

Pesticide residues in food – 2006

**Joint FAO/WHO Meeting on
Pesticide Residues**

EVALUATIONS 2006

Part II – Toxicological

IPCS International Programme on Chemical Safety



**Food and Agriculture
Organization of the United
Nations**



**World Health
Organization**

Pesticide residues in food — 2006

Toxicological evaluations

**Sponsored jointly by FAO and WHO
With the support of the International Programme
on Chemical Safety (IPCS)**

**Joint Meeting of the
FAO Panel of Experts on Pesticide Residues
in Food and the Environment
and the
WHO Core Assessment Group**

Rome, Italy, 3–12 October 2006

The summaries and evaluations contained in this book are, in most cases, based on unpublished proprietary data submitted for the purpose of the JMPR assessment. A registration authority should not grant a registration on the basis of an evaluation unless it has first received authorization for such use from the owner who submitted the data for JMPR review or has received the data on which the summaries are based, either from the owner of the data or from a second party that has obtained permission from the owner of the data for this purpose.



**Food and Agriculture
Organization of the United
Nations**



**World Health
Organization**

WHO Library Cataloguing-in-Publication Data

Pesticide residues in food : 2006, toxicological evaluations, sponsored jointly by FAO and WHO, with the support of the International Programme on Chemical Safety / Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and WHO Core Assessment Group, Rome, Italy, 3–12 October 2006.

1.Pesticide residues – toxicity. 2.No-observed-adverse-effect level. 3.Food contamination. I.FAO Panel of Experts on Pesticide Residues in Food and Environment. II.WHO Core Assessment Group on Pesticide Residues. III.Title: Pesticide residues in food 2006 : joint FAO/WHO meeting on pesticide residues. IV.Title: Evaluations 2006 : part 2, toxicological.

ISBN 978 92 4 166522 3

(NLM classification: WA 240)

© World Health Organization 2008

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

This publication contains the collective views of an international group of experts and does not necessarily represent the decisions or the stated policy of the World Health Organization.

Printed in United Kingdom

TABLE OF CONTENTS

	Page
List of participants	v
Abbreviations	ix
Introduction	xi
Toxicological evaluations	
Bifenazate*	3
Boscalid*	47
Cyfluthrin/beta-cyfluthrin**	103
Cypermethrins (including alpha- and zetacypermethrin**	157
Cyromazine**	227
Diazinon	293
Haloxypop (haloxypop-R and haloxypop-R methylester)	315
Pyrimiphos-methyl	355
Quinoxifen*	367
Temephos	403
Thiabendazole	429
Thiacloprid*	451
Thiophanate-methyl	557
Annex 1. Reports and other documents resulting from previous Joint Meetings of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Expert Groups on Pesticide Residues	575

* First full evaluation

** Evaluated within the periodic review programme of the Codex Committee on Pesticide Residues

**2006 Joint Meeting of the FAO Panel of Experts on
Pesticide Residues in Food and the Environment
and the WHO Core Assessment Group**

Rome, 3–12 October 2006

PARTICIPANTS

FAO Panel of Experts on Pesticide Residues in Food and the Environment

Dr Ursula Banasiak, Federal Institute for Risk Assessment, Thielallee 88-92, D-14195 Berlin, Germany

Professor Eloisa Dutra Caldas, University of Brasilia, College of Health Sciences, Pharmaceutical Sciences Department, Campus Universitário Darci Ribeiro, 70919-970 Brasília/DF, Brazil

Mr Stephen Funk, Health Effects Division (7509P), United States Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington DC 20460, USA (*FAO Chairman*)

Mr Denis J. Hamilton, Principal Scientific Officer, Biosecurity, Department of Primary Industries and Fisheries, PO Box 46, Brisbane, QLD 4001, Australia

Mr David Lunn, Programme Manager (Residues–Plants), Dairy and Plant Products Group, New Zealand Food Safety Authority, PO Box 2835, Wellington, New Zealand

Ms Bernadette C. Ossendorp, Centre for Substances and Integrated Risk Assessment, National Institute of Public Health and the Environment (RIVM), Antonie van Leeuwenhoeklaan 9, PO Box 1, 3720 BA Bilthoven, Netherlands

Dr Yukiko Yamada, Director, Food Safety and Consumer Policy Division, Food Safety and Consumer Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Tokyo 100-8950, Japan

WHO Members

Professor Alan R. Boobis, Experimental Medicine & Toxicology, Division of Medicine, Faculty of Medicine, Imperial College London, Hammersmith Campus, Ducane Road, London W12 0NN, England (*WHO Chairman*)

Dr Les Davies, Chemical Review, Australian Pesticides & Veterinary Medicines Authority, PO Box E240, Kingston ACT 2604, Australia

Dr Vicki L. Dellarco, Office of Pesticide Programs (7509P), United States Environmental Protection Agency, Health Effects Division; 1200 Pennsylvania Avenue NW, Washington, DC 20460, USA (*WHO Rapporteur*)

Dr Helen Hakansson, Institute of Environmental Medicine, Karolinska Institutet, Unit of Environmental Health Risk Assessment, Box 210, Nobels väg 13, S-171 77 Stockholm, Sweden

Dr Angelo Moretto, Department of Occupational Medicine and Public Health, University of Milan, ICPS Ospedale Sacco, Via Grassi 74, 20157 Milan, Italy

Professor David Ray, MRC Applied Neuroscience Group, Biomedical Sciences, University of Nottingham, Queens Medical Centre, Nottingham NG7 2UH, England

Dr Roland Solecki, Safety of Substances and Preparations, Coordination and Overall Assessment, Federal Institute for Risk Assessment, Thielallee 88-92, D-14195 Berlin, Germany

Dr Maria Tasheva, National Center of Public Health Protection (NCPHP), 15 Iv. Ev. Geshov boulevard, 1431 Sofia, Bulgaria

Secretariat

Mr Árpád Ambrus, Consultant, Homezo utca 41, H-1221, Budapest, Hungary (*FAO Temporary Adviser*)

Dr Raj Bhula, Pesticide Residues Manager, Australian Pesticides and Veterinary Medicines Authority, PO Box E240, ACT 2604, Australia (*FAO Temporary Adviser*)

Dr Hong Chen, International Program Manager, USDA/IR-4 Headquarters, 500 College Road East, Suite 201W, Princeton, NJ 08540, USA (*FAO Temporary Adviser*)

Mr Bernard Declercq, 13 impasse du court Riage, 91360 Epinay sur Orge, France (*FAO Temporary Adviser*)

Dr Ian C Dewhurst, Pesticides Safety Directorate, Mallard House, Kings Pool, 3 Peasholme Green, York YO1 7PX, England (*WHO Temporary Adviser*)

Dr Ronald D. Eichner, 13 Cruikshank Street, Wanniasa ACT 2903, Australia (*FAO Editor*)

Dr D. Kanungo, Additional DG, Directorate General of Health Services, Ministry of Health and Family Welfare, West, Block No. 1, R.K. Puram, New Delhi, India (*WHO Temporary Adviser*)

Dr Sandhya Kulshrestha, Secretary, Central Insecticides Board and Registration Committee, Directorate of Plant Protection, Quarantine & Storage, Department of Agriculture and Cooperation, Ministry of Agriculture, NH IV, Faridabad-121001, India (*WHO Temporary Adviser*)

Dr Yibing He, Pesticide Residue Division, Institute for the Control of Agrochemicals, Ministry of Agriculture, Building 22, Maizidian Street, Chaoyang District, Beijing 100026, China (*FAO Temporary Adviser*)

Dr Chaido Lentza-Rizos, National Agricultural Research Foundation, 1 Sofocli Venizelou Street, 141 23 Lycovrissi, Athens, Greece (*FAO Temporary Adviser*)

Dr Manfred Lützow, Feldhofweg 38, CH-5432 Neuenhof, Switzerland (*FAO Consultant*)

Dr Katerina Mastovska, Eastern Regional Research Center (ERRC), Agricultural Research Service (ARS), United States Department of Agriculture, 600 E. Mermaid Lane, Wyndmoor, PA 19038, USA (*FAO Temporary Adviser*)

Dr Heidi Mattock, 21bis rue du Mont Ouest, 38230 Tignieu-Jameyzieu, France (*WHO Editor*)

Dr Douglas B. McGregor, Toxicity Evaluation Consultants, 38 Shore Road, Aberdour KY3 0TU, Scotland (*WHO Temporary Adviser*)

Dr Utz Mueller, Principal Toxicologist, Risk Assessment – Chemical Safety, Food Standards Australia New Zealand, PO Box 7186, Canberra, BC ACT 2610, Australia (*WHO Temporary Adviser*)

Dr Rudolf Pfeil, Toxicology of Pesticides, Federal Institute for Risk Assessment, Thielallee 88-92, D-14195 Berlin, Germany (*WHO Temporary Adviser*)

Mr Derek Renshaw, Food Standards Agency, Aviation House 125 Kingsway, London WC2B 6NH, England (*WHO Temporary Adviser*)

Mr Christian Sieke, Federal Institute for Risk Assessment, Thielallee 88-92, D-14195 Berlin, Germany (*FAO Temporary Adviser*)

Dr Atsuya Takagi, Division of Toxicology, Chief of the Third Section, National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo 158-8501, Japan (*WHO Temporary Adviser*)

Dr Prakashchandra V. Shah, US Environmental Protection Agency (EPA), Mail Stop: 7509C, 1200 Pennsylvania Ave., NW, Washington DC 20460, USA (*WHO Temporary Adviser*)

Dr Angelika Tritscher, WHO Joint Secretary, International Programme on Chemical Safety, World Health Organization, 1211 Geneva 27, Switzerland (*WHO Joint Secretary*)

Dr Gero Vaagt, FAO Joint Secretary, FAO Plant Protection Service (AGPP), Viale delle Terme di Caracolla. 00153 Rome. Italy (*FAO Joint Secretary*)

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_29458

