Food and Agriculture Organization of the United Nations

World Health Organization

Second joint CIPAC/FAO/WHO Open Meeting

(49th CIPAC Meeting and 4th JMPS Meeting)

2005

SECOND JOINT CIPAC/FAO/WHO OPEN MEETING
(49th CIPAC Meeting and 4th JMPS Meeting)

Utrecht, The Netherlands, 7 June 2005

Summary Record of Meeting

Agenda

1. Opening and welcome

Mr Dick Tommel, President of the Board of Authorization of Pesticides (CTB) of the Netherlands welcomed CIPAC and JMPS participants to Utrecht. In his introductory remarks he gave a short description of the organization of CTB underlining the high quality of the work of the staff participating in international conferences and training courses. He emphasized the importance of having reference methods for active substances and for determination of physical-chemical properties. He considered the combination of the JMPS and CIPAC group of experts a real success and wished a fruitful meeting and a very pleasant stay in Utrecht.

Dr Gero Vaagt, FAO Joint Secretary of JMPS, in his introductory remarks thanked the CTB and especially Mr. Rudolph Schreuder and Mr Ed van der Wal and their team as the organizers of the JMPS and CIPAC meetings in Utrecht. He drew attention to continued progress with the new procedure for establishing specifications and the principles for determination of equivalence. Some countries, such as Brazil and Mexico, and the European Commission have adopted the principles of equivalence determination as developed by FAO/WHO. Such development is welcome and in line with the revised version of the *International Code of Conduct on the Distribution and Use of Pesticides*. The interest of pesticide manufacturers in obtaining FAO/WHO specifications remains high; twenty compounds are being evaluated this year and another nineteen are on next year's agenda.

Dr Morteza Zaim, WHO Joint Secretary of JMPS, in his introductory remarks thanked the CTB as the hosts for this meeting in The Netherlands. He noted that JMPS has become another model of successful and efficient collaboration among UN agencies, and that the Open meeting is the best opportunity for industry, national QC laboratories and scientists, to contribute to the work of the two organizations as well as CIPAC as it relates to development and use of FAO and WHO specifications for pesticides. Dr Zaim also noted WHO's intensified support to the member states, in recent years, for proper management of public health pesticides, including their quality control. He noted that in a global survey carried out by WHO in 2003-2004, more than 85% of the member states stated that the procurement of vector control pesticides is restricted to those recommended by WHO and that about 70% of them included WHO specifications as a requirement in public tenders. Dr Zaim thanked the JMPS Panel Members, industry and CIPAC for their support of WHO activities as it relates to development and use of pesticide specifications for quality control and international trade.

Dr Markus Müller, Chairman of CIPAC, thanked the hosts for their welcome and their good organization of the second Joint Open meeting. Dr Müller noted that this meeting is a good model for cooperation among CIPAC, WHO and FAO and the strengthening of links with industry, and is a good opportunity to learn from each other. There is a long tradition of FAO and CIPAC having sequential meetings at the same venue, where a CIPAC member is at home; now a new tradition of joint meetings has been introduced.

2. Arrangements for chairmanship and appointment of rapporteurs

Chairmanship of the Joint Open Meeting is rotated among CIPAC, FAO and WHO. This year Dr Gero Vaagt (FAO) chaired the joint meeting.

Rapporteurs were nominated to prepare a summary report of the meeting: CIPAC (Laszlo Bura), WHO (Gitasri Mukherjee) and FAO (Denis Hamilton).

3. Adoption of the agenda

The draft agenda were adopted without modification. Item 6.11 was subsequently added under Item 6, Technical liaison with other organizations.

4. Summary record of the previous meeting

4.1 First Joint CIPAC/FAO/WHO Open Meeting and 48th CIPAC as well as third JMPS Open Meeting (8 June 2004, Brno, Czech Republic)

The report was adopted without amendment.

5. Summary of reports from CIPAC, FAO and WHO

5.1 CIPAC

Dr Markus Müller, Chairman of CIPAC, reported that the decisions of 2004 are published on the CIPAC website.

CIPAC Handbooks have long been published by Black Bear Press which was taken over by Marston Press. Order forms for the CIPAC Handbooks from Marston Press are now available on the CIPAC website. CIPAC is discussing arrangements with Marston Press on how to make pre-publication methods available.

5.2 FAO

Dr Gero Vaagt, FAO Joint Secretary, reported that the FAO Manual is now available as a Chinese language publication in addition to the existing English and Spanish versions.

Translation was carried out by officers of ICAMA, the Institute for Control of Agrochemicals in Beijing.

The FAO website has been restructured and incorporates a new 'search engine' that allows searches for individual pesticides, e.g. in JMPR and JMPS evaluations or in various conventions such as the Rotterdam Convention.

FAO is considering the development of training manuals on specifications and the evaluation of data supporting specifications. Many national governments are interested in the equivalence determination process.

He also highlighted the role of FAO for procurement of pesticides for controlling locust outbreaks in some countries in 2004, and referred to issues of application of FAO specifications, regulatory requirements and problems occurring with UL formulations.

5.3 WHO

Dr Morteza Zaim, WHO Joint Secretary, explained that, in the last 12 months, specifications for 11 compounds had been published and for a further 2 compounds only the evaluation reports had been published.

Major activities of WHO pesticide management in 2004 included further strengthening of collaboration with FAO on the implementation of the *International Code of Conduct on the Distribution and Use of Pesticides* as well as : a survey of Member Countries on public health pesticide management practices; publication of guidelines for situation analysis for public health practice management; development of a training programme and training material on decision making for judicious use of insecticides; publication of the second edition of the data on global insecticide use for vector-borne disease control; establishment of a WHO database on the monitoring of use of pesticides in vector control; and, in collaboration with FAO/CIPAC, preparation of a guideline for national laboratories on quality control of pesticide products for national governments – anticipated publication in December 2005.

6. Technical liaison with other organizations

6.1 AOAC-International

Not represented at the meeting.

6.2 CropLife International and European Crop Protection Association (ECPA)

Dr Thomas Woods reported on the work of the Specifications Expert Group, a group operating within CropLife International and ECPA. The mission of the expert group is to provide a forum for experts on matters of product quality and specifications for discussion and resolution of technical issues of importance to the crop protection industry.

The Specifications Expert Group provides an industry interface with FAO/WHO and the specifications process. Its activities include: contributing to revisions of the FAO Manual; supporting proper use of FAO/WHO specifications in key countries; preparing new specification guidelines for new product types; proposing new and upgraded physical test methods to CIPAC; promoting harmonization of physical test methods among ASTM, CIPAC, OECD, and DAPF; and producing position papers on key issues, such as the proper use of FAO specifications.

6.3 American Society for Testing and Materials (ASTM)

Mr Bob Goss reported on the cooperation between ASTM and CIPAC. Arrangements were under way to cross-reference each other's methods. He mentioned the publication of various

standard guides as formulated by the Sub-committee (E 35.22) on Pesticide Formulations and Delivery Systems.

6.4 European Crop Care Association (ECCA)

Dr David van Hoogstraten presented a report on the activities of ECCA, representing many generic pesticide manufacturers in Europe. He noted that, of the active substances approved in Europe in 2002, 27% were proprietary and 73% were generic. By 2011, 96% of the current pesticides will be generic. However, the 6 'Basic R&D Companies' hold 75% of the European generic market.

ECCA supports the activities of FAO/WHO. ECCA has a formal relationship with FAO and its members adhere to the International Code of Conduct.

6.5 United Nations Industrial Development Organization (UNIDO)

Not represented at the meeting.

6.6 International Union of Pure and Applied Chemistry (IUPAC)

Mr Denis Hamilton reported on the activities of IUPAC especially relevant to CIPAC and JMPS. The IUPAC Advisory Committee on Crop Protection Chemistry carries out projects and coordinates international congresses and workshops on pesticide chemistry.

Information on the IUPAC International Congress of Pesticide Chemistry planned for Kobe, Japan in August 2006 is available at *http://www.iupac2006.jtbcom.co.jp*. Current Projects of interest to CIPAC/JMPS include: Global availability of information on agrochemicals; A critical compendium of pesticide physical chemistry data; and Glossary of terms related to pesticides. He further explained that the first two projects have begun with 60 priority pesticides. Other projects completed and published are 'Impurities in Pesticides' (2003) and 'Disposal of Pesticide Waste' (2003).

6.7 European Commission (EC)

Not represented at the meeting.

6.8 European Food Safety Authority (EFSA)

Dr Ralf Hänel reported on EFSA progress on the evaluation of compounds in Europe. A total of 53 compounds are scheduled for review in the 2nd stage with a further 163 in the 3rd stage. Completed reviews are now available on the EFSA website under the Pesticide Risk Assessment Peer Review (PRAPeR) banner: http://www.efsa.eu.int/science/praper/catindex_en.html

6.9 International Programme on Chemical Safety (IPCS)

Not represented at the meeting.

6.10 Joint FAO/IAEA (International Atomic Energy Agency) Division

Dr Josef Brodesser explained that pesticide work at IAEA originated in its programme of preparing radiolabelled compounds for research purposes. Work has continued on multi-methods for routine analysis of pesticide formulations, where a number of pesticides can be analysed under similar operating conditions by HPLC or GLC methods. The idea is that multi-methods would widen the scope of analyses and help with cost saving for official regulatory control laboratories. Repeatability testing has demonstrated comparability with CIPAC and AOAC methods in a number of cases but not in others.

6.11 Asociación Latinoamericana de la Industria Nacional de Agroquímicos (ALINA)

Mr Juan Manuel Perez presented a report on the activities of ALINA.

ALINA has 44 members, representing 16 countries of Latin America. It includes three Regional Councils: 1) Mexico, Central America and the Caribbean; 2) the Andean Group; and 3) the Mercosur Group and Chile. ALINA was formed in 2003 to unite Latin American generic manufacturers and distributors for the purpose of increasing agricultural production and competitiveness. ALINA is aiming for unification of technical and regulatory criteria between countries as a critical factor for farmers to achieve a regional competitive edge. ALINA and its members are supporting the implementation of the provisions of the *Code of Conduct*.

7. National reports regarding CIPAC activities and reports from official quality control laboratories

The following reports were presented:

Argentina, Australia, Belgium, Brazil, China, Cyprus, Czech Republic, Denmark, El Salvador, Germany, Hungary, India, Ireland, Italy, Japan, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, South Africa, Switzerland, Ukraine, UK and USA.

Summary table of national reports of official quality control laboratories.

Region	Reporting laboratory	No. samples tested	Non-compliance	
			No.	%
Africa	South Africa	16	3	19
Australia	Australia	40	15	38
Americas	El Salvador	649	30	5
	Indiana, USA	169	8	5
Europe	Belgium	73	18	25
	Cyprus	45	3	7
	Denmark	34	3	9
	Germany	146	25	17
	Hungary	1520	76	5
	Netherlands	45	0	0
	Portugal	54	2	4
	Romania	2719	55	2
	Slovakia	168	29	17
	Slovenia	18	1	6
	Spain	362	18	5
	Switzerland	48	4	8
	UK	121	15	12
Asia	China	700	100	14
	TOTAL	**6927**	**405**	**6**

8. Proposed new and amended specification guidelines

8.1 Supplement to the manual

Mr Alan Hill presented information on the supplement (*Manual on development and use of FAO and WHO specifications for pesticides, Supplement, Corrections, amendments and additions to the 1st edition of the manual. 2nd draft, 5-May-2005.* Document: Supplement to the manualopenmeeting.doc) and introduced important proposed changes.

a) Where a national registration authority has determined the equivalence of the generic manufacturer's TC/TK, using a procedure which is similar to that of the JMPS, the JMPS

may consider this to be sufficient evidence that the hazards and risks associated with the generic product have been sufficiently well characterized for JMPS purposes. As an alternative to checking directly with the national authority and at the request of FAO/WHO, the proposer may provide a written undertaking that the data submitted to FAO/WHO are identical to those submitted for registration to a specified national authority.

b) A new sub-section 3.1D provides more details on the determination of the relevance or non-relevance of impurities. It explains the principles of JMPS procedures and their relationship to GHS (Globally Harmonized System of Classification and Labelling of Chemicals) guidelines.

c) Expanded tolerances for content of active ingredient in solid mixtures are introduced to allow for the fact that supposedly uniform mixtures of solid formulations cannot be prepared with the same degree of homogeneity as is achievable with liquids.

d) The concept of TK (technical concentrate) is changed. The content of active ingredient in a TC is normally ≥900 g/kg and the content of active ingredient in a TK is normally <900 g/kg, either because a diluent has been added to a TC or because it may be impracticable or undesirable to isolate the active ingredient from the solvent, impurities, etc.

e) In 2- or 3-phase systems, e.g. SC formulations, clauses for viscosity of the product and different particle size ranges are now included.

f) The specifications for tablets have been widened in scope and refined but more work is needed to finalise the requirements.

g) A statement on impurities in microbial pesticides has been amended.

h) Amendments and additions have been made to the glossary of terms.

Dr Tom Woods queried whether the supplement would be incorporated into a new edition of the Manual? The answer was that the supplementary information would not now be incorporated into the manual, but would probably be included in a new edition in 2-3 years' time.

In relation to the changes explained in item (a) Dr Martin Rodler was not aware of any country currently using the same procedures as JMPS for equivalence determination. CropLife International had some concern with the procedure described in the second sentence of paragraph 3.1 (x).

> *In such cases (a national registration authority has determined the equivalence of the generic manufacturer's TC/TK), the data requirements given in section 3.2 may provide sufficient support for the first specification to be developed, subject to (i) certification that the data package submitted to FAO/WHO is "identical" to that submitted for registration; (ii) notification of any substantive deviations from the JMPS procedure for determination of equivalence.*

The Meeting discussed the issue of whether potential relevant impurities should be included in the specifications when their concentrations were below the detection limits in the technical material being evaluated, but did not reach a consensus.

Mr Arnie Weiss expressed the opinion that companies requesting relevance of impurities should present studies to support this.

Dr Ralf Hänel reported that the decision process in the EU is different and is not following these rules; anything which is considered relevant by the toxicologist will be considered relevant.

Dr Ralf Hänel expressed the opinion that the existing conceptual definition of a TK (it contains appropriate diluents, whereas a TC does not) was preferable to a definition based on a concentration cut-off point (900 g/kg).

Dr Martin Rodler drew attention to a statement on page 4:

> *Specifications developed under the old procedures remain valid until, following review by the JMPS, they are withdrawn by FAO and/or WHO (i.e. they are no longer accessible on the internet). Withdrawn specifications have no status as FAO or WHO specifications: they may continue to be used by third parties if required but they are not supported by FAO or WHO.*

Rewording may be necessary to discourage the use of specifications that have been withdrawn.

Written comments on supplements to the manual should be submitted by the end of July 2005.

8.2 References in evaluations including disclosure of identities of study directors

This topic was discussed and effectively settled in 2004. Full references to studies are needed in the interests of transparency.

8.3 New/amended guidelines

8.3.1 TK

No report.

8.3.2 Guideline for "Technical Salts"

The subject is still under consideration by industry and no guideline was proposed.

8.3.3 Specifications for "Tablet Characterization" for inclusion in guideline

Dr Ralph Grohs (CropLife International) suggested that the following requirements for tablets should be included: tablets need to look identical and each should contain the same dosage; packaging must protect the tablets from environmental effects; and a key requirement is disintegration time. The current guidelines require some revision to reflect these issues and, most importantly, because different applications may require very different physical characteristics in tablets which are superficially of the same type.

Dr Markus Müller expressed the opinion that the consequencies of applying pharmaceutical methods on tablets for pesticide formulations should be considered and that he will contact representatives of the European Pharmacopoeia to explore the possibility of adopting selected methods of the Pharm. Eur.

8.3.4 "Z" mixed formulations

The proposed clauses for particle size may have to be reconsidered, as all three formulation types contain at least two populations of particles.

8.3.5 Tolerances for mixed granules

Dr Tom Woods (CropLife International) explained that matching particle size distributions was the most important requirement to obtain a good mixture of two formulated solid products and to maintain homogeneity during storage and transport. Such mixtures can be very useful and convenient to the grower.

A procedure, already accepted by US EPA and UK PSD, was described for calculating tolerances for active ingredients in the 'formulation of 2 solid formulations.' The tolerances are slightly broader than those in current FAO specifications because the variability of the proportions of each formulation must be added to the variability of each active ingredient in the original solid formulations.

The sample size for analysis of such mixed solid formulations must be specified by the manufacturer. A non-representative sample may result if the sample size is too small.

The proposal for expanded tolerances for solid mixtures will be considered by the JMPS.

8.4 Coding system

The codes for mixed formulations were agreed at previous meetings.

8.4.1 Non-standard formulations

No report.

8.4.2 Parallel specifications

No report.

8.5 Others

8.5.1 Modification of equivalence process due to changes of manufacturing source

Dr Thomas Woods (CropLife International) suggested that it is reasonable to differentiate between active ingredient source changes within the same manufacturer and those associated with an original manufacturer and a totally new manufacturer. It is more likely that, for the same manufacturer, the process and operating conditions will be the same, equipment will be very similar and the quality of solvents, reagents and raw materials will be unchanged, so that equivalence requirements can be simplified.

A procedure for equivalence determination for active ingredient source changes within the same manufacturer was proposed for JMPS consideration.

8.5.2 Applicability of FAO/WHO specifications to alternative manufacturers

Dr Martin Rodler (CropLife International) reported that a national regulatory authority had misinterpreted a statement in the manual about the application of FAO/WHO specifications.

> *FAO and WHO specifications relate only to pesticides produced by manufacturers whose data on those pesticides have been evaluated as satisfactory by the FAO/WHO Joint Meeting on Pesticide Specifications (JMPS).*

The regulatory authority had correctly applied the new specifications to the products of the manufacturer that had provided data to support the new specifications, but had applied the 'old FAO specifications' (nominally withdrawn) to products from other manufacturers.

Dr Ralf Hänel reported that the interpretation of many evaluators within EU is that the old specifications are valid for all the other products, while the new specification is valid only for the respective company.

Modifications to the text in the manual were suggested to clarify that superseded FAO/WHO specifications are no longer valid.

9. Status, review and publication of CIPAC methods

9.1 Proposed review process for CIPAC methods

Dr Markus Müller described the problem of reviewing both analytical and physical test methods and the CIPAC plan for a structured approach for prioritization of older methods.

CIPAC Handbook 1 appeared in 1970. Methods from that time may no longer be applicable or practical because of the progress of science and the changes in technique and scientific equipment since then.

The CIPAC review process will consider whether FAO/WHO specifications refer to the method, the year of adoption of the method (and method extensions), the technique used, the availability of reagents and consumables and the current uses of the active ingredient. Methods (analytical and MTs) will be ranked from obsolete to 'state of the art'. Progress with the review will be discussed with FAO, WHO and industry. Obsolete methods will be listed under the heading, 'CIPAC methods no longer supported', with no method extension possible, but still available for special purposes.

A CIPAC task force will prepare a draft priority list, which will be the basis for discussions and decisions on withdrawal or other actions within CIPAC TC and Council Meeting, after consultations with FAO, WHO and industry.

9.2 Publication of CIPAC methods

A new Handbook (CIPAC Handbook L) is in preparation and publication is expected in winter or early spring 2006. The intention of CIPAC is to restart the provision of unpublished methods by the new publisher.

10. Proposed new and extended CIPAC analytical and physical test methods and CIPAC work plan 2005-06

10.1 Requirements for new CIPAC analytical methods – ISO common name

Dr Walter Dobrat explained that an ISO committee is responsible for common names and works within a guideline for naming. For example, racemates are named first and then Greek letters, as words rather than symbols, are used as a prefix for common names for specific isomers, e.g. alpha-cypermethrin. A name such as d-phenothrin does not fit within the guideline and cannot become a common name.

10.2 Adoption of analytical methods for determination of relevant impurities in pesticides as CIPAC peer validated methods

Dr Markus Müller explained that, in 2004, FAO and WHO invited CIPAC to include independent laboratory validation (ILV) into the scope of CIPAC activities. CIPAC decided to do so, and to handle ILV in a similar way to small scale studies.

The proposal for the CIPAC process is:

1) Preliminary in-house validation of the proposed method similar to that described in the guidance document SANCO 3030;

2) Recruitment through a country PAC (preferred) or information sheet; and

3) Optional assignment to a reviewer who is a CIPAC member (it is the responsibility of the company to find a reviewer) and circulation of method, report and review to CIPAC members for their consideration.

It is envisaged that the method would be adopted as a provisional CIPAC method for impurities with the method being presented and discussed for consideration at the following CIPAC Meeting.

It should be noted that currently there are no criteria suggested for acceptance other than statistical data.

The method would be available through the CIPAC website free of charge.

10.3 Collaborative testing of physical test methods for unstable properties

Mr Alan Hill described the problem for pesticides incorporated in the textiles used for mosquito nets. The initial surface concentration is changed if pesticide migrates, e.g. by diffusion, between interior and surface, during transport to and storage at the collaborative testing laboratories, and therefore it is impossible to conduct a valid collaborative study of the test method. In contrast, retention index, which measures the ratio of successive pesticide migrations under controlled conditions, is unaffected by sample transport and storage and the method is therefore amenable to collaborative study.

10.4 CIPAC work plan for 2005/2006

Dr. Müller explained that several pilot studies for analytical methods are under way, so that CIPAC expects again a series of methods to be presented and discussed at the next year's CIPAC Meeting. There are also companies who wish to proceed to full study directly without a pilot study – CIPAC has therefore only limited knowledge of studies under preparation with industry.

11. Review and publication of FAO and WHO specifications for pesticides

11.1 Status of FAO specifications

Manufacturer	Product	FAO Specification	Status
Bayer CropScience	imidacloprid TC, FS, GR, PR, SC, SL, UL, WG, WS	new	ready for publication
	iprodione TC, WP, WG, SC	new	final stage
Chlormequat Task Force (Nufarm, BASF, Ciba Specialty Chemicals, UCB SA)	chlormequat chloride TK, SL	revised	published
Dow AgroScience	picloram	new	published

Manufacturer	Product	FAO Specification	Status
Dow AgroScience, Rice Co., Proficol	propanil	revised	rescheduled for 2005
DuPont	azimsulfuron	new	published
	chlorsulfuron TC, WP, WG	revised	published
	cymoxanil	new	published
	hexazinone TC, WG, SP, GR	new	evaluation report published-publication of specifications subject to validation of the analytical method for the relevant impurity
Makhteshim	prochloraz TC, EC, SC	new	evaluation report published
Syngenta	chlorothalonil	revised	published
	paraquat dichloride	revised	published
Trifolio M, EID Parry	azadirachtin EC, TK	new	ready for publication
Fortune Biotech			final stage

11.2 Status of WHO specifications

JMPS year	Compound	Proposer	WHO publication of	
			evaluation report	specifications
2002	d-allethrin	Sumitomo	March 2004	
2002	d-phenothrin	Sumitomo	October 2004	
2002	pralethrin	Sumitomo	November 2004	
2002	transfluthrin	Bayer	January 2005	-
2003	esbiothrin	Sumitomo	October 2004	
2003	bioallethrin	Sumitomo	May 2005	
2003	d,d-trans-cyphenothrin	Sumitomo	November 2004	-
2004	*Bacillus thurin. israel.*	Valent	-	-
2004	deltamethrin LN	Vestergaard	-	-
2004	icaridin	Bayer	October 2004	

11.3 Status of joint FAO/WHO specifications

JMPS year	Compound	Proposer	WHO publication of	
			evaluation report	specifications
2002	niclosamide	Bayer	January 2004	
2002	chlorpyrifos	Dow Agroscience, Makhteshim	October 2004	
2003	deltamethrin	Bayer	April 2005	
2003	dimethoate	BASF, Cheminova, Isagro	-	-

JMPS year	Compound	Proposer	WHO publication of	
			evaluation report	specifications
2003	lambda-cyhalothrin	Syngenta	January 2004	
2003	cyfluthrin	Bayer	November 2004	
2003	propoxur	Bayer	-	-
2003	novaluron	Makhteshim	December 2004	
2003	malathion	Cheminova	September 2004	
2004	diflubenzuron	Crompton	April 2005	
2004	bifenthrin	FMC	-	-
2004	fenthion	Bayer	-	-
2004	pirimiphos-methyl	Syngenta	-	-

12. FAO/WHO priority list and programme for development of FAO and WHO specifications for pesticides

Year	Products	Proposer(s)
2006	FAO:	
	carbaryl TC	Bayer CropScience
	clodinafop propargyl …	Syngenta
	chlorothalonil TC	Sipcam Agro, Italy
	clofentezine TC, SC	Makhteshim
	fosetyl-Al TC, WG, WP	Bayer CropScience
	propanil TC	Proficol, S.A.
	propaquizafop TC, EC	Makhteshim
	WHO:	
	alpha-cypermethrin LN	BASF
	Bacillus thuringiensis israelensis WG, DT	Valent BioSciences
	permethrin LN	Sumitomo
	transfluthrin TC	Bayer
	FAO & WHO:	
	bendiocarb TC, WP	Argos
	chlorpyrifos TC, EC, UL	Cheminova, ACME Org.
	deltamethrin TC	Heranba Ind.
	dimethoate TC, EC	JSC Trans Oil, Ukraine
	etofenprox TC, EW, WP	Mitsui
	lambda-cyhalothrin TC, WP	Tagros
	RS-methoprene TC, EC	Babolna Bio
	permethrin TC, EC	Tagros

For 2006, 19 compounds are proposed – 7 FAO, 4 WHO and 8 Joint FAO/WHO.

Dr Thomas Woods suggested that oxamyl and flusilazole should be moved to 2007.

Bayer CropScience suggested transfluthrin could be added to the 2006 list, which will be considered subject to receipt of a formal request.

13. Any other matters

Dr Vaagt drew attention to the contributions of a long-standing CIPAC member Mr Bernard Declercq. The Meeting recognized Mr Declercq's valuable work over more than 30 years on pesticide residues and specifications and wished him well in his official retirement.

14. Date and venue of next meeting

The 50th CIPAC meeting and 5th JMPS will be held in Geneva, Switzerland from 7-16th June 2006.