NOSB RECOMMENDED DECISION FORM

Form NOPLIST2. Full Board Transmittal to NOP

For NOSB Meeting: Substance: Myrrh (Commiphora myrrha) essential oil											
A. Evaluation Criteria	(Applicability noted fo	r each c	ategory; Documen	tation atta	ached) <u>Criteria</u>	Satisfic	ed? (see	B below)			
1. Impact on Humans and Environment Yes X No \(\sqrt{N} \) N/A \(\sqrt{N} \)											
2. Essential & Avai	ability Criteria Yes X No ☐ N/A ☐										
3. Compatibility & 0	& Consistency Yes X No \square N/A \square										
4. Commercial Sup											
B. Substance fails	C. Proposed Anno			, ,	,						
criteria?											
MEETS criteria.	EETS criteria. Basis for annotation:										
Comments: none	ments: none To meet criteria above: Criteria:										
	Other regulatory crit	eria:	Citation:								
D. Final Board Action section 205.606	& Vote (State Actua	l Motio	n): To add My	rrh (Com	miphora myrrha) e	essentia	l oil to th	e National List in			
Motion: Steve DeMuri	Second: Julie W	/eisman	Yes: 11	No: 2	Abstain: 1	Abse	ent: 1				
	Agricultural	X	Nonagricultural		Crops						
	Synthetic		Not synthetic	Х	Livestock						
	Allowed	Х	Prohibited ²		Handling	Х					
	No restriction		Deferred4		Rejected ³						
that includes the evaluation criteria checklist: All criteria for listing this substance were met. The petition made a case that organic forms of myrrh are not commercially available, and independent research by the Handling Committee confirmed that assertion. The primary uses for this oil are as ingredients in personal care products, but it is conceivable that it could be used in organic food products as well. There are references in the literature to its' occasional use as an ingredient in beverages, and it has FDA approval for food use. The oil is extracted from the plant sap with steam. There are no synthetic solvents used in it's manufacture.											
1—substance voted to b	1—substance voted to be added as "allowed" on National List on National List to § 205.606 with Annotation (if any) No annotation										
2—substance to be added to "prohibited" paragraph of National List to § 205Describe why a prohibited substance:											
3—substance was rejec	ted by vote for amend	ing Nati	ional List to § 205.	606. De	scribe why materia	al was re	ejected:				
See summary narrative	in Section D above ar	nd attach	ned Committee Red	commend	lation documentati	on.					
4-substance was recommended to be deferred § 205 Describe why deferred; if any follow-up is needed. If follow-up needed, who conducts follow-up											
E. Approved by NOSB Chair to transmit to NOP											
<u>Jeff Moyer</u> ^{Chair}	·										
		_	Date								
			Dait								

NOSB COMMITTEE RECOMMENDATION

Form NOPLIST1. Committee Transmittal to NOSB

For NOSB Meeting:	May 2009_	Substar	ce: <u>Myrrh</u>	essential o	oil (Com	miphora myrrha)				
Committee: Crops ☐ Livestock ☐ Handling √ Petition is for: <u>The inclusion of myrrh essential oil (Commiphora myrrha) for use in perfume</u> on the National List § 205.606										
4. Impact on Hur 5. Essential & Av 6. Compatibility & 7. Commercial S B. Substance Fails of C. Proposed Annotation Basis for annotation D. Recommended Commended	5. Essential & Availability Criteria Yes √ No □ N/A □ 6. Compatibility & Consistency Yes √ No □ N/A □									
Motion by: <u>G.Davis</u>	Seconded: <u>S. De</u>	<i>Muri</i> Yes:	<u>4</u> No: <u>(</u>	Absen	t: <u>2</u>	Abstain	:_ <u>0</u> _			
	Crops	Agricultural	X	Allowed ¹		Х				
	Livestock	Non-Synthetic		Prohibite						
	Handling X	<u> </u>		Rejected						
	No restriction Commercially Un- Available as Organic ¹ X Deferred ⁴									
Substance voted to	1) Substance voted to be added as "allowed" on National List to § 205.606. with Annotation (if any) No annotation									
2) Substance to be ac	2) Substance to be added as "prohibited" on National List to § 205with Annotation (if any)									
Describe why a prohib	oited substance:									
3) Substance was rejected by vote for amending National List to § 205Describe why material was rejected:										
4) Substance was recommended to be deferred because If follow-up needed, who will										
follow up										
E. Approved by Committee Chair to transmit to NOSB: Steve DeMuri Committee Chair March 16, 2009 Date										

NOSB EVALUATION CRITERIA FOR SUBSTANCES ADDED TO THE NATIONAL LIST

Category 1. Adverse impacts on humans or the environment?

Substance - Myrrh essential oil

			1	
Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Are there adverse effects on		Χ		Petition
environment from manufacture,				
use, or disposal?				
[§205.600 b.2]				
2. Is there environmental		Χ		Petition
contamination during				
manufacture, use, misuse, or				
disposal? [§6518 m.3]				
3. Is the substance harmful to the		Χ		Petition
environment?				
[§6517c(1)(A)(i);6517(c)(2)(A)i]				
4. Does the substance contain		Х		
List 1, 2, or 3 inerts?				
[§6517 c (1)(B)(ii); 205.601(m)2]				
5. Is there potential for		Χ		
detrimental chemical interaction				
with other materials used?				
[§6518 m.1]				
6. Are there adverse biological		Х		Not intended for crop use
and chemical interactions in				·
agro-ecosystem? [§6518 m.5]				
7. Are there detrimental		Х		Not intended for crop use
physiological effects on soil				·
organisms, crops, or livestock?				
[§6518 m.5]				
8. Is there a toxic or other		Χ		
adverse action of the material or				
its breakdown products?				
[§6518 m.2]				
9. Is there undesirable		Х		
persistence or concentration of				
the material or breakdown				
products in environment?[§6518				
m.2]				
10. Is there any harmful effect on	Χ			Undiluted material may be irritant to the eyes
human health?				
[§6517 c (1)(A)(i) ; 6517 c(2)(A)i;				
§6518 m.4]	ļ	\		
11. Is there an adverse effect on		Χ		FDA approved as a food flavor.(petition)
human health as defined by				
applicable Federal regulations?				
[205.600 b.3]	<u></u>			P. CC.
12. Is the substance GRAS when	Х			Petition
used according to FDA's good				
manufacturing practices?				
[§205.600 b.5]	-	V		
13. Does the substance contain		Х		
residues of heavy metals or other				
contaminants in excess of FDA				
tolerances? [§205.600 b.5]				

¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 2. Is the Substance Essential for Organic Production? Substance – Myrrh essential oil

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance formulated or manufactured by a chemical process? [6502 (21)]		Х		Essential oil produced by steam distillation of oleoresin material exuded as sap from the plant Commiphora myrrha.
2. Is the substance formulated or manufactured by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral, sources? [6502 (21)]		X		Substance is extracted from natural plant source without chemical change.
3. Is the substance created by naturally occurring biological processes? [6502 (21)]		Х		
4. Is there a natural source of the substance? [§205.600 b.1]			Х	Substance is natural.
5. Is there an organic substitute? [§205.600 b.1]		Х		Petitioner claims that no organically produced myrrh oil is available. HC member internet search produced no organic sources.
6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]	Х			Petitioner claims substance is a vital component of certain perfumes.
7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]		Х		Fragrance is specific to this plant material.
8. Is the substance used in handling, not synthetic, but not organically produced? [§6517 c (1)(B)(iii)]	Х			See question 10
9. Is there any alternative substances? [§6518 m.6]		Х		
10. Is there another practice that would make the substance unnecessary? [§6518 m.6]	Х			Fair trade marketing efforts to work more directly with indigenous harvesters could potentially produce a certified organic (wild harvested) product.

¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 3. Is the substance compatible with organic production practices? Myrrh essential oil

Substance -

Question	Yes	No	N/A ¹	Documentation
Question	162	NO	IN/A	(TAP; petition; regulatory agency; other)
1. Is the substance compatible with organic handling? [§205.600 b.2]	Х			As long as the substance used as a component of organically certified perfumes is part of the 5% non-organic portion and resultant perfume product is not designated with myrrh in the name.
2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]	X			As a wild harvested material and extracted and/or diluted with natural solvents only.
3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]	X	X		Limited information raises concern of potential over- harvesting of the native shrubs from which myrrh is derived.
4. Is the nutritional quality of the food maintained with the substance? [§205.600 b.3]			X	
5. Is the primary use as a preservative? [§205.600 b.4]		Х		
6. Is the primary use to recreate or improve flavors, colors, textures, or nutritive values lost in processing (except when required by law, e.g., vitamin D in milk)? [205.600 b.4]		X		
7. Is the substance used in production, and does it contain an active synthetic ingredient in the following categories: a. copper and sulfur compounds;			X	
b. toxins derived from bacteria;			X	
c. pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals?			Х	
d. livestock parasiticides and medicines?			Х	
e. production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleaners?			X	

If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 4. Is the commercial supply of an agricultural substance as organic, fragile or potentially unavailable? [§6610, 6518, 6519, 205.2, 205.105 (d), 205.600 (c) 205.2, 205.105 (d), 205.600 (c)] Substance - Myrrh essential oil

Question	Ye s	No	N/A	Comments on Information Provided (sufficient, plausible, reasonable, thorough, complete, unknown)
1. Is the comparative description provided as to why the non-organic form of the material /substance is necessary for use in organic handling?	X			Plausible
2. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate <u>form</u> to fulfill an essential function in a system of organic handling?		X		
3. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quality to fulfill an essential function in a system of organic handling?		X		
4. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quantity to fulfill an essential function in a system of organic handling?	X			Plausible
 Does the industry information provided on material / substance non-availability as organic, include (but not limited to) the following: Regions of production (including factors such as climate and number of regions); 	X			Plausible
b. Number of suppliers and amount produced;		X		
c. Current and historical supplies related to weather events such as hurricanes, floods, and droughts that may temporarily halt production or destroy crops or supplies;		X		
d. Trade-related issues such as evidence of hoarding, war, trade barriers, or civil unrest that may temporarily restrict supplies; or	X			Petitioner makes the case for the difficulty of establishing a certified organic supply due to the inherent civil unrest of the main regions of production such as Somalia, Yemen, etc.

e. Are there other issues which may present a challenge to a consistent supply?	 Х	