



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

November 8, 2005

MEMORANDUM

SUBJECT: Reviewer's Guide and Summary of HED ChemSAC Approvals for Amending Commodity Definitions [40 CFR §180.1(h)] and Crop Group/Subgroups [40 CFR §180.41].

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THRU: William Donovan, Ph.D., Chairperson,
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In order to update and provide guidance to our residue chemistry reviewers and our partner's USDA-IR-4, California EPA Department of Pesticide Regulation (CDPR), and Canada Pest Management Regulatory Agency (PMRA), we have prepared this document which lists the revisions and amendments to Commodity Definitions under 40 CFR §180.1(h) and Crop Group/Subgroups under 40 CFR §180.41 that have been approved by the HED Chemistry Science Advisory Council (ChemSAC). These changes will be incorporated in the future revision of the Crop Grouping Regulation. The changes are entitled: I. Tropical and subtropical fruit commodity definitions; II. White sapote change to crop group and commodity definition; III. Commodity definition change for celery; IV. New commodity definition for parsley = cilantro; V. New commodity definition for winter squash; VI. Crop group change for turnip greens; VII. Almond residue data translatable to pistachios; VIII. Lingonberry, Juneberry, and

Salal added to Crop Group 13 Berries and Crop Subgroup 13-B Bushberry; IX. Establishment of the Oilseed Crop Group 20; and X Amendment of the Bulb Vegetable Crop Group 3. .

Reports, written by Dr. B. A. Schneider, for the analysis of each commodity definition and crop group/subgroup revisions can be obtained from the author at 703-305-5555 or E-mail schneider.bernard@epa.gov. The correct commodity term for each of the commodities discussed in this document can be found in the EPA Food and Feed Commodity Vocabulary (see <http://www.epa.gov/pesticides/foodfeed>).

A user's index to commodities and what sections to find the changes occurring are as follows:

<u>COMMODITY</u>	<u>CHANGE IN ITEM</u>
Acerola	I
Acorn squash	V
Almond	VII
Atemoya	I
Avocado	I
Beeplant	IX
Birida	I
Black mustard seed	IX
Black sapote	I
Borage, seed	IX
Brassica Leafy Vegetables Group 5	VI
Butternut squash	V
Calabaza	V
Canistel	I
Canola	IX
Cartamo	IX
Celery	III
Cherimoya	I
Chinese celery	III
Cilantro	IV
Citrus	II
Citron citrus	II
Citrus fruits	II
Citrus Fruit Group 10	II
Colewort	IX
Colza	IX
Crambe, seed	IX
Cucurbit Vegetables Group 9	V
Custard apple	I
Cushaw	V
False saffron	IX
Feijoa	I
<u>COMMODITY</u>	<u>CHANGE IN ITEM</u>
Field mustard seed	IX
Finochio	III

Flax, seed		IX
Florence fennel		V
Forage turnip		VI
Girasole		IX
Grapefruit		II
Guava		I
Herb Subgroup 19A		IV
Herbs and Spices Group 19		IV
Hubbard squash		V
Ilama		I
Indian rape		IX
Jaboticaba		I
Juneberry		VIII
Kumquat		I
Leafy Vegetables except Brassica Crop Group 4		III
Leaves of Root and Tuber Vegetables Crop Group 2	VI	
Lemon	II	
Linseed oil		IX
Longan		I
Lychee	I	
Lime		II
Lingonberry		VIII
Mamey sapote	I	
Mango	I	
Mustard, seed		IX
Oilseed Crop Group 20		IX
Orange	II	
Oriental mustard		IX
Papaya	I	
Parsley	IV	
Passionfruit		I
Pistachio		VII
Pummelo		I
Pulsan		I
Pumpkin		IV
Rambutan		I
Rapeseed, seed		IX
Safflower, seed		IX
Salal		VIII
<u>COMMODITY</u>		<u>CHANGE IN ITEM</u>
Sapodilla		I
Solin		IX
Soursop		I

Spanish lime	I
Spice Subgroup 9B	IV
Star apple	I
Starfruit	I
Sugar apple	I
Sunflower, seed	IX
Sweet anise	III
Sweet fennel	III
Tangelo	II
Turnip, forage	VI
Turnip greens	VI
Turnip tops	VI
Uniq fruit	I
Wax jambu	I
White sapote	II
Winter squash	V

ITEM I. TROPICAL AND SUBTROPICAL FRUIT COMMODITY DEFINITIONS:

The six new tropical/subtropical fruit crop definitions are as follows:

General Commodity	Specific Commodities included in definition
Papaya	Papaya; black sapote; canistel; mamey sapote; mango; sapodilla; and star apple.
Avocado	Avocado; black sapote; canistel; mamey sapote; mango; papaya; sapodilla, and star apple.
Grapefruit	Grapefruit, pummelo and their citrus cultivars and/or hybrids of these including Uniq fruit.
Guava	Guava; feijoa; jaboticaba; wax jambu; starfruit; passionfruit; and acerola.
Lychee	Lychee; longan; Spanish lime; rambutan; and pulasan.

- Modifications or expansions have also been approved for two existing crop definitions, sugar apple and white sapote.
- For the Sugar apple commodity definition: cherimoya, ilama, soursop and biriba will be added to the existing sugar apple definition, which currently covers sugar apple, atemoya and custard apple as follows:

General Commodity	Specific Commodities included in definition
Sugar apple	Sugar apple, atemoya, custard apple, cherimoya, ilama, soursop, and birida.

II. WHITE SAPOTE CHANGE TO CROP GROUP AND COMMODITY DEFINITION:

- There are two actions concerning white sapote.
 - The first action concerns white sapote becoming a member of the Citrus Fruits Crop

Group [40 CFR 180.41 (10)].

- The second action concerns adding white sapote to the Citrus fruit commodity definition [40 CFR §180.1(h)] as follows:

General Commodity	Specific Commodities included in definition
Citrus fruits	Grapefruit, lemons, limes, oranges, tangelos, citrus citron, kumquats, white sapote (<u>Casimiroa</u> spp.) and other cultivars and/or hybrids of these.

ITEM III. COMMODITY DEFINITION CHANGE FOR CELERY:

Chinese celery (Apium graveolens var. secalinum) will be added to the celery commodity definition under 40 CFR §180.1(h) as follows:

General Commodity	Specific Commodities included in definition
Celery	Celery, Florence fennel (sweet anise, sweet fennel, finocchio), Chinese celery, (fresh leaves and stalk only).

Note: Chinese celery is a member of Crop Group 4: Leafy Vegetables, except Brassica group [40 CFR 180.41 (4)].

ITEM IV. NEW COMMODITY DEFINITION FOR PARSLEY = CILANTRO:

A new commodity definition under 40 CFR §180.1(h) is established for parsley as follows:

General Commodity	Specific Commodities included in definition
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Parsley	Parsley, Cilantro.
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Note: The raw agricultural commodity (RAC) for parsley is parsley, leaves; and for cilantro is cilantro, leaves. The seeds of cilantro are coriander, seed and they are not covered as part of this commodity definition. Also, coriander, seed is a member of Crop Group 19: Herbs and Spices Group, and Crop Subgroup 19B: Spice Subgroup. Cilantro, dried leaves and parsley, dried leaves will remain as a member of Crop Group 19: Herbs and Spices Group, and Crop Subgroup 19A: Herb Subgroup.

V. NEW COMMODITY DEFINITION FOR WINTER SQUASH:

General Commodity	Specific Commodities included in definition
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Winter Squash	Fruits of the gourd (Cucurbitaceae) family that is consumed when mature, it has an inedible rind, and once picked they can be stored, and harvested seed can be germinated; e.g., <u>Cucurbita</u> spp. (acorn squash, hubbard squash, pumpkin, calabaza, butternut squash, cushaw and other cultivars and/or hybrids of these.
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Note: This new commodity definition has been incorporated into Crop Group 9: Cucurbit vegetables.

VI. CROP GROUP CHANGES FOR TURNIP GREENS:

Turnip greens will be removed from Crop Group 2: Leaves of root and tuber vegetables group [40 CFR 180.41 (2)], and it will become a member of Crop Group 5: Brassica leafy vegetables [40 CFR 180.41 (5)]. It will also be a member of Crop Subgroup 5B: Leafy Brassica greens. Forage turnip varieties grown for livestock feed uses only will remain in Crop Group 2: Leaves of root and tuber vegetables group.

VII. ALMOND RESIDUE DATA TRANSLATABLE TO PISTACHIOS:

Field residue data for almonds will be translatable to pistachios. Tolerances established for almonds will be established for pistachios at the same level.

Note: Pistachios are included as a member of the Tree Nuts Crop Group (40CFR§180.41). It was also determined that the representative commodities almond and pecan for the Tree Nuts Group adequately represent the Crop Group. The policy paper describing this action was sent to Registration Division for implementation by publishing an amendment to the Crop Group final rule in the Federal Register. However, due to FQPA priorities, the Agency has no plans to amend the Crop Group Regulations at this time, but the Agency is allowing petitioners to request tolerances for pistachios based on residue data submitted for the Tree Nut Crop Group. Until the Federal Register Notice is issued revising the Crop Group Regulation, tolerances for pistachios will be listed separately from the Crop Group, but the tolerance will be established at the same level as the Crop Group.

VIII. LINGONBERRY, JUNE BERRY, AND SALAL TO BE ADDED TO BERRIES CROP GROUP AND BUSHBERRY SUBGROUP:

Lingonberry, Juneberry, and salal will be included in Crop Group 13 - Berries and Crop Subgroup 13B- Bushberry. Until the Crop Group Regulation is repropose for petitions, the correct Section F crop tolerance expressions are as follows:

- (1). For a Crop Group 13 - Berries tolerance proposal: Berries Group and Juneberry, Lingonberry, and Salal;
 - (2). For a Crop Subgroup 13- B tolerance proposal: Bushberry Subgroup and Juneberry, Lingonberry, and Salal;
 - (3). For a blueberry tolerance proposal: Blueberry and Juneberry, Lingonberry, and Salal.
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IX. ESTABLISHMENT OF THE OILSEED CROP GROUP 20:

A new Oilseed Crop Group 20 is being established to harmonize with Canada's Crop Group 20. The representative commodities for the crop group are rapeseed (canola varieties only) and sunflower, seed. Members of this Crop Group will be rapeseed, seed; Indian rapeseed; Indian mustard, seed; field mustard, seed; black mustard, seed; flax, seed; sunflower, seed; safflower, seed; and crambe, seed. Borage, seed will also be added as a member if Canada agrees to also add it to their Crop Group 20.

Until the Federal Register Notice is issued revising the Crop Group Regulation to establish the Oilseed Crop Group 20, tolerances for the representative commodities [rapeseed (canola, seed) and sunflower, seed] as well as all members of the crop group will be listed individually, and the tolerance level will be identical.

X. AMENDMENTS TO THE BULB VEGETABLE CROP GROUP 3:

The Bulb Vegetable Crop Group 3 is

Each of the five proposals and recommendations will be discussed below, followed by a series of other recommendations on terminology, database development, and harmonization with Codex. The EPA would like to commend the valuable and high quality input of the ICGCC, all its members and the Workgroup Chairperson.

Proposal 1:

Amend the name of the crop group [40 CFR § 180.41 (c) (3)] from "Crop Group 3: Bulb Vegetables (Allium spp.) Group" to "Crop Group 3: Bulb Vegetable Group".

Recommendation for Proposal 1:

I recommend that ChemSAC concur to change the name of the current Crop Group 3: Bulb Vegetables (Allium spp.) Group [40 CFR § 180.41 (c) (3)] to "Crop Group 3: Bulb Vegetable Group, because not all of the proposed new members are Allium species (spp.). However, all of the members of the proposed new group are members of the same plant family: "Liliaceae, or Amaryllidaceae, and/or Alliaceae." The preferred family name for the Bulb vegetables is "Liliaceae", while the other two family names still have usage in taxonomic literature.

Proposal 2:

Amend the existing crop group that consists of the following seven commodities (bulb onion and green onion are same species and they are both listed under item 4): 1). Garlic (*Allium sativum* L. var. *sativum*) 2). Garlic, great-headed (elephant) (*Allium ampeloprasum* L. var. *ampeloprasum*) 3). Leek (*Allium porrum* L. (syn: *A. ampeloprasum* var. *porrum* (L.) J. Gay) 4). Onion, dry bulb and green, (*Allium cepa* L. var. *cepa*) 5). Onion, Welsh, (*Allium fistulosum* L.) 6). Shallot (*Allium cepa* var. *aggregatum* G. Don.) to an expanded crop group that consists of following 25 commodities:

- 1). Canadian garlic, *Allium canadense* L.
- 2). Chive, *Allium schoenoprasum* L.
- 3). Chive, Chinese, *Allium tuberosum* Rottler ex Spreng.
- 4). Daylily; *Hemerocallis fulva* (L.) L. var. *fulva*
- 5). ELEGANS hosta, *Hosta Sieboldiana* (Hook.) Engl.
- 6). Fritillaria, *Fritillaria* L. fritillary
- 7). Garlic, *Allium sativum* L. var. *sativum* (A. *sativum* Common Garlic Group)
- 8). Garlic, great-headed, *Allium ampeloprasum* L. var. *ampeloprasum* (A. *ampeloprasum* Great-headed Garlic Group)
- 9). Garlic, Serpent, *Allium sativum* var. *ophioscorodon* (or A. *sativum* Ophioscorodon Group)
- 10). Kurrat, *Allium kurrat* Schweinf. ex K. Krause (or A. *ampeloprasum* Kurrat Group)
- 11). Lady's leek, *Allium cernuum* Roth
- 12). Leek, *Allium porrum* L. (syn: A. *ampeloprasum* L. var. *porrum* (L.) J. Gay) (A. *ampeloprasum* Leek Group)
- 13). Lily, *Lilium* spp. (*Lilium Leichtlinii* var. *maximowiczii*, *Lilium lancifolium*)
- 14 and 15). Onion, dry bulb and green, *Allium cepa* L. var. *cepa* (A. *cepa* Common Onion Group)
- 16). Onion, Beltsville bunching, *Allium x proliferum* (Moench) Schrad. (syn: *Allium fistulosum* L. x A. *cepa* L.)
- 17). Onion, Chinese, *Allium chinense* G. Don. (syn: A. *bakeri* Regel)
- 18). Onion, fresh, *Allium fistulosum* L. var. *caespitosum* Makino
- 19). Onion, macrostem, *Allium macrostemom* Bunge
- 20). Onion, Pearl, *Allium porrum* var. *sectivum* (or A. *ampeloprasum* Pearl Onion Group)
- 21). Onion, potato, *Allium cepa* L. var. *aggregatum* G. Don. (A. *cepa* Aggregatum Group)
- 22). Onion, tree, *Allium x proliferum* (Moench) Schrad. ex Willd. (syn: A. *cepa* var. *proliferum* (Moench) Regel; A. *cepa* L. var. *bulbiferum* L.H. Bailey; A. *cepa* L. var. *viviparum* (Metz.) Alef.)
- 23). Onion, Welsh, *Allium fistulosum* L.
- 24). Shallot, *Allium cepa* var. *aggregatum* G. Don.
- 25). Wild leek, *Allium tricoccum* Aiton

Recommendation for Proposal 2:

Based on similarities in cultural practices, edible food portions, residue levels, geographical locations, similar pest problems, and lack of animal feed items and for international harmonization purposes, I recommend that ChemSAC concur to establish an expanded Crop Group 3 Bulb Vegetables Group. The representative commodities for this crop group will remain the same bulb onion and green onion, as the original bulb vegetable group. Cultivars and hybrids between members of this Crop group are also included as members of this group. The only exception to adding members to the Bulb vegetable crop group is to delete Canadian garlic (*Allium canadense* L.) from the group. At this time, the author feels that the input of the ICGCC indicates that Canadian garlic has limited potential for increased cultivation and lacks potential for commercial development as a specialty crop. While some of the added orphan crops are also considered very minor, such as *Elegans hosta* and the lily, we feel they fit well in this group because they are grown in Asia and demand from immigrants to have native crops grown in the U.S. indicate greater potential as a specialty crop.

Proposal 3:

“3. Add the following two crop subgroups:

1). Subgroup 3A: Bulb onion subgroup. Representative crop: Onion, bulb. Ten commodities included in this subgroup are: Daylily; Garlic; Garlic, Canadian; Fritillaria (bulbs only); Garlic great-headed; Garlic, Serpent; Lily; Onion, Chinese; Onion, bulb; Shallots (bulbs only).

2). Subgroup 3B: Green onion subgroup. Representative crop: Onion, green. Seventeen commodities included in this subgroup are: Chive; Chive, Chinese; *Elegans hosta*; Fritillaria (green); Kurrat; Leek; Leek, lady’s; Onion, Beltsville bunching; Onion, fresh; Onion, green; Onion, macrostem; Onion, Pearl; Onion, potato; Onion, tree; Onion, Welsh; Shallots (green); Wild leek”

Recommendation for Proposal 3:

I also recommend that ChemSAC concur to establish two new subgroups for the Bulb vegetable group based on similarities in cultural practices, edible food portions (bulb vs. leaves), residue levels, geographical locations, similar pest problems, grower input, lack of animal feed items, and for international harmonization purposes. The similarities in green onion tolerances which are usually higher than bulb onions also support the establishment of the two new subgroups. The establishment of the two new subgroups will help growers in the establishment of integrated pest management programs (IPM) and they will provide additional options for preventing or delaying pest resistance. The new subgroups will be Onion, bulb, subgroup 3A with bulb onion as its representative commodity, and Crop subgroup 3B Onion, green, subgroup with green onion as the representative commodity. A comparison of the Codex grouping with the proposed additions to the U.S. crop groups find no conflict, since they are also proposing a Bulb onion and a Green onion subgroup.

I also, note that pearl onion should be removed from the green onion subgroup 3B placed in the bulb onion subgroup 3A based on its small edible bulb. At present, we do not recommend Canadian garlic be added to the Bulb onion subgroup 3A. The subgroups will become:

1). Subgroup 3A: Onion, bulb, subgroup. Representative crop: Onion, bulb. Ten commodities included in this subgroup are: Daylily; Garlic; Fritillaria, bulb; Great headed garlic; Serpent garlic; Lily; Chinese onion; Bulb onion; Pearl onion; Shallot, bulb.

2). Subgroup 3B: Onion, green, subgroup. Representative crop: Onion, green. Seventeen commodities included in this subgroup are: Chive; Chinese chive; Elegans hosta; Fritillaria, leaves; Kurrat; Leek; Lady's leek; Beltsville bunching onion; Fresh onion; Green onion; Macrostem onion; Potato onion; Tree onion; Welsh onion; Shallot, leaves; Wild leek"

Proposal 4:

"4. Amend the commodity terminology for the representative crops for Crop Group 3 from "dry bulb onion" to "bulb onion": Onion, bulb and Onion, green".

Recommendation for Proposal 4:

I recommend we amend the commodity name for dry bulb onion to bulb onion for tolerances purposes. The term bulb onion is now the name commonly used in commerce for this type of onion, and the tolerance term will be onion, bulb. Current tolerances for dry bulb onion are equivalent to bulb onion.

Proposal 5:

"5. Amend the scientific names in the 40 CFR § 180.41 (c) (3) according to the scientific names listed above under proposal 2; correcting the misspelled word "Onion, Welch" to "Onion, Welsh". Changing onion, dry bulb to onion, bulb in 40 CFR § 180.41 (c) (3) and 40 CFR § 180.1 (h), as applicable."

Recommendation for Proposal 5:

I agree that the misspelled commodity "Onion, Welch" be corrected to "Onion, Welsh". Changing onion, dry bulb to onion, bulb in 40 CFR § 180.41 (c) (3) and the onion commodity definition under 40 CFR § 180.1 (h) The scientific names for all of the bulb vegetables were reviewed and verified by Dr. John H. Wiersema, Botanist, USDA Systematic Botany and Mycology Laboratory, and Germplasm Resources Information Network (GRIN).

Other Recommendations:

6. Amend the Commodity definitions under 40 CFR § 180.1 (h) for Onions; Onions, dry bulb only; Onions, green; and garlic to reflect the changes to the Bulb vegetable crop group 3 as follows:

Onion..... Bulb onion, green onion, and garlic.

Onion, bulb Bulb onion; garlic; Fritillaria, bulb; daylily; great headed garlic; serpent garlic; Chinese onion; lily; pearl onion; potato onion; and shallot, bulb.

Onion, greenGreen onion; chive, fresh leaves; Chinese chive, fresh leaves; Elegans hosta; Fritillaria, leaves; kurrat; lady's leek; leek; wild leek; Beltsville bunching onion; fresh onion; tree onion, tops; Welsh, onion; shallot, fresh leaves.

GarlicGarlic, Great headed garlic, and serpent garlic.

7. Chive and Chinese chive currently are members of the Herb and Spice crop group 19 and their preferred commodity terms will be changed to reflect the fresh leaves vs. the dried leaves of these commodities. Chive, fresh leaves and Chinese chive, fresh leaves will become members of the Bulb vegetable crop group 3 and the Onion, green, subgroup 3B. Chive, dried leaves and Chinese chive, dried leaves will remain in the Herb and Spice crop group 19 and the Herb subgroup 19A. A full discussion of the Herb and Spice Crop group 19 will occur when USDA IR-4 submits the petition to amend this crop group.

8. Guidance for HED SOP 99.6 - "Classification of Food Forms with Respect to Level of Blending" issued August 20, 1999, and HED SOP 2000.1 - "Guidance for Translation of Field Trial Data from Representative Commodities in the Crop Group Regulation to Other Commodities in Each Crop Group/Subgroup" issued September 12, 2000 can be updated to reflect the revisions in the Bulb vegetable crop group 3.

9. Guidance on expressing tolerance terminology for the Bulb vegetable crop group 3 and the two proposed subgroups (Onion, bulb vegetable subgroup 3A and Onion, green, subgroup 3B) are discussed under the "Tolerance expression guidance section of this analysis.

10. Incorporation of new lookup and preferred EPA terms are listed in the EPA Food and Feed Commodity Vocabulary section of this report.