

UC Small Farm Program
presents the

2007 Specialty Crops Conference

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**Market for U.S.-grown Botanicals
North American Botanical Crops with Economic Potential**

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Main Points of this Lecture

**Main North American Botanical Crops:
Cultivated, Wild-collected, Where grown?**

Snapshot of U.S. Botanicals Exports and Imports

**North American Botanicals with Official Standards
Official Standards = Demand for Specific Grades**

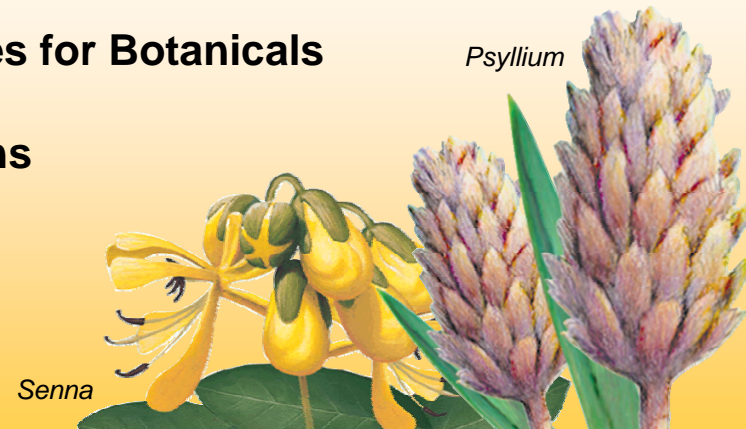
**North American Botanical Farms
Main Crops and Acreage**

North American Botanical Distributors and Processors

Good Agricultural and Collection Practices for Botanicals

Relevant Trade Associations

Other Resources



Main North American Botanical Crops: Cultivated, Wild-Collected, Where grown?

Aloe vera: Cultivated in Texas, and Tamaulipas, Mexico

American ginseng root: Cultivated in Ontario, Wisconsin; wild collected in 19 States.

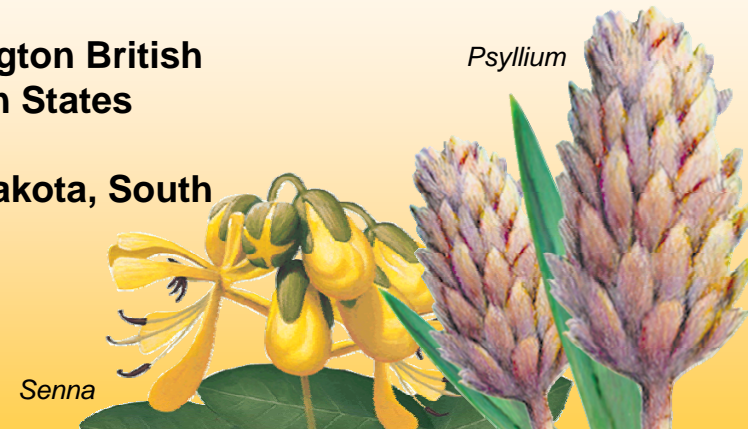
Black cohosh rhizome: Wild collected in Kentucky, Tennessee, Georgia, Ohio, North Carolina, Michigan, South Carolina, Virginia, West Virginia, Wisconsin

Capsicum fruit: Cultivated in New Mexico, Texas, Arizona, California

Cranberry fruit: Cultivated in Wisconsin, Massachusetts, Canada, New Jersey, Oregon, Washington

Echinacea herb & root: Cultivated in Oregon, Washington British Columbia; wild in many Midwestern and Mid-southern States

Flax seed: Cultivated mainly in Canada; also North Dakota, South Dakota, Montana, Minnesota



Main North American Botanical Crops: Cultivated, Wild-Collected, Where grown?

Garlic bulb: Cultivated in California

Ginger rhizome: Cultivated in Hawaii

Hop strobile: Cultivated in Oregon, Washington, Idaho

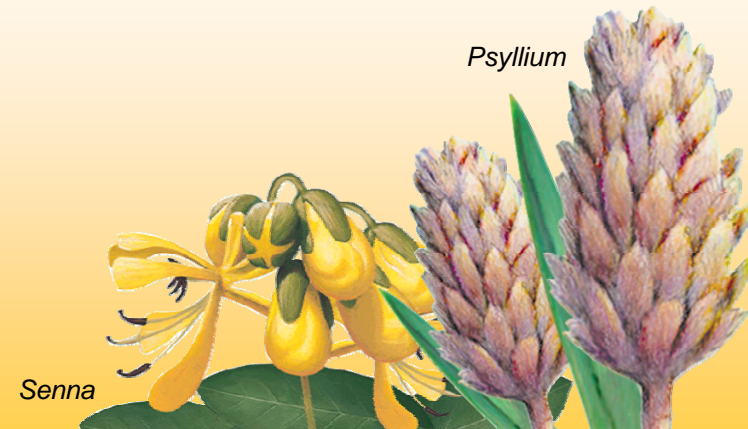
Jojoba seed: Cultivated in Sonoran Desert in Arizona, California and Mexico

Lavender flower: Cultivated in Oregon and Washington

Peppermint leaf: Cultivated in Oregon, Washington, Idaho

Saw Palmetto fruit: Wild collected in Florida

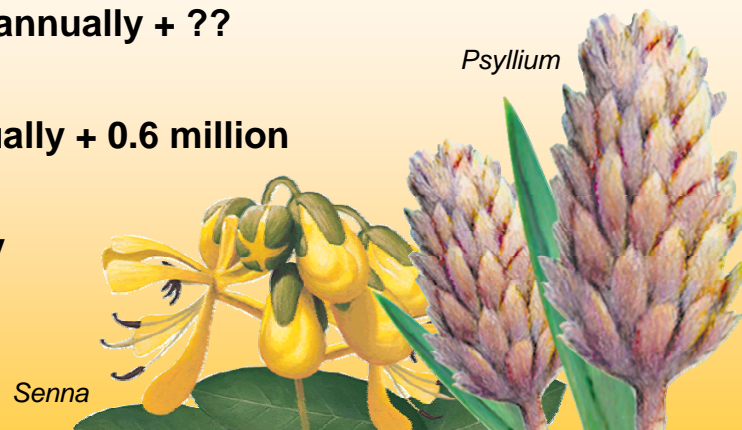
Spearmint leaf: Cultivated in Oregon, Washington



Snapshot of U.S. Botanicals Exports and Imports

SELECTED HIGH VOLUME BOTANICAL IMPORTS

1. USA imports ca. 128 million kg of Garlic annually
2. USA imports ca. 107.5 mg kg of Tea leaf annually of which about 12.5 million kg is Green Tea leaf
3. USA imports ca. 99 million kg of Capsicum fruit annually
4. USA imports ca. 48 million kg of herbal extracts (dry, liquid, soft)
5. USA imports ca. 32.5 million kg of Ginger rhizome annually
6. USA imports ca. 14.0 million kg of Psyllium husk and seed annually
7. USA imports ca. 6.5 million kg of Licorice root annually + 4.5 million kg of licorice extract
8. USA imports ca. 1 million kg of Senna leaf and pod annually + ?? million kg of senna extract
9. USA imports ca. 0.6 million kg of Ginseng root annually + 0.6 million kg of ginseng extract
10. USA imports ca. 0.4 million kg of Mint leaf annually



U.S. Imports of Selected Natural Ingredients, 2006, Value in USD, Top 5 Suppliers

HS Code	2006 Import Values in Dollars	Top five Suppliers
070320 (fresh garlic)	90,334,000	China (77.4%), South Korea (13.6%)
0712904020 (dried garlic powder)	18,543,000	China (99.6%)
0712904040 (dried, whole/cut garlic)	30,769,000	China (99.2%)
HS Codes 0902 through 0910 (tea and spices)	761,964,058	China (12.9%), India (12.7%), Indonesia (8.8%), Germany (5.6%), Brazil (5.5%)
1211 (medicinal plants)	202,055,719	China (25.8%), India (16.2%), Mexico (10.4%), Canada (6.3%), Turkey (4.3%)
121220 (seaweeds, other algae)	64,286,419	China (28.1%), South Korea (16.4%), Canada (12.7%), Japan (12.2%)
1301 (natural gums and resins)	83,140,440	Chad (23.3%), France (18.1%), India (12.4%), Thailand (10.8%), UK (9.3%)
1302 (saps, herbal extracts, mucilages, agar-agar, pectic substances)	622,117,796	India (29.2%), China (12.3%), France (7.2%), Mexico (6.3%), Germany (4.7%)
140490 (vegetable products NESOI)	37,287,254	Mexico (42.7%), Italy (22.5%), China (18.7%), Thailand (3.7%), Sri Lanka (2.5%)
151311 – 151319 (coconut oil)	284,282,364	Philippines (78.0%), Indonesia (15.7%), Malaysia (5.9%)
180400 (cocoa butter)	384,841,854	Malaysia (23.7%), Brazil (21.7%), Indonesia (15.4%), China (10.1%), Cote d'Ivoire (8.5%)
210120 (tea extracts)	116,601,000	Canada (47.4%), Mexico (12.3%), India (10.9%), China (9.9%), Kenya (5.3%)
293929 (cinchona alkaloids)	3,894,162	Germany (59.4%), Indonesia (31.0%), India (6.4%)
3301 (essential oils, resinoids)	424,784,913	Argentina (13.9%), India (12.9%), France (10.4%), China (8.9%), Mexico (7.0%)
330290 (mixed odoriferous substances NESOI)	18,495,445	Canada (23.4%), Spain (23.0%), France (20.2%), UK (14.7%), Switzerland (6.2%)
440130 (natural gums)	252,588	Singapore (49.2%), South Korea (17.2%), Italy (12.6%), Sri Lanka (11.3%), Canada (4.3%)
TOTAL U.S. Imports	3,143,650,012	

SOURCE: Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics.

Snapshot of U.S. Botanicals Exports and Imports

TABLE 1: U.S. Imports of Selected Herbs and Extracts / 2006 Import Volume (MT) / Percentage (%) of Total Quantities imported from China and Hong Kong (combined)

Herb Name	HS Codes	2006 Quantity Imported (MT)	2006 Quantity from China + Hong Kong (MT)	% of total from China
Capsicum fruit (<i>Capsicum</i> spp.)	090420	99,003.3	15,082	15.2%
Essential oils & resinoids	3301	35,983.8	3,048.6	8.5%
Garlic, fresh (<i>Allium sativum</i>)	070320	79,781.6	62,584.3	78.4%
Garlic, dried (<i>Allium sativum</i>)	07129040	48,615.4	48,354.9	99.5%
Garlic essential oil	3301295015	84.2	42.5	50.1%
Ginger rhizome (<i>Zingiber officinale</i>)	091010	32,553.2	25,594.9	78.6%
Ginseng root (<i>Panax</i> spp.)	121120	866.9	723.7	83.5%
Ginseng extracts	1302194020	675.7	465.9	68.9%
Herbal extracts & saps	130211 thru 130219	47,198.4	7,432.5	15.8%
Licorice root (<i>Glycyrrhiza</i> spp.)	121110	6,421.9	212.5	3.3%
Licorice root extracts	130212	4,644.5	3,273.7	70.1%
Other medicinal plants	121190	50,341.0	7,587.1	15.1%
Tea leaf (<i>Camellia sinensis</i>)	0902	107,576.5	21,550.8	20.0%

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division. Prepared by the Office of Trade and Industry Information (OTII), International Trade Administration, U.S. Department of Commerce.

Snapshot of U.S. Botanicals Exports and Imports

Table 2: U.S. Imports of Laxative Drug Active Ingredients, 2006, Volume (kg), % from India

Herbal Ingredient	HS Code	2006 Quantity Imported (kg)	2006 Quantity from India (kg)	% of total from India
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Castor Oil	HS 151530	45,908,470	44,128,593	96.1%
Karaya Gum	HS 1301909040	229,206	157,150	68.6%
Psyllium Husk	HS 1211909020	12,553,953	12,378,748	98.6%
Senna Leaf & Pod**	HS 12119022	410,200	410,200	?
TOTAL		59,101,829	57,074,691	96.6%

** The senna imports shown here reflect only those quantities shipped directly from India, the major source country. Data is not readily available on quantities of Indian senna imported by USA from intermediate sources. A large amount of India senna is shipped to Europe where it is value-added and re-exported to North America (but under a general 6-digit HS Code). There are also other senna producing countries including Egypt and the Sudan.

SOURCES: (1) Foreign Trade Division, U.S. Census Bureau. Prepared by the Office of Trade and Industry Information (OTH), International Trade Administration, U.S. Department of Commerce; (2) Government of India Ministry of Commerce & Industry, Department of Commerce Export-Import Data Bank.

TABLE 3: USA: SELECTED HERB IMPORTS & EXPORTS (including re-exports)

Herb Name / HS 10-Digit Code / CY: 2003-2004-2005 / Quantities: metric tons (MT)

HERB NAME	HS CODE	2003 IMPORT	2004 IMPORT	2005 IMPORT	2003 EXPORT	2004 EXPORT	2005 EXPORT
American or Asian ginseng root, <u>cultivated</u> (<i>Panax quinquefolius</i> or <i>P. ginseng</i>)	1211200020	465.3	598.4	495.4	284.0	295.4	121.7
American- and/or Asian ginseng root, <u>wild</u>	1211200040	48.0	15.9	157.0	188.6	119.2	96.1
Asian ginseng root, <u>crude extracts</u>	1302194020	708.0	529.0	628.5	0	0	0
Capsicum fruit (<i>Capsicum</i> spp.), <u>dried, crushed or ground</u>	0904202000	12,428.3	14,134.9	21,343.3	7,054.5	6,446.0	5,483.1
Coca leaf, <u>dried</u> (<i>Erythroxylum coca</i>)	1211300000	111.7	90.7	45.4	0	0	0.2
Flax seed (<i>Linum usitatissimum</i>)	1204000090 1204000000	36,037.0	42,209.1	50,996.8	66,953.4	31,598.8	87,541.4
Garlic bulb, <u>powder</u> (<i>Allium sativum</i>)	0712904020	8,686.7	13,781.2	13,298.8	1,832.3	2,004.7	2,426.3
Garlic bulb, <u>dried</u> , whole, cut, sliced or broken (<u>not powdered</u>)	0712904040	26,731.0	20,924.2	19,446.5	4,656.8	4,171.2	4,845.1
Garlic <u>essential oil</u>	3301295015	78.9	99.6	79.1	0	0	0
Ginger rhizome (<i>Zingiber officinale</i>)	0910100000/ 2000/4000	27,349.1	29,002.4	32,026.5	647.3	564.0	716.1
Green tea leaf, <u>dried</u> (<i>Camellia sinensis</i>)	0902100000 0902101000 0902109000 0902200000 0902201000 0902209000	12,053.5	11,772.6	14,146.4	1,996.5	2,138.9	1,979.1

TABLE 3: USA: SELECTED HERB IMPORTS & EXPORTS (including re-exports)

Herb Name / HS 10-Digit Code / CY: 2003-2004-2005 / Quantities: metric tons (MT)

HERB NAME	HS CODE	2003 IMPORT	2004 IMPORT	2005 IMPORT	2003 EXPORT	2004 EXPORT	2005 EXPORT
Hemp oil (<i>Cannabis</i> spp.)	1515908010	742.4	328.3	286.6	0	0	0
Hop strobile, <u>whole</u> (<i>Humulus lupulus</i>)	1210100000	2,325.5	813.1	139.8	631.6	425.5	504.2
Hop strobile, <u>pellets</u>	1210200020	2,609.0	2,762.4	3,576.3	4,915.9	5,898.6	5,054.5
Hops, <u>ground or powder</u>	1210200040	35.5	11.5	15.0	508.9	409.3	75.3
Hop strobile <u>extracts</u>	1302130000	86.2	80.4	79.4	4,917.3	5,527.7	4,613.8
Jojoba bean <u>oil</u> (<i>Simmondsia chinensis</i>)	1515906000	303.1	258.5	643.4	148.2	209.5	263.4
Lavender flw <u>essential oil</u> (<i>Lavandula</i> spp.)	3301230000	432.0	496.4	424.0	44.6	52.2	75.7
Lemon peel <u>essential oil</u> (<i>Citrus x limon</i>)	3301130000	3,848.7	3,244.3	4,580.0	871.5	1,101.0	1,579.2
Licorice root, <u>dried</u> (<i>Glycyrrhiza</i> spp.)	1211100000	11,675.4	9,764.3	7,165.2	160.0	106.0	48.5
Licorice root <u>extracts</u>	1302120000	4,547.5	3,281.0	3,209.6	5,180.1	8,158.0	12,204.3
Maté leaf, <u>dried</u> (<i>Ilex paraguariensis</i>)	0903000000	984.6	849.7	1,093.7	39.7	62.9	10.6
Mint leaf, <u>unprocessed</u> (peppermint, spearmint)	1211902000	123.2	177.0	156.3	?	?	?
Mint, <u>used as herbal tea</u>	1211904020	121.6	82.3	178.9	?	?	?
Mint leaf, <u>cut, crsh, pwd</u>	1211904040	177.8	171.9	124.1	?	?	?
Mint leaf <u>essential oil</u> (cornmint)	3301250010	981.4	884.5	869.0	?	?	?

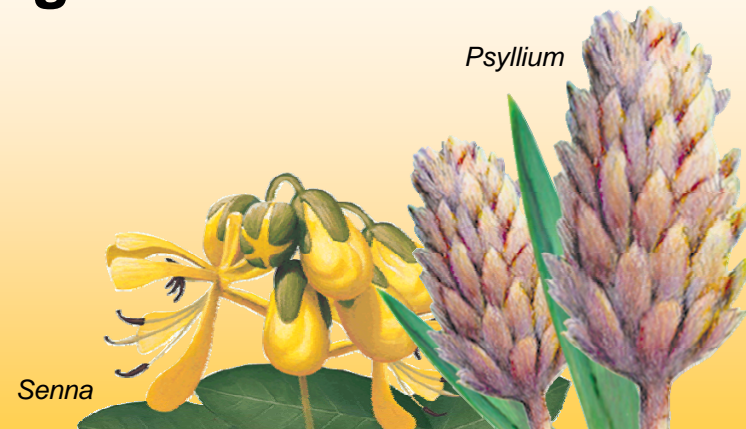
TABLE 3 (Cont.): USA: SELECTED HERB IMPORTS & EXPORTS (including re-exports)

Herb Name / HS 10-Digit Code / CY: 2003-2004-2005 / Quantities: metric tons (MT)

HERB NAME	HS CODE	2003 IMPORT	2004 IMPORT	2005 IMPORT	2003 EXPORT	2004 EXPORT	2005 EXPORT
Mint leaf <u>essential oil</u> (peppermint leaf)	3301240000	623.0	635.1	798.7	2,406.2	2,192.6	2,666.6
Mint leaf <u>essential oil</u> (spearmint leaf)	3301250020	505.3	618.7	758.2	769.3	865.3	807.6
Mint leaf <u>essential oil</u> (other mints: NESOI)	3301250050 3301250060	80.6	113.5	86.6	429.7	456.5	234.0
Opium poppy <u>exudate</u> (<i>Papaver somniferum</i>)	1302110000 1302110002	260.4	44.6	91.3	63.4	20.9	18.0
Orange peel <u>essential oil</u> (<i>Citrus sinensis</i>)	3301120000	12,292.3	10,097.7	19,072.6	7,164.0	8,129.5	6,813.9
Psyllium seed husk (<i>Plantago</i> spp.)	1211909020	14,012.2	13,584.8	14,441.4	0	0	0
Other herbs used as herbal teas (<u>single</u> <u>species</u>), NESOI	1211909080	7,182.9	7,272.0	6,680.7	1,400.7	1,806.4	2,567.3
Other herbs used as herbal teas (<u>mixed</u> <u>species</u>), NESOI	2106906587 2106909987	1,920.0	1,991.4	1,505.8	6,889.9	14,443.5	14,925.3
Other herbs <u>used in</u> <u>pharmacy</u> , NESOI	1211909090 1211909095	16,429.8	16,280.4	19,627.2	5,595.7	7,617.3	7,223.3
Other medicinal herbal <u>extracts and saps</u> , NESOI	1302190000 1302194040	23,579.3	25,291.6	21,548.5	6,691.4	5,885.8	6,817.6

North American Botanicals with Official USP Quality Standards

**Official Standards = Demand
for Specific Grade Designations**



USP Botanical Articles that are grown in North America	Mainly Cultivated	Mainly Wild Harvest	Where mainly?
<u>Aloe:</u> dried latex of leaf	X		Texas
<u>American Ginseng:</u> dried roots	X		Ontario, Wisconsin
<u>Black Cohosh:</u> dried rhizome and roots		X	Kentucky, Tennessee, Georgia, Ohio, North Carolina, Michigan, South Carolina, Virginia, West Virginia, Wisconsin
<u>Capsicum:</u> dried ripe fruit	X		New Mexico, Texas, Arizona, California
<u>Caraway:</u> dried ripe fruit	X		Canada
<u>Cascara Sagrada:</u> dried, aged bark		X	California, Oregon, Washington, British Columbia, Idaho, Montana
<u>Coriander oil:</u> Steam distilled volatile oil	X		Canada
<u>Cranberry Liquid Preparation:</u> juice derived from fruits	X		Wisconsin, Massachusetts, Canada, New Jersey, Oregon, Washington

USP Botanical Articles that are grown in North America	Mainly Cultivated	Mainly Wild Harvest	Where mainly?
<u>Echinacea angustifolia:</u> dried rhizome and root	Increasing	X	Midwestern and midsouthern States
<u>Echinacea pallida:</u> dried rhizome and root	Increasing	X	Midwestern and midsouthern States
<u>Echinacea purpurea Aerial Parts:</u> flowering tops	X		Oregon, Washington, British Columbia
<u>Echinacea purpurea Root:</u> dried rhizome and root	X		Oregon, Washington, British Columbia
<u>Elm USP:</u> dried inner bark		X	Eastern Canada and Eastern USA (Missouri, Illinois, Kentucky, Tennessee, North Carolina)
<u>Feverfew:</u> dried leaf	X		Oregon, Washington, British Columbia
<u>Garlic:</u> fresh or dried compound bulb	X		California
<u>Ginger:</u> dried rhizome	X		Hawaii

USP Botanical Articles that are grown in North America	Mainly Cultivated	Mainly Wild Harvest	Where mainly?
<u>Ginkgo:</u> dried leaf	X		South Carolina
<u>Goldenseal:</u> dried root and rhizome	Small-scale	X	Canada, USA (Illinois, Indiana, Missouri, Kentucky, Minnesota, North Carolina, Ohio, Virginia, Wisconsin)
<u>Lemon Oil:</u> volatile oil of fresh peel of fruit	X		California, Florida
<u>Orange Oil:</u> volatile oil of fresh peel of fruit	X		California, Florida
<u>Peppermint:</u> dried leaf and flowering tops	X		Oregon, Washington, Idaho, British Columbia
<u>Peppermint Oil:</u> volatile oil of fresh aerial parts	X		Oregon, Washington, Idaho, British Columbia
<u>Podophyllum:</u> dried rhizome and root	Some	X	Eastern half of North America
<u>Red Clover:</u> Dried inflorescence	X		Oregon, Washington

USP Botanical Article	Mainly Cultivated	Mainly Wild Harvest	Where mainly?
<u>St. John's Wort:</u> dried flowering tops	Both	Both	Oregon, Washington, Idaho
<u>Saw Palmetto:</u> partially dried ripe fruit		X	Florida
<u>Stinging Nettle:</u> dried root and rhizome	Both	Both	Oregon, Washington, North Carolina
<u>Storax:</u> Balsam from trunk	some	X	Eastern half of USA and Mexico
<u>Witch Hazel:</u> recently cut and partially dried dormant twigs	Some	X	Eastern North America

North American Botanical Farms

Main Crops and Acreage

ALOECORP de MEXICO

Large scale cultivation of aloe vera in State of Tamaulipas, Mexico

<http://www.aloecorp.com>

A.M. TODD COMPANY

Large scale cultivation of peppermint leaf and spearmint leaf for oil production

<http://www.amtodd.com>

AROMATICS INC.

Organic herb farms in Oregon: catnip, peppermint, spearmint, and other herbs

aromatics@msn.com

B&G FARMS

30,000 acre mint farms in Washington (conventional & organic)

BOSTON JOJOBA COMPANY

940 acre jojoba farm in Arizona

<http://www.jojobacompany.com>

CACHALOT, EL NINO, & MILLA VERDE FARMS

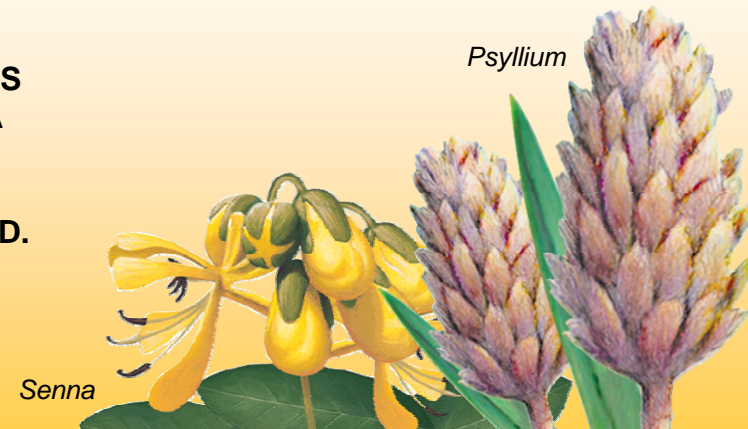
Largest commercial jojoba plantation in USA

<http://www.desertwhale.com>

CANADIAN IMPERIAL GINSENG ONTARIO LTD.

570 acres of American Ginseng in Ontario

<http://www.imperialginseng.com>



North American Botanical Farms

Main Crops and Acreage

CHAI-NA-TA FARMS LTD.

1,500 acres of American ginseng in Ontario and British Columbia

<http://www.chainata.com>

ELECTIC INSTITUTE FARM

90 acre organic herb farm in Oregon; 40 herbs: California poppy, echinacea, feverfew, ginkgo, goldenseal, hops, stinging nettles, St. John's wort

URL: <http://www.eclecticherb.com>

GAIA HERB FARM

250 acre organic herb farm in North Carolina; 50 herbs: burdock, California poppy, dandelion, echinacea, feverfew, skullcap, stinging nettles, valerian

<http://www.gaiaherbs.com/brochure.php?id=34>

GARNAY, INC.

1,200-acre ginkgo farm in South Carolina

<http://www.garnay-inc.com>

GOLDEN STATE HERBS

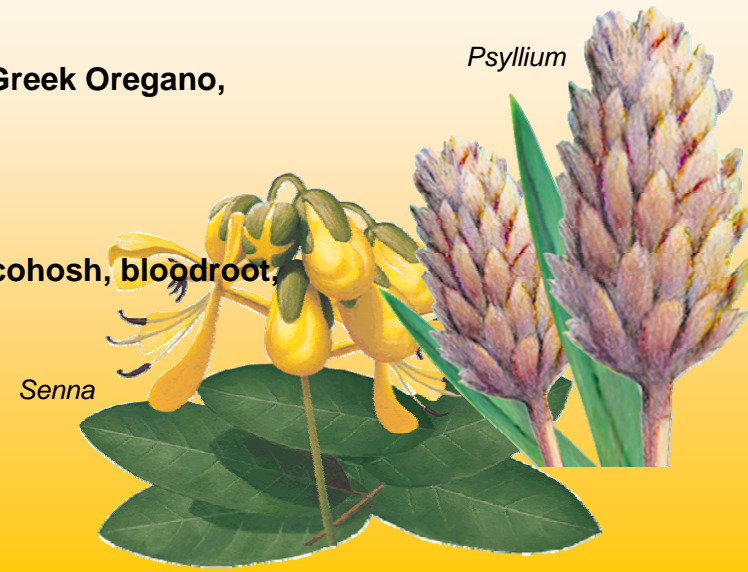
Organic herb farm in California: Dill, Basil, Italian Parsley, Greek Oregano, Marjoram

<http://www.goldenstateherbs.com>

HERB PHARM FARM

85 acre organic herb farm in Oregon; 110 herbs: arnica, black cohosh, bloodroot, calendula, echinacea, skullcap, valerian

<http://www.herb-pharm.com>



North American Botanical Farms

Main Crops and Acreage

LavenderFarms.com

A group of four lavender flower farms in Washington

<http://www.lavenderfarms.com/olympic/oly.htm>

PACIFIC BOTANICALS

114 acre organic herb farm in Oregon; burdock, chamomile, echinacea, red clover, valerian

<http://www.pacificbotanicals.com>

Pu'u'ala FARM AND RANCH

1,000 acre organic herb farm in Hawaii: kava, neem, noni fruit

<http://www.puualala.com>

PURCELL JOJOBA INTERNATIONAL

1,200 acre jojoba farm in Arizona

<http://www.purcelljojoba.com>

SAN FRANCISCO HERB & NATURAL FOOD CO.

Cultivation of echinacea, peppermint, spearmint in Oregon

<http://www.herbspicetea.com>

SAW PALMETTO BERRIES CO-OP OF FLORIDA

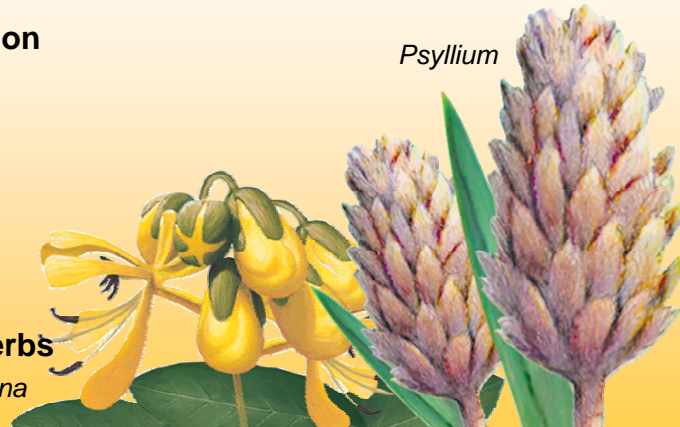
Saw palmetto fruit collection in Florida

<http://www.sawpalmettoco-op.com>

STRATEGIC SOURCING, INC.

Large range of cultivated and wild collected medicinal herbs

<http://www.strategicsourcinginc.net>



North American Botanical Farms

Main Crops and Acreage

TROUT LAKE FARM, LLC

1,200 acre organic herb farm: catnip, echinacea, feverfew, marshmallow, peppermint, red clover, skullcap, stinging nettle, valerian

<http://www.troutlakefarm.com>

TUSCAN FARM GARDENS

80 acre herb farm in British Columbia: echinacea, lavender

VAN DRUNEN FARMS

Cranberry, fennel, garlic, mint, orange peel, parsley, rosemary, sage, thyme

<http://www.vandrunenfarms.com>

WEST KOOTENAY HERB GROWERS COOPERATIVE

Agroforestry in British Columbia: cascara, devil's club, hawthorn, huckleberry

d_sawyer@columbiacable.net

WISCONSIN GINSENG & HERB CO-OP

Cooperative of 90 American ginseng farmers

<http://www.ginsengherbco-op.com>

YAKIMA CHIEF, INC. HOP GROWERS

Cooperative of hop farmers

<http://www.yakimachief.com/about/history.html>

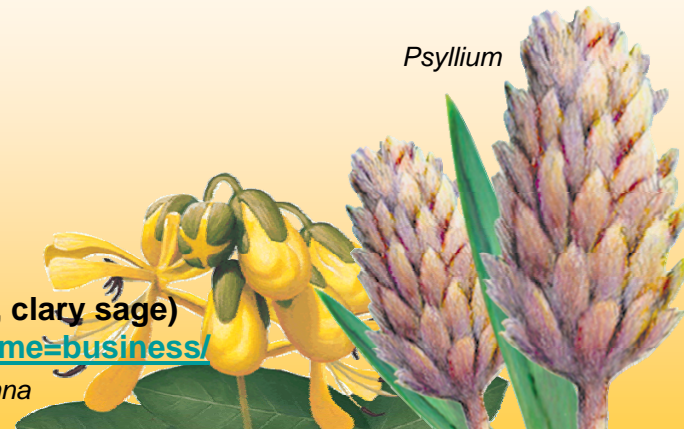
YOUNG LIVING FARM

1,600 acre organic herb farm (lavender, lemon balm, peppermint, clary sage)

http://youngliving.younglivingworld.com/MainFrame.asp?BodyFrame=business/profile_main.asp

Psyllium

Senna



North American Botanical Distributors and Processors (USA)

A.A. SAYIA & COMPANY, INC.

Internet: <http://www.aasayia.com>

A.M. TODD BOTANICALS

Internet: <http://www.amtodd.com>

ALCHEM INTERNATIONAL

Internet: <http://www.alcheminternational.com>

AMAX NUTRASOURCE, INC.

Internet: <http://www.amaxnutrasource.com>

AMERICAN BOTANICALS

Internet: <http://www.americanbotanicals.com>

AMERICAN INGREDIENTS

Internet: <http://www.amer-ing.com>

AMERICAN MERCANTILE CORPORATION

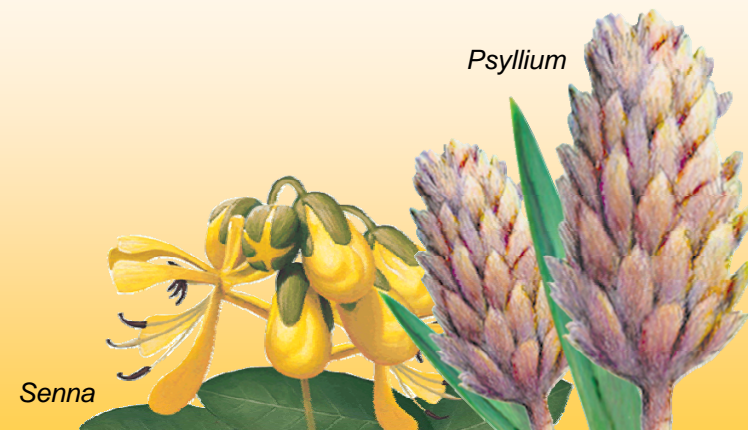
Internet: <http://www.americanmercantile.net>

BDS NATURAL PRODUCTS

Internet: <http://www.bdsnatural.com>

BI NUTRACEUTICALS

Internet: <http://www.botanicals.com>



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North American Botanical Distributors and Processors (USA)

BIO BOTANICA

Internet: <http://www.bio-botanica.com>

CHART CORPORATION

Internet: <http://www.chartcorp.com>

FAMARCO LIMITED INC

Internet: <http://famarco.com>

FEDERAL LABORATORIES CORP.

Internet: <http://www.federalabs.com>

FORESTRADE

Internet: <http://www.forestrade.com>

FRONTIER NATURAL PRODUCTS CO-OP

Internet: <http://www.frontiernaturalbrands.com>

FUTURECEUTICALS

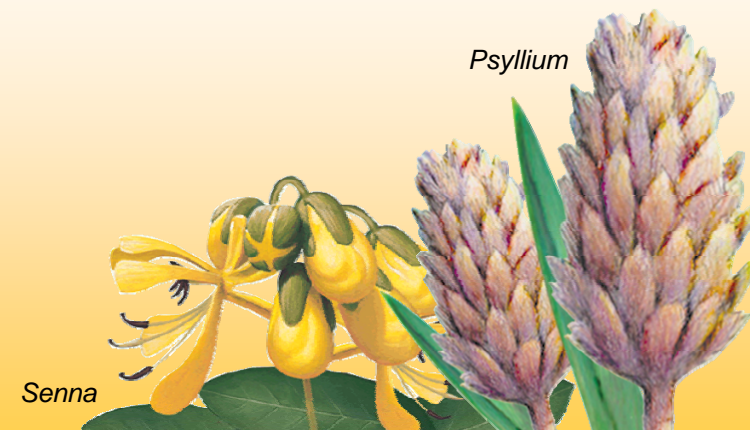
Internet: <http://www.futureceuticals.com>

GCI NUTRIENTS

Internet: <http://www.gcinutrients.com>

GENCOR PACIFIC

Internet: <http://www.gencorpacific.com>



North American Botanical Distributors and Processors (USA)

GEORGE UHE COMPANY

Internet: <http://www.uhe.com>

GLOBAL MARKETING ASSOCIATES

Internet: <http://www.gmaherbs.com>

GLORY BEE FOODS

Internet: <http://www.glorybeefoods.com/gbf>

G.S. HALY COMPANY

Internet: <http://www.gshaly.com>

HERB BARBER & SONS FOOD BROKERS INC.

Internet: <http://www.herb-barber-sons.com>

HERB TRADE

Internet: <http://www.organicherbtrade.com>

KALUSTYAN CORPORATION

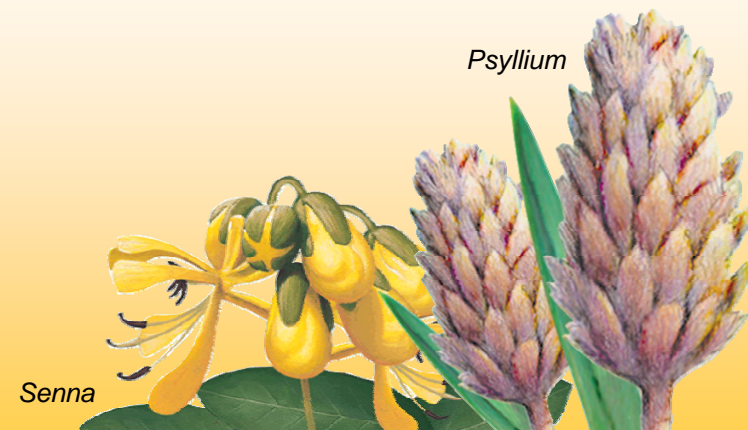
Internet: <http://www.kalustyan.com>

K.H.L. FLAVORS

Internet: <http://www.khlf.com>

LIBERTY NATURAL PRODUCTS

Internet: <http://libertynatural.com>



North American Botanical Distributors and Processors (USA)

MARROQUIN INTERNATIONAL

Internet: <http://www.marroquin-organics.com>

MB NORTH AMERICA

Internet: <http://www.mbnorthamerica.com>

MOORE INGREDIENTS LTD

Internet: <http://www.moorelab.com>

MOUNTAIN ROSE HERBS

Internet: <http://www.mountainroseherbs.com>

NATURE'S THYME LLC

Internet: <http://www.naturesthyme.com>

NUTRISCIENCE INNOVATIONS

Internet: <http://www.nutriscienceusa.com>

OPTIPURE CHEMCO INDUSTRIES

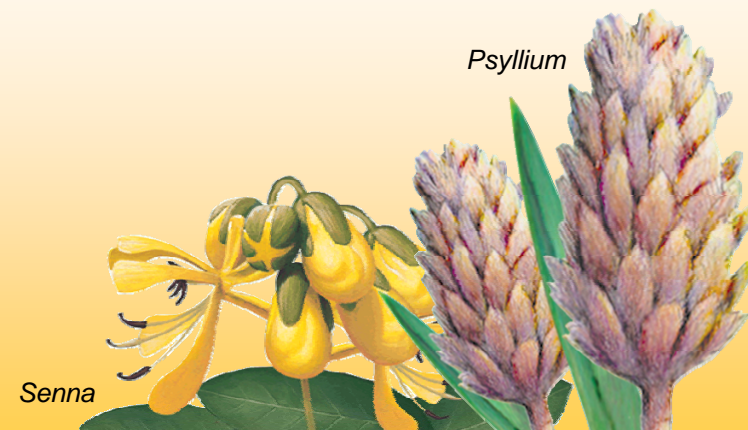
Internet: <http://www.optipure.com>

ORCAS INTERNATIONAL

Internet: <http://www.orcas-intl.com>

PACIFIC BOTANICALS

Internet: <http://www.pacificbotanicals.com>



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North American Botanical Distributors and Processors (USA)

PARCHEM NUTRITION

Internet: <http://www.parnutrition.com>

PHARMACHEM LABORATORIES

Internet: <http://www.pharmachemlabs.com>

PHARMAVITE LLC

Internet: <http://www.pharmavite.com>

PHARMLINE

Internet: <http://www.pharmlineinc.com>

P.L. THOMAS

Internet: <http://www.plthomas.com>

PLUS PHARMA INC.

Internet: <http://www.pluspharm.com>

RFI INGREDIENTS

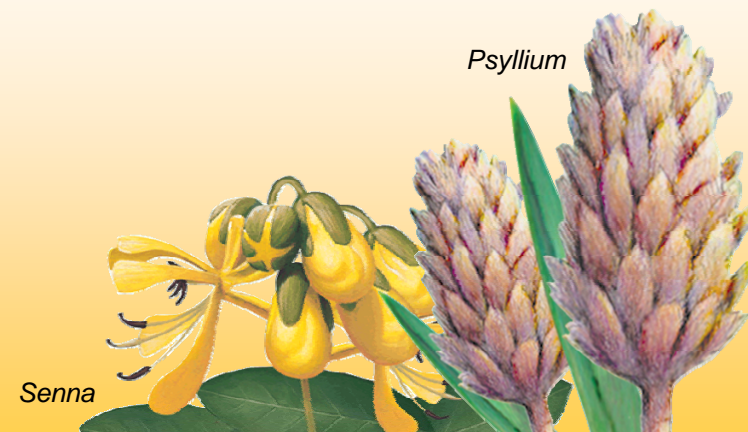
Internet: <http://www.rfiingredients.com>

SABINSA CORPORATION

Internet: <http://www.sabinsa.com>

SAMPAC ENTERPRISES

Internet: <http://www.sampacent.com>



North American Botanical Distributors and Processors (USA)

SAN FRANCISCO HERB & NATURAL FOOD COMPANY

Internet: <http://www.herbspicetea.com>

STARWEST BOTANICALS, INC.

Internet: <http://www.starwestherb.com>

STAUBER PERFORMANCE INGREDIENTS

Internet: <http://www.stauberusa.com>

STELLA LABS LLC

Internet: <http://www.stellalabs.com>

STRATEGIC SOURCING, INC.

Internet: <http://www.strategicsourcinginc.net>

STRYKA BOTANICS

Internet: <http://www.stryka.com>

THE LEBERMUTH COMPANY

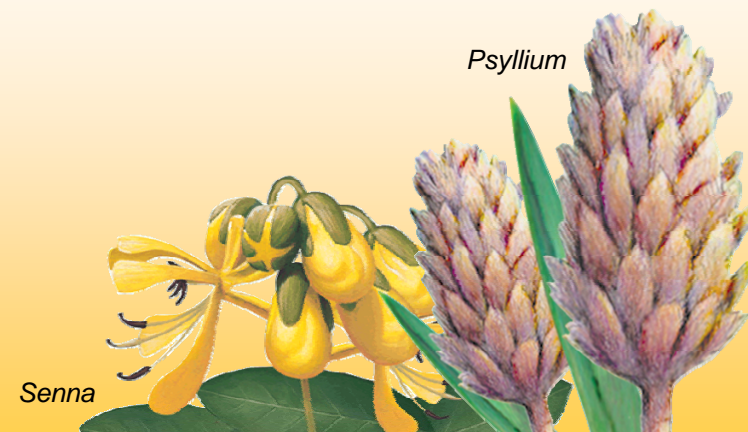
Internet: <http://www.lebermuth.com>

THE WHOLE HERB COMPANY

Internet: <http://www.wholeherbcompany.com>

TRIARCO INDUSTRIES

Internet: <http://www.triarco.com>

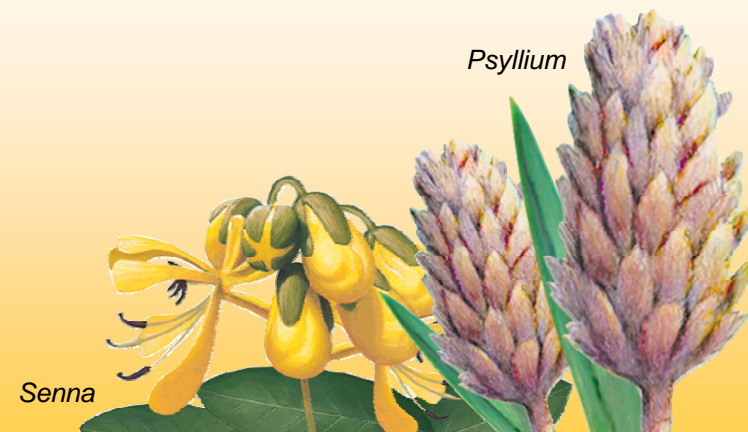


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Good Agricultural and Collection Practices (GACPs) for Botanicals

- American Herbal Products Association (AHPA) & American Herbal Pharmacopoeia (AHP)
- Committee on Herbal Medicinal Products (HMPC) of European Medicines Agency (EMA)
- European Herb Growers Association (EHGA)
- European Herbal Infusions Association (EHIA)
- State Food and Drug Administration P.R. China (SFDA PRC)
- World Health Organization (WHO)



Good Agricultural and Collection Practices (GACPs) for Botanicals

American Herbal Products Association (AHPA)
American Herbal Pharmacopoeia (AHP)
Good Agricultural and Collection Practice (GACP)
for Herbal Raw Materials

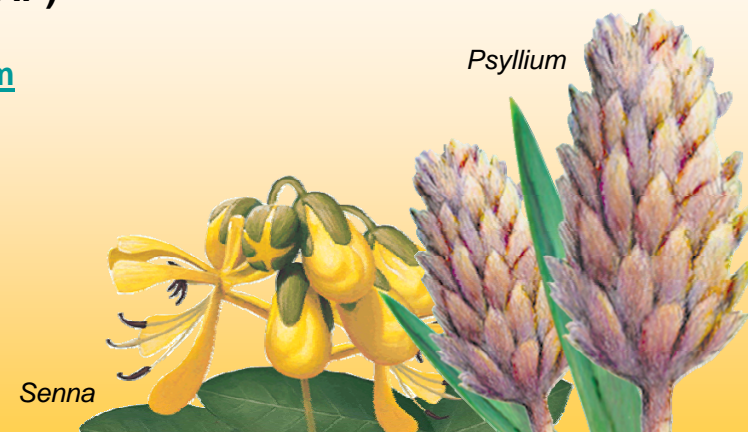
http://www.ahpa.org/Portals/0/pdfs/06_1208_AHPA-AHP_GACP.pdf

Committee on Herbal Medicinal Products (HMPC)
European Medicines Agency (EMA)
Guideline on Good Agricultural and Collection Practices
(GACP) for Starting Materials of Herbal Origin

<http://www.emea.europa.eu/pdfs/human/hmpc/24681605en.pdf>

European Herb Growers Association (EHGA)
Guidelines for Good Agricultural Practice (GAP)
of Medicinal and Aromatic Plants

<http://www.europam.net/Working%20documents.htm>



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Good Agricultural and Collection Practices (GACPs) for Botanicals

European Herb Growers Association (EHGA)
Guidelines for Good Wild crafting Practice (GWP)
of Medicinal and Aromatic Plants

<http://www.europam.net/Working%20documents.htm>

European Herbal Infusions Association (EHIA)
Guidelines for Good Agricultural and Hygiene Practices
for Raw Materials used for Herbal Infusions (GAHP)

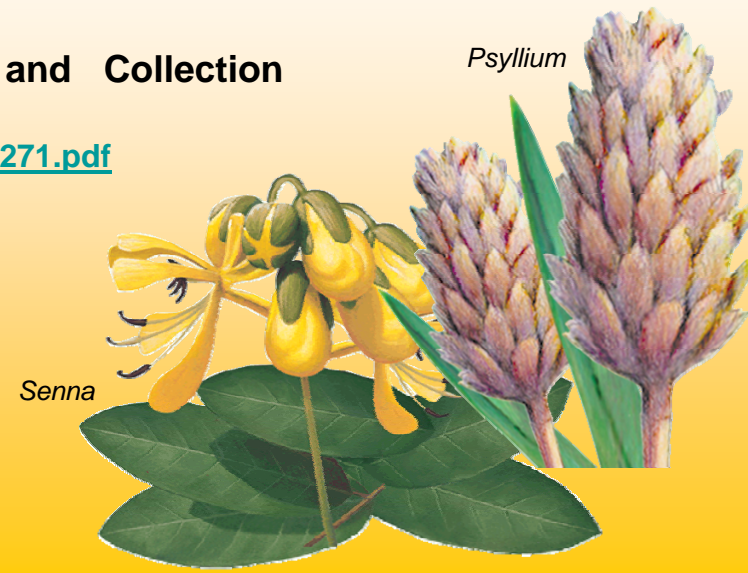
<http://www.ehia-online.org/documents/FINAL%20GAHP-EN2006.pdf>

State Food and Drug Administration P.R. China
Good Agricultural Practice for Chinese Crude Drugs
(Interim)

<http://www.sfda.gov.cn>

World Health Organization (WHO)
WHO Guidelines on Good Agricultural and Collection
Practices (GACP) for Medicinal Plants

<http://whqlibdoc.who.int/publications/2003/9241546271.pdf>



Relevant Trade Associations (USA)

American Botanical Council (ABC), PO Box 144345, Austin, Texas 78714-4345
TEL: 512.926.4900 / FAX: 512.926.2345
E-MAIL: abc@herbalgram.org
WEB: <http://www.herbalgram.org/>

American Herbal Products Association (AHPA), 8484 Georgia Ave., Suite 370,
Silver Spring, Maryland 20910, TEL: 301.588.1171, FAX: 301.588.1174
E-MAIL: ahpa@ahpa.org
WEB: <http://www.ahpa.org/>

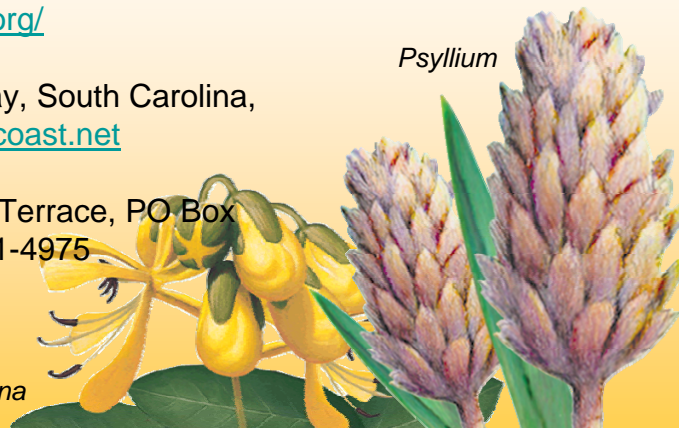
American Spice Trade Association (ASTA), 2025 M Street, NW, Suite 800,
Washington, DC 20036, TEL: 202-367-1127
E-MAIL: info@astaspice.org
WEB: <http://www.astaspice.org/>

'Awa (Kava) Development Council, PO Box 26344, Honolulu, HI 96825, TEL:
808.256.5605, FAX: 808.395.3772 / WEB: <http://awadevelopment.org/>

Carolina Agri-Solutions Growers Association (CASGA), Conway, South Carolina,
President Greg Hyman, TEL: 843-397-1502; E-MAIL: ghyman@sccoast.net

Great Plains Herb Growers Association (GPHGA), 908 W. 20th Terrace, PO Box
4422, Lawrence, Kansas 66046, TEL: 785-841-9241, FAX: 785-841-4975
E-MAIL: herbgrowers@sunflower.com
WEB: <http://www.kansasruralcenter.org/greatplains.htm>

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Relevant Trade Associations (USA)

Hop Growers of America (HGA), PO Box 9218 Yakima, Washington 98909
WEB: <http://www.usahops.org>

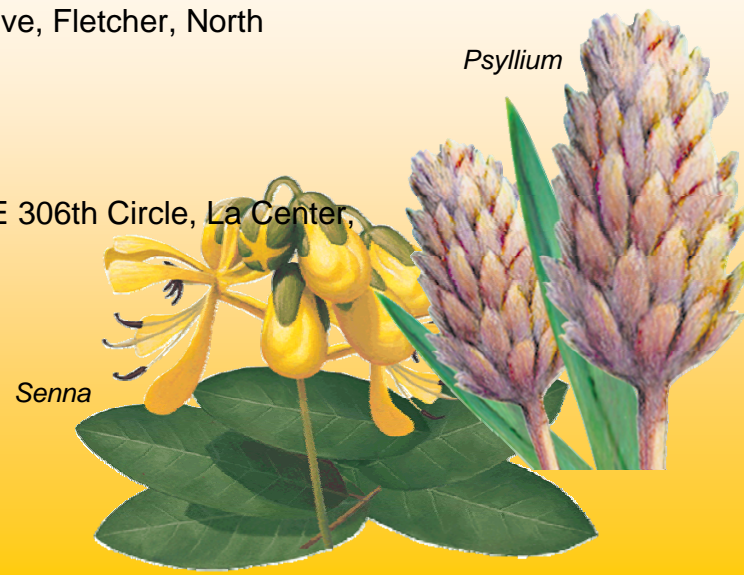
Hop Growers of Washington (HGW), P.O. Box 1207, Moxee, WA 98936, TEL:
609.453-4749 / FAX: 509.457.8581
E-MAIL: ann@wahops.org

International Aloe Science Council (IASC), 415 East Airport Freeway Suite 365,
Irving, Texas 75062 USA, TEL: (972) 258-8772
E-Mail: iasc@airmail.net
WEB: <http://www.iasc.org/iasc.html>

New Mexico Herb Growers Association (NMHGA), Albuquerque, New Mexico,
Contact: Charles Martin, 505.852.4241
E-MAIL cmartin@nmsu.edu

North Carolina Herb Association (NCHA), 455 Research Drive, Fletcher, North
Carolina 28732. TEL: 828-684-3562
E-MAIL: jeanine_davis@ncsu.edu
WEB: <http://www.ncherbs.net/ncha>

Northwest Ginseng Growers Association (NGGA), 4820 NE 306th Circle, La Center,
Washington 98629
WEB: <http://www.nwginseng.org/home.html>



Relevant Trade Associations (USA)

Roots of Appalachia Growers Association (RAGA), 33560 Beech Grove Road,
Rutland, Ohio 45775

E-MAIL: elise@ruralaction.org

WEB: <http://www.rootsofappalachia.org/index.htm>

Sequim Lavender Growers Association (SLGA), 55 Parrish Road, Sequim,
Washington 98382

WEB: <http://www.lavendergrowers.org>

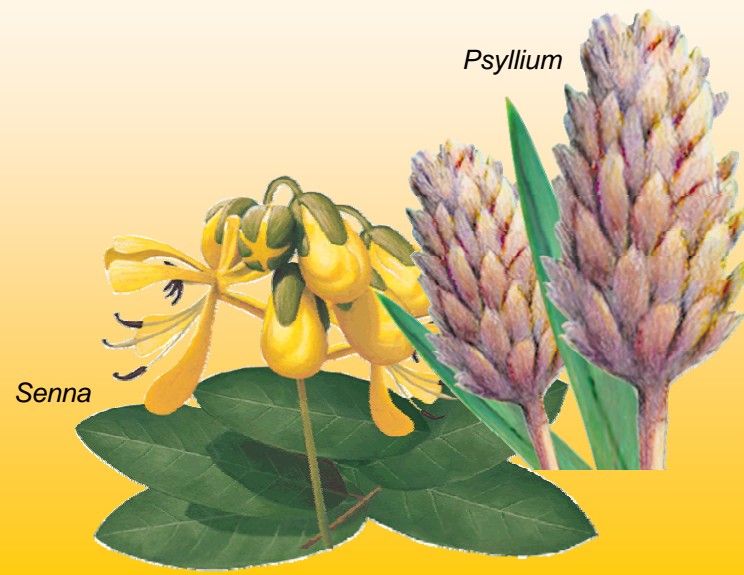
West Virginia Herb Association (WVHA), 1289 Smoke Camp Road, Weston, West
Virginia 26452, TEL: 304.269.6416

WEB: <http://www.wvherb.org>

Yerba Mate Association of the Americas (YMAA), President & Chairman David Karr,
468 Drager Street, Ashland, Oregon 97520 / FAX: 541.482.6780

E-MAIL: david@yerbamateassociation.org

WEB: <http://yerbamateassociation.org>



Relevant Trade Associations (CANADA)

Alberta Natural Health Agricultural Network (ANHAN)

204, 5904B – 50 Street, Leduc, Alberta, T9E 6J4 Canada

TEL: 780.986.0262, FAX: 780.986.0862

E-MAIL: info@anhan.org

WEB: <http://www.anhan.org>

Associated Ginseng Growers of British Columbia (AGGBC)

Box 241, Vernon, B.C. V1T 6M2 Canada, TEL: (250) 545-4737, FAX: (250) 545-0479

E-MAIL: info@bcginsenggrowers.com

WEB: <http://www.bcginsenggrowers.com>

British Columbia Herb Growers Association (BCHGA)

C/O 33511 Kinsale Place, Abbotsford, British Columbia V2S 8B2

E-mail: info@bcherbgrowers.com

WEB: <http://www.bcherbgrowers.com>

British Columbia Sea Buckthorn Growers Association

Box 471, Vernon, British Columbia V1T 6M4, TEL: 250.542.1816

E-MAIL: panaxqas@junction.net

WEB: <http://www.hippophae.com/membership.htm>

Canadian Herb, Spice and Natural Health Products Coalition

TEL: 306.694.4622, FAX: 306.694.2182

E-MAIL: shsa@imagewireless.ca

Canadian Spice Association (CSA)

885 Don Mills Road, Suite 301, Don Mills, Ontario M3C 1V9

E-MAIL: info@canadianspiceassociation.com

WEB: <http://www.canadianspiceassociation.com/>

Relevant Trade Associations (CANADA)

Filière des plantes médicinales biologiques du Québec

C.P. 43, Magog (Québec) J1X 3W7 Canada

TEL: 819.847.2676, FAX: 819.847.1862

E-MAIL: fpmq@plantesmedicinales.qc.ca

WEB: <http://www.plantesmedicinales.qc.ca/index.html>

Medicinal & Aromatic Plants Association of Manitoba

PO Box 20024, Selkirk, Manitoba R1A 1S0 Canada

TEL: (204) 766-2669, FAX: (204) 482-8667

National Herb and Spice Coalition (NHSC)

TEL: 306-694-4622, FAX: 306-694-2182

E-MAIL: shsa@imagewireless.ca

WEB: <http://www.nationalherbspice.com/>

Northern Alberta Herb Growers

8716 - 112 Street, Fort Sask., AB T8L 2S8 Canada

TEL: (780) 997-4372 / FAX: (780) 998-0078

WEB: <http://www.nabherb.com/content/home.shtml>

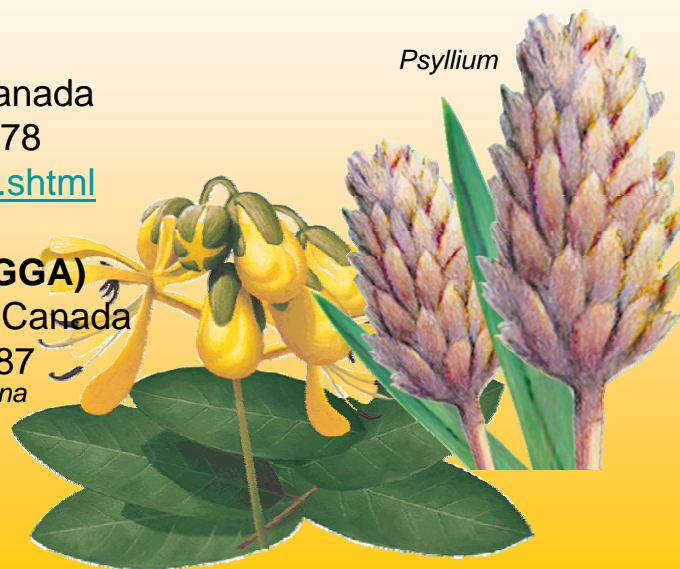
Ontario Ginseng Growers Association (OGGA)

1283 Blueline Road, Simcoe, Ontario N3Y 2N5 Canada

TEL: (519) 426-7046 / FAX: (519) 426-9087

E-MAIL: admin@ginsenggrowers.com

WEB: <http://www.ginsengontario.com>



Relevant Trade Associations (CANADA)

Ontario Herb Growers and Marketers Initiative

E-mail info@OntarioHerbs.com

WEB: <http://www.ontarioherbs.com/>

Saskatchewan Herb and Spice Association (SHSA)

Box 19 Phippen, Sask. S0K 3E0 Canada

E-MAIL: lonewolf@sasktel.net

WEB: <http://www.saskherbspice.org/>

Quebec Seabuckthorn Growers' Association (APAQ)

30, rue Sainte-Marguerite, Beaufré (Qc) G0A 1E0, CANADA

E-MAIL: info@argousier.qc.ca / TEL: 418.827.1659

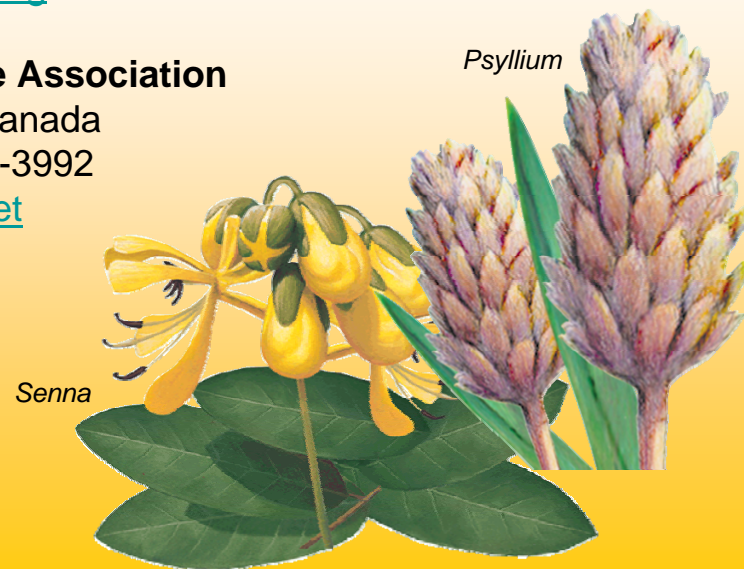
WEB: <http://www.argousier.qc.ca/eng>

Western Canadian Organic Herb and Spice Association

PO Box 16, Opal, Alberta T0A 2R0 Canada

TEL: (780) 909-1634, FAX: (780) 942-3992

E-mail: wcdnherb@telusplanet.net



Other Resources

Market News Service (MNS) for Essential Oils and Oleoresins

Quarterly overview of world market for a wide variety of Essential Oils & Oleoresins; Specific country profiles; Exporter contacts; Price information

WEB: <http://www.intracen.org/menus/search.htm>

Market News Service (MNS) for Medicinal Plants & Extracts

Quarterly report of the International Trade Centre (ITC) UNCTAD/WTO promoting international trade in medicinal plants & extracts with regional reviews

WEB: <http://www.intracen.org/mas/mns.htm>

Market News Service (MNS) for Spices

Monthly report of the International Trade Centre (ITC) UNCTAD/WTO providing detailed price and market information on selected spices and culinary herbs of particular interest to developing countries and economies

WEB: <http://www.intracen.org/mas/mns.htm>

The Organic Market News Service (MNS)

A bi-monthly market report for producers, exporters and importers, and trade support institutions in developing countries. It contains information on market trends, and in-depth features on selected organics products and geographical focus areas.

WEB: <http://www.intracen.org/Organics/organic-market-news-service.htm>



Other Resources

Marketing Manual and Web Directory for Organic Spices, Culinary Herbs and Essential Oils

No of pages: 52
Year of publication: 2006
Publisher: International Trade Centre (ITC)
Available at: <http://www.intracen.org/Organics/documents/marketing-manual.pdf>

Natural Ingredients for Pharmaceuticals and for the Food Industry: Overview and market access information for producers and international trading companies

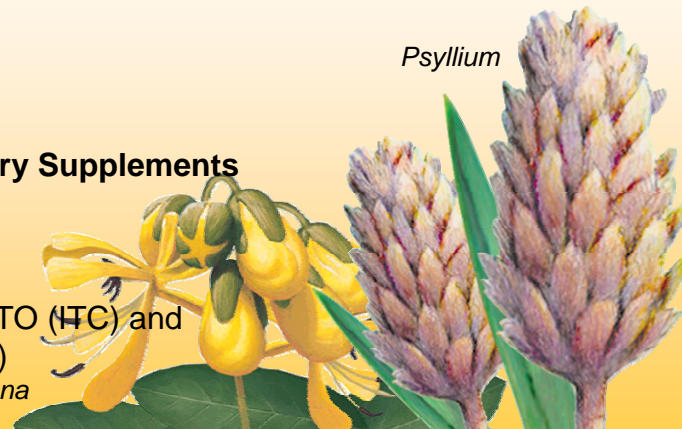
No of pages: 216
Year of publication: 2005
Publisher: Swiss Import Promotion Organization (SIPPO) and Centre for the Promotion of Imports from Developing Countries(CBI)
Available at: http://www.sippo.ch/files/publications/agri_ingredients05.pdf

The Natural Ingredients for Pharmaceuticals Market in the EU

No of pages: 84
Year of publication: 2006
Publisher: CBI
Available at: <http://www.cbi.nl>

The United States Market for Natural Ingredients used in Dietary Supplements and Cosmetics

No of pages: 141
Year of publication: 2003
Publisher: International Trade Centre UNCTAD/WTO (ITC) and Biotrade Facilitation Programme (BTFFP)
Available at: <http://www.p-maps.org>



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