

# codex alimentarius commission



FOOD AND AGRICULTURE  
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Agenda Item 13

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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON PESTICIDE RESIDUES

42<sup>nd</sup> Session

Xian, China, 19 - 24 April 2010

#### ANALYSIS OF THE REFERENCES TO PESTICIDE RESIDUES IN CODEX STAN 229-1993 AND VARIOUS SECTIONS OF VOLUME 2 OF THE CODEX ALIMENTARIUS

*Prepared by the Codex Secretariat*

#### BACKGROUND

1. The 41<sup>st</sup> Session of the Codex Committee on Pesticide Residues (April 2009) agreed that the Codex Secretariat would prepare a paper containing an analysis of the references to pesticide residues in CODEX STAN 229-1993 and various sections of Volume 2 of the Codex Alimentarius, which had been discontinued for publication, for consideration at its next session.<sup>1</sup>
2. The 32<sup>nd</sup> Session of the Codex Alimentarius Commission (July 2009) noted that several Codex texts dealing with pesticide residues contained references to texts in Volume 2 of the Codex Alimentarius relating to pesticide residues which were still valid because they had not been replaced with other texts and had no separate identification number. The Commission further noted that the Committee on Pesticide Residues had requested the Secretariat to prepare a paper containing an analysis of these discrepancies in order to take a more informed decision on this matter at its next session.<sup>2</sup>

#### INTRODUCTION

3. All Codex texts related to pesticide residues were compiled in Volume 2 of the Codex Alimentarius. This and all volumes of the Codex Alimentarius (i.e. Volumes 1 to 14) have been discontinued for publication. All texts related to pesticide residues are currently available in electronic form on the Codex website: <http://www.codexalimentarius.net/>. Most of the publications relating to Volume 2 are available in English, French and Spanish and some of them in Arabic, Chinese and Russian.
4. Volume 2 of the Codex Alimentarius was divided into two volumes namely Volumes 2A and 2B. Volume 2 as such listed all maximum residue limits for pesticide residues adopted by the Commission up to 1993. The list of maximum residue limits for pesticide residues has been transferred into a Database which is regularly updated by the Codex Secretariat after adoption by the Commission and is available in English, French and Spanish on the Codex website.
5. Volume 2A was devoted to methods of analysis and sampling and was last updated 2000. Volume 2B was meant to include the Codex Classification of Foods and Feeds. This volume was never published.
6. Methods of analysis and sampling as contained in Volume 2A are divided into Sections 1 and 2 as follows:  
Section 1 *Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs (CAC/GL 33-1999)*

<sup>1</sup> ALINORM 09/32/24, paras. 9-10.

<sup>2</sup> ALINORM 09/32/REP, para. 98.

## Section 2 Analysis of Pesticide Residues

- 2.1 *Guidelines on Good Laboratory Practice in Pesticide Residue Analysis (CAC/GL 40-1993)*
- 2.2 *Portion of Commodities to which Codex MRLs apply and which is analyzed (CAC/GL 41-1993).*
- 2.3 *Recommended Methods of Analysis for Pesticide Residues (CODEX STAN 229-1993, Rev.1-2003).*

Two additional documents have been published afterwards namely:

- *Guidelines on the Use of Mass Spectrometry (MS) for Identification, Confirmation and Quantitative Determination of Residues (CAC/GL 56-2005)* and
- *Guidelines of Estimation of Uncertainty of Results (CAC/GL 59-2006).*

7. The *Recommended Methods of Analysis for Pesticide Residues, Guidelines on the Use of MS for Identification, Confirmation and Quantitative Determination of Residues* and the *Guidelines of Estimation of Uncertainty of Results* do not contain any reference to Volume 2.

### **REQUEST FOR ACTION BY THE CCPR**

8. The following documents contain references to Volume 2 that should be changed as indicated in the table. The Committee is invited to note the updated references (in *italics* and highlighted) in the relevant documents indicated in the Annex.

9. In addition to paragraph 8, the Committee may wish to consider the following:

#### ***Portion of Commodities to which Codex MRLs apply and which is analyzed (CAC/GL 41-1993)***

10. The *Portion of Commodities to which Codex MRLs apply and which is analyzed (CAC/GL 41-1993)* is currently presented as an independent document. The Committee may wish to consider whether the guidelines should be as a stand-alone document or should be an integral part of the *Recommended Methods of Analysis for Pesticide Residues (CODEX STAN 119-1993)* or of any other more relevant document developed by CCPR. The Committee may also wish to consider whether this document should be revised upon completion of the revision of the *Codex Classification of Foods and Feeds*.

#### ***Methods of Analysis for Pesticide Residues***

11. The *Recommended Methods of Analysis for Pesticide Residues (CODEX STAN 229-1993)* was revised in 2003. Additional methods of analysis for the determination of pesticide residues that may have been agreed to by the Committee and adopted by the Commission are not contained in this document.

12. In 1999, the Committee agreed that method descriptions provided by Codex Members and interested observer organizations would be compiled in a database to make it accessible on a broad basis and would be regularly updated and expanded based on their submissions. This web based methods data bank is accessible on the home page of the Joint FAO/IAEA Training and Reference Centre for Food and Pesticide Control (TRC):

<http://www-naweb.iaea.org/nafa/fep/News-Main-page.pdf>

13. The platform is also available for providing comments and sharing experience regarding the methods. Currently, it consists mostly of abstracts, methods principles and literature references, as well as links to relevant external web pages. The FAO/IAEA Joint Division of Nuclear Techniques in Food and Agriculture continues to provide the repository for methods for pesticide analysis proposed by Codex Members and considered by the Committee. It is however noted that the list of methods should be considered as a resource list and not a list of preferred or obligatory methods for Codex purposes.

14. The Committee may wish to consider the appropriateness of maintaining such a list and should clearly determine their status within Codex based on the advantages of having a repository list of methods available worldwide and also having this exercise done by CCPR.

15. It should be emphasized that the Terms of Reference of the Committee provides for the consideration of methods of analysis and sampling for the determination of pesticide residues in food and feed that can be adopted by the Codex Alimentarius Commission as references for international trade.

## ANNEX – References to Volume 2 in Codex texts for pesticide residues

**RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS (CAC/GL 33-1999)****4. Criteria for determining compliance**

4.1 Analytical results must be derived from one or more laboratory samples taken from the lot and received in a fit state for analysis. The results must be supported by acceptable quality control data, e.g. for instrument calibration and pesticide recovery - refer to *Codex Alimentarius, Volume 2, Section 4.2, Guidelines on good laboratory practice in pesticide residue analysis (CAC/GL 40-1993)*. Results should not be corrected for recovery. Where a residue is found to exceed an MRL, its identity should be confirmed and its concentration must be verified by analysis of one or more additional analytical portions derived from the original laboratory sample(s).

**References**

5. **Joint FAO/WHO Food Standards Programme (1993).** *Guidelines on Portion of commodities to which Codex Maximum Residue Limits apply and which is analyzed (CAC/GL 41-1993)*. Codex Alimentarius, Volume 2, Section 4.1, 389-404. FAO Rome. ISBN: 92-5-103271-8.

6. **Joint FAO/WHO Food Standards Programme (1993).** *Codex classification of foods and animal feeds (CAC/MISC 4-1993)*. Codex Alimentarius, Volume 2, Section 2, 147-366. FAO Rome. ISBN: 92-5-103271-8.

**GUIDELINES ON GOOD LABORATORY PRACTICE IN PESTICIDE RESIDUE ANALYSIS (CAC/GL 40-1993, Rev.1-2003)****Foreword**

- 1 Recommended Method of Sampling for the Determination of Pesticide Residues (CAC/GL 33-1999, Volume 2A, Part 1, Second Edition, Rome, 2000).
- 2 Portion of Commodities to which Codex Maximum Residue Limits Apply and which is analysed (CAC/GL 41-1993) (CAC/GL 33-1999, Volume 2A, Part 1, Second Edition, Rome, 2000).
- 3 List of Codex Maximum Residue Limits for Pesticides (*Maximum residue limits for pesticide residues as adopted by the Codex Alimentarius Commission are available at: <http://www.codexalimentarius.net>* Codex Alimentarius, Volume Two, Pesticide Residues in Food, Rome, 1993.)
- 4 Recommended Methods of Analysis of Pesticide Residues (CODEX STAN 229-1993 CAC/GL 33-1999, Volume 2A, Part 1, Second Edition, Rome, 2000).
- 5 Codex Classification of Food and Animal Feed (CAC/MISC 4-1993 Codex Alimentarius, Volume Two, Pesticide Residues in Food, Rome, 1993).

Footnote 2 to Section 4.4.4.1 (Validation of methods): *Codex Classification of Food and Animal Feed (CAC/MISC 4-1993)* Codex Alimentarius, Volume 2, 2<sup>nd</sup>-ed., Pesticide Residues in Food, pp. 147-365, FAO, 1993

Footnote 6 to Commodity Class (Table 5. Representative commodities/samples for validation of analytical procedures for pesticide residues): *Codex Classification of Food and Animal Feed (CAC/MISC 4-1993)* Codex Alimentarius, Volume 2, 2<sup>nd</sup>-ed., Pesticide Residues in Food, pp. 147-365, FAO, 1993

**PORTION OF COMMODITIES TO WHICH CODEX MRLs APPLY AND WHICH IS ANALYZED (CAC/GL 41-1993)**

Footnotes 1 and 2: For milk and milk products regarding fat soluble pesticides see *Recommended Methods of Sampling for the Determination of Pesticide Residues for compliance with MRLs (CAC/GL 33-1999)* and also *Report of the JMPR 2004, "Section 2.7 Revisited: MRLs for fat-soluble pesticides in milk and milk products", pages 24-25.* –Section 1 of this Volume.