



**AAFCO**  
Association of American Feed Control Officials

**Ingredient Definitions Committee Minutes**  
AAFCO Midyear Meeting  
Wednesday, January 23<sup>rd</sup> 4:00PM – 7:00PM  
Hyatt Regency Albuquerque, 330 Tijeras Ave. NW,  
Albuquerque, NM 87102

Final 2/4/13

Minutes taken by: Kent Kitade, Jodi Miller; Compiled by Richard T.

164 Attendees on Role sheet

**Conference call Line and webex were provided for the meeting.**

Roll call with introductions was done. Invitation was extended to the gallery to become committeemembers:

Members Present: (8) Richard Ten Eyck, Mika Alewynse, Steve Gramlich (phone), Brett Groves, Roger Hoestenbach, Shannon Jordre, Ali Kashani, Mark Leblanc,

Members absent: Aaron Elam, Erin Bubb, Don Delorme, Jennifer Godwin, Jeri Kahana, John Machado, Becky Muir, Ricky Schroeder, Abed Zeibdawi, April Hunt,

Committee Advisors Present: (12) David Ailor, Dave Dzanis, Jill Franks, Jan Campbell, Jonathan Goodson, Leah Wilkinson, David Meeker, Vince Sewalt, Jon Nelson, Ed Rod, Jean Hofve, Steve Traylor (for Pat Tovey),

Chair noted the new list of investigators on page 21. They are set to be external point of contacts for questions about ingredients. They do not directly correlate to the section list in the OP. Investigators workloads are being balanced by the number of sections they edit. Some investigators may not even have a section (ie Canada, Botanicals). Richard is standing in for Minerals and Animal Products. Roger Hoestenbach will be handing off his investigator work in the near future. **We need 2-3 regulators to step up and help out.**

The investigators met with FDA this morning to triage the pipeline of new definitions. There are 60 – 70 definitions on the list. Most are waiting for more information from the requester.

The chair noted that there were errors published in the 2013 Official Publication (OP). Sharon Benz will make minor edits to the section 100 Header to better describe the section.

The committee concurred not to take corrective action on the following since membership had voted the day before to make identical changes in the 2014 OP:

These definitions were prematurely moved to Official:  
60.98 L-Carnitine, 87.27 Formic Acid, and 87.28 Castor Oil

These items were published prematurely in the 2013 OP  
Feed Terms: Powder (Powdered)  
Definitions: T36.1 Condensed Extracted Glutamic Acid Fermentation Product,  
T36.10 Condensed \_\_\_\_\_ Fermentation Solubles

Comments from industry: want final agendas earlier. Note revisions clearer.

**IDC recommendations to the Board from this meeting will be listed in attachment "IDC JAN 2013".**

**A.) Move the following definitions from tentative to official:**

1. Definitions to be moved from Tentative to Official
  - 1.1. 33.16 Methyl Esters of Conjugated Linoleic Acid – Ken **MSP Jordre/Groves**
  - 1.2. 71.300 Camelina Meal, extracted – Bob Church **MSP GROVES/HOESTENBACH**
  - 1.3. 71.77 Canola Meal – Bob Church **MSP Kashani/Groves**
  - 1.4.

**B.) Accept the following new definitions and place them in the OP as tentative:**

2. New Definitions: (publish as tentative)
  - 2.1. Xx.xx \_\_\_\_\_ Wheat Gluten – Steve Gramlich. not ready
  - 2.2. Xx.xx Bovine, Colostrum – Neil –not ready
  - 2.3. xx.xx Bovine Colostrum, Dried – Neil –not ready
  - 2.4. 60.112 \_\_\_\_\_ Pomace – Roger **MSP Hoestenbach/Leblanc Definition allows for other fruits to be added as reviewed by FDA.**
  - 2.5. xx.xx
  - 2.6. x
  - 2.7. x

## C.) Edit the following tables and listings in the OP as Official

- 2.8. Header for Feed Terms Section. Ali and Meagan are editing for clarity *Language was displayed and discussed. Committee did not take up the recommendation. Chair will establish a working group to refine language and report back by 5/1/13. Workgroup to consist of: Meagan Davis (lead), Ali Kashani, Steve Traylor (PFI), Jodi Miller, Leah Wilkinson (AFIA), Jan Jarman. ACTION ITEM: Feed Term workgroup report Discussion included industry wanting more time to deliberate agenda items (Traylor, Franks, Cook). Discussion also on what terms can and can't be used ie "fresh".*
- ~~2.9. Header for Mineral section. Edit Passed in Indy meet.~~
- 2.10. Section 73 Header for new Technical Additive section – Ten Eyck (73. TECHNICAL ADDITIVES Substances added to feed during manufacturing that assist in the production of feed. Examples include, but are not limited to: stabilizers, pelleting aids, anticaking agents, emulsifiers, sequestrants, flocculating agents, and additives for bio-fuel processes that generate co-products used for feed.) *MSP Hoestenbach/Mika Minor edits were made and are reflected in the language above.*
- 2.11. Table 30.1 Add *Trichoderma reesei* with gene from *Buttiauxella* sp. -Mika *MSP Jordre/Hoestenbach This item was in OP as tentative. This puts it in the table as official. There is nothing to change in the OP.*
- 2.12. Table 87.5 add use for canned pet foods for Xantham gum – Richard, put in section 73 *MSP Hoestenbach/Mika Form was edited and correct language will be in board recommendation. Item will be moved out of table 87.5 and listed in 73 as tentative.*
- 2.13. Edit Special Products section header – Roger *MSP Hoestenbach/LeBlanc,*
- 2.14. Guidelines to request definitions document – Proposed revisions from Page 334 Workgroup report – Kristi *MSP Mika/Hoestenbach Action Item: Ken Bowers will draft language for bylaws to allow this and move it forward in tandem to the board.*
- 2.15. Flavor table added to section 87 – Roger (late add to agenda) *MSP Mika/Hoestenbach Fair amount of discussion. AFIA would also like artificial flavors on the list. ACTION ITEM: Chair forms a workgroup on sorting section 87. Brett Groves(Lead), Roger Hoestenbach, Mika Alyewynse, Steve Traylor, Leah Wilkinson. Charge: sort section 87 in a manner that follows the new headers and propose changes by 5/1/13 to the ingredient definitions committee.*

## 6. Discussion Items:

- 6.1. Flavor approvals in Animal Feed. What are the rules?  
How to add them to the OP? - Leah Wilkinson, AFIA;

Mika Alewynse, CVM *Combined with discussion of the flavor table recommendation.*

6.2. Do we still need to bring ingredients into the OP in tentative status? Moderator: (Ken Bowers, By Laws Committee) Speakers: ( Leah, Mika, Richard ) *CVM likes the tentative process because it allows for public comment. Industry would like to see the review process speeded up. No consensus if it would be fine if they came into the OP as official. Suggestion of a more automatic process to reduce investigator and committee workload ie moves to official and second publication? No action items recommended.*

6.3. ~~History of beverage and fuel distillers grains. –done in Indy~~

6.4. Work Group report: Need for lamb meal, rabbit meal, or venison. –Neil Lanning (lead) Jill Franks, Steve Traylor, Leah Wilkinson, Jean Hofve, Susan Thixton, Dave Meeker *Jan Jarman is replacing Neil on the work group. She wanted to confirm membership. Jan needs 2 more regulators on the workgroup. The group will have a conference call soon and have a report ready by 6/1/13 to consider at the August meeting.*

6.5. Krill vs. Shrimp meal – ( Mika )*Krill is not an approved feed ingredient. Krill should not be marketed as shrimp meal. Safety concern is over Krill accumulating colors. Needs to come to FDA as a Food Additive Petition or Color Additive Petition.*

6.6. Rational for Rapeseed and canola meal nomenclature plus Rapeseed meal, mechanically extracted and Rapeseed meal, solvent extraction discussion of new definition proposals – Bob Church; NOPA, Leah *Bob presented the differences. Industry is submitting a white paper to FDA so they can determine if it should come in as an FAP or through AAFCO.*

~~6.7. GRAS ingredients with no question letters. We have 3 now, how does IDC want to proceed?–Moved to parking lot~~

6.8. Strategic Planning items from the board: (place holder)  
Revenue Generation: sales of Definition list

subscriptions weekly, annual license? Mobile APP for inspectors or pet food buyers? - Richard, Leah *No comments taken.*

6.9. Does IDC have any technical or leadership training needs that should be communicated to Education and Training committee. –Richard / Glo *No comments taken.*

8) Topics Left from past meetings (parking lot for future action items)

- a) Edits in Chemical Preservatives Section, antioxidant vs. preservative – Richard
- b) T 60.111 Bio Diesel Derived glycerine – Roger
- c) Other Definitions with Chromium levels –Mika
- d) 84.4 Soybean Feed, Solvent Extracted – Bob Church
- e) T33.10 \_\_\_\_\_ Distillers Oil, Feed Grade, - Ken,
- f) Pulses – discussion of definition request modifications – Roger
- g) GRAS ingredients with no-question letters. We have 3 now, how does IDC want to proceed?
- h) *Feed Term Workgroup - Meagan*
- i) *Section 87 Workgroup – Brett*
- j) *Meat terms workgroup, need 2 regulators - Jan*

MEETING ADJOURNED Approximately 6:30 PM

Need more information? Please contact:

Richard Ten Eyck, Ingredient Definitions Committee Chair  
Oregon Department of Agriculture  
635 Capital St NE  
Salem, OR 97301                      Cell: 503-351-0965  
E-mail: [rteneyck@oda.state.or.us](mailto:rteneyck@oda.state.or.us)

**Attachment “IDC Jan 2013”.**  
**Ingredient Definitions Committee recommendations A, B, C & D to the**  
**AAFCO Board and membership 1/24/13**

**A.) IDC recommends the definitions 33.16, 71.300 and 71.77 be made Official:**

IDC committee Recommendation	Voted to accept and forward to board on 1/24/13.
Board Recommendation	
Membership Vote	

**33.16 Methyl Esters of Conjugated Linoleic Acid (cis-9, trans-11 and trans-10, cis-12-octadecadienoic acids)**, may be safely used in swine feed in accordance with the prescribed conditions:

(a) The food additive is manufactured by the reaction of refined sunflower oil with methanol to produce fatty acid methyl esters, which then undergo conjugation to yield methyl esters of octadecadienoic acid. The additive consists of not less than 28 percent methyl ester of cis-9, trans-11-octadecadienoic acid, and not less than 28 percent methyl ester of trans-10, cis-12-octadecadienoic acid with the sum of the other methyl esters of octadecadienoic acid not to exceed 4 percent. The additive shall contain not less than 35 percent of other fatty acid esters composed of oleic acid, palmitic acid, stearic acid, linoleic acid, and other associated acid esters.

(b) The additive is used or intended for use in the feed of growing and finishing swine as a source of fatty acids at levels not to exceed 0.6% in the finished feed.

(c) The additive meets the following specifications:

(1) Free methyl alcohol not to exceed 0.015%.

(2) Insoluble impurities not to exceed 0.1%.

(3) Moisture not to exceed 0.5%

(4) Unsaponifiable matter not to exceed 1.0%

(d) To assure safe use of the additive, in addition to the other information required by the act:

(1) The label and labeling of the additive and any feed premix shall bear the following:

(i) The name of the additive.

(ii) A statement to indicate that methyl esters of conjugated linoleic acid (cis-9, trans-11 and trans-10, cis-12- octadecadienoic acids must not be added to vitamin or mineral premixes.

(2) The label and labeling of the additive, any feed premix, or complete feed prepared therefrom shall bear adequate directions for use.

21 CFR 573.637 (Proposed 2009, Adopted 2013)

**71.300 Camelina Meal, Extracted**, is the product obtained from high-pressure crushing of seed, or from a pre-press solvent extraction process, which removes the oil from the whole seed of the species *Camelina sativa*. The meal may be heated. The meal is the material which remains after most of the oil has been removed. It must not contain less than 30% crude protein, and a maximum of 12% crude fiber. It may contain up to 15% residual oil. The meal contains less

than 30 micromoles of any mixture of 9-Methylsulfinylnonyl glucosinolate, 10-Methylsulfinyldecyl glucosinolate, and 11-Methylsulfinylundecyl glucosinolate per gram of dry oil free solid. It is used in the diets of broiler chickens, cattle fed in confinement for slaughter, and laying hen chickens at an inclusion of no more than 10% of the diet. (Proposed 2010, Amended 2011, Adopted 2013)

**71.77 Canola Meal** low erucic acid low glucosinolate consists of the meal obtained after the removal of most of the oil by mechanical extraction, or by direct solvent or prepress solvent extraction process, from the whole seeds of the species *Brassica napus*, *Brassica campestris* or *Brassica juncea*. The oil component of which seed contains less than two percent erucic acid and the solid component of which seed contains less than 5 micromoles of allyl glucosinolate and less than 30 micromoles of any mixture of 3-butenyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3-butenyl glucosinolate and 2-hydroxy-4-pentenyl glucosinolate, and ally glucosinolate per gram of air dry, oil free solid. It must contain a maximum of 12% crude fiber and a maximum of 30 micromoles of glucosinolates per gram.

Note: A method of analysis for glucosinolates is contained in the publication by J.K. Daun and D.I. McGregor, December 15, 1981, *Glucosinolate Analysis of Rapeseed (Canola)*. Method of the Canadian Grain Commission, Grain Research Laboratory. (The method is on file with the Feed Methods Clearinghouse, Division of Animal Feeds, Center for Veterinary Medicine, Food and Drug Administration. (Proposed 1987, Adopted 1991, Amended 1995, Adopted 1998, Amended 2011, Adopted 2013)

IFN 5-05-145 Canola Meal Prepress Solvent Extracted, Low Erucic Acid, Low Glucosinolate

IFN 5-05-146 Canola Meal Solvent Extracted, Low Erucic Acid, Low Glucosinolate

**B.) IDC recommends the definition 60.112 and 73.200 be published as tentative:**

IDC committee Recommendation	Voted to accept and forward to board on 1/24/13.
Board Recommendation	
Membership Vote	

**T60.112 (\*blank - fruit) Pomace** is the sound residue from the normal processing of fruits for human consumption. This residue shall be suitable for animal feed usage and may contain the skin, peel, seed, and pulp, exclusive of stems except in accordance with good manufacturing practices. It must contain a maximum guarantee for moisture, and acid detergent fiber. The source must be declared as the first word in the ingredient name, i.e., apple pomace, etc. Moisture may be removed by an acceptable method and the term “dried” included in the name, i.e., dried apple pomace, etc.

\*Acceptable products: apple

Add to Section 73 page 424:

**Tentative  
Emulsifiers:**

**T73.200 Xanthan gum** as per 21 CFR 573.1010 is classified as a food additive as a stabilizer, emulsifier, thickener, suspending agent, or bodying agent in calf milk replacer, liquid feed supplements. Also per informal review processes, it can be used in canned dog and cat foods.

Maximum inclusion levels are 0.1% in calf milk replacers (as fed), and 0.25% in liquid feed supplements and canned dog and cat foods.

**Remove from table 87.5 Xanthan Gum (page 437)**

**C.) IDC recommends the following items be published in the OP as official:  
Header for section 73; modify table 30.1; Header for section 87; add  
language to guidelines on page 340 (requires bylaws change)**

IDC committee Recommendation	Voted to accept and forward to board on 1/24/13.
Board Recommendation	
Membership Vote	

Page 424 Section 73 Header for new Technical Additive section  
**73. TECHNICAL ADDITIVES**



Section Editor – Richard Ten Eyck, OR

Substances added to feed during manufacturing that assist in the production of feed. Examples include, but are not limited to: stabilizers, pelleting aids, anticaking agents, emulsifiers, sequestrants, flocculating agents, and additives for bio-fuel processes that generate co-products used for feed.

Page 381 Table 30.1 Add *Trichoderma reesei* with gene from *Buttiauxella* sp. *This item was in OP as tentative. This puts it in the table as official. There is nothing to change in the OP.*

Page 431 Edit section 87 header to read:

**87. SPECIAL PURPOSE PRODUCTS**

Section Editor—Vacant, Contact Richard Ten Eyck, OR

Color additives, condiments, flavoring agents, grinding agents, pigmentation, etc.

It is impracticable to list all common special purpose feed ingredients, together with the status, classification, tolerance, and limitations or restrictions, in the Official Publication.

The Association of American Feed Control Officials regard such common special purpose feed ingredients as salt, sugar, and pepper as safe for their intended use, when used in accordance with good manufacturing practice.

The less common special purpose feed ingredients, together with the status, classification, tolerance, and limitations or restrictions, are listed in the Official Publication. The least common special purpose feed ingredients, together with the status, classification, tolerance, and limitations or restrictions, are also listed in the Code of Federal Regulations; Title 21, Food and Drugs; Chapter 1--Food and Drug Administration, Department of Health and Human Services; Sub-Chapter A--General; Part 73—Color Additives, or Part 74--Color Certification, or Sub-Chapter E--Animal Drugs, Feeds, and Related Products; Part 573--Food Additives Permitted in Feed and Drinking Water of Animals or Part 582--Substances Generally Recognized as Safe or Part 584—Food Substances Affirmed as Generally Recognized as Safe in Feed and Drinking Water of Animals.

A number of ingredients have been approved by the FDA Informal Review Process (I.R.P.) (see AAFCO Official Publication: A guide to submitting New Ingredient Definitions to AAFCO).

**Add to page 340:**

**ANIMAL FOOD ADDITIVES APPROVED BY FDA**

Animal food additives approved by FDA are listed in 21 CFR 573. The food additive regulation specifies the requirements for safe use of the food additive and establishes the common or usual name for the new ingredient. To ensure that the AAFCO OP listing of defined feed ingredients is complete, the approved food additive, as specified in the published final rule, will be incorporated in the AAFCO OP's Official Common and Usual Names and Definition of Feed Ingredients section.

The designated FDA representative to the IDC will provide the appropriate investigator with the food additive regulation. The investigator will prepare a recommendation form and forward it to the Chair of the Ingredient Definitions Committee for consideration at the next committee meeting.

Since the ingredient has gone through the formal FDA approval process, once the AAFCO IDC, and the AAFCO Board, and AAFCO Membership have approved the definition, the entry will be incorporated in the AAFCO OP as Official.

\*\*\* Adoption of this process will necessitate an amendment to the bylaws on page 77-78 of the 2012 OP.

**Action Item:** *Ken Bowers will draft language for bylaws to allow this and move it forward in tandem to the board.*

Final OK for Public Contribution

**D.) IDC recommends the new table of flavors (87.30) be published as tentative:**

IDC committee Recommendation	Voted to accept and forward to board on 1/24/13.
Board Recommendation	
Membership Vote	

**Insert at page 445**

**Table T87.30 Flavoring Agents**

Flavoring substances and adjuvants may be safely used in animal food in accordance with the following conditions.

(a) They are used in the minimum quantity required to produce their intended technical effect and in accordance with all the principles of good manufacturing practice.

(b) In the appropriate forms (plant parts, fluid and solid extracts, concentrates, absolutes, oils, gums, balsams, resins, oleoresins, waxes, and distillates) consisting of one or more of the following:

Common Name	Botanical Name of Plant Source	Limitations
Aloe	<i>Aloe perryi</i> Baker, <i>A. barbadensis</i> Mill., <i>A. ferox</i> Mill., and hybrids of this sp. with <i>A. Africana</i> Mill. And <i>A. Spicata</i> Baker	
Althea root and flowers	<i>Althea officinalis</i> L.	
Amyris (West Indian sandalwood)	<i>Amyris balsamifera</i> L.	
Artemisia (wormwood)	<i>Artemisia</i> spp.	Finished food thujone free <sup>1</sup>
Benzoin resin	<i>Styrax benzoin</i> Dryander, <i>S. paralleloneurus</i> Perkins, <i>S. tonkinensis</i> (Pierre) Craib ex Hartwich, or other spp. of the Section <i>Anthostyrax</i> of the genus <i>Styrax</i>	
Blackberry bark	<i>Rubus</i> , Section <i>Eubatus</i>	
Boronia flowers	<i>Boronia megastigma</i> Nees	
Buchu leaves	<i>Barosma betulina</i> Bartl. et Wendl., <i>B. crenulata</i> (L.) Hook. or <i>B. serratifolia</i> Willd	
Cajeput	<i>Melaleuca leucadendron</i> L. and other <i>Melaleuca</i> spp.	
Camphor tree	<i>Cinnamomum camphora</i> (L.) Nees et Eberm	Safrole free

Cascara sagrada	<i>Rhamnus purshiana</i> DC	
Cassie flowers	<i>Acacia farnesiana</i> (L.) Willd	
Castor oil	<i>Ricinus communis</i> L.	
Catechu, black	<i>Acacia catechu</i> Willd	
Cedar, white (abovita), leaves and twigs	<i>Thuja occidentalis</i> L	Finished food thujone free <sup>1</sup>
Cherry pits	<i>Prunus avium</i> L. or <i>P. cerasus</i> L.	Not to exceed 25 p.p.m. prussic acid
Cherry-laurel leaves	<i>Prunus laurocerasus</i> L.	Not to exceed 25 p.p.m. prussic acid
Chestnut leaves	<i>Castanea dentate</i> (Marsh.) Borkh	
Copaiba	South American spp. of <i>Copaifera</i> L.	
Costus root	<i>Saussurea lappa</i> Clarke	
Cubeb	<i>Piper cubeba</i> L.	
Currant, black, buds and leaves	<i>Ribes nigrum</i> L.	
Damiana leaves	<i>Turnera diffusa</i> Willd	
Davana	<i>Artemisia pallens</i> Wall	
Dill, Indian	<i>Anethum sowa</i> Roxb. ( <i>Peucedanum graveolens</i> Benth et Hook., <i>Anethum graveolens</i> L.)	
Dittany of Crete	<i>Origanum dictamnus</i> L.	
Dragon's blood (dracorubin)	<i>Daemonorops</i> spp.	
Elemi	<i>Canarium commune</i> L. or <i>C. Luzonicum</i> Miq	
Erigeron	<i>Erigeron canadensis</i> L.	
Eucalyptus globulus leaves	<i>Eucalyptus globulus</i> Labill	
Fir ("pine") needles and twigs	<i>Abies sibirica</i> Ledeb., <i>A. alba</i> Mill., <i>A. sachalinesis</i> Masters or <i>A. mayriana</i> Miyabe et Kudo	
Fir, balsam, needles and twigs	<i>Abies balsamea</i> (L.) Mill	
Galbanum	<i>Ferula galbaniflua</i> Boiss. et Buhse and other <i>Ferula</i> spp.	
Gambir (catechu, pale)	<i>Uncaria gambir</i> Roxb	
Genet flowers	<i>Spartium junceum</i> L.	
Gentian rhizome and roots	<i>Gentiana lutea</i> L.	
Guaiac	<i>Guaiacum officinale</i> L., <i>G. santum</i> L., <i>Bulnesia sarmienti</i> Lor	
Guarana	<i>Paullinia cupana</i> HBK	
Haw, black, bark	<i>Viburnum prunifolium</i> L	
Hemlock needles and twigs	<i>Tsuga canadensis</i> (L.) Carr. or <i>T.</i>	

	<i>heterophylla</i> (Raf.) Sarg	
Hyacinth flowers	<i>Hyacinthus orientalis</i> L	
Imperatoria	<i>Peucedanum ostruthium</i> (L.). Koch ( <i>Imperatoria ostruthium</i> L.)	
Labdanum	<i>Cistus</i> spp.	
Linaloe wood	<i>Bursera delpechiana</i> Poiss. and other <i>Bursera</i> spp.	
Lovage	<i>Levisticum officinale</i> Koch	
Lungmoss (lungwort)	<i>Sticta pulmonacea</i> Ach	
Maple, mountain	<i>Acer spicatum</i> Lam	
Mimosa (black wattle) flowers	<i>Acacia decurrens</i> Willd. var. <i>dealbata</i>	
Myrrh	<i>Commiphora molmol</i> Engl., <i>C.</i> <i>abyssinica</i> (Berg) Engl., or other <i>Commiphora</i> spp.	
Oak, white, chips	<i>Quercus alba</i> L.	
Oak moss	<i>Evernia prunastri</i> (L.) Ach., <i>E.</i> <i>furfuracea</i> (L.) Mann, and other lichens	Finished food thujone free <sup>1</sup>
Olibanum	<i>Boswellia carteri</i> Birdw. and other <i>Boswellia</i> spp.	
Opopanax (bisabolmyrrh)	<i>Opopanax chironium</i> Koch (true opopanax) of <i>Commiphora</i> <i>erythraea</i> Engl. var. <i>Labrescens</i>	
Orris root	<i>Iris germanica</i> L. (including its variety <i>florentina</i> Dykes) and <i>I.</i> <i>pallida</i> Lam	
Passion flower	<i>Passiflora incarnate</i> L.	
Patchouly	<i>Pogostemon cablin</i> Benth. And <i>P.</i> <i>heyneanus</i> Benth	
Pennyroyal, American	<i>Hedeoma pulegioides</i> (L.) Pers	
Pennyroyal, European	<i>Mentha pulegium</i> L.	
Pine, dwarf, needles and twigs	<i>Pinus mugo</i> Turra var. <i>pumilio</i> (Haenke) Zenari	
Pine, Scotch, needles and twigs	<i>Pinus sylvestris</i> L.	
Pine, white oil	<i>Pinus palustris</i> Mill., and other <i>Pinus</i> spp.	
Quassia	<i>Picrasma excelsa</i> (Sw.) Planch, or <i>Quassia amara</i> L.	
Quebracho bark	<i>Aspidosperma quebracho-blanco</i> Schlecht, or ( <i>Quebrachia lorentzii</i> (Griseb))	Schinopsis lorentzii (Griseb.) Engl
Quillaia (soapbark)	<i>Quillaja saponaria</i> Mol	
Rhatany root	<i>Krameria triandra</i> Ruiz et Pav. Or <i>K. argentea</i> Mart	

Rhubarb root	<i>Rheum officinale</i> Baill., <i>R. palmatum</i> L., or other spp. (excepting <i>R. rhaponticum</i> L.) or hybrids of <i>Rheum</i> grown in China.	
Sandalwood, white (yellow, or East Indian)	<i>Santalum album</i> L.	
Sarsaparilla	<i>Smilax aristolochiaefolia</i> Mill., (Mexican sarsaparilla), <i>S. regelii</i> Killip et Morton (Honduras sarsaparilla), <i>S. febrifuga</i> Kunth (Ecuadorean sarsaparilla), or undetermined <i>Smilax</i> spp. (Ecuadorean or Central American sarsaparilla).	
Sassafras leaves	<i>Sassafras albidum</i> (Nutt.) Nees	Safrole free
Senna, Alexandria	<i>Cassia acutifolia</i> Delile	
Snakeroot, Canadian (wild ginger)	<i>Asarum canadense</i> L.	
Spruce needles and twigs	<i>Picea glauca</i> (Moench) Voss or <i>P. mariana</i> (Mill.) BSP	
Storax (styrax)	<i>Liquidambar orientalis</i> Mill. or <i>L. styraciflua</i> L.	
Tagetes (marigold)	<i>Tagetes patula</i> L., <i>T. erecta</i> L., or <i>T. minuta</i> L. ( <i>T. glandulifera</i> Schrank).	As oil only
<i>Thymus capitatus</i> (Spanish "origanum")	<i>Thymus capitatus</i> Hoffmg. et Link	
Tolu	<i>Myroxylon balsamum</i> (L.) Harms	
Turpentine	<i>Pinus palustris</i> Mill. and other <i>Pinus</i> spp. which yield terpene oils exclusively.	
Valerian rhizome and roots	<i>Valeriana officinalis</i> L.	
Violet, Swiss	<i>Viola calcarata</i> L.	
Walnut husks (hulls), leaves, and green nuts	<i>Juglans nigra</i> L. or <i>J. regia</i> L.	
Yerba santa	<i>Eriodictyon californicum</i> (Hook, et Arn.) Torr.	
Yucca, Joshua-tree	<i>Yucca brevifolia</i> Engelm.	
Yucca, Mohave	<i>Yucca schidigera</i> Roezl ex Ortgies ( <i>Y. mohavensis</i> Sarg.).	

1As determined by using the method (or, in other than alcoholic beverages, a suitable adaptation thereof) in section 9.129 of the "Official Methods of Analysis of the Association of Official Analytical Chemists," 13th Ed. (1980), which is incorporated by reference. Copies may be obtained from the AOAC INTERNATIONAL, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877, or may be examined at the National Archives and Records Administration

(NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

---

*Final OK for public distribution*

## **Attachment 2: Final 334 Workgroup Report, Accepted by IDC 1/24/13**

334 Workgroup report 11/21/12:

Work group: Richard TenEyck, Kristi Smedley, Gary Yingling, John Machado, Glo Dunnavan, Dave Fairfield, Aaron Elam, Sharon Benz, Linda Morrison, Emily Helmes, Vince Sewalt (Revised 11/21/12)

The workgroup recommends the following language is added to end of definition process guidelines on page 334 of the 2012 AAFCO OP:

### **ANIMAL FOOD ADDITIVES APPROVED BY FDA**

Animal food additives approved by FDA are listed in 21 CFR 573. The food additive regulation specifies the requirements for safe use of the food additive and establishes the common or usual name for the new ingredient. To ensure that the AAFCO OP listing of defined feed ingredients is complete, the approved food additive, as specified in the published final rule, will be incorporated in the AAFCO OP's Official Common and Usual Names and Definition of Feed Ingredients section.

The designated FDA representative to the IDC will provide the appropriate investigator with the food additive regulation. The investigator will prepare a recommendation form and forward it to the Chair of the Ingredient Definitions Committee for consideration at the next committee meeting.

Since the ingredient has gone through the formal FDA approval process, once the AAFCO IDC, and the AAFCO Board, and AAFCO Membership have approved the definition, the entry will be incorporated in the AAFCO OP as Official.

\*\*\* Adoption of this process will necessitate an amendment to the bylaws on page 77-78 of the 2012 OP.