NOSB COMMITTEE RECOMMENDATION

Form NOPLIST1. Committee Transmittal to NOSB

For NOSB Meeting:	<u>May 2009</u>		Substance: <u>Red Corn Color</u>					
Committee: Crops 205.606.	Committee: Crops 🗌 Livestock 🗌 Handling X Petition is for inclusion of Red Corn Color on the National List § 205.606.							
A. Evaluation Criteria (Applicability noted for each category; Documentation attached) Criteria Satisfied? (see B below) 1. Impact on Humans and Environment Yes X No N/A Impact on Humans and Environment 2. Essential & Availability Criteria Yes No X N/A Impact on Humans and Environment 3. Compatibility & Consistency Yes No X N/A Impact on Humans and Environment 4. Not or Inconsistently Available as Organic Yes No X N/A Impact on Humans								
organic is not adequa	 B. Substance Fails Criteria Category: 2 and 4 organic is not adequately addressed or explained. C. Proposed Annotation (if any):							
Basis for annotation	on: To meet criteria abov	e: Otl	ner regulatory cr	iteria: Citatic	on:			
D. Recommended (Basis for annotation: To meet criteria above: Other regulatory criteria: Citation: D. Recommended Committee Action & Vote (State Motion): Move to add Red Corn Color to the National List section 205.606.							
Motion by: <u>Steve De</u>	<u>eMuri</u> Seconded: <u>Katri</u>	i <u>na Heinze</u> Yes:	<u>0</u> No: <u>4</u>	Absent: <u>1</u> Abstaiı	n: <u>1</u>			
	Crops	Agricultural	X	Allowed ¹				
	Livestock	Non-Synthetic		Prohibited ²				
	Handling X	-		Rejected ³	X			
	No restriction	Commercially L Available as Or		Deferred4				
1) Substance voted to be added as "allowed" on National List to § 205 with Annotation (if any)								
2) Substance to be added as "prohibited" on National List to § 205with Annotation (if any)								
Describe why a prohibited substance:								
3) Substance was rejected by vote for amending National List to § 205. 606. Categories 2 and 4, essence and availability criteria, were not met.								
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 Date: March 14, 2009								

NOSB EVALUATION CRITERIA FOR SUBSTANCES ADDED TO THE NATIONAL LIST

Category 1. Adverse impacts on humans or the environment?

Substance – <u>Red Corn Color</u>

		-	-	
Question	Yes	No	N/A ¹	Documentation
				(TAP; petition; regulatory agency; other)
1. Are there adverse effects on		Х		The manufacturing process is identified as CBI in the petition,
environment from manufacture,				but a review with NOP staff indicates that this criteria is
use, or disposal?				satisfied. No adverse affects from use or disposal.
[§205.600 b.2]				
2. Is there environmental		X		Same as above.
contamination during manufacture,				Sume us usove.
use, misuse, or disposal? [§6518				
m.3]				
3. Is the substance harmful to the		X		This is an agricultural product
environment?		Λ		
[§6517c(1)(A)(i);6517(c)(2)(A)i]		v		This is an equivalence use durat
4. Does the substance contain List		Х		This is an agricultural product
1, 2, or 3 inerts? [86517 - (1)(R)(33) - 205 - (01(m))2]				
[§6517 c (1)(B)(ii); 205.601(m)2]				
5. Is there potential for detrimental		Х		This is an agricultural product
chemical interaction with other				
materials used?				
[§6518 m.1]				
6. Are there adverse biological and		Х		This is an agricultural product
chemical interactions in agro-				
ecosystem? [§6518 m.5]				
7. Are there detrimental		Х		This is an agricultural product
physiological effects on soil				
organisms, crops, or livestock?				
[§6518 m.5]				
8. Is there a toxic or other adverse		Х		This is an agricultural product
action of the material or its				
breakdown products?				
[§6518 m.2]				
9. Is there undesirable persistence		Х		This is an agricultural product
or concentration of the material or				
breakdown products in				
environment?[§6518 m.2]				
10. Is there any harmful effect on	1	Х		This is an agricultural product
human health?				
[§6517 c (1)(A)(i) ; 6517 c(2)(A)i;				
§6518 m.4]				
11. Is there an adverse effect on	1		Х	This is an agricultural product
human health as defined by			_	
applicable Federal regulations?				
[205.600 b.3]				
12. Is the substance GRAS when			X	This is an agricultural product
used according to FDA's good				ugi toutur product
manufacturing practices? [§205.600				
b.5]				
13. Does the substance contain	<u> </u>		X	This is an agricultural product
residues of heavy metals or other			Δ	r mo to an agricultural product
contaminants in excess of FDA				
tolerances? [§205.600 b.5]				
toterances? [8203.000 0.3]				

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 – <u>Red Corn Color</u>

	X 7	N	27/41	
Question	Yes	No	N/A ¹	Documentation (TAB: patition: regulatory agapay: other)
1. Is the substance formulated or manufactured by a chemical process? [6502 (21)]		X		(TAP; petition; regulatory agency; other) The petition states that red corn colorant is a vegetable juice extract of red corn kernels from <i>Gramineae Zea Mays</i> . The manufacturing process is identified as CBI in the petition, but a review with NOP staff indicates that this criteria is satisfied. No synthetic solvents are used in the extraction process. No adverse affects from use or disposal.
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)]		Х		A simple extraction process is employed. No 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	This is an agricultural product.
5. Is there an organic substitute? [§205.600 b.1]			Х	This is an agricultural product.
6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]			Х	
7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]			Х	This is an agricultural product.
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]	Х			There are some red color extracts (red cabbage, cherry juice, beet, red radish) currently listed in 205.606, but this petition does not explain why these currently listed non-organic red colors cannot be used as an alternative to the petitioned substance.
10. Is there another practice that would make the substance unnecessary? [§6518 m.6]	X			Potentially, the use of already listed non-organic red colors could be substituted for this petitioned substance.

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Category 3. Is the substance compatible with organic production practices? Substance – <u>Red Corn Color</u>

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance compatible with organic handling? [§205.600 b.2]	Х			
2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]	Х			This is an agricultural product
3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]	Х			This is an agricultural product, and could be grown sustainably.
4. Is the nutritional quality of the food maintained with the substance? [§205.600 b.3]	Х			
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		The substance is used to color food products, but not necessarily to recreate or improve colors lost in processing.
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		

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 4. Is the agricultural substance inconsistently or not commercially available as organic? Substance – <u>Red Corn Color</u>

Question	Yes	No	N/A	Comments on Information Provided (sufficient, plausible, reasonable, thorough, complete, unknown)
1. <u>Is the comparative description</u> <u>provided</u> as to why the non-organic form of the material /substance is necessary for use in organic handling?		X		The petitioner describes the use of the red corn color as a natural color additive in beverages, yogurts, confectionary, soups, sauces, desserts, etc., but it does not satisfactorily address the reasons why a non-organic form must be used.
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		Although red corn color does not appear to be available in an organic form, the raw source of the color, red corn, is available currently in an organic form. It is quite common in organic red tortilla chips and similar products. There is no compelling explanation as to the reasons for not being able to use organic red corn as opposed to conventional red corn to produce the color.
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 <u>quality</u> to fulfill an essential function in a system of organic handling?		X		There is some explanation regarding the breeding program currently underway to develop organic red corn for organic color manufacture, but there is no compelling evidence as to why currently available organic red corn is not suitable for this purpose.
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 <u>quantity</u> to fulfill an essential function in a system of organic handling?		X		The petitioner describes development of a hybrid that is suitable for the red color they desire, but there is also no compelling explanation as to the reasons why the hybrid can't be grown organically, especially considering the relatively wide ranging growing area of red corn throughout the US and the world, and the availability of organic land. A narrative is given as to difficulty in obtaining organic growers, but it is not backed up by evidence.
 5. Does the industry information provided on material / substance non- availability as organic, include (but not limited to) the following: a. Regions of production (including factors such as climate and number of regions); 	X			There is some brief description of local (to the petitioner) red corn growing areas, but it does not appear to be comprehensive.
b. Number of suppliers and amount produced;		X		No data provided.
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		No data provided.
d. Trade-related issues such as evidence of hoarding, war, trade barriers, or civil unrest that may temporarily restrict supplies; or		X		No explanation of any of these trade related factors was given, but they may not be relevant to red corn production.
e. Are there other issues which may present a challenge to a consistent supply?		X		None that were explained.