

November 20, 2006

National Organic Standards Board
c/o Robert Pooler
Agricultural Marketing Specialist
USDA/AMS/TM/NOP
P.O. Box 96456
Washington, D.C. 20090-6456.
Fax: 202/205-7808.
E-mail: nlpetition@usda.gov.

RESUBMISSION OF PETITION WITH CONFIDENTIAL BUSINESS INFORMATION (CBI) DELETED - ORIGINALLY SUBMITTED MAY 22, 2006

ADDITION OF "LEMONGRASS, FROZEN" TO 205.606

ITEM A

This petition requests that "Lemongrass, Frozen" be added to the National List under 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "organic". This agricultural substance is unavailable as organic in the frozen-from-fresh form which is required to obtain optimal flavor for certain ethnic cuisines. Addition of this item to 205.606 would allow for the substitution of conventional lemongrass frozen in the instances when organic is unavailable or organic supplies are unacceptable for the intended use.

ITEM B

1. **Substance Name:** Lemongrass (*Cymbopogon citratus* and *Cymbopogon flexuosus*) is also known as lemon grass, citronella, fever grass, serai, sereh, takrai. The flavor profile of this spice is a prominent characteristic of South East Asian cuisine. It is considered to be a delicate lemon flavor with perfume-like/aromatic background notes.
2. **Manufacturer's Name:** The following company is our primary supplier of organic dry lemongrass. Four additional suppliers of frozen organic herbs and spices have been advised of our search for frozen organic lemongrass.

CBI DELETED

**RESUBMISSION OF PETITION WITH CONFIDENTIAL BUSINESS INFORMATION
(CBI) DELETED**

ADDITION OF LEMONGRASS, FROZEN TO 205.606

Original Submission: May 22, 2006

Resubmission date: November 20, 2006

Page 2

3. **Intended Use:** Lemongrass is an agricultural ingredient used to add a distinct flavor note to South East Asian foods.

CBI DELETED

4. **Mode of Action:** Lemongrass is currently used by Amy's Kitchen to add a distinct flavor note to South East Asian foods. Dried lemongrass does not give an acceptable flavor profile in many applications. When distinct lemongrass flavor notes are required, fresh lemongrass gives an acceptable flavor profile; however, fresh lemongrass does not have the shelflife required by most food processors. Therefore, lemongrass frozen-from-fresh is the ideal type of lemongrass for use by food processors in certain ethnic products where strong lemongrass notes are required.

5. **Source and Manufacture:** Lemongrass, a perennial herb widely cultivated in the tropics and subtropics, designates two different species, East Indian, *Cymbopogon flexuosus* (DC.) Stapf., and West Indian, *Cymbopogon citratus* (DC. ex Nees) Stapf. East Indian lemongrass, also known as cochin or Malabar grass is native to India, while West Indian lemongrass is native to southern India and Ceylon. The lemongrasses are cultivated commercially in Guatemala, India, the People's Republic of China, Paraguay, England, Sri Lanka, and other parts of Indochina, Africa, Central America, and South America. The plant grows in dense clumps up to 2 meters in diameter and has leaves up to 1 meter long. (Taken from Simon, J.E., A.F. Chadwick and L.E. Craker. 1984. Herbs: An Indexed Bibliography. 1971-1980. The Scientific Literature on Selected Herbs, and Aromatic and Medicinal Plants of the Temperate Zone. Archon Books, 770 pp., Hamden, CT.)

Lemongrass is harvested and processed to give fresh, frozen and dried/powdered preparations as indicated in Attachment 1. While fresh can give an acceptable flavor profile, it does not have the shelf life required by most food processors.

**RESUBMISSION OF PETITION WITH CONFIDENTIAL BUSINESS INFORMATION
(CBI) DELETED**

ADDITION OF LEMONGRASS, FROZEN TO 205.606

Original Submission: May 22, 2006

Resubmission date: November 20, 2006

Page 3

6. **Summary of Previous Reviews:** An internet search yielded no relevant results.
7. **Regulatory Authorities:** As stated in FDA Code of Federal Regulations (CFR 21 Part 182.01) lemongrass, *Cymbopogon citratus*, is listed as Generally Recognized As Safe (GRAS). No citations regarding lemongrass were found in internet searches using EPA or California State Department of Agriculture.
8. **Chemical Abstract Service Number:** Not applicable.
9. **Physical Properties and Mode of Action:** Lemongrass provides a distinct flavor note to South East Asian foods. Based on an internet search, no known chemical interactions, toxicity or environment adversities nor health benefits or detriments are known for lemongrass plant. Note: Although the following is not relevant to this petition, internet citations showed that lemongrass is used as a fragrance and flavoring, and in folk medicine as an antispasmodic, hypotensive, anticonvulsant, analgesic, antiemetic, antitussive, antirheumatic, antiseptic, and treatment for nervous and GI disorders and fevers.
10. **Safety Information:** Lemongrass is on the FDA GRAS (Generally Recognized as Safe) list under CFR 21 Part 182.20 Essential oils, oleoresins (solvent-free), and natural extractives (including distillates). It is listed as Lemon grass (*Cymbopogon citratus* DC. and *Cymbopogon lexuosus Stapf*). It is presumed that since an extract of lemongrass is on the GRAS list, lemongrass without extraction would also be generally recognized as safe.
11. **Research Concerning Availability of Organic Lemongrass:** Discriminating chefs use fresh or frozen lemongrass and do not feel that recipes made from dried lemongrass have the same full flavor. Attachment 2 provides support for the unique flavor profile of fresh/frozen lemongrass as identified by chefs. To date, we have not located a supplier for organic frozen lemongrass.

RESUBMISSION OF PETITION WITH CONFIDENTIAL BUSINESS INFORMATION
(CBI) DELETED

ADDITION OF LEMONGRASS, FROZEN TO 205.606

Original Submission: May 22, 2006

Resubmission date: November 20, 2006

Page 4

12. **Justification Statement:** Organic dry lemongrass is available; there are two companies listed on Organic Pages On-Line and we are aware of at least one other. However, dry lemongrass is not always an acceptable substitute for frozen lemongrass and we have not yet located any supplier for organic frozen lemongrass. If it does become available in the near future, some time would be required to assess the consistency and quality of the new supply. For this reason, we would like "Lemongrass, Frozen" to be added to 205.606 to allow us time to develop an organic source with acceptable quality.

In order to maintain the flavor profile that Amy's Kitchen's customers desire and expect, we request that "Lemongrass, Frozen" be added to the National List under 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "organic". Amy's Kitchen intends to use organic frozen lemongrass when supplies are available that have been appropriately harvested, processed and frozen to meet our target flavor profile. When an organic source is not available that meets these requirements, we will provide information to our certifier, QAI, detailing our attempts to source organic and we will request to use conventional frozen lemongrass. While using a conventional source, we will aggressively continue to attempt to source acceptable organic lemongrass.

Respectfully submitted:



Marsha Koprak, Technical Service
marshakoprak@amyskitchen.net
707-586-4128



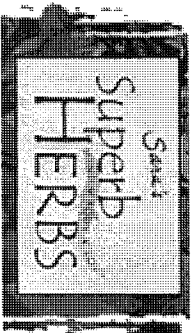
Bill Twieg, Technical Director
billtwieg@amyskitchen.net
707-578-7270

Attachments

ATTACHMENT 1

DETAILED INFORMATION ON LEMONGRASS

INCLUDING PRODUCTION METHODS



Lemongrass

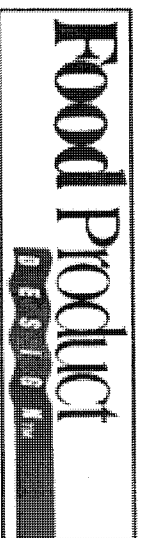
Cymbopogon citrates

Information Source: <http://www.superherbs.net/Lemongrass.htm>

Cymbopogon citratus is perennial and is an aromatic, flavorful grass that grows in southern India and Sri Lanka. It is a common ingredient in the cuisines of Africa, the Middle East, and throughout Southeast Asia. As Thai cooking has become popular, so has the familiarity of ingredients such as Thai basil and lemongrass.

Harvest and Use: Lemongrass leaves are strongly lemon scented and flavored. To use, cut off the root tip, peel the tough outer leaves, and cut away the top part of the stalk. It is the bulb section that is used, but don't throw away the leaves as they make a wonderful tea or flavor in soups, stews, and curries. The stalk will last for several days in the fridge or can be chopped and frozen for later use.

Cultivation and Propagation: It grows in dense clumps forming a bulb at the base and hollow, canelike stems. The bladed leaves are coarse and razor-sharp. They will grow to 36". Lemongrass is not difficult to grow in a pot. Water it well during the growing season, but keep on the dry side in winter. It is easier to propagate by division, rather than from seed. If you choose to sow, the temperature for germination should be at least 55 degrees.



Information Source: <http://www.foodproductdesign.com/archive/2000/0500de.html>

The type of herb used depends of course on the application. Dried herbs work best in dry mixes. For wet applications, several options exist, including fresh frozen herbs, intermediate-moisture herbs and herb pastes. According to Laurel Place, director of sales services, Supherb Farms, Turlock, CA, "fresh frozen herbs are already washed, chopped, individually quick frozen and sized, so they're 100% ready-to-use."

ATTACHMENT 2 USE OF LEMONGRASS IN COOKING

Shiok Far-eastern Cuisine

Information Source: <http://shiokfood.com/>

Recipe: Tom Yam Kai Soup

WHAT YOU NEED

Fresh or frozen lemongrass (dried lemongrass sucks) - 1 fat stalk (or 2 thin ones)

NOTE: This indicates that this chef considers fresh and frozen lemongrass as equivalents and recognizes the difference in quality between fresh and frozen vs. dried lemongrass.
AA

The Cook's Thesaurus

Information Source: <http://www.foodsubs.com/HerbsAsian.html>



lemongrass = lemon grass = citronella = fever grass = serai = takrai *Equivalents:* 1 small, trimmed stalk = 1 teaspoon serah powder = 1 tablespoon dried lemon grass *Notes:* Thai cooks use these grayish green stalks to impart a lemony flavor to their dishes. Remove the outer leaves, then use about six inches of the base, discarding the top and the very bottom. It's best to cut lemongrass into large pieces that can be easily removed after the dish is cooked. Frozen lemongrass is a good substitute for fresh, but dried lemongrass (soaked in hot water) is only a fair substitute. Use powdered version (called serah powder) only in a pinch.

NOTE: This indicates that the author considers fresh and frozen lemongrass as equivalents and recognizes the difference in quality between fresh and frozen vs. dried lemongrass.