate action to amend the Codex MRLs affected.

##### Statement by the delegation of Libya

324. The delegation of Libya proposed that, in order to ascertain the extent of the problem presented by the movement of food and pesticides in international trade, information was necessary on (a) foods moving between developing and developed countries (indicating the food commodities and volume of trade both in value and tonnage), (b) pesticides exported to developing countries (indicating the common name of the active pesticide ingredient and the value of the trade) and (c) information on misbranded (adulterated) pesticides imported by developing countries, as well as a list of those chemicals which are banned and which might be a source of environmental contamination. The delegation asserted that a firm desire existed in these countries to implement in principle the revised FAO guidelines on registration procedures in the light of local good agricultural practices and other circumstances.

The Committee noted the remarks of the delegation of Libya.

##### DATE AND PLACE OF NEXT SESSION

325. The Chairman of the Committee indicated that the next (seventeenth) Session of the Codex Committee on Pesticide Residues and its Working Groups would take place from 23 March to 1 April 1985 in The Hague.

326. The Committee was informed that similar arrangements as at the present Session for simultaneous interpretation will be made available to the Ad Hoc Working Group on Pesticide Residue Problems in Developing Countries.

CLOSURE OF THE SESSION

327. In his closing remarks the Chairman mentioned that the timing of the next Session of the CCPR was governed by several factors: the dates of other Codex meetings, the need for a sufficient interval after the 1984, and before the 1985, JMPR, the desirability of making the results of the Session available to the Sixteenth Session of the Codex Alimentarius Commission and the availability of the Congresgebouw and the staff of the Secretariat. The Chairman emphasized the importance of the part played by the Secretariat and paid tribute to their dedication to the work of the Committee.

328. The Chairman pointed to the progress made by the present Session, despite the short interval since the previous one. More than 400 proposals for MRLs had been dealt with, and the discussion on Guideline Levels had been fruitful. The document of the Working Group on Regulatory Principles held promise of facilitating the acceptance of Codex MRLs, and papers to be produced by other Ad Hoc Groups could be expected to extend the range of CCPR recommendations. In reaching agreement on an approach to the problem of PCBs the Committee had entered a completely new area.

329. The Chairman noted that 46 countries had participated: twelve attended which had not been present in 1983, while five of the 1983 participants were absent. In expressing the hope that all of these seventeen countries would be at the next Session, the Chairman stressed the importance of continuity of participation in order to derive full benefit from the work of the Committee.

330. Finally the Chairman thanked the participants and all who had contributed to the success of the Session and looked forward to welcoming them to the Seventeenth Session in 1985.

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ALINORM 85/24 A  
APPENDIX I

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ALINORM 85/24 A  
APPENDIX II

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

Members of the Group met under Chairmanship of Mr. P.A.Greve.

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H. Beck	Germany, Fed.Rep.of
R.S. Belcher	Australia
E. Celma	Spain
W.P. Cochrane	Canada
M. Cordle	United States of America
W. Dejonckheere	Belgium
J.F. Eades	Ireland
D. Eichler	Germany, Fed.Red.of
H. Frehse	IUPAC
M. Galoux	Belgium
S. Gorbach	Germany, Fed.Rep.of
M. Green Lauridsen	Denmark
P.A. Greve	The Netherlands
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D.F. Lee	United Kingdom
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J. Quigley	Ireland
H. Regenstein	GIFAP
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T. Stijve	Switzerland
G. Timme	Germany, Fed.Rep.of
M. Tournayre	France
L.G.M.Th. Tuinstra	The Netherlands
J.R. Wessel	United States of America
Hock Siew Yeo	Malaysia

1. Agenda

The Working Group discussed the following points:

- recommendations for methods of analysis;
- expression of residues;
- analysis of PCBs;
- recommendations for "simplified" methods;
- representation of residue data;
- Good Analytical Practice.

2. Recommendations for methods of analysis

The Working Group undertook the up-dating and reviewing of the recommendations given at the previous Session. The new list, which supercedes the lists given previously, is attached to this Report as Annex I to Appendix II. It will also be published by the Secretariat as Part 8 of the Guide (CAC/PR 8-1984).

3. Expression of residues

At the 14th Session of the CCPR (14-21 June, 1982) the Working Group discussed the possibility and/or desirability of simplification and harmonisation of the expression of certain residues (ALINORM 83/24 A, Appendix III, para 6.1. and 6.2.). It was agreed then by the Committee (ibid., para 225) that this matter, because of

possible toxicological implications, should be brought to the attention of the JMPR by means of a document to be prepared by FAO. The JMPR, in its meeting on 5-14 December 1983 in Geneva, considered the problem mentioned above and came to the following conclusions (FAO Plant Production and Protection Paper 56, para 2.3, 3.2. and 4):

- azinphos-ethyl: the oxygen analogue should be deleted from the definition of the residue;
- carbophenothion: the oxygen analogue, its sulphoxide and its sulphone should be deleted from the definition of the residue;
- chlorothalonil: the metabolite 4-hydroxy-2,5,6-trichloro-1,3-benzenedicarbonitrile should be deleted from the definition of the residue;
- coumaphos: the present definition should not be changed;
- ethion: { the oxygen analogue should be deleted from
- fenchlorphos: { the definition of the residue;
- fenitrothion: {
  
- fensulfothion: { the present definition should not be changed;
- fenthion: {
  
- pirimiphos-methyl: the oxygen analogue and the N-desmethyl analogue should be deleted from the definition of the residue;
- propoxur: the metabolites 2-hydroxy-phenyl methylcarbamate and 2-isopropoxy-phenyl hydroxymethylcarbamate should be deleted from the definition of the residue.

These changes in the definition of the residues do not require changes in the recommendations for methods of analysis given by the Group. From the list given by the Working Group in its 1982 meeting, the following compounds still have to be considered by the JMPR as regards the inclusion of metabolites in the definition of the residue (ALINORM 83/24 A, Appendix III, para 6.1.):

- malathion: {
- parathion: { oxygen analogue
- parathion-methyl: {
- disulfoton: oxygen analogue (= demeton-S), its sulphoxide and its sulphone
- dialifos: {
- phosmet: { oxygen analogue
- phorate: oxygen analogue, its sulphoxide and its sulphone
- benomyl/carbendazim: 2-AB

Harmonisation of the expression of the residue is still desired for disulfoton, vamidothion, fenamiphos, phorate, aldicarb, ethiofencarb, demeton, demeton-S-methyl and thiometon (ALINORM 83/24 A, Appendix III, para 6.2.).

The Working Group restated its opinion that, although changes in the definition of residues can be suggested by the Working Group for analytical reasons or from practical experience, these suggestions have to be considered by the JMPR and the Committee for their further implications. Data supporting the suggested changes should be brought to the attention of the JMPR through the appropriate channels.

#### 4. Analysis of PCBs

At the request of the Committee, the Working Group discussed the problem of analysing for PCB residues, as outlined in document CX/PR 84/10, para 19-20 and 51-54.

Based on the experience of the members of the Working Group, there are currently two main approaches for the estimation of PCB residues, viz.:

(a) the "pattern"-method: the gaschromatogram of the sample under investigation is compared with gas chromatograms of different technical PCB-products and the product giving the pattern most closely resembling that of the sample is chosen as a basis for calculation. The determination is carried out by using packed or capillary columns.

(b) the "individual component"-method: individual PCB components are determined by using capillary column gas chromatography and comparison with analytical standards. Typically, several components are chosen as indicators for the level of PCBs.

The use of Hall-(electroconductivity) and mass-spectrometric (selected-ion monitoring) detectors as a complement to the normal electron-capture detectors was mentioned by several members of the Group.

For monitoring purposes and for setting residue limits several ways of expressing PCB residues were noted:

(i) as a sum: one figure is given, arrived at either by the "pattern"-method or by adding concentrations obtained according to the "individual component"-method.

(ii) as individual figures: several figures are given, as obtained by the "individual component"-method.

The topic will remain as an agenda item for the Working Group next year and it will take into consideration any further comments from the Committee. Also, the Chairman will include in his questionnaire to the members of the Group the matter of analytical methods for PCB residues.

#### 5. Recommendations for "simplified" methods

The Working Group discussed, on the basis of a working paper, the desirability of developing and evaluating simplified approaches to residue analysis, as outlined among others in the IUPAC-Report on Pesticides, No. 13 (Pure Appl. Chem., 53, 1039-1049 (1981)).

In the discussion the following points were brought forward:

- There is a clear need for methods which do not require expensive and sophisticated instrumentation for quick screening purposes (checking compliance to MRLs). These methods should not be regarded as substitutes for more precise methods to be used for enforcement action.
- The purpose of the analysis must be clear: e.g. methods to be used for analysing samples from field trials must meet other demands than methods to be used for regulatory purposes.
- Often it is not necessary to develop entirely new methods for use under field conditions. Scaling-down in order to minimise solvent and reagent consumption can appreciably cut down costs of analysis.
- TLC is suitable for use under field conditions. Certain GLC instruments have been shown to be sufficiently reliable under such conditions.

The Working Group agreed to keep the topic on the agenda for the next meeting. The Chairman undertook to screen the references given at present by the Working Group for applicability under less sophisticated conditions. In the questionnaire to be sent out by the Chairman for next meeting, an entry will be included on simplified methods in order to enable members to supply additional useful data. The Chairman also undertook to contact the Chairman of the Working Group on Pesticide Residue Problems in Developing Countries in order to identify existing problems and to establish a regular liaison between the two Working Groups.

6. Presentation of residue data

As agreed during its previous meeting (cf ALINORM 85/24, Appendix II, para 7), the Working Group discussed an amendment, submitted by members of the Group, to the standard form for the presentation of residue data from field trials. The revised form was adopted by the Working Group and will be brought to the attention of the Secretariat. The Working Group would prefer publication of the form together with the "Guidelines on Pesticide Residue Trials" adopted by the Working Group on Sampling (cf ALINORM 85/24, Appendix III) in the new edition of the Guide.

7. Good Analytical Practice

The "Codex Guidelines on Good Analytical Practice in Pesticide Residue Analysis" as adopted last year were still considered to be valid, with the exception of para 4.6.9. (HPLC), which should read as follows:

"HPLC can often be used advantageously for the confirmation of residues initially found by gas chromatography or by other techniques and may be in certain circumstances the preferred quantitative technique. Post- or pre-column derivatisation, and/or use of different detectors, are further options available to the analyst, especially when heat-sensitivity or low volatility make the compound to be analysed less amenable to gas chromatography."

The new text is attached to this Report as Annex II to Appendix II and will be published as Part 7 of the next edition of the Guide (CAC/PR 7-1984).

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ALINORM 85/24 A  
APPENDIX III

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

Members of the group met under the Chairmanship of Mr. J.A.R. Bates.

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G. Timme	Germany, Fed.Rep.of
M. Tournayre	France
L.G.M.Th. Tuinstra	The Netherlands
J.R. Wessel	United States of America
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1. Guidelines on pesticide residue trials and sampling  
Several member countries - Australia, Canada, Denmark, France, New Zealand, Spain, UK and USA - reported that these guidelines had either been adopted or taken into account in residue data requirements in their national systems for pesticide registration. Many major companies also confirmed that their company guidelines were also being aligned with the CCPR guidelines. The Working Group indicated that it was pleased with the progress in the adoption of the guidelines and expressed the hope that other countries would soon be able to report a similar move towards harmonization of procedures for carrying out residue trials and presentation of results. As yet no proposals have been made for the modification of the guidelines.

2. Guidelines on studies to provide data on the nature and amount of pesticide residues in products of animal origin  
The Working Group considered a first draft of these guidelines and requested the Chairman to collate written comments from members and prepare a new draft for further discussion. A small number of group members would take into account related guidelines used in the registration of veterinary medicines and advise on their possible use in the present exercise. The target of the group is to prepare a document for submission to the plenary at the 17th CCPR in 1985.

3. Guidelines on sampling food for the determination of pesticide residues for regulatory purposes

Member countries offered no comments on the use of these guidelines in practice but the delegate of the United States of America drew attention to some practical difficulties and the lack of clear recommendations for sampling of meat and meat products moving in trade.

Before drafting guidance on this subject the group agreed that information should be collected on current approaches of importing and exporting countries and on methods used for the representative sampling of meat for other purposes.

After discussing the proposal of the Peoples Republic of China recorded in document CX/PR 48/2 the Group concluded that rabbit meat could not be included with carcass meat or poultry and recommended that it should be treated, and defined, as a Separate Codex Commodity.

4. Portion of commodities to which Codex MRLs apply and which should be analyzed

Some minor editing of this reference document was made. These changes would be included in the Codex Guide to be published in the near future.

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ALINORM 85/24 A  
APPENDIX IV

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

1. The above Working Group held its session on 29 May 1984 under the Chairmanship of Mr. A.F. Rahde (Brazil).

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M. Walsh	EEC
B.B. Watts	New Zealand
G.A. Willis	United Kingdom

Appointment of rapporteurs

2. Mr. B.B. Watts (New Zealand) and Mr. N. Rao-Maturu (FAO) were appointed to act as rapporteurs of the session of the Working Group.

Adoption of the Provisional Agenda

3. The Working Group adopted the provisional agenda (WG3/PR 84/1) without change.

Matters of interest to the Working Group

4. The Working Group had before it documents WG3/PR 84/2, CX/PR 84/2, CX/PR 84/2 Add 1 and ALINORM 85/31 containing matters of interest to the Working Group.

Matters arising from Codex Committees and Regional Coordinating Committees  
Coordinating Committee for Africa, 6th Session (ALINORM 85/28).

5. The group noted that the Coordinating Committee for Africa had requested FAO/WHO to prepare a manual on the availability of information on pesticides, the work and recommendations of international bodies in the field of pesticides and sources for technical assistance. The Committee had also strongly supported the development by FAO of a Code of conduct on the distribution and use of pesticides.

6. The Group was informed that Mr. G. Baptist (Nigeria), who had been nominated as Vice-Chairman of the Working Group had retired and that an alternate Vice-Chairman for the region should be elected during the Session.

7. The group expressed the opinion that the preparation of a manual (para 5) would be useful and agreed that it should be included as one of the recommendations of the group.

Coordinating Committee for Latin America, 4th Session (ALINORM 85/36)

8. The group noted that the Coordinating Committee for Latin America had endorsed the recommendations of the group and had agreed that every country in the region should examine them with a view to their implementation. The Committee had also discussed the resolution on acceptance of Codex MRLs and ERLs adopted by the First Session of Developing Countries in Asia concerning Pesticide Residue Problems and had recommended that countries should consider them carefully with a view to forming an opinion on the approach of the Group to the question of acceptance of Codex MRLs. The Committee had considered that problems relating to pesticide residues should be discussed at a workshop and had also supported the elaboration by FAO of the Code of Conduct for the sale and export of pesticides. Brazil had stressed the need for a document for use by developing countries on the control and safe use of pesticides, while Cuba had emphasized the need for establishing Codex MRLs for certain tropical products.

9. The group noted that many of the matters raised by the Committee were already covered by the recommendations of the group.

Report of the first Session of the Group of Developing Countries in Asia concerning Pesticide Residue Problems (ALINORM 85/31)

10. The report was introduced by Mr. Prayoon Deema (Thailand).

11. The session had been organized by Mr. Deema, Vice-Chairman of the Ad Hoc Working Group on Pesticide Residue Problems in Developing Countries, as a follow up of the recommendations of this Working Group and hosted by courtesy of Thailand. The session was attended by delegations from nine countries and representatives of five national and international organizations.

12. The session had stressed the need for generating residue data from supervised field trials conducted for pesticides of common interest in the region. Such an exercise would enable an active participation of developing countries in the process of establishing Codex MRLs in order to ensure that Codex limits were appropriate to the situations prevailing in those countries.

13. The Session had adopted a resolution concerning the acceptance of Codex MRLs and had referred it to the CCPR for consideration.

14. The session had concluded that i) inadequate laboratory equipment ii) lack of trained personal in pesticide analysis and iii) absence of analytical methods for pesticide residues that are simple and that need no sophisticated equipment; were major problems faced by the countries in the region and were impeding the enforcement and acceptance of Codex MRLs. The session had recommended that a regional pesticide laboratory be established in Thailand as a service laboratory for formulation control and residue analysis and for providing training for laboratory staff in the field of residue analysis and pesticide formulation control.

15. Noting the urgent need for trained personnel in residue analysis in many countries of the region the session had recommended that the Asian Regional Network for Production, Marketing and Control of Pesticides, should favourably consider organizing a workshop for training personnel in residue analysis.

#### Financial assistance from Industry

16. Noting and appreciating the existing allocation of resources by Industry to further the safe and efficient use of pesticides in developing countries, the session had recommended that GIFAP should review its current assistance to developing countries in this area. Recognizing that there was an increasing demand for pesticides in developing countries, the session had felt that it would be appropriate for Industry to provide financial assistance ("Pesticide Penny Scheme") to be devoted exclusively to pesticide residues and pesticide quality control work.

17. The Working Group expressed the opinion that it was essential for developing countries to generate appropriate residue data and to participate more actively in the establishment of Codex MRLs and ERLs. Attention should initially be directed to commodities especially of tropical origin, which are subject to export trade. The Group agreed that a recommendation to this effect be included in the list of recommendations.

18. The Working Group referred the Asian Resolution on Acceptance of Codex MRLs to the plenary session of the CCPR.

19. The representative of GIFAP informed the Working Group that GIFAP is sympathetic to the practical problems existing in developing countries in establishing new laboratories, maintaining existing laboratories and in training laboratory personal. However, unlike national governments and various UN funding agencies, GIFAP is not a funding body for projects of this kind. A second practical problem related to the determination of priorities in different parts of the world in the allocation of any such centrally raised fund. As a counter proposal, the GIFAP representatives recommended that FAO should examine with Industry on a regional basis the possibility of Industry supplying help in kind, notably technical expertise, starting with the regional pesticide laboratory proposed to be established in Thailand.

20. The delegation from the Philippines informed the Working Group that a regional workshop on pesticide formulations had already been held in Bangladesh and that plans were ahead to convene a regional workshop on residue analysis for a period of two weeks, utilizing the facilities available in Thailand and funds from the UNDP/UNIDO regional network for Production, Marketing and Control of Pesticides in Asia and the far east. The representative of GIFAP agreed to consider favourably the possibility of GIFAP assisting the workshop not only with technical expertise but also by providing certain chemicals and standards needed.

21. The Group supported the idea that wherever possible such sessions of the regional groups on pesticide problems should be convened alongside meetings of the Coordinating Committee for Asia. This would ensure maximum attendance and active participation.

#### Statements from Countries.

22. Mr. Tolosa (Argentina) gave an account of the pesticide related activities within his country. An international national committee attached to the Ministry of Commerce, controlled the registration of pesticides within the country and protocols existed for the control of imports of pesticides. Special stress was given to food contamination by these national programmes. Mr. Tolosa drew the attention of the Group to the very stringent requirements of the developed countries, which were difficult to meet.

23. Mr. Rahde, Chairman of the Working Group, informed the Group about two meetings on pesticide related problems, which had been held in Cuba and Chili. At these meetings, some of the problems faced by the region on i) registration of pesticides ii) labelling of pesticides and iii) guarding confidentiality of data on pesticides had been discussed.

#### FAO activities

24. The Working Group was informed that FAO will continuously follow its approach to solve pesticide residue problems in developing countries in two ways:

1. training in the safe and efficient use of pesticides since such a use of pesticides is considered the best preventive measure to avoid residue problems.

2. improvement of infrastructure and implementation of pesticide laboratories including staff training in pesticide analysis to enable developing countries to monitor - besides quality of pesticides - residues and in this way to contribute to the work of the JMPR and the CCPR.

Recently FAO had conducted a training course in the safe and efficient use of pesticides in Sudan for plant protection and extension staff so that in turn they can train farmers on the next lower level. Courses on this line can also be expected in the future.

Pesticide laboratories are being established during 1984 in Vietnam, Burma and Kabul/Afghanistan.

25. The Group expressed the opinion that, in the future, FAO should organize the training courses on a regional basis, whenever possible.

WHO activities

26. The Working Group was informed that WHO was interested in the safe use of pesticides and control of pesticide residues in developing countries. The Joint FAO/WHO Food Contamination Monitoring Programme, among other activities, was collecting data on levels of certain pesticides in individual foods and in total diet samples aimed at estimating pesticide residue intake via food and encouraging appropriate control measures. A number of developing countries like Qatar, Sudan and Egypt were among the collaborating countries which participated in the programme.

27. WHO also published environmental health criteria documents on certain pesticides.

Recommendations of the Ad Hoc Working Group

28. The Working Group had before it document WG3/PR 84/3 containing a summary of reactions of Codex Committees on its recommendations. It noted with satisfaction that several member states, as well as FAO and WHO had already taken some action and expressed the opinion that the recommendations needed to be updated periodically.

29. The Group considered the recommendations and made changes in the light of the conclusions of the Coordinating Committees and other information.

Recommendation 1a:

30. The Group noted that the terminology used; "stepwise" or "phased" registration, meant the procedure by which the introduction of a pesticide was permitted by the registering authority in several stages. The Group was of the opinion that what the developing countries needed were guidelines on a basic registration scheme for pesticides, and guidelines on how to introduce an appropriate scheme. It was agreed to modify the recommendation to read as follows:

"prepare and supply to developing countries, at the earliest; guidelines for the gradual introduction of a basic registration scheme for pesticides with an ultimate aim of preparing a model pesticides law/regulations for appropriate action by the governments of developing countries."

Recommendation 1b:

31. The Working Group was of the opinion that an ideal pesticide laboratory had two functions to perform i) pesticide formulation control and ii) pesticide residue analysis and that this should be reflected in the recommendation. The point was made that it would be difficult to describe an ideal laboratory in other than general terms. The Group agreed to modify the recommendation to read as follows:

"evaluate conditions in a given country and then prepare a proposal for the essential components of a pesticide laboratory which could fit the needs of that country. This proposal should take into account that as well pesticide formulation control as pesticide residue analysis for relevant food commodities should be covered."

Recommendation 3

32. The delegation of India drew attention to the fact that assistance to developing countries in many instances could be made available by bilateral assistance and cited availability of funding for the purpose from EEC as an example.

33. The Group agreed to modify the recommendation to read as follows to accommodate the point raised by India:  
"Requests that FAO and WHO and International Organizations such as UNDP, UNEP, IAEA, IUPAC and GIFAP as well as governments and bilateral agencies should, in the light of the country's priorities, intensify .....pesticide analysis and training."

Recommendation 4

34. The Group noted that the recommendation was a general one, but quite important and agreed that the environmental health criteria, which were important to the developing countries resulted from activity of the IPCS. The Group was of the opinion that the implications as contained in the recommendation should be examined by the international agencies WHO, UNEP and those responsible for the programme as well as the programme advisory committee and that advice should be provided.

The Group agreed to modify recommendation 4 to read as follows:

"Recommends that with respect to the "International Programme on Chemical Safety" .....examined by the international organizations WHO, ILO and UNEP responsible for the programme as well as by the programme advisory committee and which organizations should also advise the Working Group on pesticide problems in developing countries of the Codex Committee on Pesticide Residues."

Recommendation 8

35. The Group was of the opinion that, in addition to establishing a Codex Contact Point in the field of pesticides, there was a need to identify the individual in the interdepartmental Committee, who would be responsible for all Codex matters related to pesticides. Accordingly the Group agreed to include a new recommendation to read as follows.

"Identify the responsible person in the interdepartmental Committee who would be responsible for all Codex matters related to pesticides".

36. After some discussions, the Group agreed to retain recommendation 8c(iii) since, in its opinion, the evaluations and reports of the JMPR, when available, would help in the updating of national toxicological registers.

37. The Group was of the opinion that the former recommendation 8d (now 8e) should be a collaborative effort of the regional Committees. The Group agreed to add to the existing recommendation "such a document should be a collaborative effort of regional Committees."

Recommendation 11

38. The Group was of the opinion that the existing questionnaires should be updated periodically to elicit information from governments and agreed to modify the recommendation to read as follows:

"Agrees that there is a need for periodic updating of questionnaires to be sent to Governments to elicit information".

Recommendation 12

39. The Group was of the opinion that assistance from FAO and WHO to organize regional meetings was necessary but agreed not to change the present wording.



### Recommendation 13

40. The Group was of the opinion that although foreign exchange problems are faced by the developing countries, they should make every effort to continue to support financially pesticide laboratories, especially those established under the technical cooperation programme, since it was to be assumed that such laboratories had been considered to represent a certain priority to the countries concerned. It was more important to maintain existing laboratories in good functional order, rather than request assistance in the establishment of new laboratories.

41. The revised recommendation of the Working Group on Developing Countries is given in Annex I.

### Third revised questionnaire on manpower development and facilities for pesticide residue control in developing countries.

42. The Working Group had before it document WG3/PR 84/4 containing a revised draft questionnaire proposed by FAO and GIFAP.

43. It was pointed out by a number of delegations that information on i) laboratory facilities and ii) trained personnel should be sought by separate questions and hence there was a need to modify the present questionnaire. The Group agreed with these observations and asked the Codex Secretariat to redraft the questionnaire with the assistance of Argentina. The Group noted the information resulting from the questionnaire could be used to identify the needs of developing countries.

44. The Group noted that GIFAP had coordinated the replies to the earlier questionnaire. In reply to a question put to GIFAP whether they could be in a position to assist once more, GIFAP informed the Group that it would need to consider such a possibility with the technical director before informing the Codex Secretariat.

### FAO Code of Conduct on the distribution and use of pesticides.

45. The Working Group was informed that the Code of Conduct on the distribution and use of pesticides is being revised by FAO, and that the revised version would be available in June 1984. Thereafter the revised version would be sent out for comments. A government consultation to consider or even to adopt the Code is envisaged for late November 1984.

46. The Group expressed the opinion that the revised version of the Code of Conduct should be sent to all Codex Contact Points, to elicit comments from Governments, which should be taken into consideration in the final revision of the Code. The FAO representative agreed to such a procedure.

### Nomination of Chairman and Vice-Chairmen of the Working Group

47. The Group elected the following officers from among the delegates:

Chairman	: Dr. A.F. Rahde (Brazil)
Vice-Chairman (Asia)	: Dr. Prayoon Deema (Thailand)
Vice-Chairman (Africa)	: Dr. Salva, M. Dogein (Egypt)
Vice-Chairman (Latin America)	: Dr. Toloza Victoriano (Argentina)

### Other Business

48. There was no other business to discuss. The delegation of Gabon indicated that the Interafrican Plant Health Council would provide information to and could collaborate with the Working Group and other bodies dealing with pesticide residue matters in the Region of Africa.

### RECOMMENDATIONS

The Committee, on the advice of the Working Group:

Noting that most of the countries, in spite of having food laws and regulations for the prevention of food adulteration, do not have adequate laws/regulations for the registration of pesticides:

Noting that facilities for pre-registration trials on pesticides and their formulation, toxicity tests, determination of residues on crops, stored food commodities, animal foods, processed foods, etc., generation of appropriate data on intake and on the impact of pesticides on the environment are inadequate or even non-existent in many countries;

Noting that, wherever laboratory facilities exist, the available equipment and funds, including foreign exchange, for the continued operation of the laboratory are insufficient, and that the number of laboratories is inadequate;

Agreeing that the training of appropriate personnel in the above fields deserves immediate attention;

1. Requests that, in order to overcome the above drawbacks, FAO and WHO should:
  - (a) prepare and supply to developing countries, at the earliest, guidelines for the gradual introduction of a basic registration scheme for pesticides with an ultimate aim of preparing a model pesticides law/regulations for appropriate action by the governments of developing countries, and
  - (b) evaluate conditions in a given country and then prepare a proposal for the essential components of a pesticide laboratory which would fit the needs of that country. This proposal should take into account that as well pesticide formulation control as pesticide residue analysis for relevant food commodities should be covered.
2. Recommends that FAO/WHO and other International Bodies should be prepared to supply, on request, information on toxicological data (including toxic hazards and precautions to be taken) and efficacy of pesticides and formulations to developing countries.
3. Requests that FAO and WHO and International Organizations such as UNDP, UNEP, IAEA, IUPAC and GIFAP as well as governments and bilateral agencies should in the light of the country's priorities, intensify their assistance to developing countries for establishing suitable laboratory facilities for pesticide analysis and training.
4. Recommends that, with respect to the "International Programme on Chemical Safety", the implications especially concerning the use and control of pesticides in developing countries should be examined by the international organizations WHO, ILO and UNEP responsible for the programme as well as the programme advisory Committee and which organizations should also advise the Working Group on pesticide problems in developing countries of the Codex Committee on Pesticide Residues.
5. Recommends that, in order to accelerate the development of pesticide control, consultations among developing countries be arranged in the various regions in order to study the needs and means so that action programmes on pesticide residues could be drawn up on the basis of priorities decided in these consultations, through an approach involving "Technical Cooperation among Developing Countries (TCDC)".

APPENDIX IV (contd.)  
ANNEX I (contd.)

6. Recommends that, as a collaborative effort among countries, Regional Committees on Pesticides should be established to discuss problems related to pesticides in the Region and that seminars and conferences for exchange of technical information and experiences gained in this field be held frequently.
7. Requests that the Codex Committee on Pesticide Residues and Codex Regional Coordinating Committees should include on their agenda subjects of interest to developing countries in the field of pesticides including those proposed by the Working Group.
8. Recommends that developing countries should:
  - (a) Establish national inter-departmental committees to deal with matters related to pesticide residues and to act as a National Codex Committee and as the Codex Contact Point in this field.
  - (b) Identify the responsible person in the interdepartmental Committee who would be responsible for all Codex matters related to pesticides.
  - (c) Ensure control of import, sale and use of pesticides and their residues in food.
  - (d) Take steps to ensure that pesticides are registered on the basis of:
    - (i) appropriate data such as those recommended by FAO/WHO;
    - (ii) local agricultural information; and taking into account, where appropriate
    - (iii) the Evaluations and Reports of the Joint FAO/WHO Meetings on Pesticide Residues to supplement toxicological and residue data which should be required to be submitted by each company applying for national registration.
  - (e) Prepare a document indicating the presently available facilities and expertise in developing countries for pre-registration trials, toxicological evaluation, residue analysis, generation of appropriate data on intake of pesticide residues, and impact on the environment. Such a document should be a collaborative effort of regional Committees.
  - (f) To carry out regular monitoring where facilities exist or are developed subsequently and, pending the availability of such facilities, to cooperate/collaborate in residue analysis of food items of national/international importance.
9. Agrees that there is increasing need for governments to identify clearly the department(s) in charge of national programmes of pesticide residues, to whom policy matters and documents should be referred;
10. Recommends that all governments should prepare or update without delay the mailing list of personnel connected with pesticide residues for ensuring timely supply of FAO/WHO documents on the subject.
11. Agrees that there is a need for periodic updating of questionnaires to be sent to all governments to elicit information on:
  - (a) available technical facilities;
  - (b) infrastructures;
  - (c) instrumental analysis, control and toxicological aspects of pesticides; and
  - (d) availability of expert manpower in the area.

12. Observes that there is an increasing interest and need felt to promote regional meetings on pesticide residues, at least three months prior to the regular sessions of the Codex Committee on Pesticide Residues, aiming at technical cooperation and the evaluation of common problems in the area relating to:
  - (i) registration
  - (ii) analytical methods
  - (iii) good agricultural practice; and
  - (iv) acceptances of Codex maximum residue limits; andagrees that assistance from FAO and WHO in such meetings would be most welcome.
13. Recommends that developing countries take steps to ensure the continued availability of funds and foreign exchange so that laboratories including those established under UN technical assistance arrangements remain fully operational.
14. Recommends that the governments, UN Bodies and international organizations to whom the above recommendations are directed take follow-up action as early as possible and that appropriate funds be earmarked so that the recommendations be given effect.

New recommendations to be inserted at a suitable place

1. Requests FAO/WHO to consider the preparation of a manual to advise on the availability of information on pesticides, the work and recommendations of international bodies and sources of technical assistance etc.
2. Urge governments to undertake collaborative studies aimed at generating residue data for such of the commodities which move in international trade and which are of economic significance to the developing countries, from supervised field trials conducted according to Good Agricultural Practice using pesticides of common interest in the region. Such an exercise enables the active participation of the developing countries in the Region in the process of establishing Codex MRLs and ERLs in order to ensure that Codex limits are appropriate to the situations prevailing in those countries.
3. Urge the ad hoc Working Group on Methods of Analysis of Codex Committee on Pesticide Residues to develop simplified methods of analysis for the determination of pesticides, that could be used without sophisticated equipment.

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ALINORM 85/24 A  
APPENDIX V

REPORT OF THE AD HOC WORKING GROUP ON REGULATORY PRINCIPLES

1. The Group met under the Chairmanship of Mr. J. Wessel.

D.C. Abbot	United Kingdom
J. Aerts	Belgium
E. Akogue MBA	Gabon
A. Alves	Brazil
A. Andersson	Sweden
H. Aziz	Malyasia
J.A.R. Bates	United Kingdom
R.S. Belcher	Australia
A.F.H. Besemer	The Netherlands
A.L. Black	Australia
H. Blomqvist	Finland
G. Bressau	Germany, Fed.Rep.of
M. de Cacqueray	France
F. Chandra	United Kingdom
P. Deema	Thailand
M.B. Declercq	France
S. Fertig	United States of America
G.B. Fuller	GIFAP
C. Gaston	Philippines
S. Gorbach	Germany, Fed.Rep.of
R. van Havere	Belgium
L.R. Hodges	GIFAP
G.N. Hooper	Australia
G.R.R. Jenkins	United Kingdom
B.G. Julin	GIFAP
A. Kariya	Japan
G. Keuck	Germany, Fed.Rep.of
D.G. Kloet	The Netherlands
K.I. Ko	Korea, Ref.of
J. van der Kolk	The Netherlands
F.W. Kopisch-Obuch	FAO
K. Krishnamurthy	India
R.J. Lacoste	GIFAP
L.G. Ladomery (Secretary)	FAO
M. Laurent	GIFAP
K. Leemans	GIFAP
M. Leng	GIFAP
D.G. Lindsay	United Kingdom
G. Mathijs	EPPO
N.R. Maturu	FAO
R. Melo	Mozambique
R. Meck	GIFAP
F. Muto	GIFAP
J.P. Ngoua	Gabon
H.M. Nollen	The Netherlands
S.A.K. Nordqvist	Sweden
A. Okumura	Japan
J. Paakkanen	Finland
Y.S. Park	Korea, Ref.of
R. Parry	United States of America
R. Petzold	Germany, Fed.Rep.of
E. Plattner	Austria
A. Rahde	Brazil

APPENDIX V (contd.)

F.M. Ramer	GIFAP
F.J. Raveney	GIFAP
H. Regenstein	GIFAP
S. Rickard	GIFAP
A.F. Rivai	Indonesia
H. Roovers	Benelux
R.R. Rowe	GIFAP
Sanaa Tolan	Egypt
L. Smeets	Belgium
T.H. Smith	Norway
A. Ström	Sweden
J. Taylor	Canada
B. Thomas	GIFAP
R.C. Tincknell	GIFAP
W. Töpner	Germany, Fed.Rep.of
P. Vermes	Israel
G. Vettorazzi	WHO
K. Voldum-Clausen	Denmark
M. Walsh	EEC
J. Wessel	United States of America
G.A. Willis	United Kingdom
L. Wood	United States of America
D.A. Yague	Spain

2. Agenda:

The following topics were discussed:

- a. Codex Questionnaire on National Government Systems for the Regulation of Pesticide Residues in Food.
- b. Working Document on "Recommended National Regulatory Practices to Facilitate Acceptance and Use of Codex Limits for Pesticide Residues in Food" (CX/PR 84/8).
- c. Acceptability of Codex Limits in Light of Possible Dietary Exposure.

Questionnaire on National Pesticide Regulatory Systems

3. The United Kingdom reported that to date 59 countries had responded to the questionnaire. The latest set of amendment sheets, which include up-dated information received during the past year, will be circulated by the U.K. to member countries in the next few weeks.

4. The Working Group discussed its previous commitment to circulate a similar questionnaire to member countries in the year prior to the 18th Session of the CCPR. The Group acknowledged that the original questionnaire had provided valuable information on national pesticide regulatory systems but concluded that a second questionnaire of the same type would not add that much to the current information. Instead, the Group decided that it would be more useful to obtain information from countries on their use of and experience with the Working Group's document on Recommended National Regulatory Practices (CX/PR 84/8) when adopted by the Committee and published in its final form.

Recommended National Regulatory Practices

5. The completed questionnaires identified a number of problems common to most countries that could serve as obstacles to acceptance of Codex MRLs. The obstacles involve matters of policy, procedure, and

perception regarding various aspects of pesticide regulation. For most countries, the obstacles are not caused so much by national legislation per se, but rather differences in the regulatory practices in the application of national law in relationship to the recommendations of the CCPR.

6. In order to assist member countries in overcoming these obstacles, the document on "Recommended National Regulatory Practices to Facilitate Acceptance and Use of Codex Limits for Pesticide Residues" (CX/PR 84/8) was prepared. It consists of two main parts. The first part provides background information on the system for elaborating Codex MRLs, as well as related internationally agreed upon principles and procedures concerning the regulation of pesticide residues in food; the relationship of the CCPR system to pesticide regulatory policies and practices followed by member countries; and the problems that confront countries in accepting and uniformly applying Codex limits to food in international trade. The second part of the document provides information and recommendations for governments to follow for dealing with these problems.

7. During the past year, members of the Working Group had several opportunities to provide input into the document. At this session's meeting, the Working Group conducted a final review and agreed that the document, with some further editing, would be extremely valuable for all governments. The Working Group recommended therefore, that the Committee adopt the document for wide distribution and use by member countries with the understanding that the current working document will undergo editing, including any changes the Committee may suggest, before issuance as a CCPR document. The final document will also include a summary of the recommendations that governments should consider in order to facilitate their acceptance of Codex MRLs.

8. The Working Group also expressed the view that the document should be updated, when necessary, to reflect new developments in the CCPR that would affect national regulatory practices. Additionally, the Working Group suggested that the document be included on the agenda of future sessions of the CCPR for discussion of the views and experiences of governments in their use of the document and the effect it has on their national practices. To facilitate this discussion, comments from governments are requested and should be submitted to the Chairman of the Working Group several months prior to each session.

#### Acceptability of Codex Limits in Light of Possible Dietary Exposure

9. The Working Group briefly discussed the difficulties which governments can experience in determining the acceptability of certain Codex limits from a consumer safety point of view and identified this as an issue for future work. The Group recognized that the FAO/WHO Food Contamination Monitoring Programme's Guidelines for the Study of the Dietary Intake of Contaminants are useful in retrospectively assessing exposure to pesticide residues and for comparison with ADIs. However, the Group believed that guidance would also be useful in conducting a prospective assessment of possible dietary exposure of a population group to a pesticide before a Codex limit is recommended for acceptance by governments. If the Committee agrees, a working paper on the issue would be prepared by the Working Group for the next session.

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REPORT OF THE AD HOC WORKING GROUP ON PRIORITIES

The Group met under the chairmanship of Mr. A.F.H. Besemer.

A. Anderson	Sweden
H. Aziz	Malaysia
J.A.R. Bates	United Kingdom
J.C. Benstead	Australia
A.F.H. Besemer	The Netherlands
A.L. Black	Australia
G. Bressau	Germany, Fed.Rep.of
W.P. Cochrane	Canada
P. Deema	Thailand
G. Dupuis	Switzerland
G. Fuller	GIFAP
C. Gaston	Philippines
W. Graham	GIFAP
Hock Stew Yeo	Malaysia
L.R. Hodges	GIFAP
G.N. Hooper	Australia
M. l'Hotellier	France
G.R.R. Jenkins	United Kingdom
A. Kariya	Japan
G. Keuck	GIFAP
K.I. Ko	Korea, Rep.of
J. van der Kolk	The Netherlands
K. Krishnamurthy	India
M. Laurent	GIFAP
K. Leemans	GIFAP
M.L. Leng	GIFAP
S. Lerdwerasirikul	Thailand
M. Lynch	Ireland
G. Mathijs	EPP0
A. Okumura	Japan
P. Pakkala	Finland
Y.S. Park	Korea. Rep.of
R.M. Parry	United States of America
H. Regenstein	GIFAP
A. Röpsch	Germany, Fed.Rep.of
L. Rosival	Czechoslovakia
R.R. Rowe	GIFAP
T. Sakamoto	Japan
Salwa H. Dogheim	Egypt
J.P. Seiler	Switzerland
O. Silupanapaporn	Thailand
A. Ström	Sweden
J. Taylor	Canada
G. Timme	Germany, Fed.Rep.of
R.C. Tincknell	GIFAP
J.C. Tournayre	France
P. Vermes	Isreal
K. Voldum-Clausen	Denmark
M. Walsh	EEC
B.B. Watts	New Zealand
G.A. Willis	United Kingdom
A. Yague	Spain



APPENDIX VI(contd.)

1. The Working Group reviewed priority lists I and II as assigned at the 15th CCPR Session (ALINORM 85/24 Appendix VI). It noted that the following compounds were on the agenda for the 1984 JMPR.

cyhalothrin  
propamocarb  
carbosulfan  
methoprene

The Working Group was informed the uses of oxycarboxin were limited and that the extent of use was now decreasing. It was agreed that oxycarboxin should be removed from the current priority lists. The Working Group confirmed the priority status of dimethipin and flucythrinate and was assured that data for dimethipin would be available for review by the 1985 JMPR and for flucythrinate might be made available.

These compounds were retained in list I.

2. A review of the compounds in the 1983 list II revealed the proposal for prothiophos had been withdrawn and the Working Group agreed to delete it. The data for the evaluation of fluvalinate would not be available in time for the 1985 JMPR and it was agreed that it still met the criteria for priority and should therefore stay in list II. The U.S. delegate agreed to review the criteria for thiofanox and the Working Group considered that it should stay in list II pending this review.

3. The compounds vinclozolin and glyphosate had, in the past, justified their inclusion in priority lists. The Working Group believed that these compounds still met the criteria for priority but again noted, with regret, that the manufacturers found difficulty in submitting the relevant data to JMPR. The Working Group agreed that the compounds should be deleted from current priority lists but recommended that the availability of data for their evaluation should be kept under constant review.

4. The Group examined submissions for new compounds as follows:

Number	ISO Common name	Chemical name, Submitting Country, Trade Names and Basic Manufacturer
84 - 01	chlofentezine	3,6-bis-(o-chlorophenyl)- 1,2,4,5-tetrazine United Kingdom/Appolo Acaristop/FBC Ltd.
84 - 02	thiodicarb	dimethyl N,N' (thiobis -[(methylimino)carbonyloxy]) bis-ethanimidothioate USA/Larvin, Nivral/Union Carbide
84 - 03	pyrazophos	O,O-diethyl-O-(5-methyl-6-ethoxycarbonyl- pyrazolo-(1,5a)-pyrimid-2-yl)-thionophosphate Federal Republic of Germany/Afugan, Missile/ Hoechst AG.

- 84 - 04 propiconazole (R,S)-1-[2-(2,4 dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole  
Australia/Tilt/Ciba-Geigy
- 84 - 05 cyfluthrin (R,S)-2-cyano-4-fluoro-3-phenoxybenzyl (1R,S)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate  
Australia/Baythroid/Bayer AG.

5. The Group established 1984 priority lists as follows:  
A. List I: This list gives compounds judged to meet selection criteria and can be considered for evaluation by the 1985 JMPR.

dimethipin	USA	Uniroyal
flucythrinate	New Zealand	Cyanamid
chlofentezine	U.K.	FBC Ltd.
thiodicarb	USA	Union Carbide
pyrazophos	FRG	Hoechst AG.

B. List II: This list gives compounds judged to meet selection criteria and can be considered for evaluation by the 1986 or later JMPR.

fluvalinate	USA	Zoecon
thiofanox	USA	Diamond Shamrock
propiconazole	Australia	Ciba-Geigy
cyfluthrin	Australia	Bayer AG.

6. The delegation of The Netherlands drew attention to the available new data on the toxicology of inorganic bromide. The Working Group recommended that a review of these data should be given priority for evaluation at the 1985 JMPR.

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