

**National Organic Standards Board
Handling Committee
Petitioned Material Proposal
Murraya koenigii (curry leaves)
March 31, 2012**

Summary of Proposed Action:

A petition has been received to add *Murraya koenigii* (curry leaves) to be added to §205.606-Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.” *Murraya koenigii* (more commonly known as curry leaves or sweet neem leaves) is an extremely fragrant leaf commonly used for Indian cuisine.

Discussion

Since curry leaves are natural, not reported to be toxic or dangerous and are in fact a common condiment or ingredient in human diets, the Handling Committee chose not to request a TR.

Searches of the NOP database and two major organic certifiers’ online databases (QAI) and directories (CCOF) have yielded only three suppliers of organic curry leaves. The NOP’s database lists two distinct suppliers of curry leaves, both located in Sri Lanka while the CCOF directory lists one domestic source. QAI’s product listing database did not return any results. Since curry leaves are an important ingredient in numerous Indian recipes, and it is reported that no common ingredient substitution exists, this agricultural item appears to meet the requirements defined for “commercially available” in §205.2 in the NOP regulation (appropriate form, quality, quantity). As a result, curry leaves are a candidate for listing on §205.606.

The petitioner indicated that a pest species quarantined in the United States, the Asian citrus psyllid, is commonly found on curry leaves in common countries of origin; as a result, imported organic curry leaves are not reliably available. A simple internet search for the pest yields numerous reliable stories on the quarantines in place. Additionally, the single domestic supplier has limited quantities available, well under the quantity claimed to be needed by the petitioner.

Evaluation Criteria

(Applicability noted for each category; Documentation attached)
“B” below)

Criteria Satisfied? (see

- | | | | |
|--|-------|-----------------------------|------------------------------|
| 1. Impact on Humans and Environment | x Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 2. Essential & Availability Criteria | x Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 3. Compatibility & Consistency | x Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 4. Commercial Supply is Fragile or Potentially Unavailable as Organic (only for § 205.606) | x Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |

Substance Fails Criteria Category: [] Comments:

Proposed Annotation (if any):

Basis for annotation: To meet criteria above Other regulatory criteria Citation

Notes:

Recommended Committee Action & Vote, including classification recommendation (state actual motion):

Classification Motion: Motion to determine substance as non-synthetic.

Motion by: John Foster Seconded by: Harold Austin

Yes: 5 No: 0 Absent: 1 Abstain: 0 Recuse: 0

Listing Motion: Motion to add *Murraya koenigii* (curry leaves) to §205.606- Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.”

Motion by: John Foster Seconded by: Joe Dickson

Yes: 5 No: 0 Absent: 1 Abstain: 0 Recuse: 0

Crops	<input type="checkbox"/>	Agricultural	<input type="checkbox"/>	Allowed¹	x
Livestock	<input type="checkbox"/>	Non-synthetic	x	Prohibited²	<input type="checkbox"/>
Handling	x	Synthetic	<input type="checkbox"/>	Rejected³	<input type="checkbox"/>
No restriction	<input type="checkbox"/>	Commercial unavailable as organic	x	Deferred⁴	<input type="checkbox"/>

¹Substance voted to be added as “allowed” on National List to § 205. with Annotation (if any):

²Substance to be added as “prohibited” on National List to § 205. with Annotation (if any):

Describe why a prohibited substance:

³Substance was rejected by vote for amending National List to § 205. . Describe why material was rejected:

⁴Substance was recommended to be deferred because
If follow-up needed, who will follow up:

Approved by Committee Chair to Transmit to NOSB

John Foster, Committee Chair

3/31/12

NOSB Evaluation Criteria for Substances Added To the National List

Category 1. Adverse impacts on humans or the environment?

Substance: *Murraya koenigii* (Curry Leaves)

Question	Yes	No	N/A¹	Documentation (TAP; petition; regulatory agency; other)
1. Are there adverse effects on environment from manufacture, use, or disposal? [§205.600 b.2]		x		
2. Is there environmental contamination during manufacture, use, misuse, or disposal? [§6518 m.3]		x		
3. Is the substance harmful to the environment and biodiversity? [§6517c(1)(A)(i);6517(c)(2)(A)i]		x		
4. Does the substance contain List 1, 2		x		

or 3 inerts? [§6517 c (1)(B)(ii); 205.601(m)2]				
5. Is there potential for detrimental chemical interaction with other materials used? [§6518 m.1]		x		
6. Are there adverse biological and chemical interactions in agro-ecosystem? [§6518 m.5]		x		
7. Are there detrimental physiological effects on soil organisms, crops, or livestock? [§6518 m.5]		x		
8. Is there a toxic or other adverse action of the material or its breakdown products? [§6518 m.2]		x		
9. Is there undesirable persistence or concentration of the material or breakdown products in environment? [§6518 m.2]		x		
10. Is there any harmful effect on human health? [§6517 c (1)(A)(i); 6517 c(2)(A)i; §6518 m.4]		x		
11. Is there an adverse effect on human health as defined by applicable Federal regulations? [205.600 b.3]		x		
12. Is the substance GRAS when used according to FDA's good manufacturing practices? [§205.600 b.5]			x	
13. Does the substance contain residues of heavy metals or other contaminants in excess of FDA tolerances? [§205.600 b.5]		x		

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

NOSB Evaluation Criteria for Substances Added To the National List

Category 2. Substance Essential for Organic Production?

Substance: *Murraya koenigii* (Curry Leaves)

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)]		x		
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		
3. Is the substance created by naturally occurring biological processes? [6502 (21)]	x			
4. Is there a natural source of the substance? [§205.600 b.1]	x			
5. Is there an organic substitute? [§205.600 b.1]	x			But limited and uncertain supply
6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]	x			For those foods needing the profile the ingredient imparts
7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]			x	
8. Is the substance used in handling, not synthetic, but not organically produced? [§6517 c (1)(B)(iii)]	x			
9. Is there any alternative substances? [§6518 m.6]		x		
10. Is there another practice that would make the substance unnecessary? [§6518 m.6]		x		

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

NOSB Evaluation Criteria for Substances Added To the National List

Category 3. Substance compatible with organic production practices?

Substance: *Murraya koenigii* (Curry Leaves)

Question	Y e s	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance compatible with organic handling? [§205.600 b.2]	x			Petition
2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]	x			
3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]			x	
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]			x	
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:			x	
a. copper and sulfur compounds;			x	
b. toxins derived from bacteria;			x	
c. pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals?			x	
d. livestock parasiticides and medicines?			x	
e. production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleaners?			x	

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

NOSB Evaluation Criteria for Substances Added To the National List

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:** *Murraya koenigii* (Curry Leaves)

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. <u>Is the comparative description provided</u> as to why the non-organic form of the material /substance is necessary for use in organic handling?	x			Petition
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 form 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			
5. Does the industry information provided on material / substance non-availability as organic, include (but not limited to) the following:	x			
a. Regions of production (including factors such as climate and number of regions);				
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	x			

temporarily restrict supplies; or				
e. Are there other issues which may present a challenge to a consistent supply?	x			

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