CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 9 **CX/PR 22/53/11**

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PESTICIDE RESIDUES

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GUIDELINES FOR THE RECOGNITION OF ACTIVE SUBSTANCES OR AUTHORIZED USES OF ACTIVE SUBSTANCES OF LOW PUBLIC HEALTH CONCERN THAT ARE CONSIDERED EXEMPTED FROM THE ESTABLISHMENT OF MAXIMUM RESIDUE LIMITS OR DO NOT GIVE RISE TO RESIDUES

(AT STEP 7)

(Prepared by the Electronic Working Group chaired by Chile and co-chaired by India and the United Stated of America)

Codex members and observers wishing to submit comments at Step 6 on this document should do so as instructed in CL 2022/37-PR available on the Codex webpage[1]

BACKGROUND

1. CCPR50 (2018) agreed to prepare a discussion paper to provide guidance for pesticides which do not give rise to residues or whose residues do not give rise to public health concern and could therefore be exempted from the establishment of Codex maximum residue limits (CXLs). The Committee further agreed that this work would be carried through an Electronic Work Group (EWG) chaired by Chile and co-chaired by India and the United States of America for consideration by CCPR51 (2019). In taking this decision, the Committee noted that this was a new area, which lacked internationally harmonized guidelines and yet was increasing growth in the use of these compounds globally and therefore it merited exploring.[2]

2. CCPR51 (2019) considered the discussion paper and agreed to recommend new work to provide an international reference for harmonized concepts and criteria for the recognition of this set of pesticides. CAC42 (2019) approved the new work as contained in the project document submitted by CCPR50. The proposed guidelines would be developed through an EWG, chaired by Chile and co-chaired by India and the United States of America, working in English and Spanish, with the following terms of reference[3]:

    a) To develop common criteria for the identification of compounds of low public health concern that may be exempted of CXLs and/or that do not give rise to residues.

    b) Provide harmonized Codex definitions as appropriate.

    c) Provide examples of compounds that meet the criteria to facilitate the development of the guidelines (such examples will not necessarily remain in the final document).

    d) Based on the above considerations, present a proposed Guidelines for consideration at CCPR52.

3. CAC42 (2019) approved[4] the new work as contained in the project document[5] submitted by CCPR50.

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1 Codex webpage/Circular Letters: http://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/.
Codex webpage/CCCF/Circular Letters: https://www.fao.org/fao-who-codexalimentarius/committees/committee/related-circular-letters/en/?committee=CCPR

2 REP18/PR50, paras. 158 – 160

3 REP19/PR51, paras. 203 – 206

4 REP19/CAC42, para. 14 and Appendix V

5 REP19/PR51, Appendix IX

Work process of the EWG

4. The EWG was joined by several member countries and observer organizations and a Member Organization.

2019-2020

5. The EWG worked through the online platform and according to a work schedule included two rounds of comments. A total of 9 member countries[6] and 3 observer organizations[7] provided comments. As result revised guidelines were presented to the CCPR52.

2020-2021

6. In view of the rescheduling of CCPR52 from 2020 to 2021 due to the COVID19 pandemic, the EWG submitted an interim report summarizing the work done between 2019-2020 including the guidelines. Codex members and Observers were invited to submit comments at Step 3 on the guidelines through CL 2020/14-PR, in particular on the definitions and criteria. The comments received in reply this circular letter were considered by the EWG Chairs to prepare an improved version of the guidelines for further discussion by the EWG.

7. The EWG continued to work during 2020 – 2021 to provide revised guidelines for consideration by CCPR52. This stage included one round of comments within the EWG and a total of 8 member countries[8] and 1 observer organization[9] provided observations.

CCPR52 (2021)

8. The EWG Chair, introduced the item[10] and summarized the information provided in the working document i.e. background, work process, key points of discussion in the EWG, conclusions and recommendations for consideration by CCPR. The results of the pre-meeting[11] session held prior to CCPR52 were also presented, recalling the general support expressed by members and observers on the work carried out by the EWG.

9. CCPR52 (2021) noted general support to advance the guidelines to CAC44 for adoption at Step 5 and to re-establish the EWG, chaired by Chile and co-chaired by India and USA to:

    - further develop the Guidelines as presented in Appendix XII and taking into consideration the written comments submitted and those received during the pre-meeting and plenary sessions;
    - provide examples of compounds to facilitate the development of the Guidelines. Examples will not remain in the final document, but they could be made available to Codex members, on the Codex website and
    - to present a revised proposal with a view to finalizing the Guidelines at CCPR53 (2022) Based on the above considerations.

WORK PROCESS EWG

10. The EWG was joined by several member countries, observer organizations and a Member Organization. The list of participants is presented in Appendix III.

11. The EWG worked through the online platform and according to the work schedule included two rounds of comments.

12. The first draft was prepared by Chile, the United States and India, with the followings considerations for the members of the EWG:

    - The revised Guidelines incorporate most of the comments received in document CX PR 21/52/12-Add.1 and in the conference room document (CRDs) submitted by members and observers at CCPR52. Comments expressed by members and observers who attended the virtual-pre meeting were also considered.

6 Argentina, Chile, China, Costa Rica, France, Germany, Guatemala, United Kingdom and Uruguay
7 CropLife International, AgroCare and Tea & Herbal Infusions Europe
8 Argentina, Australia, Chile, Costa Rica, Ecuador, Germany, Guatemala and United Kingdom
9 AgroCare
10 CX PR 21/52/12
11 Report of the virtual pre-meeting: CRD 26

- The EWG Chairs proposed a change in the title of the guidelines:

  "Guidelines for the recognition of active substances or authorized uses of active substances of low public health concern that are considered exempted from the establishment of maximum residue limits or do not give rise to residues"

  The term "compounds" was replaced by "active substances" to be consistent throughout the text.

  The text "or authorized uses of active substances " was also added, since in some cases the exemptions apply to the authorized uses and not to the active substance.

  Finally, the word "Codex" was omitted from the title as the audience for the guideline is intended to be beyond Codex and because it may give the impression that exemptions could be granted by Codex.

- Throughout the document, corrections were made in consideration of the changes made to the title. Also corrections were made on the terminology to avoiding the use of different terms for the same concept.

- Definitions were provided according to those used in FAO/WHO or Codex texts where applicable.

13. Regarding the list of examples of substances (Appendix II) also suggestions were received. According TORs, examples will not remain in the final document, but they could be made available on the Codex website.

14. In the first round of the EWG, comments were received from Australia, Chile, Costa Rica, Finland, France, Guatemala, India, United Kingdom, Uruguay, and Croplife International. The most of commnets were considered in the preparation of the second draft of the guidelines.

15. In the second round comments were received from Chile, Germany, United Kingdom and the United States of America (USA).

RECOMMENDATIONS

16. CCPR is invited to consider the “Guidelines for the recognition of active substances or authorized uses of active substances of low public health concern that are considered exempted from the establishment of Maximum Residue Limits or do not give rise to residues” (see Appendix I) and determine its readiness for final adoption by CAC45 (2022) and if not, to identify key issues that would need further consideration in order to finalize the Guidelines at CCPR54 (2023).

APPENDIX I
(For comments)

GUIDELINES FOR THE RECOGNITION OF ACTIVE SUBSTANCES OR AUTHORIZED USES OF ACTIVE SUBSTANCES OF LOW PUBLIC HEALTH CONCERN THAT ARE CONSIDERED EXEMPTED FROM THE ESTABLISHMENT OF MAXIMUM RESIDUE LIMITS OR DO NOT GIVE RISE TO RESIDUES

PREFACE

1. Pesticides are substances used in agriculture to achieve health, quality and performance in crops through preventive and control of biotic factors that affect them. They include, inter alia, insecticides, fungicides, herbicides, acaricides, growth regulators, semiochemicals, and repellents.

2. Pesticides contain active substances that can be of chemical or biological origin.

3. Chemical pesticides could be synthetic or of natural origin.

4. Among pesticides of biological origin, a.k.a. biopesticides, for the purpose of this Guidance Document, make reference to active substances based on microorganisms (Microbial pesticides), compounds made from plants like plant extracts (Botanical pesticides), pheromones (Semiochemicals) and substances of animal origin. Therefore, substances referred to as biofertilizers, bioregulators or biostimulants as well as invertebrates such as insects and nematodes or other macroorganisms are not covered by this guidance document.

5. Sometimes authorized uses of the pesticides on food crops result in residues. Codex Alimentarius Commission (CAC) has set Maximum Residue Limits (MRLs) for pesticides on specific foodstuffs or food groups traded internationally to protect the health of consumers based on the recommendations of the Joint FAO/WHO Meeting on Pesticide Residues (JMPR). Some countries establish their own MRLs as a result of the evaluations carried out by national or regional agencies on risk assessment.

6. Codex MRLs (CXLs) have been adopted based on the recommendations of the JMPR evaluations and in accordance with Good Agricultural Practices (GAP) data. Food resulting from commodities that comply with the MRLs will be toxicologically acceptable (are considered to be safe for consumers). The question of whether an active substance or a specific authorised use of an active substance fulfills one or more criteria with the aim to exempt the substance or a specific authorized use of an active substance from the setting of maximum residue limits is the result of an evaluation of toxicology and residue behavior.

7. When authorized uses of pesticides do not produce residues or are identical and indistinguishable from certain natural components of the food commodities either considered to be of low or no toxicological significance, some regulations explicitly grant an exemption from the requirement to establish an MRL or state that an MRL is not required for the respective active substance or its authorized uses. However, there are no harmonized or internationally recognized criteria for MRL exemptions.

8. These guidelines represent a first step toward harmonisation or international recognition of criteria for exempting active substances, or their authorized uses, of low public health concern from the requirement to establish MRLs.

SECTION 1. SCOPE

9. These guidelines apply without prejudice to any other provisions of the Codex Alimentarius Commission (CAC) establishing MRLs for pesticides on foodstuffs.

10. These guidelines aim to make use of the different criteria used by some countries and international organizations to decide that it is not necessary to establish MRLs for an active substance or a specific authorized use of an active substance because a risk assessment concludes that they are oflow risk and low public health concern

11. These criteria are presented in an attempt to provide a consistent and harmonized approach for determining when an active substance or its authorized uses could be considered exempt from the establishment of MRLs.

12. These guidelines are intended to be used by the countries' competent authorities that do not have established criteria for the MRLs exemption for active substances or its authorized uses in their respective legislation.

SECTION 2. DEFINITIONS

13. **Acceptable daily intake (ADI):** It is the daily intake which, during an entire lifetime, appears to be without appreciable health risks to the consumer on the basis of all the known facts at the time of the evaluation. It is expressed in milligrams of the chemical per kilogram of body-weight.

14. **Active substance/ingredient:** means the part of the product that provides the pesticidal action.

15. **Active substances of low Public Health concern:** Active substances and their relevant metabolites considered of low or no toxicity to human and animal health based on risk assessments

16. **Acute Reference Dose (ARfD):** The acute RfD of a chemical is an estimate of the amount of a substance in food and/or drinking-water, normally expressed on a body-weight basis, that can be ingested in a period of 24 hours or less without appreciable health risk to the consumer on the basis of all known facts at the time of the evaluation.

17. **Authorized use:** Authorized use refers to the safe use of a pesticide based upon a use pattern determined at national level. It includes domestically approved, registered or recommended uses, which take into account public and occupational health and environmental safety considerations.

18. **Biological pesticide (Biopesticide):** A pesticide containing active substances made from living or dead microorganisms such as bacteria, algae, protozoa, viruses and fungi (See Microbial pesticides), pheromones and other semiochemicals (See Semiochemicals pesticides), and plants or parts of plants (See botanical pesticides), designed to repel, destroy or control any pest or regulate the growth of plants (For example *Bacillus amyloliquefaciens* strain FZB24, Trichoderma atroviride (formerly T. harzianum) strains IMI 206040 and T11).

19. **Botanical pesticide:** A pesticide containing active substances that consists of one or more components found in plants and obtained by subjecting plants or parts of plants of the same species to a process such as pressing, milling, crushing, distillation and/or extractions. The process may include further concentration, purification and/or blending, provided that the chemical nature of the components is not intentionally modified/altered by chemical and/or microbial processes (For example *Annona* spp. (Annonins, Squamocin), neem (Azadirachta indica)).

20. **Environmental exposure:** Levels of substances and levels arising from past human activities present in the environment (e.g. agriculture), in situations relevant for the respective environmental compartment.

21. **Feed**: Any single or multiple materials, whether processed, semi-processed or raw, which is intended to be fed directly to food producing animals.

22. **Food Group/Crop Group:** A collection of foods/crops subject to MRLs that have similar characteristics and similar potential for residue for which a common group MRL can be set. Representative commodities can be used to establish MRLs on an entire crop group or subgroup. The Codex classification of food and animal feed commodities describe the various food groups moving in trade and lists commodities included in each group.

23. **Good agricultural practice in the use of pesticides (GAP):** includes the nationally authorized safe uses of pesticides under actual conditions necessary for effective and reliable pest control. It encompasses a range of levels of pesticide applications up to the highest authorized use, applied in a manner which leaves a residue which is the smallest amount practicable. Authorized safe uses are determined at the national level and include nationally registered or recommended uses, which take into account public and occupational health and environmental safety considerations. Actual conditions include any stage in the production, storage, transport, distribution of food commodities and animal feed.

24. **Joint FAO/WHO meeting on pesticide residues (JMPR):** The "Joint Meeting on Pesticide Residues" (JMPR) is an expert *ad hoc* body administered jointly by Food and Agriculture Organisation and World Health Organisation. The JMPR has met annually since 1963 to conduct scientific evaluations of pesticide residues in food. It provides advice on the acceptable levels of pesticide residues in internationally traded food. The JMPR consists of experts who attend as independent internationally recognized specialists acting in a personal capacity and not as representatives of national governments.

25. **Maximum residue limit (MRL):** A Maximum Residue Limit (MRL) is the maximum concentration of a pesticide residue (expressed as mg/kg), recommended by the Codex Alimentarius Commission to be legally permitted in or on food commodities and animal feeds. MRLs are based on good agricultural practice (GAP) data and foods derived from commodities that comply with the respective MRLs are intended to be toxicologically acceptable.

    Codex MRLs which are primarily intended to apply in international trade, are derived from estimations made by the JMPR following:

    (a) Toxicological assessment of the pesticide and its relevant metabolites; and

    (b) Review of residue data from supervised trials and supervised uses including those reflecting national good agricultural practices. Data from supervised trials conducted at the highest nationally recommended, authorized or registered uses are included in the review. In order to accommodate variations in national pest control requirements, Codex MRLs take into account the higher levels shown to arise in such supervised trials, which are considered to represent effective pest control practices.

    Consideration of the various dietary residue estimates and determinations both at the national and international level in comparison with the ADI and the ARfD, should indicate that foods complying with Codex MRLs are safe for human consumption.

26. **Microbial pesticide: A pesticide containing** active substances used for the control or management of pests such as invertebrates, weeds or microbial pathogens of crops, made from microorganisms such as bacteria, protozoa, fungi and viruses. They include complete organisms (either viable or non-viable), organelles of the organism, metabolites produced by the organism, spores of the organism or occlusion bodies.

27. **Natural Substances:** Consist of one or more components that originate from nature, including but not limited to: plants, algae/microalgae, animals, minerals, bacteria, fungi, protozoans, viruses, viroids and mycoplasmas. They can either be sourced from nature or are nature identical synthesized or produced by micro-organisms.

28. **Pest:** means any species, strain or biotype of plant, animal or pathogenic agent injurious to plants and plant products, materials or environments and includes vectors of parasites or pathogens of human and animal diseaseand animals causing public health nuisance.

29. **Pesticide:** means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animal during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds or which may be administered to animals for the control of ectoparasites. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant, fruit thinning agent, or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilizers, plant and animal nutrients, food additives, and animal drugs.

30. **Pesticide residue:** Pesticide Residue means any specified substance in food, agricultural commodities, or animal feed resulting from the use of a pesticide. The term includes any derivatives of a pesticide, such as conversion products, metabolites, reaction products, and impurities considered to be of toxicological or ecotoxicological significance.

31. **Semiochemicals:** Active substances or mixtures of substances emitted by plants, animals, and other organisms that evoke a behavioural or physiological response in individuals of the same or other species. Different types of semiochemicals include:

    - Allelochemicals produced by individuals of one species that modify the behaviour of individuals of a different species (i.e., an interspecific or interspecies effect). They include allomones (emitting species benefits), kairomones (receptor species benefits) and synomones (both species benefit).
    - Pheromones produced by individuals of a species that modify the behaviour of other individuals of the same species (i.e. an intraspecific or intraspecies effect).
    - Straight-chained lepidopteran pheromones (SCLPs) are a group of pheromones consisting of unbranched aliphatics having a chain of nine to eighteen carbons, containing up to three double bonds and ending in an alcohol, acetate or aldehyde functional group. This structural definition encompasses the majority of known pheromones produced by insects in the order Lepidoptera, which includes butterflies and moths.

SECTION 3. CRITERIA FOR THE RECOGNITION OF ACTIVE SUBSTANCES OR AUTHORIZED USES OF ACTIVE SUBSTANCES OF LOW PUBLIC HEALTH CONCERN THAT ARE CONSIDERED EXEMPTED FROM THE ESTABLISHMENT OF MAXIMUM RESIDUE LIMITS

32. To grant the exemption from the establishment of MRLs to an active substance or a specific authorized use, the active substances or the specific use must meet the requirements of at least one of the following criteria.

33. Special consideration must be taken for those situations where the MRL exemption is linked to a certain pesticide GAP use.

34. It can be GAP dependent whether or not residues are expected; in case residues are expected or will occur according to GAP expected/measured residue levels have to be assessed in comparison with possible environmentally relevant exposure levels.

35. Therefore, every time a new use is requested, this new use should be assessed with regard to its exemption from MRLs (whether or not the active substance has already been exempted from MRL setting).

36. According to the criteria proposed below, active substances or specific authorized uses for which a risk assessment process concludes that there are not immediate or delayed harmful effects on human or animal health, directly or through drinking water , foods, or through aggregate effects, may be exempted from the need to establish MRLs.

Criterion 1. Active substances without hazardous properties identified

37. Active substances and their relevant metabolites for which, according to risk assessments, it has been considered that it is not necessary to establish health based guidance values (ADI/ARfD). It should be excluding cases that there are active substances that do not have ADI/ARfD established because they are genotoxic substances or due to lack of data to define these values.

38. Active substances and relevant metabolites that do not bioaccumulate or do not have the capacity to cause significantly toxic effects such as, corrosive, sensitizing, neurotoxic, immunotoxin, carcinogenic, mutagenic, reproductive, developmental or endocrine disrupting effects, among others at environmentally relevant levels.

Criterion 2. Active substances for which it is not possible to differentiate between the exposure associated with its use as pesticide with its environmental relevant exposure levels or its other uses in the food chain

39. Active substances which, by themselves, are food components or have low-toxicity of no human or animal health concern.

40. Active substances for which environmental exposure associated with the food substance cannot be differentiated from the one linked to the use as a pesticide (Botanical pesticides, natural chemical substances)

41. Food and/or feed items which are known allergens should be subject to additional requirements, not related to risk from pesticides.

42. Measurable environmental levels should be assessed carefully and taken into consideration when deciding on the use of this criterion For instance, where the exposure through residues from pesticides use does not add significantly to the exposure from environmentally relevant levels or other authorised uses, exemptions from establishing MRLs may be granted. Case by case considerations are needed taking into account the specificities of each substance and the exposure levels.

Criterion 3. Active substances for which no consumer exposure linked to the mode of application is foreseen

43. This criterion includes substances such as pheromones and other semiochemicals dispersed through dispensers for mating disruption purposes where the consumer's exposure from the application level is similar to the environmental exposure level of the substance.

Criterion 4. Microorganisms that are not of human or animal health concern

44. This criterion also concerns microbial active substances that may potentially produce toxins/metabolites. Such microorganisms should only be considered exempted from the establishment of MRL if it can be proven that such toxins/metabolites are not present on edible parts of the treated crops, at levels on or in the treated crop that will either exceed environmental relevant levels and potentially cause harm to human and animal health.

45. Microorganisms that are primary human or animal pathogens (excluding target species) could not be considered exempted from the establishment of MRL. For microorganisms that are taxonomically close relatives to such pathogen microorganisms, a MRL exemption would be possible only if evidence is provided to prove that they do not negatively affect human or animal health.

APPENDIX II

(For information)

EXAMPLES OF ACTIVE SUBSTANCES

The list of examples are not exhaustive nor indicative of any agreed list recommended for international harmonization. They are presented to support better understanding of the provisions in the Guidelines and will not remain in the final document, but they could be made available on the Codex website.

Criterion	Examples of subtances/microorganisms
Criterion 1. Active substances without hazardous properties identified	1. Calcium hydroxide
	2. Fructose
	3. Hydrogen peroxide
	4. Sodium chloride
	5. Sodium hydrogen carbonate
	6. Sucrose
	7. Vinegar
	8. L-ascorbic acid (Vitamin C)
Criterion 2. Active substances for which it is not possible to differentiate between the exposure associated with its use as pesticide with its environmental relevant exposure leves or its other uses in the food chain.	9. Plant oils/ Vegetable oils Rapeseed oil, Castor oil, corn oil, rice bran oil, cotton seed oil, Sesame oil, linseed oil, olive oil, peanut oil, Tea tree oil, Neem oil, Karanj oil, Mahua (Madhuca) oil.
	10. Plant essential oils Clove oil, citronella oil orange oil, spearmint oil, citrus oil, fennel oil, cederwood oil, lemongrass and, rosemary oil, turmeric oil, thyme oil, vetiver oil, catnip oil. eucalyptus leaf oil and extract.
	11. Essential oil constituents Geraniol eugenol, linalool, limonene, citronellal, thymol, carvone, 1,8-cineole, p-cymene, ar-turmerone, gingerols, pinene, terpine-ol.
	12. *Annona* spp. (*Annonins, Squamocin*)
	13. Brassinolides
	14. *Chenopodium* oil and extract
	15. Garlic extract
	16. Giberellic acid (GA3)
	17. Karanjin
	18. *Ryania* spp. (Ryanodines)
	19. *Reynoutria sachalinensis* extract
	20. Rocaglamides (*Aglaia spp.*)
	21. Soaps (fatty acid salts)
	22. *Sophora flavescens* (Matrine, oxymatrine)
	23. Sulphur
	24. Triacontanol
	25. Pheromones

Criterion	Examples of subtances/microorganisms
Criterion 3. Active substances for which no consumer exposure linked to the mode of application is foreseen	26. (Z)-8-Dodecen-1-yl-acetate
	27. (E)-8-Dodecen-1-yl-acetate
	28. (Z)-8-Dodecen-1-ol
	29. (E/z)-8-Dodecen-1-yl-acetate
	30. (E, E)-8,10-Dodecadien-1-ol
	31. 1-Dodecanol
	32. (E)-11-Tetradecen-1-ol
	33. Gossyplure
	34. 9- Hexadecenal, 11-Hexadecenal, and Hexadecenol
	35. Hexadecadienyl acetate
	36. Rescalure
	37. (E)-11-Tetradecen-1-yl-ol acetate
Criterion 4. Microorganisms that are not of human or animal health concern	38. *Trichoderma asperellum* (formerly T. *harzianum*) strains ICC012, T25 and TV1
	39. *Trichoderma atroviride* (formerly T. *harzianum)* strains IMI 206040 and T11
	40. *Trichoderma gamsii* (formerly T. viride) strain ICC080
	41. *Trichoderma harzianum* strains T-22 and ITEM 908
	42. *Trichoderma polysporum* IMI-206039
	43. *Streptomyces* strain K61 (formerly S. griseovirides)
	44. *Bacillus amyloliquefaciens* strain FZB24
	45. *Bacillus amyloliquefaciens* strain MBI600
	46. Bacillus amyloliquefaciens subsp. Plantarum D747
	47. *Bacillus firmus* I – 1582
	48. *Bacillus subtilis* str. QST 713
	49. *Beauveria bassiana* strain ATCC 74040
	50. *Beauveria bassiana* strain GHA
	51. *Helicoverpa armigera* nucleopolyhedrovirus
	52. *Bacillus sphaericus*
	53. *Chaetomium globosum*
	54. Entomopathogenic nematodes (EPNs)
	55. *Fusarium oxysporum strain Fo47*
	56. *Metarhizium anisopliae*
	57. *Paecilomyces lilacimus*
	58. *Pseudomonas fluorescens*
	59. *Trichoderma viride*
	60. *Trichoderma virens*
	61. Nucleopolyhedro virus (NPV) of *Spodoptera litura*
	62. *Verticillium lacanii*

APPENDIX III

LIST OF PARTICIPANTS

Chair: Chile	
Eduardo Aylwin Agencia Chilena para la Calidad e Inocuidad Alimentaria (ACHIPIA) (Presidente)	Roxana Vera Muñoz Servicio Agricola y Ganadero (SAG) (Asistente del Presidente)
Co-chairs	
India	**United States**
Dr. S.C. Dubey (Co-chair) Assistant Director General Plant Protection and Biosafety Indian Council of Agricultural Research	Aaron Niman Environmental Health Scientist LCDR, U.S. Public Health Service Health Effects Division, Office of Pesticide Programs Office of Chemical Safety and Pollution Prevention Environmental Protection Agency

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Registry of Agrochemicals and Biologics of the National Service of Agrifood Health and Quality (SENASA)

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