Pesticide residues in food — 2012

Joint FAO/WHO Meeting on Pesticide Residues

EVALUATIONS 2012

Part II — Toxicological





Pesticide residues in food — 2012

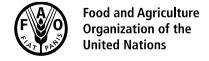
Toxicological evaluations

Sponsored jointly by FAO and WHO

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

Rome, Italy, 11–20 September 2012

The summaries and evaluations contained in this book are, in most cases, based on unpublished proprietary data submitted for the purpose of the JMPR assessment.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.





WHO Library Cataloguing-in-Publication Data

Pesticide residues in food - 2012: toxicological evaluations / Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues, Rome, Italy, 11–20 September 2012.

1.Pesticide residues - toxicity. 2.No-observed-adverse-effect level. 3.Food contamination. I.FAO Panel of Experts on Pesticide Residues in Food and the Environment. II.WHO Core Assessment Group on Pesticide Residues. III.Title: Pesticide residues in food 2012: evaluations. Part 2, Toxicological.

ISBN 9789241665285

(NLM classification: WA 240)

© World Health Organization 2013

All rights reserved. Publications of the World Health Organization are available on the WHO website (www.who.int) or can be purchased 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 non-commercial distribution—should be addressed to WHO Press through the WHO web site (<u>www.who.int/about/licensing/copyright_form/en/index.html</u>).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion w hatsoever 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 w hich 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. How ever, the published material is being distributed without warranty of any kind, either express 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.

TABLE OF CONTENTS

		Page
List of part	icipants	v
Abbreviation	ons used	vii
Introduction	n	xi
Toxicologic	cal monographs and monograph addenda	1
Ametoctradin*		
Bentazone**		
Chlorfenapyr*		99
Dinotefuran*		
Fenpropathrin**		253
Fenvalerate**		
Fluxapyroxad*		363
Glufosinate-ammonium**		547
MCPA*		653
Picoxystrobin*		725
Sedaxane*		769
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 Core Assessment Group on Pesticide Residues	841

^{*} First full evaluation

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

2012 Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues

Rome, 11-20 September 2012

List of participants

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

- Dr Ursula Banasiak, Federal Institute for Risk Assessment, Berlin, Germany
- Professor Eloisa Dutra Caldas, Pharmaceutical Sciences Department, College of Health Sciences, University of Brasilia, Brasília/DF, Brazil (FAO Rapporteur)
- Mr David Lunn, Principal Advisor (Residues and Plants), Import and Export Standards, Ministry for Primary Industries, Wellington, New Zealand
- Dr Dugald MacLachlan, Residues and Microbiology Policy, Export Standards, Food Division, Department of Agriculture, Fisheries and Forestry, Canberra, ACT, Australia (FAO Chairman)
- Mr Christian Sieke, Unit Residue Assessment of Pesticides and Biocides, Department of Chemicals Safety, Berlin, Germany
- Dr Yukiko Yamada, Director-General for Technological Affairs, Chief Scientific Officer, Ministry of Agriculture, Forestry and Fisheries, Tokyo, Japan

WHO Core Assessment Group on Pesticide Residues

- Professor Alan R. Boobis, Centre for Pharmacology and Therapeutics, Division of Experimental Medicine, Department of Medicine, Faculty of Medicine, Imperial College London, London, England
- Dr Les Davies, Australian Pesticides and Veterinary Medicines Authority, Kingston, ACT, Australia
- Dr Vicki L. Dellarco, Office of Pesticide Programs, Environmental Protection Agency, Washington, DC, USA (WHO Rapporteur)
- Dr Douglas B. McGregor, Toxicity Evaluation Consultants, Aberdour, Scotland
- Professor Angelo Moretto, Department of Biomedical and Clinical Sciences Luigi Sacco, University of Milan, International Centre for Pesticides and Health Risk Prevention, Luigi Sacco Hospital, Milan, Italy (WHO Chairman)
- Dr Roland Solecki, Chemical Safety Division, Steering of Procedures and Overall Assessment, Federal Institute for Risk Assessment, Berlin, Germany
- Dr Maria Tasheva, Associate Professor Toxicologist, Sofia, Bulgaria

Secretariat

- Ms Catherine Adcock, Health Evaluation Directorate, Pest Management Regulatory Agency, Ottawa, Ontario, Canada (*WHO Expert*)
- Professor Árpád Ambrus, National Food Chain Safety Office, Budapest, Hungary (FAO Temporary Adviser)
- Mr Kevin Bodnaruk, West Pymble, NSW, Australia (FAO Editor)
- Ms Gracia Brisco, Food and Agriculture Organization of the United Nations, Rome, Italy (*Codex Secretariat*)
- Ms Marloes Busschers, Board for the Authorisation of Plant Protection Products and Biocides, Wageningen, the Netherlands (WHO Expert)

- Dr Ian Dewhurst, Chemicals Regulation Directorate, York, England (WHO Expert)
- Dr William Donovan, Office of Pesticide Programs, Environmental Protection Agency, Washington, DC, USA (*FAO Temporary Adviser*)
- Dr Yi Bing He, Department of Science and Education, Ministry of Agriculture, Beijing, China (FAO Temporary Adviser)
- Mr Paul Humphrey, Australian Pesticides and Veterinary Medicines Authority, Kingston, ACT, Australia (*FAO Temporary Adviser*)
- Mr Makoto Irie, Agricultural Chemicals Office, Plant Products Safety Division, Food Safety and Consumer Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries, Tokyo, Japan (FAO Temporary Adviser)
- Dr Debabrata Kanungo, Chairman, Scientific Panel on Residues of Pesticides and Antibiotics, Food Safety and Standards Authority of India, Faridabad, India (WHO Expert)
- Professor Mi-Gyung Lee, Department of Food Science and Biotechnology, College of Natural Science, Andong National University, Andong-si Gyeongsangbuk-do, Republic of Korea (FAO Temporary Adviser)
- Dr Samuel Margerison, Pesticides Program, Australian Pesticides and Veterinary Medicines Authority, Kingston, ACT, Australia (FAO Temporary Adviser)
- Dr Francesca Metruccio, International Centre for Pesticides and Health Risk Prevention, Luigi Sacco Hospital, Milan, Italy (WHO Expert)
- Dr Matthew O'Mullane, Food Standards Australia New Zealand, Canberra, ACT, Australia (WHO Expert)
- Dr Rudolf Pfeil, Toxicology of Pesticides and Biocides, Federal Institute for Risk Assessment, Berlin, Germany (*WHO Expert*)
- Dr Xiongwu Qiao, Shanxi Academy of Agricultural Sciences, Shanxi, China (FAO Temporary Adviser)
- Dr Prakashchandra V. Shah, Inert Ingredient Assessment Branch, Registration Division, Office of Pesticide Programs, Environmental Protection Agency, Washington, DC, USA (WHO Expert)
- Ms Marla Sheffer, Orleans, Ontario, Canada (WHO Editor)
- Ms Trijntje van der Velde-Koerts, National Institute for Public Health and the Environment (RIVM), Bilthoven, the Netherlands (FAO Temporary Adviser)
- Dr Philippe Verger, Department of Food Safety and Zoonoses, World Health Organization, Geneva, Switzerland (WHO Joint Secretary)
- Dr Gerrit Wolterink, Centre for Substances and Integrated Risk Assessment, National Institute for Public Health and the Environment (RIVM), Bilthoven, the Netherlands (WHO Expert)
- Ms YongZhen Yang, Plant Production and Protection Division, Food and Agriculture Organization of the United Nations, Rome, Italy (FAO Joint Secretary)
- Dr Midori Yoshida, Section Chief, Division of Pathology, Biological Safety Research Centre, National Institute of Health Sciences, Ministry of Health, Labour and Welfare, Tokyo, Japan (WHO Expert)

Abbreviations used

ADI acceptable daily intake

ADME absorption, distribution, metabolism and elimination

ADP adenosine diphosphate

ae acid equivalent

AFC antibody-forming cell

AHH aryl hydrocarbon hydroxylase

ALP alkaline phosphatase
ALT alanine aminotransferase

APTT activated partial thromboplastin time

ARfD acute reference dose

AST aspartate aminotransferase ATP adenosine triphosphate

AU area unit

AUC area under the plasma concentration—time curve

BMD benchmark dose

BMD_L lower-bound confidence limit on the benchmark dose

BMDS benchmark dose software BrdU 5-bromo-2'-deoxyuridine

BROD benzyloxyresorufin *O*-dealkylase

BSP bromosulfophthalein BUN blood urea nitrogen

bw body weight

CAS Chemical Abstracts Service

CCPA 4-chloro-2-carboxyphenoxyacetic acid

CHL Chinese hamster lung
CHO Chinese hamster ovary
CI confidence interval

 $C_{\rm max}$ maximum concentration in plasma

CMC carboxymethylcellulose CP cyclophosphamide

CPIA 2-(4-chlorophenyl)isovaleric acid

cpm counts per minute

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 28124



