codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 6 (d) **CX/PR 10/42/7**

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CODEX COMMITTEE ON PESTICIDE RESIDUES

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PROPOSED DRAFT PRINCIPLES AND GUIDANCE ON THE SELECTION OF REPRESENTATIVE COMMODITIES FOR THE EXTRAPOLATION OF MRLS TO COMMODITY GROUPS

(At Step 3 of the Procedure)

Governments and interested international organizations are invited to submit comments in writing **to**: Ms. Duang Lifang, Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), P.R China, Fax: +86-10-59194252, email: ccpr@agri.gov.cn **with copies to** the Secretariat, Codex Alimentarius Commission, Joint WHO/FAO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy, by email codex@fao.org or fax: +39-06-5705-4593 **by 15 March 2010.**

Proposed Draft Principles and Guidance on the Selection of Representative Commodities for the Extrapolation of MRLs to Commodity Groups

Table of Contents

INTRODUCTION 2

GENERAL PRINCIPLES 3

PROCEDURES 3

- Good Agricultural Practices (GAPs) 4
- Alternative Representative Commodities 4
- Precedence in Selection of Representative Commodities 4
- Definition of Similar Residues 4
- Use and Combination of Data Sets 4
- Wider Extrapolations 4
- Table 1. Examples of the Selection of Representative Commodities 5

ADDENDUM I, Detailed Justification 6

- A. Bulb Vegetables 6
- B. Fruiting Vegetables, other than Cucurbits 22

ADDENDUM II, Background Information Regarding Representative Commodities 45

INTRODUCTION

Residue extrapolation is the process by which the residue levels on representative commodities are utilized to estimate residue levels on related commodities in the same commodity group or subgroup for which trials have not been conducted. Representative commodities are chosen based on their commercial importance and the similarity of their morphology and residue characteristics to other related commodities in the group or subgroup. Ideally representative commodities are the most economically important commodities in production or consumption in a group or subgroup and have a greater dietary burden and have residue characteristics similar to other members of the group or subgroup. Residue extrapolation is a common consideration utilised by regulators internationally for ensuring that data requirements are only at a level that is scientifically justified in conducting risk assessment and to ensure the regulatory process does not become unnecessarily burdensome especially for minor crops.

The objective of this document is to (1) propose criteria for the selection of representative commodities; (2) propose example representative commodities and (3) provide a detailed justification for the selection of the representative commodities (Addendum I). Additional background information regarding the status of representative commodities is provided in Addendum II to this document.

GENERAL PRINCIPLES

Representative commodities within each Codex Classification commodity group and subgroup will be selected and proposed, based on consideration of all available information. The following principles will be used for the selection of representative commodities:

- A representative commodity is most likely to contain the highest residues.
- A representative commodity is likely to be major in terms of production and/or consumption.
- A representative commodity is most likely similar in morphology, growth habit, pest problems and edible portion to the related commodities within a group or subgroup.

To facilitate the global use of the commodity groups for MRLs, alternative representative commodities may be selected giving flexibility for use of residue research conducted in different countries or regions that may vary due to regional differences in dietary consumption and/or areas of production for certain commodities.

Table 1 in this document is provided to (1) separate the selection of representative commodities from the Codex Classification itself; (2) propose representative commodities in parallel with the respective Codex commodity grouping classification revisions; (3) provide flexibility on the selection of representative crops and (4) provide guidance not only to CCPR and CCPR members, but also to JMPR, product manufacturers and other data generators.

Addendum I to this document provides detailed background information (bulb vegetables and fruiting vegetables, other than Cucurbits) regarding production, consumption, MRLs and characteristics and justification for selection of the representative commodities according to the indicated principles. In all cases, it is assumed that all of the commodities covered by a commodity group MRL utilize the similar use pattern or GAP.

Addendum II to this document provides more detailed background information regarding residue extrapolations and history and use by JMPR.

PROCEDURES

As proposals for the revision of the Codex Classification are made and revised commodity groupings are developed and provided to the CCPR for their review, proposals on representative commodities will also be provided in parallel with the respective commodity grouping revisions and will advance through the CCPR step process for adoption by the CAC.

As comments are addressed on the revisions of the classification and the proposed representative commodities and these are approved by the CCPR and accepted by the CAC, two separate documents will be created and maintained: (1) the revised Codex Classification (without mention of representative commodities) and (2) principles and guidance on the selection of representative commodities.

The JMPR may be advised to use the representative commodities adopted by the CAC. However, JMPR may use other representative commodities (including those which may be specifically requested by member nations) on a case-by-case basis. The JMPR will be requested to provide to the CCPR justification for the use of any alternative representative commodities, based on all available data.

Good Agricultural Practices (GAPs)

The application of the three principles in the selection of representative commodities is based on the assumption that all of the commodities, covered by the commodity group MRL, utilize the same use pattern or GAP.

Alternative Representative Commodities

To facilitate the global use of the commodity groups for MRLs, alternative representative commodities may be selected giving flexibility for use of residue research conducted in different countries or regions that may vary due to regional differences in dietary consumption and/or areas of production for certain commodities. Table 1 in this document proposes representative commodities for commodity groups. Depending on country or regional differences, alternative representative commodities may be proposed by a country. For example, leeks may be proposed as an alternative representative commodity for green onions in the green onion subgroup of Bulb Vegetables.

Precedence in Selection of Representative Commodities

In situations where a representative commodity does not meet all three of the above principles, a representative commodity should at least meet the first two principles (likely to contain the highest residues and also major in terms of production and consumption).

Definition of Similar Residues

When representative commodities are utilized to extrapolate to other members of a commodity group, it is based on the assumption that the representative commodities will have similar residues. "Similar residues" are difficult to define numerically, because this would require knowing actual residues for all commodities in a group. Rather, the expectation of similar residues is based upon consideration of all of the information provided in Addendum I of this document. This information will be prepared for each commodity group and will form the basis of the proposals for representative commodities.

Use and Combination of Data Sets

When representative commodities are utilized to extrapolate MRLs to other members of the commodity group, MRLs may be calculated as either the highest MRL calculated for any of the individual representative commodities or the residue data may be combined and the MRL calculated from the larger combined data set.

Wider Extrapolations

A representative commodity should meet at least the first two principles described above, i.e. likely to contain the highest residues and also major in terms of production and consumption. However, it may not always fit well with the growth habits, or pest problems of morphology within one group or subgroup. In such situations, extrapolations beyond the members of a commodity group may be appropriate. These can be considered on a case-by-case basis when commodities (with similar GAPs) have similar size, shape and surface area. Examples of these possible wider extrapolations include (1) translation of certain stone or pome fruit MRLs to a tropical fruit; (2) where residues are all <LOQ for pre-emergent herbicide uses and (3) seed treatments for non systemic pesticides.

Table 1. Examples of the Selection of Representative Commodities

Codex Group / Subgroup	Examples of Representative Commodities [1,2]	Extrapolation to the following commodities
Group 009 Bulb Vegetables	(1) Bulb onion and (2) Spring Onion	Bulb vegetables (VA 0035): Chives; Chives, Chinese; Daylilly; Elegans hosta; Fritillaria (bulb); Fritillaria (green); Garlic; Garlic chives; Garlic, Great-headed; Garlic, Serpent; Kurrat; Lady's leek; Leek; Lily; Onion, Beltsville bunching; Onion, Bulb; Onion, Chinese; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Shallot; Silverskin onion; Spring onion; Tree onion; Wild leek
Subgroup 009A, Bulb Onions	Bulb onion	Bulb vegetables (VA 2031): Daylilly; Fritillaria (bulb); Garlic; Garlic, Great-headed; Garlic, Serpent; Lily; Onion, Bulb; Onion, Chinese; Shallot; Silverskin onion
Subgroup 009B, Green Onions	Spring onion (Leek may be an alternative)	Green Onions (VA 2032): Chives; Chives, Chinese; Elegans hosta; Fritillaria (green); Garlic chives; Kurrat; Lady's leek; Leek; Onion, Beltsville bunching; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Spring onion; Tree onion; Wild leek
Group 012 Fruiting vegetables, other than Cucurbits	(1) Tomato and (2) Sweet Pepper and (3) Chili Pepper or small variety of Eggplant	Fruiting vegetables, other than Cucurbits (VO0050): African eggplant; Bush tomato; Cherry tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Ground cherries, Martynia; Okra; Pea eggplant; Pepino; Peppers, chilli; Peppers, sweet; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Thai eggplant
Group 012A, Tomatoes	Tomato	Tomatoes (VO 2045): Bush tomato; Cherry tomato; Cocona; Currant tomato; Garden huckleberry; Goji berry; Ground cherries; Sunberry; Tomatillo; Tomato
Group 012B, Peppers	(1) Sweet Pepper and (2) one cultivar of chili pepper	Peppers (VO 0051): Martynia; Peppers, chilli; Peppers, sweet
Group 012C, Eggplants	(1) One cultivar of large variety eggplant and (2) one cultivar of small variety eggplant	Eggplants (VO 2046): African eggplant; Eggplant; Pea eggplant; Scarlet eggplant; Thai eggplant
Group 012D, Other	- -	Okra, Roselle, Pepino

[1] Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.

[2] See Addendum I to this document for detailed background information (bulb vegetables and fruiting vegetables, other than Cucurbits) regarding production, consumption, MRLs and characteristics and justification for selection of the representative commodities according to the indicated principles.

ADDENDUM I, Detailed Justification

A. Bulb Vegetables

Proposed representative commodities for Group 009 Bulb Vegetables from Table 1 are as follows:

Codex Group / Subgroup	Examples of Representative Commodities [1,]	Extrapolation to the following commodities
Group 009 Bulb Vegetables	(1) Bulb onion and (2) Spring Onion	Chives; Chives, Chinese; Daylilly; Elegans hosta; Fritillaria (bulb); Fritillaria (green); Garlic; Garlic chives; Garlic, Great-headed; Garlic, Serpent; Kurrat; Lady's leek; Leek; Lily; Onion, Beltsville bunching; Onion, Bulb; Onion, Chinese; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Shallot; Silverskin onion; Spring onion; Tree onion; Wild leek
Subgroup 009A, Bulb Onions	Bulb onion	Daylilly; Fritillaria (bulb); Garlic; Garlic, Great-headed; Garlic, Serpent; Lily; Onion, Bulb; Onion, Chinese; Shallot; Silverskin onion
Subgroup 009B, Green Onions	Spring onion	Chives; Chives, Chinese; Elegans hosta; Fritillaria (green); Garlic chives; Kurrat; Lady's leek; Leek; Onion, Beltsville bunching; Onion, fresh; Onion macrostem; Onion, Pearl; Onion, potato; Onion, Welsh; Spring onion; Tree onion; Wild leek

[1] Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.

A.1. Introduction – Bulb Vegetables

There are many vegetables in the plant family 'Liliaceae' that are grown commercially and sold and consumed in most regions and countries. There are over 500 *Allium* species alone, but not all are economically important as a food crop. The Codex Classification of Foods and Animal Feeds currently includes 12 commodities in Group 009 Bulb Vegetables. The proposed draft revision includes 10 commodities in Group 009A (Bulb onions) and 17 commodities in Group 009B (Green Onions).

All commodities proposed in the new commodity group are from the same botanical family, Liliaceae, which is also called Amaryllidaceae and/or Alliaceae, and 22 of them are from the genus *Allium*. The original Bulb vegetable Group 009 contained only commodities from the genus *Allium* except for the genus *Foeniculum* (Fennel, bulb; Fennel, Italina and Fennel, Roman). Four proposed commodities that are not *Allium* species include the Daylily [*Hemerocallis fulva* (L.) L.]; *Elegans hosta*, [*Hosta sieboldiana* (Hook.) Engl.]; Fritillaria, [*Fritillaria camchatcensis* (L.) Ker. Gawl.]; and Lily [*Lilium* spp.]. These commodities are very similar to some of the *Allium* species in terms of physical characteristics and cultural practices.

Two subgroups are proposed (1) Group 009A, Bulb Onions and (2) Group 009B, Green Onions. Bulb onions are bulb vegetables with mature bulbs. The entire bulb may be consumed after removal of the parchment-like skin. A maximum residue limit for bulb onions would apply to the whole commodity after removal of roots and adhering soil and whatever parchment skin is easily detached. Green onions are bulb vegetables with immature bulbs. The immature bulbs and leaves and stems may also be consumed. A maximum residue limit for green onions would apply to the whole vegetable after removal of roots and adhering soil.

A.2. Production – Bulb Vegetables:

Bulb onions and green onions are the most widely grown bulb vegetables in the world with the largest acreage and they represent the majority of the bulb vegetable markets.

Table 2 provides bulb vegetable production in various countries that are members of the International Crop Grouping Consulting Committee (ICGCC) and information on major bulb vegetable production acreages and yield is provided in Table 3 (FAO Statistics). The major world bulb onion producing region is Asia followed by Europe, Africa, and then North America (Table 3). The major green onion producing regions are Asia followed by Central America and then Africa, while the major garlic producing regions are Asia, Europe, South America, Africa, and North America (Table 3).

Production of Other Bulb Vegetables:

Garlic: Asia leads the world in garlic production and China produces over 50% of the world supply of garlic.

Shallot: Production regions include Europe with small scale production in the U.S. includes 50 acres in Washington State for dried shallots and about 950 acres in Louisiana and other southern states for green shallots. Ontario, Quebec and British Columbia, Canada with 2200 lbs of seed bulbs yield on average 10,000 to 15,000 lbs of shallots (CHAPUT 2004b).

Fritillaria: Production in U.S.: Fritillarias are distributed in 15 States in the United States. Most widely distributed are *Fritillaria atropurpurea* Nutt (spotted fritillary) in 13 States, and Fritillaria pudica (Pursh) Spreng (yellow fritillary) in 11 States. There is no specific production data for fritillarias but they are grown for their edible bulb and leaves.

Leek: Domesticated in the eastern Mediterranean and now are cultivated throughout the world. Crop yields 500 cases per acre (205 cases/ha) in Ontario, Canada (CHAPUT 2004a). Production in U.S.: Includes California, New Jersey, Michigan, and Virginia, and a total of 594 acres in California in 2004 (SISCO 2004a).

Daylily and Lily: Daylilies are reportedly grown in China, Japan, and Europe (as ornamentals) and Lilies in Japan (Table 2).

Fresh onion: Grown in China and Japan which grew 751 acres producing 5350 tons in 2000 (NAGASAWA 2004b).

Lady's leek: Widely distributed in the US, Canada and Mexico.

Chinese chive: Both China and Japan have reported production of Chinese chives (Table 2).

Macrostem onion: Grown in China and Korea which has reported 288 ha with 4,290 M/T (OH 2004a).

Tree onion: Tree onion is reported to be grown in Asia and the US (Florida).

Welsh onion: Grown in Europe, China, Japan, and Korea (Table 2). Also grown in California and Hawaii, where in 2002 production was 125 acres (KAWATE 2004a). It is also grown in Europe, China, Japan, and Korea (Table 2).

Table 2. Bulb Vegetable Production Regions/Countries (Based on FAO Statistics and information provided by the members of the International Crop Grouping Consulting Committee)

Commodites	US	Australia	Canada	China	Japan	Korea	Mexico	Africa	Europe	Central America	South America
Chinese chive	√			√	√						
Chive	√		√	√	√				√		
Daylily	√			√	√				√		
Elegans hosta					√	√					
Fritillaria	√		√								
Garlic	√	√	√	√	√	√	√	√	√	√	√
Canadian garlic	√		√						√		
Great headed garlic	√					√					
Leek	√		√						√		
Lady's leek	√		√				√				
Lily					√						
Beltsville bunching onion	√		√		√	√					
Bulb onion	√	√	√	√	√	√	√	√	√	√	√
Chinese onion	√				√						
Fresh onion				√	√						
Green onion	√	√	√	√	√	√	√	√	√	√	√
Macrostem onion						√					
Potato onion	√										
Tree onion	√										
Welsh onion	√			√	√	√			√		
Shallot	√		√						√		
Wild leek	√		√								
Wild onion	√		√				√				

Note: Shaded commodities are grown world-wide.

Table 3. Production of Major Bulb Vegetables by Country and Region in 2007 (Based on FAO Statistics 2007)

Countries	Bulb Onion	Green Onion/Shallot	Garlic
Australia	5,000 Ha 245,000 Tonnes	NA	NA
Canada	6,962 Ha 237,147 Tonnes	NA	NA
China	1,000,900 Ha 20,552,000 Tonnes	27,500 Ha 805,000 Tonnes	692,400 Ha 12,088,000 Tonnes
India	619,500 Ha 8,178,300 Tonnes	NA	147,000 Ha 645,000 Tonnes
Japan	24,500 Ha 1,165,000 Tonnes	25,000 Ha 560,000 Tonnes	2,000 Ha 20,000 Tonnes
Korea, Republic of	15,000 Ha 855,000 Tonnes	20,000 Ha 535,000 Tonnes	27,500 Ha 325,000 Tonnes
Korea, Democractic People's Republic of	7,000 Ha 84,000 Tonnes	7,500 Ha 98,000 Tonnes	8,500 Ha 95,000 Tonnes
U.S.	64,460 Ha 3,602,090 Tonnes	NA	12,060 Ha 221,810 Tonnes
Africa	312,840 Ha 5,033,530 Tonnes	44,350 Ha 538,525 Tonnes	38,873 Ha 356,610 Tonnes
Central America	52,665 Ha 1,371,916 Tonnes	12,580 Ha 150,435 Tonnes	6,135 Ha 50,620 Tonnes
North America	71,427 Ha 3,839,287 Tonnes	NA	12,060 Ha 221,810 Tonnes
South America	157,124 Ha 3,795,326 Tonnes	17,050 Ha 154,500 Tonnes	41,435 Ha 351,164 Tonnes
Asia	2,425,440 Ha 41,556,882 Tonnes	112,360 Ha 2,319,666 Tonnes	994,489 Ha 13,881,086 Tonnes
Europe	409,844 Ha 8,252,166 Tonnes	15,415 Ha 234,300 Tonnes	106,719 Ha 785,845 Tonnes
World Total	3,451,941 Ha 64,475,126 Tonnes	208,069 Ha 3,588,336 Tonnes	1,204,711 Ha 15,686,310 Tonnes

A.3. Consumption – Bulb Vegetables:

The bulb vegetable commodities in the proposed crop group are herbaceous annual, biennial or perennial plants cultivated as annuals and grown for their bulb and/or its leaf blades and leaf bases and stalks. Consumption data in the FAOSTAT website only includes the general category of "onion" so these data are not included in this document. However, all of the bulb onions and green onions are used similarly and they are cooked or eaten raw in vegetable dishes, in soups or salads, and used fresh or dehydrated for flavors. Many of these bulb vegetables also have medicinal properties. There are no processed commodities for any members of the Bulb vegetable group. The portion analyzed compared to edible portions consumed are shown in Table 4.

Table 4. Bulb Vegetable Portion Analyzed for the RAC and the Edible Portion Consumed.

Commodity	**Commodity Analyzed**	**Edible Portion Consumed**
Daylily	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Young shoots, flowers, and bulbs.
Fritillaria, bulb	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Bulb
Garlic	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Cloves (small bulbs enclosed in scales).
Garlic, Great-headed	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Cloves (small bulbs enclosed in scales).
Garlic, Serpent	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Flower stalk or scape and bulb.
Lily	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Bulblets and leaves.
Onion, Bulb	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Whole bulb after peeling
Onion, Chinese	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Bulb
Shallot	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Bulb with scales removed for dry
Silverskin onion	Whole bulb commodity after removal of roots and adhering soil and whatever parchment skin is easily detached	Bulb

Table 4 (continued). Bulb Vegetable Portion Analyzed for the RAC and the Edible Portion Consumed.

Commodity	Commodity Analyzed	Edible Portion Consumed
Chives	Whole vegetable after removal of roots and adhering soil	Leaves, pseudostems, and immature bulb
Chives, Chinese	Whole vegetable after removal of roots and adhering soil	Mainly leaves and young inflorescences (buds and stalks) flower
Elegans hosta	Whole vegetable after removal of roots and adhering soil	Flower is edible, and young leaves and leaf stalks are eaten when soft.
Fritillaria (green)	Whole vegetable after removal of roots and adhering soil	Leaves and young inflorescences (buds and stalks)
Garlic chives	Whole vegetable after removal of roots and adhering soil	Leaves and young inflorescences (buds and stalks)
Kurrat	Whole vegetable after removal of roots and adhering soil	Whole plant without leaves
Lady's leek	Whole vegetable after removal of roots and adhering soil	Leaves and bulb
Leek	Whole vegetable after removal of roots and adhering soil	Leaves and bulb
Onion, Beltsville bunching	Whole vegetable after removal of roots and adhering soil	Bulblet and leaves
Onion, fresh	Whole vegetable after removal of roots and adhering soil	Leaves and pseudostems.
Onion, macrostem	Whole vegetable after removal of roots and adhering soil	Corn-like shoots and bulbs.
Onion, pearl	Whole vegetable after removal of roots and adhering soil	Bulb
Onion, potato	Whole vegetable after removal of roots and adhering soil	Bulb after outer scales
Onion, Welsh	Whole vegetable after removal of roots and adhering soil	Thick leaves and leaf bases, and seeds.
Spring Onion	Whole vegetable after removal of roots and adhering soil	Whole plant, leaves, pseudostems and immature bulb
Tree Onion	Whole vegetable after removal of roots and adhering soil	Top bulblets or bulbils and leaves
Wild leek	Whole vegetable after removal of roots and adhering soil	Whole plant without roots

A.4. Residue Tolerances – Bulb Vegetables:

Table 5 shows bulb vegetable MRLs from Codex, the EU and the US. Green onion residue tolerances are generally higher than bulb onion MRLs. During pesticide applications the stalk and stems of green onions are exposed to pesticide applications and hence the stalk and stem of green onion are also analyzed. This supports the establishment of the two proposed subgroups. There are many established MRLs for the proposed representative commodities (bulb onions and spring onion) which supports the establishment of these commodities as representative crops for their respective subgroups.

Table 5. Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; MRLs as of February 11, 2009)

	Garlic (ppm) (Group 009A, Bulb Onions)			Garlic, Great Headed (ppm) (Group 009A, Bulb Onions)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Acetamiprid	0.02	--	(0.01)	0.02	--	--
Azinphos-methyl	2	(0.5)	(0.05)	2	(0.5)	--
Azoxystrobin	1	--	(0.05)	1	--	--
Bensulide	0.1	--	--	0.1	--	--
Boscalid	3	--	(0.5)	3	--	--
Bromoxynil	0.1	--	(0.05)	0.1	--	--
Captan	0.05	--	(0.02)	0.05	--	--
Carbaryl						
Carboxin	0.2	--	(0.1)	0.2	--	--
Carfentrazone-ethyl	0.1	--	(0.01)	0.1	--	--
Chlorothalonil	0.5	--	0.5	0.5	--	--
Chlorpyrifos	0.5	--	(0.05)	0.5	--	--
Clethodim	0.2	0.5	0.5	0.2	--	--
Cymoxanil	0.05	--	0.05	0.05	--	--
Cypermethrin	0.1	--	0.1	0.1	--	--
Cyprodinil	0.6	--	(0.3)	0.6	--	--
Cyromazine	0.2	--	(0.05)	0.2	--	--
DCPA	1	--	1	1	--	--
Deltamethrin	0.1	--	0.1	0.1	--	--
Diazinon	0.75	--	(0.01)	0.75	--	--
Dicloran	5	--	(0.5)	10	--	--
Dimethenamid	0.01	0.01	0.01	0.01	--	--
Dimethomorph	2	--	(0.1)	2	--	--
Ethofumesate	0.25	--	(0.05)	0.25	--	--
Fluazifop	0.5	--	2	0.5	--	--
Fludioxonil	0.02	--	0.05	0.02	--	--
Flumioxazin	0.02	--	0.05	0.02	--	--
Fluopicolide	7	--	(0.01)	7	--	--
Fluroxypyr	0.03	--	0.05	0.03	--	--
Fosetyl-Al	0.5	--	2	0.5	--	--

Note: That shaded cells indicate that the MRL is established for the respective crop group rather than for the individual commodity.

Table 5 (continued). Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Garlic (ppm) (Group 009A, Bulb Onions)			Garlic, Great Headed (ppm) (Group 009A, Bulb Onions)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Gamma Cyhalothrin	0.1	--	--	0.1	--	--
Glyphosate	0.2	--	(0.1)	0.2	--	--
Inorganic bromide resulting from fumigation	50	--	(0.05)	20	--	--
Iprodione	0.1	--	0.2	0.5	--	--
Lambda Cyhalothrin	0.1	--	(0.02)	0.1	--	--
Malathion	8	--	(0.02)	8	--	--
Maleic hydrazide	15	--	15	15	--	--
Mancozeb	0.5	--	(0.1)	0.5	--	--
Mandipropamid	0.05	--	(0.01)	0.05	--	--
Maneb	7	(0.5)	(0.1)	7	--	--
Metalaxyl	3	--	(0.5)	3	--	--
Methyl Parathion	1	--	(0.02)	1	--	--
Oxamyl	0.2	--	(0.01)	0.2	--	--
Oxydemeton-methyl	0.05	--	(0.02)	0.05	--	--
Oxyfluorfen	0.05	--	0.05	0.05	--	--
Paraquat dichloride	0.1	--	(0.02)	0.1	--	--
Pendimethalin	0.1	--	(0.05)	0.1	--	--
Permethrin	0.1	--	(0.05)	0.1	--	--
Propiconazole	0.2	--	(0.05)	0.2	--	--
Pyraclostrobin	0.9	(0.05)	(0.2)	0.9	--	--
Pyrimethanil	0.1	--	(0.05)	0.1	--	--
Pyriproxyfen	0.7	--	(0.05)	0.7	--	--
S-metolachlor	0.1	--	(0.05)	0.1	--	--
Sethoxydim	1	--	(0.5)	1	--	--
Spinetoram	0.1	--	(0.05)	0.1	--	--
Spinosad	0.1	--	0.1	0.1	--	--
Spirotetramat	0.3	--	(0.1)	0.3	--	--
Tebuconazole	0.2	--	(0.1)	0.2	--	--
Thiophanate-methyl	0.5	--	(0.1)	0.5	--	--
Trifluralin	0.05	--	0.5	0.05	--	--
Zeta-Cypermethrin	0.1	--	0.1	0.1	--	--

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5 (continued). Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Onion, Bulb (ppm) (Group 009A, Bulb Onions)		
Compound	**US**	**Codex**	**EU**
Acetamiprid	0.02	--	(0.01)
Azinphos-methyl	2	(0.5)	(0.05)
Azoxystrobin	1	--	(0.05)
Bensulide	0.1	--	--
Boscalid	3	--	3
Bromoxynil	0.1	--	(0.05)
Captan	0.05	--	(0.02)
Carbaryl			
Carboxin	0.2	--	(0.1)
Carfentrazone-ethyl	0.1	--	(0.01)
Chlorothalonil	0.5	0.5	0.5
Chlorpyrifos	0.5	(0.2)	(0.2)
Clethodim	0.2	0.5	0.5
Cymoxanil	0.05	--	0.5
Cypermethrin	0.1	0.1	0.1
Cyprodinil	0.6	(0.3)	(0.3)
Cyromazine	0.2	(0.1)	(0.05)
DCPA	1	--	1
Deltamethrin	0.1	(0.05)	0.1
Diazinon	0.75	(0.05)	(0.05)
Dicloran	10	(0.2)	(0.2)
Dimethenamid	0.01	0.01	0.01
Dimethomorph	2	--	(0.1)
Ethofumesate	0.25	--	(0.05)
Fenamidone	0.2	--	(0.02)
Fluazifop	0.5	--	(0.3)
Fludioxonil	0.2	0.5	(0.1)
Flumioxazin	0.02	--	0.05
Fluopicolide	7	--	(0.01)
Fluroxypyr	0.03	--	0.05
Fosetyl-Al	0.5	--	50
Gamma Cyhalothrin	0.1	--	--
Glyphosate	0.2	--	(0.1)
Inorganic bromide resulting from fumigation	20	--	(0.05)

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5 (continued). Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Onion, Bulb (ppm) (Group 009A, Bulb Onions)		
Compound	**US**	**Codex**	**EU**
Iprodione	0.5	(0.2)	(0.2)
Lambda Cyhalothrin	0.1	--	(0.02)
Malathion	8	(1)	(0.02)
Maleic hydrazide	15	15	15
Mancozeb	0.5	0.5	1
Mandipropamid	0.05	--	(0.01)
Maneb	7	(0.5)	(1)
Metalaxyl	3	(2)	(0.5)
Methyl Parathion	1	--	(0.02)
Oxamyl	0.2	--	(0.01)
Oxydemeton-methyl	0.05	--	(0.02)
Oxyfluorfen	0.05	--	0.05
Paraquat dichloride	0.1	--	(0.02)
Pendimethalin	0.1	--	(0.05)
Permethrin	0.1	--	(0.05)
Propiconazole	0.2	--	(0.05)
Pyraclostrobin	0.9	(0.2)	(0.2)
Pyrimethanil	0.1	0.2	0.1
Pyriproxyfen	0.15	--	(0.05)
S-metolachlor	0.1	--	(0.05)
Sethoxydim	1	--	(0.5)
Spinetoram	0.1	--	(0.05)
Spinosad	0.1	--	0.2
Spirotetramat	0.3	--	(0.1)
Tebuconazole	0.2	--	(0.05)
Thiophanate-methyl	0.5	--	(0.1)
Trifluralin	0.05	--	0.5
Zeta-Cypermethrin	0.1	0.1	0.1

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5 (continued). Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Onion, Green (ppm) (Group 009B, Green Onions)			Onion, Potato (ppm) (Group 009B, Green Onions)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Acetamiprid	4.5	--	--	0.02	--	--
Azoxystrobin	7.5	--	--			
Boscalid	3	--	--	3	--	--
Bromoxynil						
Captan	0.05	--	--	0.05	--	--
Carfentrazone-ethyl	0.1	--	--	0.1	--	--
Chlorothalonil	5	--	--			
Clethodim	2	--	--			
Cymoxanil	1.1	--	--	0.05	--	--
Cypermethrin	6	--	(0.05)			
Cyprodinil	4	--	--			
Cyromazine	3	--	--	3	--	--
Deltamethrin	1.5	--	--			
Diazinon	0.75	--	--			
Dimethenamid	0.01	--	--			
Dimethomorph	2	--	--	2	--	--
Fenamidone	1.5	--	--			
Fludioxonil	7	--	--	0.02	--	--
Flumioxazin						
Fluopicolide	7	--	--	7	--	--
Fosetyl-Al	10	--	--			
Glyphosate	0.2	--	--	0.2	--	--
Inorganic bromide resulting from fumigation	20	--	--			
Malathion	8	(5)	(3)			
Mandipropamid	4	--	--			
Metalaxyl	10	--	--			
Methomyl	3	--	--			
Methoxyfenozide	5	--	--			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5 (continued). Residue Tolerances established on Bulb Vegetable Group 009:

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Onion, Green (ppm) (Group 009B, Green Onions)			Onion, Potato (ppm) (Group 009B, Green Onions)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Paraquat dichloride	0.05	--	--			
Pendimethalin	0.2	--	--			
Propiconazole	9	--	--			
Pyraclostrobin	0.9	--	--	0.9	--	--
Pyrimethanil	2	3	--			
Pyriproxyfen	0.7	--	--	0.7	--	--
S-metolachlor	2	--	--			
Sethoxydim	1	--	--	1	--	--
Spinetoram	2	--	--	0.1	--	--
Spinosad	2	--	--	0.1	--	--
Spirotetramat				0.3	--	--
Tebuconazole	1.3	--	--	0.2	--	--
Thiophanate-methyl	3	--	--			
Trifluralin	0.05	--	--	0.05	--	--
Zeta-Cypermethrin	3	--	--			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5. (continued) Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Onion, Tree (ppm) (Group 009B, Green Onions)			Onion, Welsh (ppm) (Group 009B, Green Onions)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Acetamiprid	4.5	--	--	4.5	--	(0.01)
Boscalid	3	--	--	3	--	(0.5)
Captan	0.05	--	--	0.05	--	(0.02)
Carfentrazone-ethyl	0.1	--	--	0.1	--	(0.01)
Cymoxanil	1.1	--	--	1.1	--	(0.05)
Cyromazine	3	--	--	3	--	(0.05)
Dimethenamid				0.01	--	0.01
Dimethomorph	2	--	--	2	--	(0.3)
Fenamidone				1.5	--	(0.02)
Fludioxonil	0.02	--	--	0.02	--	0.3
Fluopicolide	7	--	--	7	--	(0.01)
Glyphosate	0.2	--	--	0.2	--	(0.1)
Methoxyfenozide	5	--	--	5	--	(0.02)
Pendimethalin				0.2	--	(0.05)
Pyraclostrobin	0.9	--	--	0.9	--	(0.02)
Pyriproxyfen	0.7	--	--	0.7	--	(0.05)
Sethoxydim	1	--	--	1	--	(0.5)
Spinetoram	0.1	--	--	0.1	--	(0.05)
Spinosad	0.1	--	--	0.1	--	0.2
Tebuconazole	1.3	--	--	1.3	--	(0.5)
Trifluralin	0.05	--	--	0.05	--	0.5

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 5. (continued) Residue Tolerances established on Bulb Vegetable Group 009

(FASonline: mrldatabase.com; residue tolerances as of February 11, 2009)

	Leeks (ppm) (Group 009B, Green Onions)		
Compound	**US**	**Codex**	**EU**
Acetamiprid	4.5	--	(0.01)
Boscalid	3	--	5
Captan	0.05	--	2
Carfentrazone-ethyl	0.1	--	(0.01)
Cymoxanil	1.1	--	(0.05)
Cyromazine	3	--	(0.05)
Dimethenamid	0.01	--	0.01
Dimethomorph	2	--	(0.2)
Fenamidone	1.5	--	(0.02)
Fludioxonil	0.02	--	0.05
Fluopicolide	7	--	(0.3)
Glyphosate	0.2	--	(0.1)
Lambda Cyhalothrin	0.15	--	0.3
Malathion	8	--	(0.02)
Methomyl	3	--	(0.05)
Methoxyfenozide	5	--	(0.02)
Pendimethalin	0.2	--	(0.05)
Pyraclostrobin	0.9	(0.7)	(0.5)
Pyriproxyfen	0.7	--	(0.05)
Sethoxydim	1	--	(0.5)
Spinetoram	0.1	--	(0.05)
Spinosad	0.1	--	0.5
Tebuconazole	1.3	--	(1)
Trifluralin	0.05	--	0.5

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

A.5. Characteristics (morphology, edible portions, growth habits, pest problems and livestock feed items) – Bulb Vegetables:

The 27 commodities in the proposed group are herbaceous annual, biennial or perennial cool season plants cultivated as annual crops. Onions are one of the few vegetables that are monocots. The cultivation of onions for over 5,000 years has led to a huge range of cultivars that can vary widely in edible bulb shapes, leaf and flower types. They are grown for their edible bulb and/or its leaf blades and leaf bases, flowers, and stalks. The Alliums are best known for their distinctive smell and taste. Characteristics that identify the onion family include bulb growth (single or in clusters), time of flowering, flower color, absence of bulbils in the inflorescence, and type of food storage structure. Plant breeders have found that many members of the bulb vegetable group can cross and bear fertile hybrids. When a species or hybrids include many cultivars such as the Alliums, they are arranged by taxonomists in groups. For example shallots belong to the "Aggregatum group", which includes the potato onion. Both bulb onion and green onions have similar uses and are cooked or eaten raw in vegetable dishes, in soups or salads, and used fresh or dehydrated for flavors. Most of these bulb vegetables also have medicinal properties.

Members of the bulb vegetable group 009 are attacked by many leaf and/or bulb pests, which include several insect, plant disease organisms (bacterial, fungal and viral), nematode and weed pest problems. Onions are weak competitors with weeds. The fact that most of these bulb vegetables are in the same genus with similar biological and cultural aspects indicates they should also encounter similar pest problems, hence have similar needs for pest control products with similar use patterns.

There are no significant animal feed items associated with any of the current or proposed members of the Bulb vegetables group 009. Members of the bulb vegetable group are considered undesirable as a livestock feed for dairy cattle because they leave a distinct odor to the milk. Therefore, since there are no animal feed items, there is a no reasonable expectation of residues in meat, milk, poultry or eggs.

A.6. Conclusion – Bulb Vegetables:

Representative crops (Bulb onion and Spring onion) for Group 009 Bulb Vegetables were selected based on the principles in the Guidance document as follows:

(1) A representative commodity should be major in terms of production and consumption:

The proposed representative crops (bulb onion and spring onion) are the most widely grown bulb commodities throughout the world (see Tables 2 and 3).

(2) A representative commodity should be likely to contain the highest residues.

The similarities in green onion residue tolerances which are generally higher than bulb onions support the establishment of the two subgroups (Bulb onions and green onions).

Residues for the proposed representative commodity (bulb onion) for subgroup 009A are similar to the residues of garlic and the great headed garlic (Table 5). This would be expected given the similar morphology and growth habits of these commodities. Given the higher production of bulb onions compared to garlic it is reasonable to propose bulb onion as the representative commodity for subgroup 009A.

Residues of the proposed representative commodity (spring onion) for subgroup 009B are generally higher than residues of the potato onion, the tree onion and the Welsh onion (Table 5). Given the higher production of spring onion (Table 3), it is reasonable to propose spring onion as the representative commodity for subgroup 009B.

(3) A representative commodity should be similar in morphology, growth habit, similar pest problems and edible portion to the related commodities within a group or subgroup:

The bulb vegetable commodity group and subgroups consists of commodities with similar cultural practices, edible food portions (bulb vs. leaves), residue levels, geographical locations, similar pest problems and lack of animal feed items.

A.7. References – Bulb Vegetables:

CHAPUT 2004a: Chaput, J. 2004a. Personal communications. Bulb Vegetables in Canada. 17 Aug. 04.

CHAPUT 2004b: Chaput, J. 2004b. Personal communications. Bulb Vegetables in Canada. 10 Sept. 04.

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NAGASAWA 2004a: Nagasawa, N. and J. Ikeda 2004a. Personal communications. Bulb vegetables data from "Statistics of Agriculture, Forestry and Fisheries" by Japanese MAFF. Japan, 31 May 04.

NAGASAWA 2004b: Nagasawa, N. and J. Ikeda 2004b. Personal communications. Bulb vegetables data from "Statistics of Agriculture, Forestry and Fisheries" by Japanese MAFF. Japan, 23 to 25 Aug. 04.

OH 2004a: OH, B-Y 2004d. Personal communications. Bulb vegetables data. Korea, 11 Oct. 04

SISCO 2004a. Sisco, R. 2004a. Personal communications. Bulb Vegetables. University of California at Davis, Davis, CA. 11 MAY 04.

B. Fruiting Vegetables, other than Cucurbits

Proposed representative commodities for Group 012 Fruiting vegetables, other than Cucurbits from Table 1 are as follows:

Codex Group / Subgroup	Examples of Representative Commodities [1]	Extrapolation to the following commodities:
Group 012 Fruiting vegetables, other than Cucurbits	(1) Tomato and (2) Sweet Pepper and (3) Chili Pepper or small variety of Eggplant	African eggplant; Bush tomato; Cherry tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Ground cherries, Martynia; Okra; Pea eggplant; Pepino; Peppers, chilli; Peppers, sweet; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Thai eggplant
Group 12A, Tomatoes	Tomato	Bush tomato; Cherry tomato; Cocona; Currant tomato; Garden huckleberry; Goji berry; Ground cherries; Sunberry; Tomatillo; Tomato
Group 12B, Peppers	(1) Sweet Pepper and (2) one cultivar of chili pepper	Martynia; Peppers, chilli; Peppers, sweet
Group 12C, Eggplants	(1) One cultivar of large variety eggplant and (2) one cultivar of small variety eggplant	African eggplant; Eggplant; Pea eggplant; Scarlet eggplant; Thai eggplant
Group 012D, Other	- -	Okra, Roselle, Pepino

[1] Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.

B.1. Introduction – Fruiting Vegetable, other than Cucurbits

Group 012 Fruiting vegetables, other than Cucurbits are derived from the immature and mature fruits of various plants, usually annual vines or bushes. This group does not include fruits or vegetables of the botanical family Cucurbitaceae or the pods of vegetables of the Leguminosae family. Of the 21 commodity entries proposed in the revised Codex Fruiting vegetables commodity group, 18 are from the same botanical family, Solanaceae. The three other commodities are from botanical families of Martyniaceae (martynia) and Malvaceae (okra and roselle).

Fruiting vegetables are warm season annual or perennial plants grown for fruits, and some also for leaves. They are consumed fresh or cooked in vegetable dishes, soups or salads, and they can be used fresh or in a dehydrated form. Some of these fruiting vegetables also have medicinal properties. Among the 21 commodities, the proposed representative commodities of tomato, peppers (both sweet pepper and chili pepper), and eggplant are the most widely grown fruiting vegetables (non-Cucurbit) in the world and with the largest production areas.

The vegetables of this group are fully exposed to pesticides applied during the period of fruit development, except those of which the edible portion is covered by husks, such as ground cherries (Physalis spp.). The latter fruiting vegetables are protected from most pesticides by the husk except from pesticides with a systemic action. The fact that most of these vegetables are in the same family with similar biological and cultural aspects suggests they should also encounter similar pest problems and hence have similar needs for pest control products and with similar use patterns.

The Codex Classification of Foods and Animal Feeds currently includes 10 commodities in Group 012 Fruiting Vegetables, other than Cucurbits. Edible fungi and mushrooms are proposed for inclusion in

the new Edible fungi group 018. Sweet corn will be included in the cereal grains group 020. The proposed draft revision includes 10 commodities in Group 12A (Tomatoes) and 5 commodities in Group 12B (Peppers) and 6 commodities in Group 12C (Eggplants).

B.2. Production – Fruiting Vegetables, other than Cucurbits

Members of the Fruiting vegetables, other than Cucurbit Group 012 are produced throughout the world. Production of fruiting vegetables that are reported by FAO Statistics (2007) include tomato, eggplant, peppers and okra. The proposed representative commodities, tomato, sweet peppers, chili peppers and eggplant are widely grown throughout the world. Based on FAO agriculture statistics, the most widely produced crop in hectares and in total metric ton is the tomato (Table 6). Information on major fruiting vegetable production (hectares) and yield (metric tons) is provided in Table 6 (FAO Statistics). Asia is the predominant fruiting vegetable producing region with over 50% of the fruiting vegetable production.

Tomatoes are among the most important food crops in all parts of the world except areas of cool, short growing seasons. Tomatoes originated in the western Coastal Plain of South America extending from Ecuador to Chile. Tomato are used for fresh market or processing (paste, puree and juice) Most peppers are thought to have originated in Mexico and Central America, and the Amazon basin. The plants have large leaves and can get more than 2.5 meter tall. Various cultivars of chili peppers are cultivated in the Caribbean region, Central and South America, Asia and Africa. Tabasco peppers are an important cash crop in southern Louisiana. Habañero pepper is one of the main agriculture commodities grown in the Yucatan Peninsula. Usually, its pods are sold fresh; however, demand for high quality habanero dried pods, powder, and mash exceeds the supply, and this has resulted in a rush to grow more habaneros in the U.S., Central and South America, and the Caribbean. Today India is the world's largest producer of chile peppers.

Production of Other Fruiting Vegetables, other than Cucurbits:

African Eggplant**:** African eggplant is a small tropical, perennial, originally from Africa but is now cultivated on a large scale in Suriname. The crop grows in warm, non-humid conditions found throughout the savannah belt of West and East Africa.

Bush Tomato: The fruit provides excellent nourishment and is recognized as possibly the most important of all Central Australian native plant foods, and is one of the key commercially significant "bush food" species. It is native to Central Australia (South Australia, Western Australian and Northern Territory). It is a small shrub that produces underground suckers from the mother plant, and has spines on its branches. In Australia it is grown or wild harvested about 20 ha annually.

Cocona: The spineless cocona is apparently unknown in the wild, having been observed by botanists only in cultivation from Peru and Colombia to Venezuela and bordering regions of Brazil. The fruits are consumed by the native Indians and commonly marketed throughout the producing areas of Latin America. In Colombia and Brazil, the cocona is a domestic product, while in Peru it is the basis of an industry. The wild variety, *S. topiro* var. *georgicum* Heiser, of the lowlands of eastern Ecuador and Colombia, is a smaller plant with smaller fruits and with spines on the stem, branches and leaves. In Florida and Trinidad, the cocona is grown at near sea level. In Colombia, it is grown from sea-level to an elevation of 610 m, while elsewhere in South America it thrives at altitudes up to 910 - 1,200 m.

Production of Other Fruiting Vegetables, other than Cucurbits (continued):

Currant tomato: It is native to Andean areas of South America. The plant is more slender in growth than tomato.

Goji berry: Goji berry is the common name for the plant *Lycium barbarum* L.that is often mistaken with the wolfberry (L. chinense Mill.). Its original habitat is obscure, probably southeastern Europe to southwest Asia. The wolfberry species currently grow in many world regions. However, only in China is there significant commercial goji berry cultivation. China, the main supplier of goji berry products in the world, had total exports generating US $120 million in 2004. This production derived from 82,000 hectares farmed nationwide, yielding 95,000 tons.

Ground cherry: Groundcherry plants are annuals in the north; while some forms are perennial in the tropics. Both upright and trailing forms occur. The fruits are smooth-skinned and are completely enclosed in a thin papery husk, which is free and easily removed. Groundcherries are widely grown in home gardens

in many parts of the world, including the U.S., but enter commerce only to a very limited extent. In California, groundcherries are grown for commercial sales the year round. Other types of groundcherries are commercially available from New Zealand from April to June. Canada grew 104 acres of *P. peruviana* and *P. pruinosa* in Ontario and Quebec, and 100 acres in 2004 (HYNES 2005b).

Huckleberry, Garden: This is an native North American herbaceous annual that grows up to 1 or more meters in height, having simple, ovate leaves about 15 cm long, pointed at both ends. Fruits are globular, smooth skinned, black, and borne in small clusters. Fruits are used for preserves and pies. A garden form, with fruits about l cm in diameter, is occasionally cultivated in home gardens. The garden huckleberry is a close relative to the poisonous nightshade weeds. Currently garden huckleberry is not commercially produced in the U.S., however, it is grown in some home gardens. This crop is widely distributed in temperate to tropical regions.

Martynia**:** This is an annual plant, native to the Southwestern U.S., that grows up to 0.5 to 1 meter in height. The fruit is hairy, about 2.5 cm thick and 10 to 15 cm long at maturity, about half the length consisting of a slender curved beak. Martynia is popularly called "unicorn plant," is grown for its seed pods which are picked while young and tender and used for pickles, like cucumbers, and is grown culturally similar to okra. The small, immature pods are made into pickles, like cucumbers. Other production regions include Mexico.

Okra**:** Okra is native to the Old World tropics (probably West Africa) and has become established in the wild in some New World tropical areas. It is widely used in India, Africa and the Middle East, but almost unknown in Europe and northern North America. Okra is also grown in Canada. Japan produced 10,858 T in 2004 on 579 ha (NAGASAWA 2005).

Pea Eggplant: Pea eggplant is native to the West Indies; the erect, much-branching perennial shrub is up to 4 m in height. This plant is originally from Africa and was brought to Brazil with the slave trade. It is still grown in West Africa where in some countries it is known as "garden eggs". The pea eggplant fruit grows in clusters similar to cherry tomatoes. The species is distributed in Alabama, Florida, Hawaii, Maryland, Puerto Rico, and Virgin Islands.

Pepino: This plant is an erect, spineless, bushy herb resembling a tomato vine and is native to Ecuador and Peru. The edible fruit is ovoid to oval, up to 15 cm long, borne on a long stem. It is cultivated in the tropics and subtropics including Australia and New Zealand, and can be grown in most parts of the U.S.

Roselle: Originally native to tropical Africa, roselle is grown in the subtropics and tropics worldwide and has escaped cultivation and become naturalized in tropical America and Asia. Roselle is grown rather extensively in the tropics, and to some extent in warmer sections of the U.S.

Production of Other Fruiting Vegetables, other than Cucurbits (continued):

Scarlet Eggplant: It is cultivated for its edible fruit in Asia and northern and central Africa.

Tomatillo: The tomatillo plant is native to Mexico and Central America and is cultivated throughout the region. They also are cultivated in India, Australia and South Africa as well as in the southern US. Tomatillos were introduced from Mexico and are available all year from Mexico

Table 6. Production of Major Fruiting Vegetables, Other than Cucurbit by Country and Region in 2007 (Based on FAO Statistics 2007)

Countries	Tomato	Eggplant	Okra	Chillies & Peppers, Dry	Chilles & Peppers, Green
Australia	8,000 Ha 465,000 Tonnes	NA	NA	NA	2,200 Ha 40,000 Tonnes
Canada	7,934 Ha 607,852 Tonnes	NA	NA	NA	2,143 Ha 41,234 Tonnes
China	1,455,200 Ha 33,645,000 Tonnes	1,201,800 Ha 18,033,000 Tonnes	NA	40,000 Ha 250,000 Tonnes	653,200 Ha 14,033,000 Tonnes
India	479,200 Ha 8,585,800 Tonnes	512,800 Ha 8,450,200 Tonnes	346,700 Ha 3,497,200 Tonnes	500,000 Ha 753,000 Tonnes	5,500 Ha 51,000 Tonnes
Japan	13,000 Ha 750,000 Tonnes	12,000 Ha 375,000 Tonnes	NA	NA	3,500 Ha 150,000 Tonnes
Korea, Republic of	6,500 Ha 425,000 Tonnes	325 Ha 5,500 Tonnes	NA	NA	55,000 Ha 345,000 Tonnes
Korea, Democractic People's Republic of	8,500 Ha 65,000 Tonnes	5,000 Ha 46,000 Tonnes	NA	NA	27,000 Ha 60,000 Tonnes
U.S.	175,000 Ha 11,500,000 Tonnes	2,200 Ha 75,000 Tonnes	1,300 Ha 10,000 Tonnes	NA	31,970 Ha 855,870 Tonnes
Africa	660,215 Ha 14,507,140 Tonnes	71,422 Ha 1,437,890 Tonnes	418,040 Ha 1,457,520 Tonnes	463,555 Ha 457,650 Tonnes	343,016 Ha 2,382,854 Tonnes
Central America	144,610 Ha 3,360,793 Tonnes	2,050 Ha 50,300 Tonnes	5,490 Ha 44,710 Tonnes	37,000 Ha 60,000 Tonnes	99,602 Ha 1,740,805 Tonnes
North America	182,944 Ha 12,107,973 Tonnes	2,200 Ha 75,000 Tonnes	1,300 Ha 10,000 Tonnes	NA	34,113 Ha 897,104 Tonnes
South America	141,088 Ha 6,415,428 Tonnes	1,530 Ha 15,280 Tonnes	600 Ha 4,200 Tonnes	24,700 Ha 168,300 Tonnes	28,370 Ha 409,500 Tonnes
Asia	2,827,803 Ha 67,798,472 Tonnes	1,922,845 Ha 29,626,454 Tonnes	407,005 Ha 3,898,979 Tonnes	983,557 Ha 1,546,405 Tonnes	1,050,725 Ha 17,471,985 Tonnes
Europe	594,643 Ha 20,497,562 Tonnes	39,014 Ha 838,088 Tonnes	700 Ha 6,000 Tonnes	48,235 Ha 107,450 Tonnes	131,753 Ha 3,002,035 Tonnes
World Total	4,626,232 Ha 126,246,708 Tonnes	2,043,788 Ha 32,072,972 Tonnes	833,920 Ha 5,428,069 Tonnes	1,557,849 Ha 2,348,370 Tonnes	1,703,486 Ha 26,056,900 Tonnes

B.3. Consumption – Fruiting Vegetables, other than Cucurbits:

The entire fruiting vegetable or the edible portion after discarding husks or peels may be consumed in a fresh form or after processing (paste, puree and juice). Consumption data in the FAO Statistics website includes tomato and the general category of "pepper" without distinguishing between sweet peppers and chili peppers (Table 7). The World Health Organization (WHO) classifies tomatoes, peppers (both chili and sweet) and eggplants as crops being significant in diets world wide (Middle Eastern, Far Eastern, Africa, Latin America and European), according to WHO regional data (WHO, 1998). Okra is considered significant in diet only in Middle Eastern regional diets.

Table 7. Major Fruiting Vegetable, Other than Cucurbit Production by Country and Region in 2007 (Based on FAO Statistics 2007)

Countries	Tomato	Pepper
Australia	423,853 Tonnes	2,131 Tonnes
Canada	874,669 Tonnes	4,784 Tonnes
China	25,265,098 Tonnes	21,120 Tonnes
India	6,836,430 Tonnes	46,986 Tonnes
Japan	1,065,302 Tonnes	8,521 Tonnes
Korea, Republic of	313,372 Tonnes	3,534 Tonnes
Korea, Democractic People's Republic of	62,430 Tonnes	8 Tonnes
U.S.	10,108,874 Tonnes	59,586 Tonnes
Africa	13,106,853 Tonnes	21,424 Tonnes
Central America	1,596,480 Tonnes	1,650 Tonnes
North America	10,983,543 Tonnes	64,370 Tonnes
South America	5,596,657 Tonnes	27,623 Tonnes
Asia	50,955,246 Tonnes	153,491 Tonnes
Europe	19,268,586 Tonnes	71,414 Tonnes
World Total	102,788,602 Tonnes	343,850 Tonnes

B.4. Residue Tolerances – Fruiting Vegetables, other than Cucurbits

The vegetables of this group are fully exposed to pesticides applied during the period of fruit development, except those of which the edible portion is covered by husks, such as ground cherries (Physalis spp.). The latter fruiting vegetables are protected from most pesticides by the husk except from pesticides with a systemic action. Table 8 shows Fruiting Vegetable residue tolerances from Codex, the EU and the US. There are considerably more residue tolerances established for the proposed fruiting vegetable representative commodities (Tomato; Sweet Pepper, Chili Pepper and Eggplant) than the other member commodities (tomatillo, ground cherry, pimentos, okra, cubanella). In addition residue tolerances established for the respective commodities for tomato, sweet pepper and chilli pepper are remarkably similar and supports the concept that residue levels will be similar between other members of the group/subgroup. This supports the establishment of these commodities as representative commodities for their respective subgroups.

Table 8. Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Tomato (ppm) (Group 12A, Tomato Subgroup)			Tomatillo (ppm) (Group 12A, Tomato Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Abamectin	0.02	0.02	0.02	0.02	--	--
Acetamiprid	0.2	--	(0.1)	0.2	--	--
Acibenzolar-S-methyl	1	--	1	1	--	--
Azinphos-methyl	2	(1)	(0.05)			
Azoxystrobin	0.2	--	2	2	--	--
Bensulide	0.1	--	--	0.1	--	--
Benthiavalicarb-isopropyl	0.45	--	(0.3)			
Beta-cyfluthrin	0.2	0.2	--	0.5	--	--
Bifenazate	2	(0.5)	(0.5)	2	--	--
Bifenthrin	0.15	--	0.2			
Boscalid	1.2	--	(1)	1.2	--	--
Buprofezin	1.3	(1)	(1)	1.3	--	--
Captan	0.05	5	2	0.05	--	--
Carbaryl	5	5	(0.5)	5	--	--
Carfentrazone-ethyl	0.1	--	(0.01)	0.1	--	--
Chlorantraniliprole	0.7	--	(0.3)	0.7	--	--
Chlorfenapyr	1	--	(0.05)	1	--	--
Chlorothalonil	5	5	(2)	6	--	--
Clethodim	1	1	1	1	--	--
Cryolite	7	--	--			
Cyazofamid	0.2	--	0.2			
Cyfluthrin	0.2	0.2	(0.05)	0.5	--	--
Cymoxanil	0.2	--	0.2	0.2	--	--
Cyprodinil	0.45	0.5	1	0.45	--	--
Cyromazine	0.5	1	1			
DCPA	1	--	1			
Deltamethrin	0.2	0.3	0.3	0.3	--	--

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Tomato (ppm) (Group 12A, Tomato Subgroup)			Tomatillo (ppm) (Group 12A, Tomato Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Diazinon	0.75	(0.5)	(0.01)			
Dichlorvos	0.05	--	(0.01)			
Dicloran	5	--	(0.3)			
Dicofol	2	(1)	(1)	2	--	--
Difenoconazole	0.6	(0.5)	2	0.6	--	--
Dimethoate	2	--	(0.02)			
Dimethomorph	1.5	(1)	(1)	1.5	(1)	--
Dinotefuran	0.7	--	--	0.7	--	--
Disulfoton	0.75	--	(0.02)			
Emamectin	0.02	--	--	0.02	--	--
Endosulfan	1	1	(0.5)			
EPTC	0.1	--	(0.05)	0.1	--	--
Ethephon	2	2	(1)			
Etridiazole	0.15	--	(0.05)			
Famoxadone	1	2	1	4	--	--
Fenamidone	1	--	(0.5)	1	--	--
Fenhexamid	2	2	(1)	2	--	--
Fenpropathrin	0.6	1	(0.01)	1	--	--
Fenvalerate	1	1	(0.02)			
Flonicamid	0.4	--	(0.3)	0.4	--	--
Flubendiamide	0.6	--	(0.2)	0.6	--	--
Fludioxonil	0.5	0.5	1	0.5	--	--
Flumioxazin	0.02	--	0.05	0.02	--	--
Fluopicolide	1.6	--	(0.4)	1.6	--	--
Fluoxastrobin	1	--	(0.05)	1	--	--
Fosetyl-Al	3	--	100			
Fosthiazate	0.02	--	0.02			
Gamma Cyhalothrin	0.1	--	--	0.2	--	--
Glyphosate	0.1	--	0.1	0.1	--	--
Halosulfuron-methyl	0.05	--	(0.01)	0.05	--	--
Imidacloprid	1	(0.5)	(0.5)	1	--	--
Indoxacarb	0.5	0.5	0.5	0.5	--	--
Inorganic bromide resulting from fumigation	20	75	50			
Lactofen	0.02	--	(0.01)	0.02	--	--
Lambda Cyhalothrin	0.1	--	0.1	0.2	--	--

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Tomato (ppm) (Group 12A, Tomato Subgroup)			**Tomatillo (ppm) (Group 12A, Tomato Subgroup)**		
Compound	US	Codex	EU	US	Codex	EU
Malathion	8	(0.5)	(0.02)			
Mancozeb	4	(2)	(3)			
Mandipropamid	1	--	1	1	--	--
Maneb	4	(2)	(3)			
Metalaxyl	1	(0.5)	(0.2)	1	--	--
Metaldehyde	0.24	--	(0.05)			
Methamidophos	1	--	(0.01)			
Methomyl	1	--	(0.2)	0.2	--	--
Methoxyfenozide	2	2	2	2	--	--
Metolachlor	0.1	--	(0.05)			
Metribuzin	0.1	--	0.1			
Mevinphos	0.2	--	(0.01)			
Myclobutanil	0.3	0.3	0.3	4	--	--
Naled	0.5	--	--			
Napropamide	0.1	--	0.1	0.1	--	--
Novaluron	1	--	1			
O-phenylphenol	10	--	--			
Oxamyl	2	2	(0.02)			
Paraquat dichloride	0.05	0.05	(0.02)	0.05	0.05	--
Pendimethalin	0.1	--	(0.05)	0.1	--	--
Permethrin	2	(1)	(0.05)			
Phosphine	0.01	--	0.05			
Piperonyl Butoxide	8	(2)	--			
Propamocarb hydrochloride	2	2	10	2	--	--
Pymetrozine	0.2	--	0.5	0.2	--	--
Pyraclostrobin	1.4	(0.3)	(0.2)	1.4	--	--
Pyrethrins	1	(0.05)	1			
Pyridaben	0.15	--	0.3			
Pyridalyl	1	--	--	1	--	--
Pyrimethanil	0.5	0.7	1			
Pyriproxyfen	0.2	--	1	0.2	--	--
Rimsulfuron	0.05	--	0.05			
S-metolachlor	0.1	--	(0.05)	0.1	--	--
Sethoxydim	4	--	(1)	4	--	--
Spinetoram	0.4	--	0.5	0.4	--	--
Spinosad	0.4	(0.3)	1	0.4	--	--
Spiromesifen	0.45	--	1	0.45	--	--

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Tomato (ppm) (Group 12A, Tomato Subgroup)			Tomatillo (ppm) (Group 12A, Tomato Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Spirotetramat	2.5	--	(2)	2.5	--	--
Streptomycin	0.25	--	--			
Tebufenozide	1	1	1	1	--	--
Thiamethoxam	0.25	--	(0.2)	0.25	--	--
Trifloxystrobin	0.5	0.7	0.5	0.5	--	--
Trifloxysulfuron	0.01	--	--			
Trifluralin	0.05	--	0.5	0.05	--	--
Uniconazole-P	0.01	--	--	0.01	--	--
Zeta-Cypermethrin	0.2	0.5	0.5	0.2	--	--
Ziram	7	(2)	(0.1)			
Zoxamide	2	2	(0.5)			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Ground Cherry (ppm) (Group 12A, Tomato Subgroup)			Pepper, Bell (Sweet) (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Abamectin	0.02	--	--	0.02	0.02	0.05
Acephate				4	--	(0.02)
Acetamiprid	0.2	--	--	0.2	--	0.3
Acibenzolar-S-methyl	1	--	--	1	--	(0.02)
Azinphos-methyl				0.3	1	(0.05)
Azoxystrobin	2	--	--	2	--	2
Benoxacor				0.01	--	--
Bensulide	0.1	--	--	0.1	--	--
Beta-cyfluthrin	0.5	--	--	0.5	(0.2)	--
Bifenazate	2	--	--	2	2	2
Bifenthrin	0.5	--	--	0.5	--	(0.2)
Boscalid	1.2	--	--	1.2	--	2
Buprofezin	1.3	--	--	1.3	--	(1)
Captan	0.05	--	--	0.05	--	0.1
Carbaryl	5	--	--	5	5	(0.05)
Carbofuran				1	--	(0.02)
Carfentrazone-ethyl	0.1	--	--	0.1	--	(0.01)
Chlorantraniliprole	0.7	--	--	0.7	--	1
Chlorfenapyr	1	--	--	1	--	(0.05)
Chlorothalonil	6	--	--	6	7	(2)
Chlorpyrifos				1	2	(0.5)
Clethodim	1	--	--	1	--	(0.5)
Clomazone				0.05	--	(0.01)
Cryolite				7	--	--
Cyfluthrin	0.5	--	--	0.5	(0.2)	(0.3)
Cymoxanil	0.2	--	--	0.2	--	(0.05)
Cyromazine				1	1	1
Deltamethrin	0.3	--	--	0.3	--	(0.2)
Dicofol	2	--	--	2	(1)	(0.02)
Difenoconazole	0.6	--	--	0.6	--	(0.05)
Diflubenzuron				1	--	1
Dimethoate				2	(1)	(0.02)
Dimethomorph	1.5	(1)	--	1.5	(1)	(0.5)
Dinotefuran	0.7	--	--	0.7	--	--
Disulfoton				0.1	--	(0.02)
Emamectin	0.02	--	--	0.02	--	--
Endosulfan				2	--	(1)
EPTC	0.1	--	--	0.1	--	(0.05)

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Ground Cherry (ppm) (Group 12A, Tomato Subgroup)			Pepper, Bell (Sweet) (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Ethephon				30	(5)	(3)
Famoxadone	4	--	--	4	--	(0.02)
Fenamidone	1	--	--	1	--	(0.02)
Fenbuconazole				0.4	--	(0.05)
Fenhexamid	2	--	--	2	2	2
Fenpropathrin	1	--	--	1	1	(0.01)
Fenvalerate				1	(0.5)	(0.02)
Flonicamid	0.4	--	--	0.4	--	(0.05)
Flubendiamide	0.6	--	--	0.6	--	(0.2)
Fludioxonil	0.01	--	--	0.01	1	2
Flumioxazin	0.02	--	--	0.02	--	0.05
Fluopicolide	1.6	--	--	1.6	--	(0.01)
Fluoxastrobin	1	--	--	1	--	(0.05)
Gamma Cyhalothrin	0.2	--	--	0.2	--	--
Glyphosate	0.1	--	--	0.1	--	0.1
Halosulfuron-methyl	0.05	--	--	0.05	--	(0.01)
Imidacloprid	1	--	--	1	1	1
Indoxacarb	0.5	--	--	0.5	(0.3)	(0.3)
Inorganic bromide resulting from fumigation				30	(20)	30
Lactofen	0.02	--	--	0.02	--	(0.01)
Lambda Cyhalothrin	0.2	--	--	0.2	--	(0.1)
Malathion				8	(0.1)	(0.02)
Mandipropamid	1	--	--	1	--	(0.01)
Maneb				7	(1)	(5)
Metalaxyl	1	--	--	1	1	(0.5)
Methamidophos				1	1	(0.01)
Methomyl	0.2	--	--	0.2	0.7	0.2
Methoxyfenozide	2	--	--	2	2	(1)
Mevinphos				0.25	--	(0.01)
Myclobutanil	4	--	--	4	--	(0.5)
Naled				0.5	--	--
Napropamide	0.1	--	--	0.1	--	0.1
O-phenylphenol				10	--	--
Oxamyl				2	2	(0.02)

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

Paraquat dichloride	0.05	0.05	--	0.05	0.05	(0.02)
	Ground Cherry (ppm) (Group 12A, Tomato Subgroup)			**Pepper, Bell (Sweet) (ppm) (Group 12B, Pepper Subgroup)**		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Oxydemeton-methyl				0.75	--	(0.02)
Pendimethalin	0.1	--	--	0.1	--	(0.05)
Permethrin				0.5	1	(0.05)
Phosphine				0.01	--	0.05
Propamocarb hydrochloride	2	--	--	2	3	10
Pymetrozine	0.2	--	--	0.2	--	1
Pyraclostrobin	1.4	--	--	1.4	(0.5)	(0.5)
Pyridalyl	1	--	--	1	--	--
Pyriproxyfen	0.2	--	--	0.2	--	1
Quinoxyfen				0.35	1	(0.02)
S-metolachlor	0.1	--	--	0.1	--	(0.05)
Sethoxydim	4	--	--	4	--	(0.5)
Spinetoram	0.4	--	--	0.4	--	0.5
Spinosad	0.4	--	--	0.4	(0.3)	2
Spiromesifen	0.45	--	--	0.45	--	0.5
Spirotetramat	2.5	--	--	2.5	--	(2)
Streptomycin				0.25	--	--
Tebufenozide	1	--	--	1	1	1
Thiamethoxam	0.25	--	--	0.25	--	0.5
Trifloxystrobin	0.5	--	--	0.5	(0.3)	(0.3)
Trifluralin	0.05	--	--	0.05	--	0.5
Uniconazole-P	0.01	--	--	0.01	--	--
Zeta-Cypermethrin	0.2	--	--	0.2	0.5	0.5

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pimentos (Sweet) (ppm) (Group 12B, Pepper Subgroup)			Okra (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Abamectin	0.02	0.02	--			
Acetamiprid	0.2	--	--			
Acibenzolar-S-methyl	1	--	--			
Azoxystrobin	2	--	--	2	--	2
Benoxacor	0.01	--	--			
Bensulide	0.1	--	--			
Beta-cyfluthrin	0.5	(0.2)	--			
Bifenazate	2	2	--	2	--	(0.01)
Bifenthrin	0.5	--	--	0.5	--	(0.2)
Boscalid	1.2	--	--			
Buprofezin	1.3	--	--	4	--	(0.5)
Captan	0.05	--	--	0.05	--	(0.02)
Carbaryl	5	5	--	4	--	(0.05)
Carfentrazone-ethyl	0.1	--	--	0.1	--	(0.01)
Chlorantraniliprole	0.7	--	--			
Chlorfenapyr	1	--	--			
Chlorothalonil	6	7	--	6	--	(2)
Chlorpyrifos	1	2	--			
Clethodim	1	--	--			
Cyfluthrin	0.5	(0.2)	--			
Cymoxanil	0.2	--	--			
Deltamethrin	0.3	--	--			
Dicofol	2	(1)	--			
Difenoconazole	0.6	--	--			
Dimethomorph	1.5	(1)	--			
Dinotefuran	0.7	--	--			
Disulfoton	0.1	--	--			
Emamectin	0.02	--	--			
EPTC	0.1	--	--			
Famoxadone	4	--	--			
Fenamidone	1	--	--			
Fenbuconazole	0.6	--	--			
Fenhexamid	2	2	--			
Fenpropathrin	1	1	--			
Flonicamid	0.4	--	--	0.4	--	(0.05)
Flubendiamide	0.6	--	--	0.3	--	(0.01)
Fludioxonil	0.01	1	--			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pimentos (Sweet) (ppm) (Group 12B, Pepper Subgroup)			Okra (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Flumioxazin	0.02	--	--	0.02	--	0.05
Fluopicolide	1.6	--	--			
Fluoxastrobin	1	--	--			
Gamma Cyhalothrin	0.2	--	--	0.2	--	--
Glyphosate	0.1	--	--	0.5	--	(0.1)
Halosulfuron-methyl	0.05	--	--			
Imidacloprid	1	1	--	1	--	(0.5)
Indoxacarb	0.5	(0.3)	--	0.5	--	(0.02)
Inorganic bromide resulting from fumigation	30	(20)	--	30	200	30
Lactofen	0.02	--	--	0.02	--	(0.01)
Lambda Cyhalothrin	0.2	--	--			
Malathion				8	--	(0.02)
Mandipropamid	1	--	--	1	--	(0.01)
Mesotrione				0.01	--	0.05
Metalaxyl	1	1	--			
Methomyl	0.2	0.7	--			
Methoxyfenozide	2	2	--	2	--	(0.02)
Metolachlor				0.5	--	(0.05)
Myclobutanil	4	--	--	4	--	(0.02)
Napropamide	0.1	--	--			
O-phenylphenol	10	--	--			
Oxamyl	2	2	--			
Paraquat dichloride	0.05	0.05	--	0.05	0.05	(0.02)
Pendimethalin	0.1	--	--			
Permethrin	0.5	1	--			
Phosphine				0.01	--	0.05
Propamocarb hydrochloride	2	3	--			
Pymetrozine	0.2	--	--			
Pyraclostrobin	1.4	(0.5)	--			
Pyridalyl	1	--	--			
Pyriproxyfen	0.2	--	--	0.02	--	1
Quinoxyfen	0.35	1	--			
S-metolachlor	0.1	--	--			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pimentos (Sweet) (ppm) (Group 12B, Pepper Subgroup)			Okra (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Sethoxydim	4	--	--	2.5	--	(0.5)
Spinetoram	0.4	--	--	0.4	--	0.5
Spinosad	0.4	(0.3)	--	0.4	--	1
Spiromesifen	0.45	--	--			
Spirotetramat	2.5	--	--			
Streptomycin	0.25	--	--			
Tebuconazole				1.2	--	(0.05)
Tebufenozide	1	1	--			
Thiamethoxam	0.25	--	--			
Trifloxystrobin	0.5	(0.3)	--			
Trifluralin	0.05	--	--	0.05	--	0.5
Uniconazole-P	0.01	--	--			
Zeta-Cypermethrin	0.2	0.5	--	0.2	--	0.5

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pepper, Non Bell (Chili) (ppm) (Group 12B, Pepper Subgroup)			Pepper, Cubanelle (Chili) (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Abamectin	0.02	--	0.05	0.02	--	--
Acephate	4	--	(0.02)			
Acetamiprid	0.2	--	0.3			
Acibenzolar-S-methyl	1	--	(0.02)			
Azinphos-methyl	0.3	--	(0.05)			
Azoxystrobin	2	--	2	2	--	--
Bensulide	0.1	--	--			
Bentazon	0.05	--	0.1			
Beta-cyfluthrin	0.5	(0.2)	--	0.5	--	--
Bifenazate	2	--	2	2	--	--
Bifenthrin	0.5	--	(0.2)			
Boscalid	1.2	--	2			
Buprofezin	4	--	(1)			
Captan	0.05	--	0.1			
Carbaryl	5	(0.5)	(0.05)			
Carbofuran	1	--	(0.02)			
Carfentrazone-ethyl	0.1	--	(0.01)			
Chlorantraniliprole	0.7	--	1			
Chlorfenapyr	1	--	(0.05)	1	--	--
Chlorothalonil	6	--	(2)			
Chlorpyrifos	1	--	(0.5)			
Clethodim	1	--	(0.5)			
Clomazone	0.05	--	(0.01)			
Cryolite	7	--	--			
Cyfluthrin	0.5	(0.2)	(0.3)	0.5	--	--
Cymoxanil	0.2	--	(0.05)			
Cyromazine	1	1	1			
Deltamethrin	0.3	--	(0.2)	0.3	--	--
Dicofol	2	(1)	(0.02)			
Difenoconazole	0.6	--	(0.05)			
Diflubenzuron	1	--	1			
Dimethoate	2	(1)	(0.02)			
Dimethomorph	1.5	(1)	(0.5)			
Dinotefuran	0.7	--	--	0.7	--	--
Disulfoton	0.1	--	(0.02)	0.1	--	--
Emamectin	0.02	--	--	0.02	--	--
Endosulfan	2	--	(1)			
EPTC	0.1	--	(0.05)			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pepper, Non Bell (Chili) (ppm) (Group 12B, Pepper Subgroup)			Pepper, Cubanelle (Chili) (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Ethephon	30	(5)	(3)			
Famoxadone	4	--	(0.02)			
Fenamidone	3.5	--	(0.02)			
Fenbuconazole	0.4	--	(0.05)			
Fenhexamid	0.02	2	2			
Fenpropathrin	1	--	(0.01)	1	--	--
Fenvalerate	1	--	(0.02)			
Flonicamid	0.4	--	(0.05)			
Flubendiamide	0.6	--	(0.2)			
Fludioxonil	0.01	--	2			
Flumioxazin	0.02	--	0.05			
Fluopicolide	1.6	--	(0.01)			
Fluoxastrobin	1	--	(0.05)	1	--	--
Gamma Cyhalothrin	0.2	--	--	0.2	--	--
Glyphosate	0.1	--	0.1			
Halosulfuron-methyl	0.05	--	(0.01)	0.05	--	--
Imidacloprid	1	1	1			
Indoxacarb	0.5	(0.3)	(0.3)	0.5	--	--
Inorganic bromide resulting from fumigation	30	--	30			
Lactofen	0.02	--	(0.01)			
Lambda Cyhalothrin	0.2	--	(0.1)			
Malathion	8	(0.1)	(0.02)			
Mandipropamid	1	--	(0.01)			
Maneb	7	--	(5)			
Metalaxyl	1	1	(0.5)			
Methamidophos	1	2	(0.01)			
Methomyl	0.2	0.7	0.2	0.2	--	--
Methoxyfenozide	2	2	(1)			
Mevinphos	0.25	--	(0.01)			
Myclobutanil	4	--	(0.5)			
Naled	0.5	--	--			
Napropamide	0.1	--	0.1			
Oxamyl	5	--	(0.02)			
Oxydemeton-methyl	0.75	--	(0.02)			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Pepper, Non Bell (Chili) (ppm) (Group 12B, Pepper Subgroup)			Pepper, Cubanelle (Chili) (ppm) (Group 12B, Pepper Subgroup)		
Compound	**US**	**Codex**	**EU**	**US**	**Codex**	**EU**
Paraquat dichloride	0.05	0.05	(0.02)			
Pendimethalin	0.1	--	(0.05)	0.1	--	--
Phosphine	0.01	--	0.05			
Propamocarb hydrochloride	2	--	10	2	--	--
Pymetrozine	0.2	--	1			
Pyraclostrobin	1.4	(0.5)	(0.5)			
Pyridalyl	1	--	--			
Pyriproxyfen	0.2	--	1			
Quinoxyfen	1.7	10	(0.02)			
S-metolachlor	0.1	--	(0.05)			
Sethoxydim	4	--	(0.5)			
Spinetoram	0.4	--	0.5			
Spinosad	0.4	(0.3)	2			
Spiromesifen	0.45	--	0.5			
Spirotetramat	2.5	--	(2)			
Streptomycin	0.25	--	--	0.25	--	--
Tebufenozide	1	1	1	1	--	--
Thiamethoxam	0.25	--	0.5			
Trifloxystrobin	0.5	--	(0.3)			
Trifluralin	0.05	--	0.5	0.05	--	--
Uniconazole-P	0.01	--	--			
Zeta-Cypermethrin	0.2	0.5	0.5			

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Eggplant (ppm) (Group 12C, Eggplant Subgroup)		
Compound	**US**	**Codex**	**EU**
Abamectin	0.02	--	0.02
Acetamiprid	0.2	--	(0.1)
Acibenzolar-S-methyl	1	--	(0.02)
Azinphos-methyl	0.3	--	(0.05)
Azoxystrobin	2	--	2
Bensulide	0.1	--	--
Beta-cyfluthrin	0.5	(0.2)	--
Bifenazate	2	--	(0.5)
Bifenthrin	0.05	--	0.2
Boscalid	1.2	--	(1)
Buprofezin	1.3	--	(1)
Captan	0.05	--	(0.02)
Carbaryl	5	(1)	(0.05)
Carfentrazone-ethyl	0.1	--	(0.01)
Chlorantraniliprole	0.7	--	(0.3)
Chlorfenapyr	1	--	(0.05)
Chlorothalonil	6	--	(2)
Clethodim	1	--	(0.5)
Cryolite	7	--	--
Cyfluthrin	0.5	(0.2)	(0.1)
Cymoxanil	0.2	--	(0.05)
Deltamethrin	0.3	--	0.3
Dicofol	2	--	(0.02)
Difenoconazole	0.6	--	(0.05)
Dimethomorph	1.5	(1)	(0.05)
Dinotefuran	0.7	--	--
Emamectin	0.02	--	--
Endosulfan	1	(0.1)	(0.05)
EPTC	0.1	--	(0.05)
Famoxadone	4	--	(1)

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Eggplant (ppm) (Group 12C, Eggplant Subgroup)		
Compound	**US**	**Codex**	**EU**
Fenamidone	1	--	(0.02)
Fenbutatin-oxide	6	--	(1)
Fenhexamid	2	2	(1)
Fenpropathrin	1	(0.2)	(0.01)
Fenvalerate	1	--	(0.02)
Flonicamid	0.4	--	(0.05)
Flubendiamide	0.6	--	(0.01)
Fludioxonil	0.01	0.3	1
Flumioxazin	0.02	--	0.05
Fluopicolide	1.6	--	(0.01)
Fluoxastrobin	1	--	(0.05)
Gamma Cyhalothrin	0.2	--	--
Glyphosate	0.1	--	0.1
Halosulfuron-methyl	0.05	--	(0.01)
Imidacloprid	1	(0.2)	(0.5)
Indoxacarb	0.5	0.5	0.5
Inorganic bromide resulting from fumigation	20	--	30
Lactofen	0.02	--	(0.01)
Lambda Cyhalothrin	0.2	--	0.5
Malathion	8	--	(0.02)
Mandipropamid	1	--	1
Maneb	7	--	(3)
Metalaxyl	1	--	(0.05)
Methamidophos	1	--	(0.01)
Methomyl	0.2	--	0.2
Methoxyfenozide	2	--	(0.5)
Myclobutanil	4	--	(0.3)
Naled	0.5	--	--

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

Table 8 (continued). Residue Tolerances established on Fruiting Vegetable Group 012

(FASonline: mrldatabase.com; residue tolerances as of March 19, 2009)

	Eggplant (ppm) (Group 12C, Eggplant Subgroup)		
Compound	**US**	**Codex**	**EU**
Napropamide	0.1	--	0.1
Oxamyl	2	--	(0.02)
Oxydemeton-methyl	1	--	(0.02)
Paraquat dichloride	0.05	0.05	(0.02)
Pendimethalin	0.1	--	(0.05)
Permethrin	0.5	1	(0.05)
Phosphine	0.01	--	0.05
Propamocarb hydrochloride	2	(0.3)	10
Pymetrozine	0.2	--	0.5
Pyraclostrobin	1.4	(0.3)	(0.2)
Pyridalyl	1	--	--
Pyriproxyfen	0.2	--	1
S-metolachlor	0.1	--	(0.05)
Sethoxydim	4	--	(0.5)
Spinetoram	0.4	--	0.5
Spinosad	0.4	--	1
Spiromesifen	0.45	--	0.5
Spirotetramat	2.5	--	(2)
Tebufenozide	1	--	(0.5)
Thiamethoxam	0.25	--	(0.2)
Trifloxystrobin	0.5	--	(0.02)
Trifluralin	0.05	--	0.5
Uniconazole-P	0.01	--	--
Zeta-Cypermethrin	0.2	0.2	0.5

Note: That shaded cells indicate that the residue tolerance is established for the respective crop group rather than for the individual commodity.

B.5. Characteristics (morphology, edible portions, growth habits, pest problems and livestock feed items) – Fruiting Vegetables, other than Cucurbits:

Fruiting vegetables are warm season annual or perennial plants grown for fruits, and some also for leaves. They are consumed fresh or cooked in vegetable dishes, soups or salads, and they can be used fresh or in a dehydrated form. Tomatoes can be processed into paste, puree and juice. Among the 21 proposed commodities, tomato, peppers (both sweet bell and chili peppersl), and eggplant are the most widely grown fruiting vegetables (non-Cucurbit) in the world and with the largest acreages.

The vegetables of this group are fully exposed to pesticides applied during the period of fruit development, except those of which the edible portion is covered by husks, such as ground cherries (Physalis spp.). The latter fruiting vegetables are protected from most pesticides by the husk except from pesticides with a systemic action.

There are no significant animal feed items associated with any of the current or proposed members of Fruiting vegetables group 012. Since there are no animal feed items, there is a no reasonable expectation of residues in meat, milk, poultry or eggs.

The members of the Fruiting Vegetable Crop Group share many of the same pest problems since most are members of the same Solanaceae botanical family. Because of the similarity in the botany, cultivars and cultural practices among these crops, they have can be expected to have similar pest problems. Some of the pests affect the external appearance of the fruit, some from damage by feeding on the leaves or buds, and some by reducing postharvest qualities. Many pests and diseases which afflict Solanaceous vegetables, such as tomato, pepper and potato, are also troublesome to eggplants.

B.6. Conclusion – Fruiting Vegetables, other than Cucurbits

Proposed representative commodities (Tomato; Sweet Pepper, Chili Pepper, Eggplant, large and small cultivar) for Group 012 Fruiting Vegetables, other than Cucurbits were selected based on the principles in the Guidance document as follows:

(1) A representative commodity should be major in terms of production and consumption:

The proposed representative commodities, tomato, sweet peppers, chili pappers and eggplant are widely grown throughout the world. Based on FAO agriculture statistics, the most widely produced crop in hectares and in total metric ton is the tomato (Table 6). Information on major fruiting vegetable production (hectares) and yield (metric tons) is provided in Table 6 (FAO Statistics, 2007). Asia is the predominant fruiting vegetable producing region with over 50% of the fruiting vegetable production. The World Health Organization (WHO) classifies tomatoes, peppers (both chili and sweet) and eggplants as crops being significant in diets world wide (Middle Eastern, Far Eastern, Africa, Latin America and European) according to WHO regional data (WHO, 1998). Okra is considered significant in diet only in Middle Eastern regional diets.

(2) A representative commodity should be likely to contain the highest residues.

There are considerably more residue tolerances (Table 8) established for the proposed representative commodities (Tomato; Sweet Pepper, Chili Pepper and Eggplant) than the other member commodities (tomatillo, ground cherry, pimentos, okra, cubanella) for which residue tolerances are established. In addition, residue tolerances established for the respective commodities of tomato, sweet pepper and chilli pepper are remarkably similar and supports that residue levels will be similar between other members of the group. This supports the establishment of these commodities as representative commodities for their respective subgroups.

(3) A representative commodity should be similar in morphology, growth habit, similar pest problems and edible portion to the related commodities within a group or subgroup:

The fruiting vegetable, other than Cucurbits commodity group and subgroups consists of commodities with similar cultural practices, edible food portions, geographical locations, similar pest problems and lack of animal feed items.

Both peppers and eggplants consist of commodities with both large sized varieties (sweet pepper) and small sized varieties (chilli pepper). Note that eggplants can now be found in sizes as small as large peas (pea eggplant). Because of these size differences in the same commodity, both sweet pepper and one cultivar of chilli pepper are proposed as representative commodities for Group 12B and one cultivar of large variety eggplant and one cultivar of small variety eggplant are proposed for Subgroup 12C. Note that for the entire commodity group, the proposed representative commodities are (1) tomato; (2) Sweet Pepper and (3) Chili pepper or small variety of eggplant.

B.7. References – Fruiting Vegetables, other than Cucurbits:

FAO Statistics: FAO Statistics 2007. http://faostat.fao.org/faostat/form?collection=Production. Crops.

HYNES: Hynes, s. 2005. Personal communications. Fruiting vegetable production in Canada. PMRA, Health Canada. 22 Nov. 05.

NAGASAWA 2005c. Nagasawa, N. 2005c. Personal Communication. Fruiting vegetables and mushrooms in Japan based Statistics of Agriculture, Forestry and Fisheries by MAFF. 13 Jun. 05.

WHO, 1998: GEMS/Food Regional Diets. Regional per capita consumption of raw and semi-processed agricultural commodities. Food Safety Unit. World Health Organisation, WHO/FSF/FOS/98.3, Geneva, 1998.

ADDENDUM II, Background Information Regarding Representative Commodities

Background Information for the Draft Principles and Guidance on the Selection of Representative Commodities for the Extrapolation of MRLs to Commodity Groups

Background

1. Residue extrapolation is the process by which the residue levels on representative commodities are utilized to estimate residue levels on related commodities in the same crop group or subgroup for which trials have not been conducted, but would have similar residue levels. Representative commodities are chosen based on their commercial importance, similar morphology and residue characteristics. Ideally representative crops are the most economically important crops in production or consumption in a crop group and have a greater dietary burden and have residue characteristics similar to other members of the crop group or subgroup. Residue extrapolation is a common consideration utilised by regulators internationally for ensuring that data requirements are only at a level that is scientifically justified in conducting risk assessment and to ensure the regulatory process does not become unnecessarily burdensome. This is critical because it is not always economically attractive for a product manufacturer to conduct trials on the many crops which are grown in relatively small amounts/areas (minor crops), but which may nonetheless be scientifically supported via extrapolation. Residue extrapolation may be used to simply estimate the residue level of a commodity on the basis of data generated for a similar commodity or, as is currently extensively practiced, it may be used in conjunction with established crop groupings to establish residue levels for an entire commodity grouping or subgroup.

2. The Residue Chemistry Expert Group (RCEG) of the OECD (Final Report: OECD Residue Chemistry Expert Group Meeting, Paris, Jan. 22-24, 2008) drafted a Representative Crops and Extrapolation document (Annex I) that provided background, described national approaches, classification criteria and provided a table comparing representative crops for the US, EU, Australia and Japan. The OECG RCEG will adopt the new Codex Food and Feed Classification when it is finalized.

3. JMPR currently uses representative commodities for estimation of MRLs for commodities of minor crops or crop groups on a case-by case basis according to the paragraph "Estimation of group maximum residue levels" of the *FAO manual on the submission and evaluation of pesticide residues data for the estimation of residue levels in food and feed*, 2002, page 58. The lack of formal criteria or an agreed mechanism to determine the members of a group for which data are needed before a group MRL can be established at the international level limits the ability of the JMPR to apply extrapolations on a regular basis. Extrapolations to group Codex MRLs have historically been limited to a few groups: citrus fruit, pome fruit, stalk and stem vegetables, cereal grains, and stone fruit (*IR-4/USDA International Croup Grouping Symposium Proceedings*, 2002, page 51).

4. JMPR gave their view on estimating group MRLs in the paragraph "Estimation of group maximum residue levels" of the FAO manual and some of the relevant listed principles are summarised below:

   - The Codex Classification is the basis for recommending MRLs for individual and grouped commodities.
   - In the absence of sufficient data for one commodity, data from a similar crop for which GAP is similar may support the estimation of MRLs.
   - Data on residues in all or most of the major commodities with the potential for high residues within a group may allow estimates of MRLs to be extrapolated to other crops in the group.
   - In order for a group limit to be proposed, not only must residue levels in the major commodities in the group not to be different, but the physical nature and other characteristics of the crops that might influence residue levels, as well as cultural practices and GAP for the individual commodities, must also be taken into account.

   The premise of this approach is that if data are available for representative crops, and if GAP and cultural practises among the individual members are similar, the residue levels will not vary widely and a maximum residue level can be estimated that will suffice for other members of the group for which no data are available.

   JMPR further addressed the issue of representative crops and crop groups in General Consideration 2.8 of the 2006 Report (Updating the Principles and Methods of Risk Assessment).

   Codex MRLs are used as trade standards. MRLs for control-of-use are parochial (national, local), whereas MRLs for trade purposes should be global.

   From the trade perspective, it is preferable to have an MRL than no MRL if residues are likely in the food/feed commodity. A more liberal policy is needed for extrapolation of MRLs to groups, and JMPR recommends the following scientific minimum conditions for group MRLs: (1) The pesticide is registered or authorized for use on the crop group [or many individual members of the group, JMPR 2008] and (2) Relevant and adequate residue data are available for at least one major commodity of the group. All relevant data for commodities of the group should be considered.

5. Residue extrapolation was included in the scope of the work in the extended revision of the Codex Classification of Foods and Animal Feeds, approved by the CAC 2006.

6. The CCPR 2007 in Beijing, China agreed that the Electronic Working Group of the Codex Classification of Foods and Animal Feeds, led by The Netherlands and the United States, should prepare a draft document outlining the principles of and guidance on the selection of representative crops for the purpose of extrapolation of MRLs. It was agreed that the guidance on selection of representative crops should be developed as a separate document to be provided to the JMPR rather than as a part of the Codex Classification itself (ALINORM 07/30/24, paragraphs 142 – 152).

7. At the CCPR 2008 in Hangzhou, China, the Delegation of the USA presented Addendum II on the selection of representative crops. This document considered the available information on the use of representative commodities by international regulatory authorities and noted that the principles were generally similar. It was also noted that the selection of suitable representative commodities should be flexible to account for differences in worldwide production. For the purpose of residue extrapolation, the US proposed that the principles presented in Addendum II would be used and that representative commodities would be selected in parallel with the revision of the respective crop grouping classification. The guidance document on the selection of representative commodities will be a separate document from the Codex Classification of Foods and Animal Feeds. The Meeting requested that the JMPR comment upon Addendum II (ALINORM 08/31/24, paragraphs 113 – 115).

8. The 2008 JMPR considered Addendum II (Report 2008, General Item, The Meeting offered the following comments: (1) Groupings should be formed so that members would be (typically) subject to the same GAP and would form a group with similar residue characteristics and (2) Representative commodities should be chosen according to (1) commercial importance and (2) residue characteristics.

Criteria (1) and (2) may conflict, that is, the most important commercial crop may not be the most important from a residue perspective, e.g., chilli peppers and sweet peppers. The JMPR considers all available data; the residue data driving the group MRL will not necessarily be from the suggested ”representative” commodities.

A group MRL should normally not be set based only on data from a minor crop. The selection of representative crops and corresponding commodities for particular crops and commodity groups “would be very valuable to proponents planning residue trials.”

9. Conclusion of JMPR 2008: The JMPR looks forward to further progress with commodity grouping and representative commodities. Careful attention to grouping will assist the JMPR to propose group MRLs more often.

10. At the CCPR 2009 in Beijing, China, the Delegation of the USA presented the Draft Principles and Guidance on the Selection of Representative Commodities for the Extrapolation of MRLS to Commodity Groups as a separate document. A number of comments were received and the Committee agreed to return the proposed draft Principles and Guidance to Step 2 for redrafting by the Delegation of the USA in order to take into account the comments made at the Forty first session.