

Herb Safety / 中藥安全

John K. Chen

Ph.D., Pharm.D., O.M.D., L.Ac.

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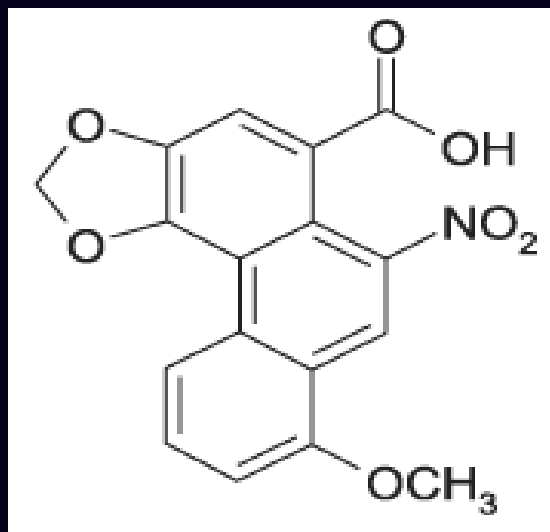
The logo for eLotus, featuring the word "eLotus" in a white, lowercase, sans-serif font on a dark purple rectangular background.

Herb Safety / 中藥安全

- Prohibited Compounds / 禁用化合物
- Restricted Compounds / 限制化合物
- Pregnancy and Nursing / 懷孕+護理
- Heavy metals / 重金屬
- Micro-organisms / 微生物
- Mycotoxins / 霉菌毒素
- Herbicides & Pesticides / 除草劑+殺蟲劑
- Endangered Plants and Animals / 瀕危動植物

Prohibited Compounds / 禁用化合物

- Aristolochic acid / 馬兜鈴酸



*Caulis
Aristolochiae
Manshuriensis*



*Aristolochia
fangchi*



*Aristolochia
moupinensis*



*Aristolochia
fordiana*



*Radix
Aristolochiae*



*Aristolochia
mollissima*



*Asarum
sieboldii*



*Fructus
Aristolochiae*

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International Journal of
Molecular Sciences



[Int J Mol Sci](#). 2020 Feb; 21(3): 1157.

Published online 2020 Feb 10. doi: [10.3390/ijms21031157](https://doi.org/10.3390/ijms21031157)

PMCID: PMC7043226

PMID: [32050524](https://pubmed.ncbi.nlm.nih.gov/32050524/)

Aristolochic Acid-Induced Nephrotoxicity: Molecular Mechanisms and Potential Protective Approaches

[Etienne Empweb Anger](#), [Feng Yu](#), and [Ji Li](#)*

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Import Alert 54-10

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Import Alert # 54-10

Published Date: 12/10/2020

Type: DWPE

Import Alert Name:

"Detention Without Physical Examination of Bulk/Finished Dietary Supplements Products Containing Aristolochic Acid"

Reason for Alert:

The botanical *Aristolochia* spp. and other plants in the *Aristolochiaceae* family are widely used as ingredients in traditional Chinese herbal medicines and other traditional medicines. These products may often be labeled for drug use (e.g., claims that they are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of diseases), although there are no approved new drug applications (NDAs). Some products containing botanicals in this family may also be labeled as dietary supplements or may not be labeled in accordance with the requirements for any specific FDA-regulated product.

Prohibited Compounds / 禁用化合物

- Aristolochic acid / 馬兜鈴酸
 - 馬兜鈴 *Mǎ Dōu Líng* (Fructus Aristolochiae)
 - 廣防己 *Guǎng Fáng Jǐ* (Radix Aristolochiae Fangchi)
 - 關木通 *Guān Mù Tōng* (Caulis Aristolochiae Manshuriensis)
 - 青木香 *Qīng Mù Xiāng* (Radix Aristolochiae)
 - 天仙藤 *Tiān Xiān Téng* (Herba Aristolochiae)
 - 細辛 *Xì Xīn* (Radix et Rhizoma Asari)



Evergreen™

CERTIFICATE OF ANALYSIS

G1236

PRODUCT :



防己(Fang Ji)
Radix Stephaniae Tetrandrac

MANUFACTURING DATE : 2022.07.27

BATCH No. :

420707101

EXPIRY DATE :

2026.07.26

DETERMINATION		SPECIFICATION	RESULT	TEST METHOD
Description		Brown color granule	Conform	F420707
Loss On Drying		< 8.00%	5.38%	E-GT10
Total Ash		< 8.00%	2.60%	E-GT19
Acid - Insoluble Ash		< 3.00%	0.14%	E-GT20
Dilute EtOH Extract		> 15.00%	30.35%	E-GT21
H ₂ O Extract		> 24.00%	37.05%	E-GT22
Total Heavy Metal		< 20.00ppm	Pass	E-GT31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.337 ppm	E-GT32
	Arsenic (As)	< 2.00ppm	N.D.	E-GT32
	Cadmium (Cd)	< 0.20ppm	N.D.	E-GT32
	Mercury (Hg)	< 0.10ppm	N.D.	E-GT32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass	E-GT35
	Total Yeast and Mold	< 10 ³ CFU/g	Pass	E-GT35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass	E-GT37
	E. coli	Absent in 1g	Negative	E-GT35
	Salmonella	Absent in 10g	Negative	E-GT35
Aristolochic Acid Test		N.D.	N.D.	E-GT61
T.L.C. Identification		Positive		F420707

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm · Aristolochic Acid Test-50 ppb)

JS™



Analytical Report

DATE: September 27, 2022 **FRL JOB ID:** J22-0913-B **ALIQUOT ID:** 220913003-1-01

CLIENT: Evergreen Herbs and Medical Supplies

SAMPLE ID: Fang Ji - Lot #420707101 ←
Herbal supplement

ANALYSIS: Limit test for aristolochic acid I by High Performance Liquid Chromatography with Tandem Mass Spectrometry (LCMS-LIMIT-ARISTO)

RESULTS:

	<u>Replicate</u>	<u>Result</u>
→ Aristolochic Acid I	Sample	ND
	Duplicate	ND
	Mean	N/A

ANALYSIS NOTE: ND = Not detected at or above 0.5 ug/g

This document electronically signed by James Kababick on 9/27/2022; Signature on file.





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CERTIFICATE OF ANALYSIS

G1574

PRODUCT :

木通(Mu Tong)
Caulis Akebiae

MANUFACTURING DATE : 2021.06.02

BATCH No. : 420402001

EXPIRY DATE : 2025.06.01

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD	
Description	Sand color granule	Conform	F420402	
Loss On Drying	< 8.00%	3.87%	E-GT10	
Total Ash	< 7.00%	0.89%	E-GT19	
Acid - Insoluble Ash	< 4.00%	0.00%	E-GT20	
Dilute EtOH Extract	> 26.00%	31.94%	E-GT21	
H ₂ O Extract	> 31.00%	42.92%	E-GT22	
Total Heavy Metal	< 20.00ppm	Pass	E-GT31	
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	N.D.	E-GT32
	Arsenic (As)	< 2.00ppm	N.D.	E-GT32
	Cadmium (Cd)	< 0.20ppm	N.D.	E-GT32
	Mercury (Hg)	< 0.10ppm	N.D.	E-GT32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass	E-GT35
	Total Yeast and Mold	< 10 ³ CFU/g	Pass	E-GT35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass	E-GT37
	E. coli	Negative	Negative	E-GT35
	Salmonella	Negative	Negative	E-GT35
Aristolochic acid Test	N.D.	N.D.	E-GT61-2	
T.L.C. Identification		Positive	F420402	

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm * Aristolochic Acid Test-50ppb)



Analytical Report

DATE: March 21, 2022 **FRL JOB ID:** J22-0225-F **ALIQUOT ID:** 220225012-1-01

CLIENT: Evergreen Herbs and Medical Supplies

SAMPLE ID: Mu Tong - Lot #420402001 ←
Herbal supplement

ANALYSIS: Limit test for aristolochic acid I by High Performance Liquid Chromatography with Tandem Mass Spectrometry (LCMS-LIMIT-ARISTO)

RESULTS:	<u>Replicate</u>	<u>Result</u>
← Aristolochic Acid I	Sample	ND
	Duplicate	ND
	Mean	N/A

ANALYSIS NOTE: ND = Not detected at or above 0.5 ug/g

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CERTIFICATE OF ANALYSIS

G2402

PRODUCT :



龍膽瀉肝湯(Long Dan Xie Gan Tang)
Gentiana Combination

MANUFACTURING DATE : 2021.12.22

BATCH No. :

32169010

EXPIRY DATE :

2025.12.21

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD	
Description	Sand color granule	Conform	F32169	
Loss On Drying	< 8.00%	3.75%	E-GT10	
Total Ash	< 10.00%	4.22%	E-GT19	
Acid - Insoluble Ash	< 4.00%	0.44%	E-GT20	
Dilute EtOH Extract	> 40.00%	52.84%	E-GT21	
H ₂ O Extract	> 40.00%	55.94%	E-GT22	
Total Heavy Metal	< 20.00ppm	Pass	E-GT31	
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.299 ppm	E-GT32
	Arsenic (As)	< 2.00ppm	0.273 ppm	E-GT32
	Cadmium (Cd)	< 0.20ppm	0.035 ppm	E-GT32
	Mercury (Hg)	< 0.10ppm	N.D.	E-GT32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass	E-GT35
	Total Yeast and Mold	< 10 ³ CFU/g	Pass	E-GT35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass	E-GT37
	E. coli	Absent in 1g	Negative	E-GT35
	Salmonella	Absent in 10g	Negative	E-GT35
Aristolochic Acid Test	Negative	N.D.	E-GT61-2	
T.L.C. Identification		Positive	F32169	

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm ; Aristolochic Acid-50ppb)






Analytical Report

DATE: March 21, 2022 **FRL JOB ID:** J22-0225-F **ALIQUOT ID:** 220225014-1-01

CLIENT: Evergreen Herbs and Medical Supplies

SAMPLE ID: Long Dan Xie Gan Tang - Lot #32169010 
Herbal supplement

ANALYSIS: Limit test for aristolochic acid I by High Performance Liquid Chromatography with Tandem Mass Spectrometry (LCMS-LIMIT-ARISTO)

RESULTS:	<u>Replicate</u>	<u>Result</u>
 Aristolochic Acid I	Sample	ND
	Duplicate	ND
	Mean	N/A

ANALYSIS NOTE: ND = Not detected at or above 0.5 ug/g

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Prohibited Compounds / 禁用化合物

- Pyrrolizidine alkaloids / 吡咯里西啉生物鹼

Pyrrolizidine Alkaloid (PA) Containing Plants



Ragwort



Fiddleneck



Heliotrope



Crotalaria



Groundsel



Houndstongue

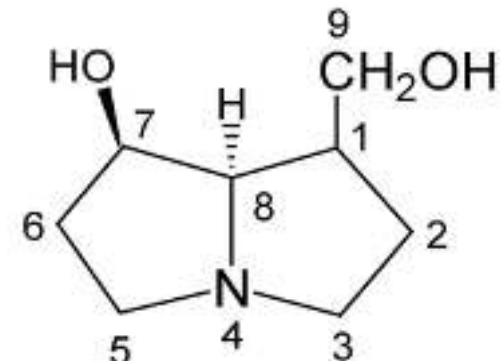


Patterson's curse



Alsike clover

HorseDVM™



Platynecine

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Pyrrolizidine alkaloids [Title]

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Review > J Pharm Pharm Sci. 2015;18(4):825-43. doi: 10.18433/j3bg7j.

Hepatotoxicity of Pyrrolizidine Alkaloids

Manuela G Neuman¹, Lawrence Cohen, Mihai Opris, Radu M Nanau, Jeong Hyunjin

Affiliations + expand

PMID: 26626258 DOI: 10.18433/j3bg7j

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Abstract

Purpose: This article aimed 1) to review herbal medicine containing pyrrolizidine alkaloids (PA)-induced toxicities of the liver; 2) to encourage the recognition and prevention of common problems encountered when using complementary and alternative medicine and 3) to review the toxic effects of herbal remedies containing PAs.

FDA Advises Dietary Supplement Manufacturers to Remove Comfrey Products From the Market

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July 6, 2001

To: American Botanical Council,
American Herbal Products Association,
Council for Responsible Nutrition,
Consumer Healthcare Products Association,
National Nutritional Foods Association,
Utah Natural Products Alliance,
American Association of Oriental Medicine, and the
American College of Acupuncturists and Traditional Medicine.

The Food and Drug Administration (FDA) is issuing this letter to communicate to you our concern about the marketing of dietary supplements that contain the herbal ingredient comfrey (*Symphytum officinale* (common comfrey), *S. asperum* (prickley comfrey), and *S. x uplandicum* (Russian comfrey)). These plants are a source of pyrrolizidine alkaloids that present a serious health hazard to consumers when they are ingested. FDA asks that you share this information with your members.

The use of comfrey in dietary supplements is a serious concern to FDA. These plants contain pyrrolizidine alkaloids, substances which are firmly established to be hepatotoxins in animals. Reports in the scientific literature clearly associate oral exposure of comfrey and pyrrolizidine alkaloids with the occurrence of veno-occlusive disease (VOD) in animals. Moreover, outbreaks of hepatic VOD have been reported in other countries over the years and the toxicity of these substances in humans is generally accepted. The use of products containing comfrey has also been implicated in serious adverse incidents over the years in the United States and elsewhere. However, while information is generally lacking to establish a cause-effect relationship between comfrey ingestion and observed adverse effects humans, the adverse effects that have been seen are entirely consistent with the known effects of comfrey ingestion that have been described in the scientific literature. The pyrrolizidine alkaloids that are present in comfrey, in addition to being potent hepatotoxins, have also been shown to be toxic to other tissues as well. There is also evidence that implicates these substances as carcinogens. Taken together, the clear evidence of an association between oral exposure to pyrrolizidine alkaloids and serious adverse health effects and the lack of any valid scientific data that would enable the agency to determine whether there is an exposure, if any, that would present no harm to consumers, indicates that this substance should not be used as an ingredient in dietary supplements.

<https://wayback.archive-it.org/7993/20170722024314/https://www.fda.gov/Food/RecallsOutbreaksEmergencies/SafetyAlertsAdvisories/ucm111219.htm>

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Prohibited Compounds / 禁用化合物

- Pyrrolizidine alkaloids / 吡咯里西啶生物鹼
 - 款冬花 *Kuǎn Dōng Huā* (Flos Farfarae)
 - 佩蘭 *Pèi Lán* (Herba Eupatorii)
 - 千里光 *Qiān Lǐ Guāng* (Herba Senecionis Scandentis)
 - 紫草 *Zǐ Cǎo* (Radix Arnebiae)

Prohibited Compounds / 禁用化合物

- 檳榔 *Bing Lang* (Semen Arecae)



檳榔 *Bing Lang* (Semen Arecae)

- Chewing areca nut results in exposure to alkaloids including arecoline, which is reported to have cytotoxic, genotoxic, mutagenic, and carcinogenic effects. In its 2004 and 2012 evaluations on the carcinogenic risks to humans from areca (betel) nuts, the World Health Organization's International Agency for Research on Cancer (IARC) stated that there is sufficient evidence to conclude that areca nut chewed with or without tobacco causes oral cancer in humans. It also stated that there is sufficient evidence in experimental animals for the carcinogenicity of areca nut with or without tobacco (IARC, 2004; 2012). Further, review of the literature indicates that regular consumption of areca nut and areca nut products is associated with a range of persistent adverse systemic health effects.

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT**

**SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986
(Proposition 65)**

**NOTICE TO INTERESTED PARTIES
February 3, 2006**

**Chemicals Listed Effective February 3, 2006
As Known To The State Of California
To Cause Cancer**

The Office of Environmental Health Hazard Assessment (OEHHA) of the California Environmental Protection Agency is adding "*areca nut*" and "*betel quid without tobacco*" to the list of chemicals known to the state to cause cancer for purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Health and Safety Code section 25249.5, Proposition 65). A betel quid (synonymous with 'pan' or 'paan') generally contains betel leaf, areca nut and slaked lime, and may contain tobacco. Areca nut is the seed of the fruit of the oriental palm *Areca catechu*. It should be noted that it is the nut and not other elements of the areca nut plant (such as the husk) that is being listed under Proposition 65. The listing of "*areca nut*" and "*betel quid without tobacco*" is effective **February 3, 2006**.

Health and Safety Code section 25249.8(a) requires that certain substances identified by the International Agency for Research on Cancer (IARC) or the National Toxicology Program (NTP), as described in Labor Code sections 6382(b)(1) and (d), be included on the Proposition 65 list. Labor Code section 6382(b)(1) references substances identified as human or animal carcinogens by IARC, and Labor Code section 6382(d) references substances identified as carcinogens or potential carcinogens by IARC or NTP. "*Areca nut*" and "*betel quid without tobacco*" were identified by IARC as known to be human carcinogens.

Import Alert 23-15

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Import Alert # 23-15

Published Date: 04/27/2023

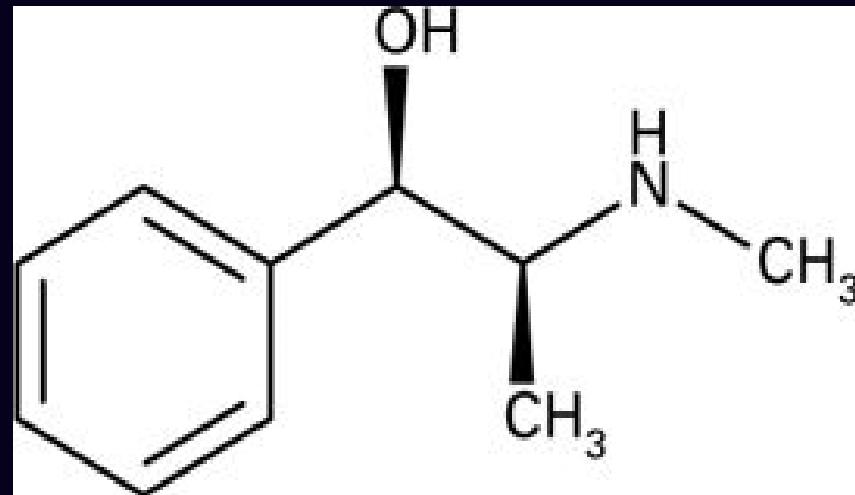
Type: DWPE

Import Alert Name:

"Detention Without Physical Examination of Food Products That Are, or That Contain, Areca (Betel) Nuts, Including Finished Dietary Supplements and Bulk Dietary Ingredients"

Restricted Compounds / 限制化合物

- Ephedrine alkaloids / 麻黃鹼
 - 麻黃 *Má Huáng* (Herba Ephedrae)



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/ [Small Entity Compliance Guide: Final Rule Declaring Dietary Supplements Containing Ephedrine Alkaloids Adulterated Because They Present an Unreasonable Risk](#)

SMALL ENTITY COMPLIANCE GUIDE

Small Entity Compliance Guide: Final Rule Declaring Dietary Supplements Containing Ephedrine Alkaloids Adulterated Because They Present an Unreasonable Risk

JULY 2008

Drugs of Abuse

A DEA RESOURCE GUIDE / 2020 EDITION



DEA limits the quantity of Schedule I and II controlled substances and specific List I chemicals (pseudoephedrine, ephedrine, and phenylpropanolamine) that may be produced in

the United States in any given calendar year for legitimate medical, scientific and research needs, inventory, and lawful exports. By utilizing available


https://www.dea.gov/sites/default/files/2020-04/Drugs%20of%20Abuse%202020-Web%20Version-508%20compliant-4-24-20_0.pdf


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**FLORA RESEARCH LABORATORIES, LLC
ANALYTICAL REPORT**

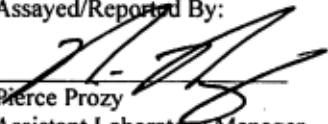
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DATE: March 15, 2021
REPORT: Determination of Ephedra Alkaloids in Dietary Supplements and Botanicals by High Performance Liquid Chromatography Tandem Mass Spectrometry (HPLC-MS/MS)
CLIENT: Evergreen Herbs and Medical Supplies
FRL SAMPLE ID: 210301001 JOB: J21-0301-A
CLIENT  Ma Xing Gan Shi Tang – Lot #AK20201118 Herbal supplement
ANALYSIS DATA: Average of Duplicate Analyses

Compound	Result
Ephedrine	ND
Pseudoephedrine	ND
Norephedrine	ND
 Norpseudoephedrine	ND
Methylephedrine	ND
Methylpseudoephedrine	ND

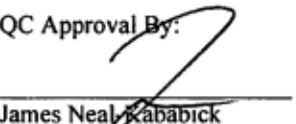
ND = Not Detected at or above 1µg/g

Assayed/Reported By:


Pierce Prozy
Assistant Laboratory Manager

Date: 03/15/21

QC Approval By:


James Neal Kababick
Laboratory Director

Date: 3/15/21

elotus™



**FLORA RESEARCH LABORATORIES, LLC
ANALYTICAL REPORT**


Page 1 of 1

DATE: August 11, 2020

REPORT: Determination of Ephedra Alkaloids in Dietary Supplements and Botanicals by High Performance Liquid Chromatography Tandem Mass Spectrometry (HPLC-MS/MS)

CLIENT: Evergreen Herbs and Medical Supplies

FRL SAMPLE ID: 200803016 JOB: J20-0803-D

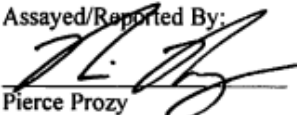
CLIENT ID:  92016901 Ge Gen Tang

ANALYSIS DATA:

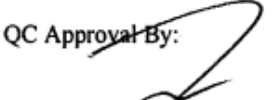


Compound	Result
Ephedrine	ND
Pseudoephedrine	ND
Norephedrine	ND
Norpseudoephedrine	ND
Methylephedrine	ND
Methylpseudoephedrine	ND

ND = Not Detected at or above 1µg/g

Assayed/Reported By:

Pierce Prozy
Assistant Laboratory Manager

Date: 08/11/20

QC Approval By:

James Neal Kababick
Laboratory Director

Date: 8/11/20



Pregnancy / 懷孕

Indian J Pharm Sci. 2009 Jan-Feb; 71(1): 1-7.

doi: [10.4103/0250-474X.51941](https://doi.org/10.4103/0250-474X.51941)

PMCID: [PMC2810038](https://pubmed.ncbi.nlm.nih.gov/20177448/)

PMID: [20177448](https://pubmed.ncbi.nlm.nih.gov/20177448/)

Drug Use in Pregnancy; a Point to Ponder!

Punam Sachdeva,* B. G. Patel, and B. K. Patel¹

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Abstract

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Pregnancy is a special physiological condition where drug treatment presents a special concern because the physiology of pregnancy affects the pharmacokinetics of medications used and certain medications can reach the fetus and cause harm. Total avoidance of pharmacological treatment in pregnancy is not possible and may be dangerous because some women enter pregnancy with medical conditions that require ongoing and episodic treatment (e.g. asthma, epilepsy, hypertension). Also during pregnancy new medical problems can develop and old ones can be exacerbated (e.g. migraine, headache) requiring pharmacological therapy. The fact that certain drugs given during pregnancy may prove harmful to the unborn child is one of the classical problems in medical treatment. In 1960's pregnant ladies who ingested thalidomide gave birth to children with phocomalia. Various other examples of teratogenic effects of drugs are known. It has been documented that congenital abnormalities caused by human teratogenic drugs account for less than 1% of total congenital abnormalities. Hence in 1979, Food and Drug Administration developed a system that determines the teratogenic risk of drugs by considering the quality of data from animal and human studies. FDA classifies various drugs used in pregnancy into five categories, categories A, B, C, D and X. Category A is considered the safest category and category X is absolutely contraindicated in pregnancy. This provides therapeutic guidance for the clinician. This article focuses on various aspects relating to drug use during pregnancy.

Sachdeva P, Patel BG, Patel BK. Drug use in pregnancy; a point to ponder! Indian J Pharm Sci. 2009 Jan;71(1):1-7. doi: [10.4103/0250-474X.51941](https://doi.org/10.4103/0250-474X.51941). PMID: [20177448](https://pubmed.ncbi.nlm.nih.gov/20177448/); PMCID: [PMC2810038](https://pubmed.ncbi.nlm.nih.gov/20177448/).

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Pregnancy Contraindicated / 懷孕禁用

- *Ba Dou* (Fructus Crotonis), *Ban Mao* (Mylabris), *Bie Jia* (Carapax Trionycis), *Bing Pian* (Borneolum Syntheticum), *Cao Wu* (Radix Aconiti Kusnezoffii), *Chan Su* (Venenum Bufonis), *Chan Tui* (Periostracum Cicadae), *Chuan Wu* (Radix Aconiti), *Da Zao Jiao* (Fructus Gleditsiae), *Dan Fan* (Chalcanthite), *Ding Jing Cao* (Herba Linderniae), *E Zhu* (Rhizoma Curcumae), *Fei Zi* (Semen Torreyae), *Gan Qi* (Resina Toxicodendri), *Gan Sui* (Radix Kansui), *Gou Wen* (Herba Gelsemii Elegantis), *Gua Di* (Pedicellus Cucumeris), *Guan Mu Tong* (Caulis Aristolochiae Manshuriensis), *Gui Ban* (Plastrum Testudinis), *Hu Yao Huang* (Herba Leucas Mollissimae), *Hu Zhang* (Rhizoma et Radix Polygoni Cuspidati), *Huai Jiao* (Fructus Sophorae), *Ji Li* (Fructus Tribuli), *Ji Xue Teng* (Caulis Spatholobi), *Jin Yin Hua* (Flos Lonicerae Japonicae), *Jiu Ceng Ta* (Herba Ocimi Basilici), *Ku Shen* (Radix Sophorae Flavescens), *Lei Gong Teng* (Radix Tripterygii Wilfordii), *Li Lu* (Radix et Rhizoma Veratri), *Liu Huang* (Sulfur), *Liu Ji Nu* (Herba Artemisiae Anomalae), *Lu Lu Tong* (Fructus Liquidambaris), *Ma Qian Zi* (Semen Strychni), *Meng Chong* (Tabanus), *Mu Bie Zi* (Semen Momordicae), *Pao Zai Cao* (Herba Physalis Angulatae), *Pu Huang* (Pollen Typhae), *Pu Yin* (Radix Wikstroemia Indica), *Qian Niu Zi* (Semen Pharbitidis), *Qing Fen* (Calomelas), *Quan Xie* (Scorpio), *Ru Xiang* (Olibanum), *San Leng* (Rhizoma Sparganii), *Shang Lu* (Radix Phytolaccae), *She Gan* (Rhizoma Belamcandae), *She Xiang* (Moschus), *Sheng Fu Zi* (Radix Aconiti Lateralis), *Shu Wei Huang* (Herba Rostellulariae), *Shui Yin* (Hydrargyrum), *Shui Zhi* (Hirudo), *Su Mu* (Lignum Sappan), *Tian Hua Fen* (Radix Trichosanthis), *Tian Xian Teng* (Herba Aristolochiae), *Ting Li Zi* (Semen Descurainiae seu Lepidii), *Tu Bie Chong* (Eupolyphaga seu Steleophaga), *Wang Bu Liu Xing* (Semen Vaccariae), *Wu Gong* (Scolopendra), *Wu Ling Zhi* (Faeces Troglodyteri), *Xiong Huang* (Realgar), *Xue Jie* (Resina Daemonoropsis), *Ya Dan Zi* (Fructus Bruceae), *Yi Yi Ren* (Semen Coicis), *Yu Li Ren* (Semen Pruni), *Yuan Hua* (Flos Genkwa), *Zao Jiao Ci* (Spina Gleditsiae), *Zhang Nao* (Camphora), *Zhi Cao Wu* (Radix Aconiti Kusnezoffii Cocta), *Zhi Chuan Wu* (Radix Aconiti Cocta).

Pregnancy Caution / 懷孕限制

- *Bai Fu Zi* (Rhizoma Typhonii), *Bai Guo* (Semen Ginkgo), *Ban Xia* (Rhizoma Pinelliae), *Bing Lang* (Semen Arecae), *Bu Gu Zhi* (Fructus Psoraleae), *Cang Er Zi* (Fructus Xanthii), *Cha Chi Huang* (Herba Stellariae Aquaticae), *Chuan Niu Xi* (Radix Cyathulae), *Chuan Xin Lian* (Herba Andrographis), *Chuan Xiong* (Rhizoma Chuanxiong), *Da Fu Pi* (Pericarpium Arecae), *Da Huang* (Radix et Rhizoma Rhei), *Da Ji* (Herba Cirsii Japonici), *Dan Nan Xing* (Arisaema cum Bile), *Dan Zhu Ye* (Herba Lophatheri), *Dang Gui* (Radix Angelicae Sinensis), *Di Long* (Pheretima), *Fan Xie Ye* (Folium Sennae), *Fu Zi* (Radix Aconiti Lateralis Praeparata), *Gan Jiang* (Rhizoma Zingiberis), *Gou Qi Zi* (Fructus Lycii), *Hai Ma* (Hippocampus), *He Huan Pi* (Cortex Albiziae), *Hong Hua* (Flos Carthami), *Hou Po* (Cortex Magnoliae Officinalis), *Hu Jiao* (Fructus Piperis), *Hu Lu Ba* (Semen Trigonellae), *Hua Jiao* (Pericarpium Zanthoxyli), *Hua Rui Shi* (Ophicalciturum), *Huang Yao Zi* (Rhizoma Dioscoreae Bulbiferae), *Ji Xue Cao* (Herba Centellae), *Jiang Huang* (Rhizoma Curcumae Longae), *Jue Ming Zi* (Semen Cassiae), *Ku Xing Ren* (Semen Armeniacae Amarum), *Lu Hui* (Aloe), *Ma Bian Cao* (Herba Verbenae), *Ma Chi Xian* (Herba Portulacae), *Ma Huang* (Herba Ephedrae), *Mang Xiao* (Natrii Sulfas), *Mian Ma Guan Zhong* (Rhizoma Dryopteridis Crassirhizomatis), *Mu Dan Pi* (Cortex Moutan), *Niao Bu Su* (Ramus Kalopanax Pictus), *Niu Huang* (Calculus Bovis), *Niu Xi* (Radix Achyranthis Bidentatae), *Qi Ye Lian* (Radix Schefflerae), *Rou Gui* (Cortex Cinnamomi), *San Qi* (Radix et Rhizoma Notoginseng), *Shen Qu* (Massa Medicata Fermentata), *Suan Zao Ren* (Semen Ziziphi Spinosa), *Tan Xiang* (Lignum Santali Albi), *Tao Ren* (Semen Persicae), *Tian Nan Xing* (Rhizoma Arisaematis), *Xi Jiao* (Cornu Rhinoceri), *Xiang Yuan* (Fructus Citri), *Xiao Hui Xiang* (Fructus Foeniculi), *Xin Yi Hua* (Flos Magnoliae), *Yi Mu Cao* (Herba Leonuri), *Yu Jin* (Radix Curcumae), *Yuan Zhi* (Radix Polygalae), *Chong Lou* (Rhizoma Paridis), *Zhe Shi* (Haematitum), *Zhi Qiao* (Fructus Aurantii), *Zhi Shi* (Fructus Aurantii Immaturus), *Zhu Fan Hua Tou* (Rhizoma Mirabilidis), *Zhu Sha* (Cinnabaris), *Zhu Ye* (Herba Phyllostachys),.

當歸 *Dāng Guī* (Radix Angelicae Sinensis)

- Benefit:
 - Pain and diarrhea during pregnancy: use *Dang Gui* with *Bai Shao* (Radix Paeoniae Alba), *Fu Ling* (Poria), *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), and *Ze Xie* (Rhizoma Alismatis). **Exemplar Formula:** *Dang Gui Shao Yao San* (Tangkuei and Peony Powder).
 - Restless fetus, lower back soreness, abdominal pain and breech presentation of the fetus: incorporate *Dang Gui* with *Chuan Xiong* (Rhizoma Chuanxiong), *Jing Jie Sui* (Spica Schizonepetae), *Tu Si Zi* (Semen Cuscutae), *Ai Ye* (Folium Artemisiae Argyi), and *Hou Po* (Cortex Magnoliae Officinalis). **Exemplar Formula:** *Bao Chan Wu You Fang* (Preserve Pregnancy and Care Free Decoction).

當歸 *Dāng Guī* (Radix Angelicae Sinensis)

- Risk:
 - *Dang Gui* mainly tonifies blood, but it also has a mild effect to move the blood so it needs to be used with caution during pregnancy.
 - *Dang Gui* has a mild stimulating effect on the uterine muscles, and therefore, may help with contraction during delivery, but may increase risk of miscarriage if used at a large amount.

當歸 *Dāng Guī* (Radix Angelicae Sinensis)

- Traditional Chinese medicine considers *Dang Gui* to be a blood tonic, and it is thus commonly used to treat pregnant women who have blood deficiency.
- However, when caring for pregnant women, one should always exercise caution and use medicinal substances only when the benefits outweigh the risks.

Nursing / 護理

[Aust Prescr](#). 2015 Oct; 38(5): 156–159.

Published online 2015 Oct 1. doi: [10.18773/austprescr.2015.056](https://doi.org/10.18773/austprescr.2015.056)

PMCID: PMC4657301

PMID: [26648652](https://pubmed.ncbi.nlm.nih.gov/26648652/)

Drugs in breastfeeding

[Neil Hotham](#), Specialist editor

¹Australian Medicines Handbook

[Elizabeth Hotham](#), Program director²

²Bachelor of Pharmacy Program, University of South Australia, Adelaide

SUMMARY

[Go to: ▶](#)

Most commonly used drugs are relatively safe for breastfed babies. The dose received via milk is generally small and much less than the known safe doses of the same drug given directly to neonates and infants.

Drugs contraindicated during breastfeeding include anticancer drugs, lithium, oral retinoids, iodine, amiodarone and gold salts.

Hotham N, Hotham E. Drugs in breastfeeding. *Aust Prescr*. 2015 Oct;38(5):156-9. doi: 10.18773/austprescr.2015.056. Epub 2015 Oct 1. Erratum in: *Aust Prescr*. 2016 Feb;39(1):27. PMID: 26648652; PMCID: PMC4657301.

eLOTUS™

Nursing / 護理

- Little or no information available
- Amount present in breast milk is generally very small
- Avoid using herbs that are “extremely toxic” in Materia Medica

i) World Health Organization

ii) United States Pharmacopoeia. These are the heavy limits for many of the botanicals listed in the USP.

iii) European Union Pharmacopoeia. These are heavy metal limits for botanical drugs.

Heavy metals / 重金屬

	WHO ⁱ	USP ⁱⁱ	EUP ⁱⁱⁱ
Lead (Pb)	10 ppm	10 ppm	5 ppm
Mercury (Hg)	0.3 ppm	3 ppm	0.1 ppm
Arsenic (As)	n/a	3 ppm	2 ppm
Cadmium (Cd)	0.3 ppm	3 ppm	0.2 ppm

i. World Health Organization

ii. United States Pharmacopoeia. These are the heavy limits for many of the botanicals listed in the USP.

iii. European Union Pharmacopoeia. These are heavy metal limits for botanical drugs.



Heavy metals / 重金屬

- 龍齒 *Long Chi* (Dens Draconis)
- 龍骨 *Long Gu* (Os Draconis)
- 海帶 *Hai Dai* (Thallus Laminariae)
- 海螵蛸 *Hai Piao Xiao* (Endoconcha Sepiae)
- 海藻 *Hai Zao* (Sargassum)
- 昆布 *Kun Bu* (Thallus Eckloniae)
- 蜈蚣 *Wu Gong* (Scolopendra)
- 全蠍 *Quan Xie* (Scorpio)



Evergreen™



Product # FP529090 **Kelp Powder Atlantic UHD**

Lot No. C111515

Release Date 12/13/21

Supplemental Information

* Organochloride Pesticides (GC-MS)	QC-0125	Meets USP/EP Requirements	Complies (See Attached)
* Organophosphorus Pesticides(GC-MS)	QC-0125	Meets USP/EP Requirements	Complies (See Attached)
* Pyrethroid Pesticides (GC-MS)	QC-0125	Meets USP/EP Requirements	Complies (See Attached)
Inorganic Arsenic (ppm)	Vendor	≤ 3 ppm	0.1
* Arsenic (ICP-MS)	QC-0120	≤ 35.0 ppm	34.03
* Cadmium (ICP-MS)	QC-0120	≤ 1.0 ppm	0.25
* Lead (ICP-MS)	QC-0120	≤ 2.0 ppm	0.13
* Mercury (ICP-MS)	QC-0120	≤ 0.1 ppm	< 0.04

Manufactured Date: 12/13/21

Expiration Date: 12/13/24


eLotus™



Evergreen™

CERTIFICATE OF ANALYSIS


G1500

PRODUCT :  龍骨(Long Gu)
Os Draconis

BATCH No. : 411609703

MANUFACTURING DATE : 12.05.2018

EXPIRY DATE : 12.04.2022

DETERMINATION		SPECIFICATION	RESULT	TEST METHOD
Description		Light brown color powder	Conform	F411609
Loss On Drying		< 8.00%	0.21%	GT-10
Total Ash		> 93.00%	99.50%	GT-19
Acid - Insoluble Ash		< 11.00%	8.07%	GT-20
Dilute EtOH Extract		< 5.00%	0.31%	GT-21
H ₂ O Extract		< 5.00%	0.53%	GT-22
Total Heavy Metal		< 20.00ppm	Pass	GT-31
 Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.415 ppm	GT-32
	Arsenic (As)	< 2.00ppm	N.D.	GT-32
	Cadmium (Cd)	< 0.20ppm	N.D.	GT-32
	Mercury (Hg)	< 0.10ppm	N.D.	GT-32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁷ CFU/g	Pass	GT-35
	Total Yeast and Mold	< 10 ⁵ CFU/g	Pass	GT-35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ⁴ CFU/g	Pass	GT-37
	E. coli	Negative	Negative	GT-35
	Salmonella	Negative	Negative	GT-35
T.L.C. Identification			Positive	F411609


N.D. : It means the result is under limit of quantitation (LOQ)
(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm)



Evergreen™

CERTIFICATE OF ANALYSIS


G2084

PRODUCT :  柴胡加龍骨牡蠣湯(Chai Hu Jia Long Gu Mu Li Tang)
 Bupleurum & Dragon Bone Combination

MANUFACTURING DATE : 2022.05.03

BATCH No. : 32239103

EXPIRY DATE : 2026.05.02

DETERMINATION		SPECIFICATION	RESULT	TEST METHOD
Description		Sand color granule	Conform	F32239
Loss On Drying		< 8.00%	3.37%	E-GT10
Total Ash		< 15.00%	8.85%	E-GT19
Acid - Insoluble Ash		< 5.00%	0.72%	E-GT20
Dilute EtOH Extract		> 27.00%	35.67%	E-GT21
H ₂ O Extract		> 32.00%	44.82%	E-GT22
Total Heavy Metal		< 20.00ppm	Pass	E-GT31
 Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.274 ppm	E-GT32
	Arsenic (As)	< 2.00ppm	N.D.	E-GT32
	Cadmium (Cd)	< 0.20ppm	0.040 ppm	E-GT32
	Mercury (Hg)	< 0.10ppm	N.D.	E-GT32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass	E-GT35
	Total Yeast and Mold	< 10 ³ CFU/g	Pass	E-GT35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass	E-GT37
	E. coli	Absent in 1g	Negative	E-GT35
	Salmonella	Absent in 10g	Negative	E-GT35
T.L.C. Identification			Positive	F32239

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm)

Micro-organisms / 微生物

Micro-organisms	AHPA ⁱ	EUP ⁱⁱ
Aerobic bacteria	10 ⁷ CFU per gram	10 ⁵ CFU per gram or millilitre
Gram negative bacteria	10 ⁴ CFU per gram	10 ³ CFU per gram or millilitre
<i>E. coli</i>	Absent in 1 gram	Absent in 1 gram or millilitre
<i>Salmonella</i>	Absent in 10 grams	Absent in 10 grams or millilitre
Yeasts and molds	10 ⁵ CFU per gram	10 ⁴ CFU per gram or millilitre

i. American Herbal Products Association. Guidance on Microbiological Limits. 2009. Note: These safety limits are for non-liquid dietary supplements.

ii. European Pharmacopoeia 6.0. Section 5.1.4. Microbiological quality of Pharmaceutical Preparation. Page 529-530. Note: These safety limits are for herbal medicine drugs (whole, reduced or powdered) of liquid and non-liquid forms.





Evergreen™

CERTIFICATE OF ANALYSIS

G1654

PRODUCT :



人參(Ren Shen)
Radix et Rhizoma Ginseng

MANUFACTURING
DATE :

2020.07.15

BATCH No. :

410201903

EXPIRY DATE :

2024.07.14

DETERMINATION		SPECIFICATION	RESULT	TEST METHOD
Description		Sand color powder	Conform	F410201
Loss On Drying		< 8.00%	3.22%	GT-10
Total Ash		< 7.00%	5.49%	GT-19
Acid - Insoluble Ash		< 2.00%	0.48%	GT-20
Dilute EtOH Extract		> 30.00%	37.79%	GT-21
H ₂ O Extract		> 37.00%	48.16%	GT-22
Total Heavy Metal		< 20ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.200 ppm	GT-32
	Arsenic (As)	< 2.00ppm	N.D.	GT-32
	Cadmium (Cd)	< 0.20ppm	0.056 ppm	GT-32
	Mercury (Hg)	< 0.10ppm	N.D.	GT-32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁷ CFU/g	Pass	GT-35
	Total Yeast and Mold	< 10 ⁵ CFU/g	Pass	GT-35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ⁴ CFU/g	Pass	GT-37
	E. coli	Negative	Negative	GT-35
	Salmonella	Negative	Negative	GT-35
Pesticides Limit Test	Total DDT's	< 0.2ppm	Pass	GT-53
	Total BHC's	< 0.2ppm	Pass	GT-53
	Total PCNB's	< 0.1ppm	Pass	GT-53
	Quintozene	N.D.	N.D.	GT-53
Sulfur dioxide		< 10ppm	N.D.	GT-52
T.L.C. Identification			Positive	F410201

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm

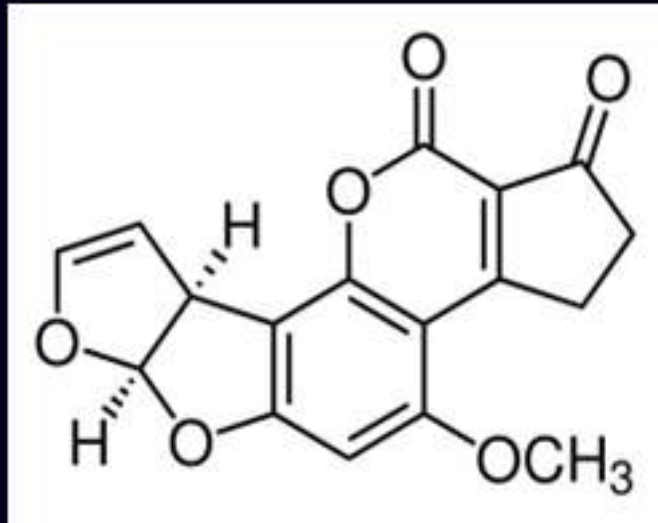
α-BHC, γ-BHC, β-BHC, δ-BHC, p,p'-DDE, p,p'-DDD, PCNB, PCA, MPCPS, o,p'-DDT, p,p'-DDT-0.01ppm ·

· Quintozene-0.01ppm · Sulfur dioxide-10ppm)

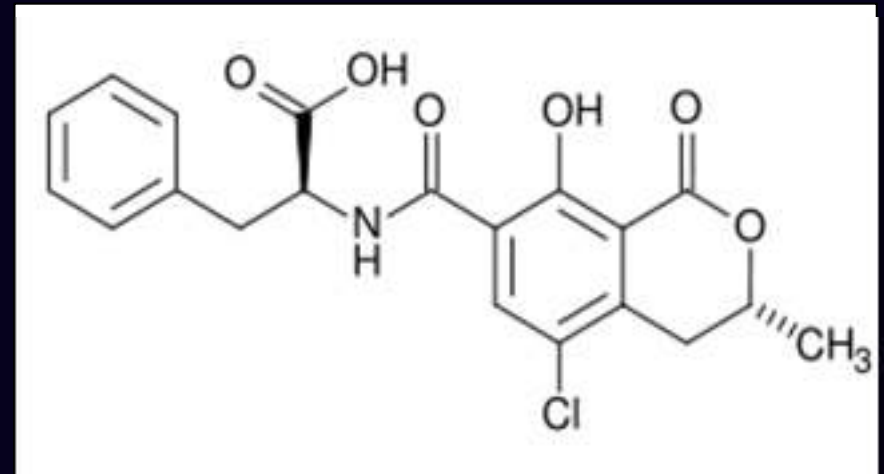
OTUS™

Mycotoxins / 霉菌毒素

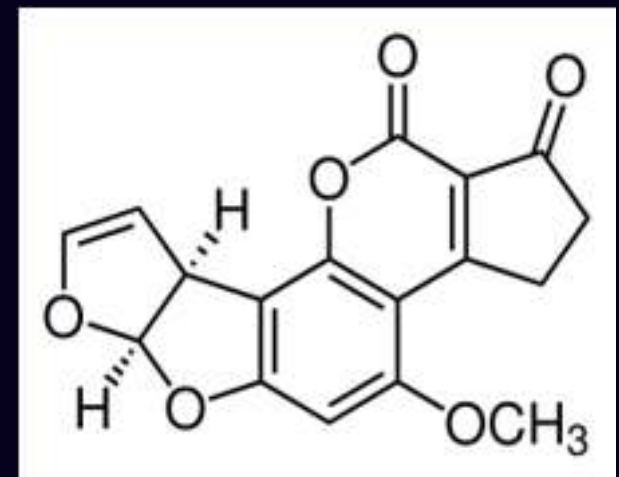
- Aflatoxins / 黃曲霉毒素



- Ochratoxins / 赭曲霉毒素



Aflatoxins / 黃曲霉毒素



Aflatoxins / 黃曲霉毒素

Aflatoxin Toxicity

Aayush Dhakal; Muhammad F. Hashmi; Evelyn Sbar.

▸ [Author Information and Affiliations](#)

Last Update: February 19, 2023.

Continuing Education Activity

Go to:

Aflatoxins are metabolites produced by toxigenic strains of molds, mainly *Aspergillus flavus* and *A. parasiticus*, which grow in soil, hay, decaying vegetation, and grains. Aflatoxin is produced by fungal action during food production, harvest, storage, and processing. Dietary exposure to aflatoxins may result in severe toxic and carcinogenic outcomes in humans and animals. Aflatoxin toxicity may result in nausea, vomiting, abdominal pain, convulsions, and other signs of acute liver injury. Long-term exposure also leads to various complications like growth retardation, cirrhosis, and hepatocellular carcinoma. This activity describes the evaluation and management of aflatoxin toxicity and reviews the role of the interprofessional team in managing patients with this condition.

Dhakal A, Hashmi MF, Sbar E. Aflatoxin Toxicity. [Updated 2023 Feb 19]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557781/>

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[1] US Food and Drug Administration. Safety limits of aflatoxins for human food and animal feeds.

[1] American Herbal Products Association. Recommended safety limits for aflatoxins in dietary supplements.

[1] European Union Pharmacopoeia. Safety limits of aflatoxins for botanical drugs.

Aflatoxins / 黃曲霉毒素

Aflatoxins	US FDA ⁱ	AHPA ⁱⁱ	EUP ⁱⁱⁱ
Aflatoxins B ₁		5 ppb	2 ppb
Aflatoxins B ₁ , B ₂ , G ₁ , G ₂	20 ppb	20 ppb	4 ppb

* ppb – parts per billion

i. US Food and Drug Administration. Safety limits of aflatoxins for human food and animal feeds.

ii. American Herbal Products Association. Recommended safety limits for aflatoxins in dietary supplements.

iii. European Union Pharmacopoeia. Safety limits of aflatoxins for botanical drugs.

Aflatoxins / 黃曲霉毒素

- 荷葉 *He Ye* (Folium Nelumbinis)
- 枸杞子 *Gou Qi Zi* (Fructus Lycii)
- 百合 *Bai He* (Bulbus Lili)
- 薄荷 *Bo He* (Herba Menthae)
- 草豆蔻 *Cao Dou Kou* (Semen Alpiniae Katsumadai)
- 防風 *Fang Feng* (Radix Saposhnikoviae)
- 黃精 *Huang Jing* (Rhizoma Polygonati)
- 絞股藍 *Jiao Gu Lan* (Rhizoma seu Herba Gynostemmatis)
- 菊花 *Ju Hua* (Flos Chrysanthemi)
- 蓮子 *Lian Zi* (Semen Nelumbinis)
- 龍眼肉 *Long Yan Rou* (Arillus Longan)
- 麥芽 *Mai Ya* (Fructus Hordei Germinatus)
- 芡實 *Qian Shi* (Semen Euryales)
- 砂仁 *Sha Ren* (Fructus Amomi)
- 山藥 *Shan Yao* (Rhizoma Dioscoreae)
- 山楂 *Shan Zha* (Fructus Crataegi)
- 烏梅 *Wu Mei* (Fructus Mume)
- 小茴香 *Xiao Hui Xiang* (Fructus Foeniculi)
- 延胡索 *Yan Hu Suo* (Rhizoma Corydalis)



Evergreen™

CERTIFICATE OF ANALYSIS

G1890

PRODUCT :



延胡索(Yan Hu Suo)
Rhizoma Corydalis

MANUFACTURING DATE : 2020.05.21

BATCH No. :

420806905

EXPIRY DATE :

2024.05.20

DETERMINATION		SPECIFICATION	RESULT	TEST METHOD
Description		Yellow color granule	Conform	F420806
Loss On Drying		< 10.00%	4.17%	GT-10
Total Ash		< 7.00%	2.18%	GT-19
Acid - Insoluble Ash		< 5.00%	0.23%	GT-20
Dilute EtOH Extract		> 25.00%	34.06%	GT-21
H ₂ O Extract		> 27.00%	48.63%	GT-22
Total Heavy Metal		< 20.00ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.100 ppm	GT-32
	Arsenic (As)	< 2.00ppm	N.D.	GT-32
	Cadmium (Cd)	< 0.20ppm	0.115 ppm	GT-32
	Mercury (Hg)	< 0.10ppm	N.D.	GT-32
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass	GT-35
	Total Yeast and Mold	< 10 ³ CFU/g	Pass	GT-35
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass	GT-37
	E. coli	Negative	Negative	GT-35
	Salmonella	Negative	Negative	GT-35
Aflatoxin Limit Test	Total Aflatoxin (B1+B2+G1+G2)	< 20ppb	N.D.	GT-51
	Aflatoxin (B1)	< 5ppb	N.D.	GT-51
T.L.C. Identification			Positive	F420806

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm + Aflatoxin B1, B2, G1, G2-1ppb)



Certificate of Analysis



Evergreen Herbs
17431 E Gale Ave

Date Received: 11/6/2017

Date Reported: 11/9/2017

City of Indust CA
Attn: Lily Huang

P.O. Number: 65582

Certificate No: 2534686



Client Sample ID: Yuan Zhi Lot# 421401603

Trilogy ID: S173101155



Description Misc

Notes:

Analysis	Results	Units	Detection Limit	Method	Reference
Aflatoxin B1	3.4	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin B2	ND	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin G1	35.3	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin G2	ND	ppb	1 ppb	HPLC	AOAC 994.08 with modifications

Results Approved by:

Julie Brunkhorst Laboratory Services Representative

ND = None Detected

The results of these tests are performed under ambient temperature and humidity. These results relate only to the samples tested. This report shall not be reproduced except in full, without written approval of the laboratory. Samples retained for 30 days after receipt. All analytical results inherently contain a degree of uncertainty. Our methods have been validated and specific uncertainties determined for each method. Uncertainty measurements are available upon request.

Page 1 of 1

Trilogy Analytical Laboratory, Inc.
870 Vossbrink Dr. ♦ Washington, MO 63090
Phone 636-239-1521 ♦ Fax: 636-239-1531



Evergreen™

CERTIFICATE OF ANALYSIS

G1940

PRODUCT :



遠志(Yuan Zhi)
Radix Polygalae

MANUFACTURING
DATE :

11.08.2018

BATCH No. :

421401703

EXPIRY DATE :

11.07.2022

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD
Description	Brown color granule	Conform	F421401
Loss On Drying	< 8.00%	4.79%	GT-10
Total Ash	< 6.00%	1.26%	GT-19
Acid - Insoluble Ash	< 3.00%	0.00%	GT-20
Dilute EtOH Extract	> 42.00%	53.61%	GT-21
H ₂ O Extract	> 42.00%	60.79%	GT-22
Total Heavy Metal	< 20.00ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	N.D.
	Arsenic (As)	< 2.00ppm	N.D.
	Cadmium (Cd)	< 0.20ppm	N.D.
	Mercury (Hg)	< 0.10ppm	N.D.
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass
	Total Yeast and Mold	< 10 ³ CFU/g	Pass
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass
	E. coli	Negative	Negative
	Salmonella	Negative	Negative
Pesticides Limit Test	Total DDT's	< 0.2ppm	Pass
	Total BHC's	< 0.2ppm	Pass
	Total PCNB's	< 0.1ppm	Pass
Aflatoxin Limit Test	Total Aflatoxin (B1+B2+G1+G2)	< 20ppb	N.D.
	Aflatoxin (B1)	< 5ppb	N.D.
T.L.C. Identification		Positive	F421401

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm)

α-BHC, γ-BHC, β-BHC, δ-BHC, p,p'-DDE, p,p'-DDD, PCNB, PCA, MPCPS, o,p'-DDT, p,p'-DDT-0.01ppm, AflatoxinB1, B2, G1, G2-1ppb)

LOTUS™

Certificate of Analysis



Evergreen Herbs
17431 E Gale Ave

Date Received: 5/25/2017

Date Reported: 5/26/2017

City of Indust CA
Attn: Lily Huang

Certificate No: 2516281



P.O. Number: PO-56242

Trilogy ID: R171451210



Client Sample ID: Lian Zi Lot 421502601

Description Dietary Supplement

Notes: RETEST ORIGINAL SAMPLE ID:
S17131112P

Analysis	Results	Units	Detection Limit	Method	Reference
Aflatoxin B1	16.3	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin B2	1.9	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin G1	ND	ppb	1 ppb	HPLC	AOAC 994.08 with modifications
Aflatoxin G2	ND	ppb	1 ppb	HPLC	AOAC 994.08 with modifications

Results Approved by:

Julie Brunkhorst Laboratory Services Representative

ND = None Detected

The results of these tests are performed under ambient temperature and humidity. These results relate only to the samples tested. This report shall not be reproduced except in full, without written approval of the laboratory. Samples retained for 30 days after receipt. All analytical results inherently contain a degree of uncertainty. Our methods have been validated and specific uncertainties determined for each method. Uncertainty measurements are available upon request.

Page 1 of 1

Trilogy Analytical Laboratory, Inc.
870 Vossbrink Dr. ♦ Washington, MO 63090
Phone 636-239-1521 ♦ Fax: 636-239-1531



Evergreen™

CERTIFICATE OF ANALYSIS

G1486

PRODUCT :



蓮子(Lian Zi)
Semen Nelumbinis

MANUFACTURING DATE : 2019.12.03

BATCH No. : 421502802

EXPIRY DATE : 2023.12.02

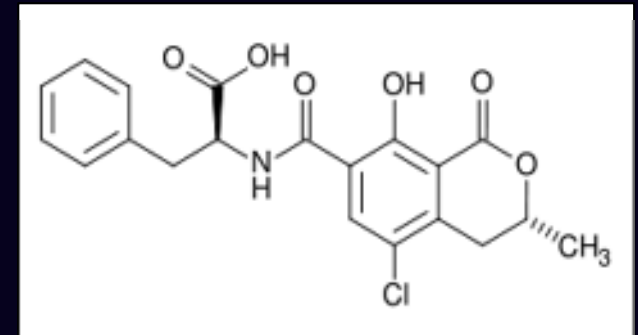
DETERMINATION	SPECIFICATION	RESULT	TEST METHOD
Description	Sand color granule	Conform	F421502
Loss On Drying	< 8.00%	3.66%	GT-10
Total Ash	< 9.00%	3.41%	GT-19
Acid - Insoluble Ash	< 3.00%	0.18%	GT-20
Dilute EtOH Extract	> 23.00%	31.70%	GT-21
H ₂ O Extract	> 34.00%	40.91%	GT-22
Total Heavy Metal	< 20.00ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	N.D.
	Arsenic (As)	< 2.00ppm	N.D.
	Cadmium (Cd)	< 0.20ppm	0.044 ppm
	Mercury (Hg)	< 0.10ppm	N.D.
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass
	Total Yeast and Mold	< 10 ³ CFU/g	Pass
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass
	E. coli	Negative	Negative
	Salmonella	Negative	Negative
Aflatoxin Limit Test	Total Aflatoxin (B1+B2+G1+G2)	< 20ppb	N.D.
	Aflatoxin (B1)	< 5ppb	N.D.
Sulfur dioxide	< 10ppm	N.D.	GT-52
T.L.C. Identification		Positive	F421502

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm ; Aflatoxin B1, B2, G1, G2-1ppb)

S™

Ochratoxins / 赭曲霉毒素



Epub 2018 Jan 5.

Ochratoxin A: Toxicity, oxidative stress and metabolism

Yanfei Tao¹, Shuyu Xie², Fanfan Xu², Aimei Liu³, Yanxin Wang¹, Dongmei Chen¹, Yuanhu Pan⁴, Lingli Huang¹, Dapeng Peng⁴, Xu Wang⁵, Zonghui Yuan⁶

Affiliations + expand

PMID: 29309824 DOI: [10.1016/j.fct.2018.01.002](https://doi.org/10.1016/j.fct.2018.01.002)

Abstract

Ochratoxin A (OTA) is a widespread mycotoxin commonly found as a corn contaminant. It has been shown to be nephrotoxic, hepatotoxic, teratogenic and immunotoxic to several species of animals and to cause kidney and liver tumors in mice and rats. The focus of this article is primarily intended to summarize the progress in research associated with oxidative stress as a plausible mechanism for OTA-induced toxicity as well as its metabolism. The present review shows that studies have been carried out for decades to elucidate the production of reactive oxygen species (ROS) and oxidative stress as a result of OTA treatment and have correlated them with various types of OTA toxicity, indicating that oxidative stress plays critical roles in the toxicity of OTA. The major metabolic pathways of OTA are hydrolysis and a small percentage of absorbed OTA is hydroxylated. CYP450, carboxypeptidase A, trypsin, α -chymotrypsin and cathepsin have been shown to be able to degrade OTA. Most metabolites of OTA are less toxic than OTA except OP-OTA. Further understanding of the role of oxidative stress in OTA-induced toxicity will throw new light on the use of antioxidants, scavengers of ROS, as well as on the blind spots of the metabolism and metabolic enzymes of OTA. The present review might contribute to reveal the oxidative stress-induced toxicity of OTA and help to protect against its oxidative damage.

Ochratoxins / 赭曲霉毒素

Ochratoxin A	US FDA ⁱ	AHPA ⁱⁱ	Europe ⁱⁱⁱ
Ochratoxin A	n/a	n/a	3-10 ppb

i. US Food and Drug Administration. No safety limits has been established for ochratoxin A.

ii. American Herbal Products Association. No safety limits has been established for ochratoxin A.

iii. Official Journal of the European Communities. Commission Regulation (EC) No 472/2002. Safety limits for ochratoxin A vary for different food products: 3 ppb for finished products derived from cereals (for direct human consumption); 5 ppb for raw cereal grains (including raw rice, buckwheat); and 10 ppb for dried vine fruits (currants, raisins, sultanas)

The logo for eLotus, featuring the word "eLotus" in a white, lowercase, sans-serif font on a dark purple rectangular background.

Ochratoxins / 赭曲霉毒素

- 枸杞子 *Gou Qi Zi* (Fructus Lycii)
- 甘草 *Gan Cao* (Radix et Rhizoma Glycyrrhizae)
- 炙甘草 *Zhi Gan Cao* (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle)



Evergreen™

CERTIFICATE OF ANALYSIS

G1290

PRODUCT :



枸杞子(Gou Qi Zi)
Fructus Lycii

MANUFACTURING
DATE :

2020.06.20

BATCH No. :

420904904

EXPIRY DATE :

2023.06.19

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD
Description	Sand color granule	Conform	F420904
Loss On Drying	< 8.00%	5.46%	GT-10
Total Ash	< 7.00%	2.06%	GT-19
Acid - Insoluble Ash	< 3.00%	0.05%	GT-20
Dilute EtOH Extract	> 21.00%	38.31%	GT-21
H ₂ O Extract	> 32.00%	43.04%	GT-22
Total Heavy Metal	< 20.00ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	N.D.
	Arsenic (As)	< 2.00ppm	N.D.
	Cadmium (Cd)	< 0.20ppm	N.D.
	Mercury (Hg)	< 0.10ppm	N.D.
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass
	Total Yeast and Mold	< 10 ³ CFU/g	Pass
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass
	E. coli	Negative	Negative
	Salmonella	Negative	Negative
Aflatoxin Limit Test	Total Aflatoxin (B1+B2+G1+G2)	< 20ppb	N.D.
	Aflatoxin (B1)	< 5ppb	N.D.
Sulfur dioxide		< 10ppm	N.D.
Ochratoxin Limit Test	Ochratoxin A	< 10ppb	N.D.
T.L.C. Identification		Positive	F420904

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm + Aflatoxin B1, B2, G1, G2-1ppb + Sulfur dioxide-10ppm + Ochratoxin-0.3 ppb)

Intertek Testing Services Taiwan Ltd. : Entrust Intertek Testing Services Taiwan Ltd. to perform the test.

Intertek Testing
Services Taiwan Ltd.


LOTUS™



Evergreen™

CERTIFICATE OF ANALYSIS

G1952

PRODUCT :  炙甘草(Zhi Gan Cao)
Radix et Rhizoma Glycyrrhizae Praeparata cum Melle

BATCH No. : 420503-2903

MANUFACTURING DATE : 2020.06.15

EXPIRY DATE : 2024.06.14

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD
Description	Brown color granule	Conform	F420503-2
Loss On Drying	< 8.00%	3.71%	GT-10
Total Ash	< 9.00%	4.60%	GT-19
Acid - Insoluble Ash	< 3.00%	0.28%	GT-20
Dilute EtOH Extract	> 40.00%	52.50%	GT-21
H ₂ O Extract	> 42.00%	58.08%	GT-22
Total Heavy Metal	< 20.00ppm	Pass	GT-31
Heavy Metal Limit Test	Lead (Pb)	< 5.00ppm	0.171 ppm
	Arsenic (As)	< 2.00ppm	0.297 ppm
	Cadmium (Cd)	< 0.20ppm	N.D.
	Mercury (Hg)	< 0.10ppm	N.D.
Microbial Limit Test	Total Aerobic Microbial Count	< 10 ⁴ CFU/g	Pass
	Total Yeast and Mold	< 10 ³ CFU/g	Pass
	Bile-Tolerant Gram-Negative Bacteria	< 10 ² CFU/g	Pass
	E. coli	Negative	Negative
	Salmonella	Negative	Negative
Aflatoxin Limit Test	Total Aflatoxin (B1+B2+G1+G2)	< 20ppb	N.D.
	Total Aflatoxin (B1)	< 5ppb	N.D.
Pesticides Limit Test	Total DDT's	< 0.2ppm	Pass
	Total BHC's	< 0.2ppm	Pass
	Total PCNB's	< 0.1ppm	Pass
Ochratoxin Limit Test	Ochratoxin A	< 10ppb	0.516 ppb
T.L.C. Identification		Positive	F420503-2

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm ; AflatoxinB1, B2, G1, G2-1ppb ;

α-BHC, γ-BHC, β-BHC, δ-BHC, p,p'-DDE, p,p'-DDD, PCNB, PCA, MPCPS, o,p'-DDT, p,p'-DDT-0.01ppm , Ochratoxin-0.3ppb)

Refer to Ministry of Health and welfare Food Sanitation Regulation No.: 1031900979 Method of Test for Mycotoxin in Foods -Test of

Ochratoxin A.

eLotus™

Herbicides + Pesticides / 除草劑+殺蟲劑

- Organochlorines
 - 33 different organochlorine insecticides, including endrin, dieldrin, aldrin, quitozene
- Organophosphorous
 - 100 different types of organophosphorous pesticides, including malathion and parathion
- Pyrethrums
 - Pyrethrin I

Herbicides + Pesticides / 除草劑+殺蟲劑

- 枸杞子 Gou Qi Zi Fructus Lycii, 八角茴香 Ba Jiao Hui Xiang Fructus Anisi Stellati, 百合 Bai He Bulbus Lillii, 白芍 Bai Shao Radix Paeoniae Alba, 薄荷 Bo He Herba Menthae, 草豆蔻 Cao Dou Kou Semen Alpiniae Katsumadai, 柴胡 Chai Hu Radix Bupleuri, 陳皮 Chen Pi Pericarpium Citri Reticulatae, 赤芍 Chi Shao Radix Paeoniae Rubra, 川芎 Chuan Xiong Rhizoma Chuanxiong, 大棗(紅) Da Zao (Hong) Fructus Jujubae, 當歸 Dang Gui Radix Angelicae Sinensis, 當歸尾 Dang Gui Wei Extremitas Radix Angelicae Sinensis, 黨參 Dang Shen Radix Codonopsis, 杜仲 Du Zhong Cortex Eucommiae, 番瀉葉 Fan Xie Ye Folium Sennae, 防風 Fang Feng Radix Saposhnikoviae, 甘草 Gan Cao Radix et Rhizoma Glycyrrhizae, 桂心 Gui Xin Cortex Rasmus Cinnamomi, 桂枝 Gui Zhi Ramulus Cinnamomi, 荷葉 He Ye Folium Nelumbinis, 黑大棗 Hei Da Zao Fructus Jujubae Nigrum, 紅花 Hong Hua Flos Carthami, 化橘紅 Hua Ju Hong Exocarpium Citri Grandis, 黃精 Huang Jing Rhizoma Polygonati, 黃耆 Huang Qi Radix Astragali, 黃耆[炙] Huang Qi [Zhi] Radix Astragali Praeparata cum Melle, 絞股藍 Jiao Gu Lan Rhizoma seu Herba Gynostemmatis, 桔梗 Jie Geng Radix Platycodonis, 金銀花 Jin Yin Hua Flos Lonicerae Japonicae, 橘紅 Ju Hong Exocarpium Citri Reticulatae, 菊花 Ju Hua Flos Chrysanthemi, 蓮子 Lian Zi Semen Nelumbinis, 龍眼花 Long Yan Hua Flos Longan, 龍眼肉 Long Yan Rou Arillus Longan, 麥冬 Mai Dong Radix Ophiopogonis, 麥芽 Mai Ya Fructus Hordei Germinatus, 牡丹皮 Mu Dan Pi Cortex Moutan, 枇杷葉 Pi Pa Ye Folium Eriobotryae, 芡實 Qian Shi Semen Euryales, 羌活 Qiang Huo Rhizoma et Radix Notopterygii, 青皮 Qing Pi Pericarpium Citri Reticulatae Viride, 人參 Ren Shen Radix et Rhizoma Ginseng, 肉豆根 Rou Dou Gen Radix Myristicae, 肉桂 Rou Gui Cortex Cinnamomi, 三七 San Qi Radix et Rhizoma Notoginseng, 砂仁 Sha Ren Fructus Amomi, 山藥 Shan Yao Rhizoma Dioscoreae, 山楂 Shan Zha Fructus Crataegi, 山茱萸 Shan Zhu Yu Fructus Corni, 烏梅 Wu Mei Fructus Mume, 細辛 Xi Xin Radix et Rhizoma Asari, 西洋參 Xi Yang Shen Radix Panacis Quinquefolii, 小茴香 Xiao Hui Xiang Fructus Foeniculi, 野菊花 Ye Ju Hua Flos Chrysanthemi Indici, 遠志 Yuan Zhi Radix Polygalae, 炙甘草 Zhi Gan Cao Radix et Rhizoma Glycyrrhizae Praeparata cum Melle, 紫蘇梗 Zi Su Geng Caulis Perillae, 紫蘇葉 Zi Su Ye Folium Perillae, 紫蘇子 Zi Su Zi Fructus Perillae

Herbicides + Pesticides / 除草劑+殺蟲劑

- 人參 *Ren Shen* (Radix et Rhizoma Ginseng)
- 西洋參 *Xi Yang Shen* (Radix Panacis Quinquefolii)



CERTIFICATE OF ANALYSIS

G1654

PRODUCT :



人參(Ren Shen)
Radix et Rhizoma Ginseng

MANUFACTURING
DATE :

2020.07.15

BATCH No. :

410201903

EXPIRY DATE :

2024.07.14

DETERMINATION	SPECIFICATION	RESULT	TEST METHOD
Description	Sand color powder	Conform	F410201
Loss On Drying	< 8.00%	3.22%	GT-10
Total Ash	< 7.00%	5.49%	GT-19
Acid - Insoluble Ash	< 2.00%	0.48%	GT-20
Dilute EtOH Extract	> 30.00%	37.79%	GT-21
H ₂ O Extract	> 37.00%	48.16%	GT-22
Total Heavy Metal	< 20ppm	Pass	GT-31
Heavy Metal Limit Test			
Lead (Pb)	< 5.00ppm	0.200 ppm	GT-32
Arsenic (As)	< 2.00ppm	N.D.	GT-32
Cadmium (Cd)	< 0.20ppm	0.056 ppm	GT-32
Mercury (Hg)	< 0.10ppm	N.D.	GT-32
Microbial Limit Test			
Total Aerobic Microbial Count	< 10 ⁷ CFU/g	Pass	GT-35
Total Yeast and Mold	< 10 ⁵ CFU/g	Pass	GT-35
Bile-Tolerant Gram-Negative Bacteria	< 10 ⁴ CFU/g	Pass	GT-37
E. coli	Negative	Negative	GT-35
Salmonella	Negative	Negative	GT-35
Pesticides Limit Test			
Total DDT's	< 0.2ppm	Pass	GT-53
Total BHC's	< 0.2ppm	Pass	GT-53
Total PCNB's	< 0.1ppm	Pass	GT-53
Quintozene	N.D.	N.D.	GT-53
Sulfur dioxide	< 10ppm	N.D.	GT-52
T.L.C. Identification		Positive	F410201

N.D. : It means the result is under limit of quantitation (LOQ)

(LOQ : Pb-0.1ppm; As-0.25ppm; Cd, Hg-0.025ppm)


α-BHC, γ-BHC, β-BHC, δ-BHC, p,p'-DDE, p,p'-DDD, PCNB, PCA, MPCPS, o,p'-DDT, p,p'-DDT-0.01ppm

· Quintozene-0.01ppm · Sulfur dioxide-10ppm)



Evergreen™

Certificate of Analysis

Product Name:  **American Ginseng Root** Harvest Date: **Fall 2019**
 Latin Name: **Panax Quinquefolius** Testing Complete Date: **2/27/2020**
 Lot Number: **200720-MP** Retest Date: **2/27/2023**

PHYSICAL DESCRIPTION	
PLANT PART	Whole Root
APPEARANCE	Powder
COLOR	Tan, Light Tan to Off-White
AROMA	Characteristic of Ginseng
TASTE	Characteristic of Ginseng
PARTICLE SIZE	NA
Aw (Water Activity) (AOAC 978.18)	NA
TOTAL GINSENOSESIDES	2.8% or above

PESTICIDES			
Compound	Specification	Test Method	Result
Dacthal (DCPA, Chlorthal-dimethyl)	< 10 ppb	ANA067CHEM	PASS
DDE, p,p'-	< 10 ppb	ANA067CHEM	PASS
DDT, o,p'-	< 10 ppb	ANA067CHEM	PASS
DDT, p,p'-	< 10 ppb	ANA067CHEM	PASS
Dieldrin	< 20 ppb	ANA067CHEM	PASS
Folpet	< 20 ppb	ANA067CHEM	PASS
HCH, alpha- (alpha-BHC)	< 10 ppb	ANA067CHEM	PASS
HCH, beta- (beta-BHC)	< 10 ppb	ANA067CHEM	PASS
HCH, delta- (delta-BHC)	< 10 ppb	ANA067CHEM	PASS
Hexachlorobenzene (HCB)	< 10 ppb	ANA067CHEM	PASS
Lindane (gamma-HCH, gamma-BHC)	< 10 ppb	ANA067CHEM	PASS
Pentachloroaniline	< 10 ppb	ANA067CHEM	PASS
Pentachlorobenzene	< 10 ppb	ANA067CHEM	PASS
Pentachlorothioanisole	< 10 ppb	ANA067CHEM	PASS
Procymidone	< 10 ppb	ANA067CHEM	PASS
Quintozene (Pentachloronitrobenzene)	< 10 ppb	ANA067CHEM	PASS
Technazene	< 10 ppb	ANA067CHEM	PASS
Tetrachloroaniline (2,3,5,6-)	< 10 ppb	ANA067CHEM	PASS
Boscalid	< 1000 ppb	ANA067CHEM	PASS
Chlorpyrifos - ethyl	< 10 ppb	ANA067CHEM	PASS
Pesticide Complete Profile	FDA Food Product Limits	ANA067CHEM	PASS

CHEMICAL TESTS			
Compound	Specification	Test Method	Result
Arsenic	< 2 ppm	AOAC 2015.01	PASS
Cadmium	<.3 ppm	AOAC 2015.01	PASS
Copper	< 20 ppm	AOAC 2011.14	PASS
Lead	< 5 ppm	AOAC 2015.02	PASS
Mercury	< .2 ppm	AOAC 2015.01	PASS

MICROBIOLOGICAL TESTS			
Compound	Specification	Test Method	Result
Total Microbial Count	NMT 100,000 cfu/g	Current USP -NF	PASS
Yeast	NMT 750 cfu/g	Current USP -NF	PASS
Mold	NMT 750 cfu/g	Current USP -NF	PASS
E. Coli	NMT 10 cfu/g	Current USP -NF	PASS
Salmonella	ND	Current USP -NF	PASS
Staphylococcus	ND	Current USP -NF	PASS



Analytical Report

DATE: May 24, 2023

FRL JOB ID: J23-0512-D

ALIQUOT ID: 230512005-1-01

CLIENT: Evergreen Herbs and Medical Supplies

SAMPLE ID: Ba Zhen Tang - Lot #32089101
Herbal supplement

ANALYSIS: Quantitative Analysis of Pesticides in Botanical Dietary Supplements using FDA Modified QuEChERS Sample Preparation and Gas Chromatography-Tandem Mass Spectrometry (GC-QQQ) for USP<561> pesticides (less bromide ion and dithiocarmates expressed as CS₂) (GCMS-QNT-PEST-USP561A)

RESULTS:	Compound	Limit (ppm)	Result	Compound	Limit (ppm)	Result	Compound	Limit (ppm)	Result
				Fenchlorphos (sum of fenchlorphos and fenchlorphos-oxon)	0.1	PASS	Parathion-ethyl and Paraoxon-ethyl (sum of)	0.5	PASS
	Acephate	0.1	PASS	Fenitrothion	0.5	PASS	Parathion-methyl and Paraoxon-methyl (sum of)	0.2	PASS
	Alachlor	0.05	PASS	Fenpropathrin	0.03	PASS	Pendimethalin	0.1	PASS
	Aldrin and dieldrin (sum of)	0.05	PASS	Fensulfotioin (sum of fensulfotioin, fensulfotioin-oxon, fensulfotioin-oxonsulfone, and fensulfotioin-sulfone)	0.05	PASS	Pentachloroanisole	0.01	PASS
	Azinphos-ethyl	0.1	PASS	Fenthion (sum of fenthion, fenthion-oxon, fenthion-oxon-sulfone, fenthion-oxon-sulfonide, fenthion-sulfone, and fenthion-sulfonide)	0.05	PASS	Fenmethrin and isomers (sum of)	1	PASS
	Azinphos-methyl	1	PASS	Fenvalerate	1.5	PASS	Phosalone	0.1	PASS
	Bromophos-ethyl	0.05	PASS	Flucythrinate	0.05	PASS	Phosmet	0.05	PASS
	Bromophos-methyl	0.05	PASS	t-Fluvinate	0.05	PASS	Piperonyl butoxide	3	PASS
	Bromopropylate	3	PASS	Fonophos	0.05	PASS	Priniphos-ethyl	0.05	PASS
	Chlordane (sum of cis-, trans-, and oxychlordane)	0.05	PASS	Heptachlor (sum of heptachlor, cis-heptachlorepoxide, and trans-heptachlorepoxide)	0.05	PASS	Priniphos-methyl (sum of priniphos-methyl and N-deethyl-priniphos-methyl)	4	PASS
	Chlorfenvinphos	0.5	PASS	Hexachlorobenzene	0.1	PASS	Procyimadone	0.1	PASS
	Chlorpyrifos-ethyl	0.2	PASS	HCH (sum of alpha, beta, and delta isomers)	0.3	PASS	Prolenophos	0.1	PASS
	Chlorpyrifos-methyl	0.1	PASS	Lindane (gamma-HCH)	0.6	PASS	Prothiofos	0.05	PASS
	Chlorthal-dimethyl	0.01	PASS	Malathion and malaoxon (sum of)	1	PASS	Pyrethrum (sum of cinarin I, cinarin II, jasmolin I, jasmolin II, pyrethrin I, and pyrethrin II)	3	PASS
	Cyfluthrin (sum of)	0.1	PASS	Mecarbam	0.05	PASS	Quinalphos	0.05	PASS
	γ-Cyhalothrin	1	PASS	Methacryfos	0.05	PASS	Quintozene (sum of quintozene, pentachloroaniline, and methyl pentachlorophenyl sulfide)	1	PASS
	Cypermethrin and isomers (sum of)	1	PASS	Methamidophos	0.05	PASS	S-421	0.02	PASS
	DDT (sum of o,p'-DDE, p,p'-DDE, o,p'-DDT, p,p'-DDT, o,p'-TDE, and p,p'-TDE)	1	PASS	Methidathion	0.2	PASS	Tecnazene	0.05	PASS
	Deltamethrin	0.5	PASS	Methoxychlor	0.05	PASS	Tetradifon	0.3	PASS
	Diazinon	0.5	PASS	Mirex	0.01	PASS	Vinclozolin	0.4	PASS
	Dichlorfuanid	0.1	PASS	Monocrotophos	0.1	PASS			
	Dichlorvos	1	PASS						
	Dicofol	0.5	PASS						
	Dimethoate and omethoate (sum of)	0.1	PASS						
	Endosulfan (sum of isomers and endosulfan sulphate)	3	PASS						
	Endrin	0.05	PASS						
	Ethion	2	PASS						
	Etrinfos	0.05	PASS						

This document electronically signed by James Kababick on 5/24/2023; Signature on file.



Analytical Report

DATE: May 24, 2023

FRL JOB ID: J23-0512-D

ALIQUOT ID: 230512006-1-01

CLIENT: Evergreen Herbs and Medical Supplies

SAMPLE ID: Zhi Bai Di Huang Wan - Lot #32179106
Herbal supplement

ANALYSIS: Quantitative Analysis of Pesticides in Botanical Dietary Supplements using FDA Modified QuEChERS Sample Preparation and Gas Chromatography-Tandem Mass Spectrometry (GC-QQQ) for USP<561> pesticides (less bromide ion and dithiocarmates expressed as CS2) (GCMS-QNT-PEST-USP561A)

RESULTS:	Compound	Limit (ppm)	Result	Compound	Limit (ppm)	Result	Compound	Limit (ppm)	Result
				Fenchlorphos (sum of fenchlorphos and fenchlorphos-oxon)	0.1	PASS	Parathion-ethyl and Paraoxon-ethyl (sum of)	0.5	PASS
	Acephate	0.1	PASS	Fenitrothion	0.5	PASS	Parathion-methyl and Paraoxon-methyl (sum of)	0.2	PASS
	Alachlor	0.05	PASS	Fenpropathrin	0.03	PASS	Permethrin and isomers (sum of)	1	PASS
	Aldrin and dieldrin (sum of)	0.05	PASS	Fensulfathion (sum of fensulfathion, fensulfathion-oxon, fensulfathion-oxonsulfone, and fensulfathion-sulfone)	0.05	PASS	Phosalone	0.1	PASS
	Azinphos-ethyl	0.1	PASS	Fenthion (sum of fenthion, fenthion-oxon, fenthion-oxon-sulfone, fenthion-oxon-sulfoxide, fenthion-sulfone, and fenthion-sulfoside)	0.05	PASS	Phosmet	0.05	PASS
	Azinphos-methyl	1	PASS	Fenvalerate	1.5	PASS	Piperonyl butoxide	3	PASS
	Bromophos-ethyl	0.05	PASS	Flucythrinate	0.05	PASS	Priniphos-ethyl	0.05	PASS
	Bromophos-methyl	0.05	PASS	I-Fluralphate	0.05	PASS	Priniphos-methyl and N-desethyl-priniphos-methyl	4	PASS
	Bromopropylate	3	PASS	Fenoxypipate	0.05	PASS	Procyimidone	0.1	PASS
	Chlordane (sum of cis-, trans-, and oxychlordane)	0.05	PASS	Heptachlor (sum of heptachlor, cis-heptachloroepoxide, and trans-heptachloroepoxide)	0.05	PASS	Profenophos	0.1	PASS
	Chlorfenvinphos	0.5	PASS	Hexachlorobenzene	0.1	PASS	Prothiophos	0.05	PASS
	Chlorpyrifos-ethyl	0.2	PASS	HCH (sum of alpha, beta, and delta isomers)	0.3	PASS	Pyrethrum (sum of cinerin I, cinerin II, jasmolin I, jasmolin II, pyrethrin I, and pyrethrin II)	3	PASS
	Chlorpyrifos-methyl	0.1	PASS	Lindane (gamma-HCH)	0.6	PASS	Quintozene (sum of quitozene, pentachloroamine, and methyl pentachlorophenyl sulfide)	0.05	PASS
	Chlorthal dimethyl	0.01	PASS	Malathion and malaoxon (sum of)	1	PASS	Quintozene (sum of quitozene, pentachloroamine, and methyl pentachlorophenyl sulfide)	1	PASS
	Cyfluthrin (sum of)	0.1	PASS	Mecarbam	0.05	PASS	S-421	0.02	PASS
	Cyhalothrin	1	PASS	Methacryfos	0.05	PASS	Tecnazene	0.05	PASS
	Cypermethrin and isomers (sum of)	1	PASS	Methamidophos	0.05	PASS	Tetradifon	0.3	PASS
	DDT (sum of o,p'-DDE, p,p'-DDE, o,p'-DDT, p,p'-DDT, o,p'-TDE, and p,p'-TDE)	1	PASS	Methidathion	0.2	PASS	Vinclozolin	0.4	PASS
	Deltamethrin	0.5	PASS	Methoxychlor	0.05	PASS			
	Diazinon	0.5	PASS	Mirex	0.01	PASS			
	Dichlofuanid	0.1	PASS	Monocrotophos	0.1	PASS			
	Dichlorvos	1	PASS						
	Dicofol	0.5	PASS						
	Dimethoate and omethoate (sum of)	0.1	PASS						
	Endosulfan (sum of isomers and endosulfan sulphate)	3	PASS						
	Endrin	0.05	PASS						
	Ethion	2	PASS						
	Etrinofos	0.05	PASS						

This document electronically signed by James Kababick on 5/24/2023; Signature on file.



Endangered Plants Animals / 瀕危動植物

Endangered Species	Status
<i>Hu Gu</i> (Os Tigris)	Appendix I
<i>She Xiang</i> (Moschus)	Appendix I
<i>Xi Jiao</i> (Cornu Rhinoceri)	Appendix I
<i>Xiong Dan</i> (Fel Ursi)	Appendix I

Endangered Plants Animals / 瀕危動植物

Endangered Species	Status
<i>Gou Ji</i> (Rhizoma Cibotii)	Appendix II
<i>Hong Jing Tian</i> (Radix et Rhizoma Rhodiolae Crenulatae)	Appendix II
<i>Mu Xiang</i> (Radix Saussureae)	Appendix II
<i>Rou Cong Rong</i> (Herba Cistanches)	Appendix II
<i>Tian Ma</i> (Rhizoma Gastrodiae)	Appendix II

中华人民共和国
The People's Republic of China
野生动植物允许进出口证明书
PERMIT/CERTIFICATE FOR IMPORT, EXPORT & RE-EXPORT
OF WILD FAUNA AND FLORA

06 出口	1. 证号: 2003CNMEN0544/02
07 再出口	2. 发证日期: DEC. 16, 2003
08 进口	

3. 进出口名称、产地和用途:
江丰股份有限公司
江丰公司前347号

4. 境外生产/出口、收购/用途:
深圳高新实业发展有限公司
深圳龙岗区园岭路9号海泰大厦806-808室

3a. 进出口岸: TW 台湾

4a. 出口口岸: CN 深圳

5. 海关特殊监管区或保税港区:
(H-CODE 12119039 12119032)

6. 海关特殊监管区或保税港区:

对于该批货物, 只有当运输符合《陆运植物运输须知》或空运条件符合 IATA《国际空运规则》要求的情况下, 本证明书方为有效。
本证书仅限一次性使用



中华人民共和国
海关总署进出口管理办公室
地址: 中华人民共和国
北京市东城区
和平门内大街18号
邮政编码: 100014
电 话: 86-10-64239010
86-10-64239008
86-10-64214190
86-10-24298215

5a. 贸易方式: 5b. 安全标志号:

7 序号	7a 种名(中文名、学名)	7b 进出口别	7c 用途	7d 数量/单位	7e 原产地
A	川芎 Ligusticum sinense	出口	中药原料 Medicinal Herb/Root	~3000 Kgs	
B	川芎附片 Ligusticum sinense	出口	中药原料 TCM/Slice	~1000 Kgs	
C	川芎 Ligusticum sinense	出口	中药原料 TCM/Stem	~1000 Kgs	

8. 签发机关:
Guangzhou JUN 25 2003

9. 海关备注:

14. 备注:	海关备注
A	
B	
C	
D	

说明: 本证书一式四联, 此联供检验检疫局用。



CERTIFICATE FOR NON-REGULATED SPECIES LISTED IN THE HS COMMODITY APPENDIX OF IMPORT & EXPORT ON WILD FAUNA & FLORA

== <进出口野生动植物种商品目录>
物种证明

<input checked="" type="checkbox"/> EXPORT 出口	Contract No. 合同号 2009CN/SS0004/UQ
<input type="checkbox"/> RE-EXPORT 再出口	
<input type="checkbox"/> IMPORT 进口	Valid Until 有效期至 2009-06-14
<input type="checkbox"/> OTHER 其它	

1. Applicant 申请人 Chuang Song Zang Pharmaceutical Co., Ltd. No. 29-1, Wu Niao Lane, San Shou Village, Yann Teou Hsiang	2. Applicant's Tel. 申请人电话 +86 21 6411 1111
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3. Consignor 发货人 TW Kaohsiung	4. Export Port 出口港 CN Shanghai
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5. HS Code, Description and Special Conditions 12119990.70, 其它陆生哺乳类	6. Terms Address, Jurisdiction of Management Authority The Endangered Species Import and Export Management Office of the People's Republic of China Address: Beijing High Tech Park, 15th Floor, Building 15A, No. 15, Zhongguo Road, Beijing Tel: +86 10 6461 0000 Fax: +86 10 6461 0000 中华人民共和国濒危物种进出口管理办公室 地址: 北京中关村科技园中关大街15号15层15A座 电话: +86 10 6461 0000 传真: +86 10 6461 0000
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No.	Species (Chinese & Latin Name)	Class	Origin	Quantity	Weight	Remarks
A	苍芎阿莫海 <i>C. fulvifrons (DeMeun)</i> Wildt	NON	A	100	kg	Body

ST-45 CERTIFICATE RE-ENTRY (A)

Original 2009-04-15

Place Issued 发证地点: Beijing 北京

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Official Seal: [Red Seal]

Book No. 证书编号	0011260
A	
B	
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Country/Region 国别/地区: CN
Date 日期: 2009-04-15
Official Stamp 官方印章: [Stamp]

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0011260



- *Cistanche deserticola*
Y.C. Ma. (肉苁蓉 *Ròu Cōng Róng*)

– protected by CITES



- *Cistanche tubulosa*
(Schrenk) Wright (管花肉苁蓉 *Guǎn Huā Ròu Cōng Róng*)

– Not protected by CITES



Herb Safety / 中藥安全

- Prohibited Compounds / 禁用化合物
- Restricted Compounds / 限制化合物
- Pregnancy and Nursing / 懷孕+護理
- Heavy metals / 重金屬
- Micro-organisms / 微生物
- Mycotoxins / 霉菌毒素
- Herbicides & Pesticides / 除草劑+殺蟲劑
- Endangered Plants and Animals / 瀕危動植物



美国中医师

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- More information on the classic formulas can be found in the ***Chinese Herbal Formulas and Applications***
- Collection formulas can be found in the Lotus ***Clinical Manual of Oriental Medicine***
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