



***Golden Leaf Ginkgo biloba* Monograph**

Related Terms

Ginkgo biloba, Ginkgoaceae (family), Cancer, Irradiation, Skin fibrosis, ribonucleases, and Flavone glycosides. ⁽¹⁾

Reference

(1) Integrated Taxonomic Information System Database®, Ginkgo biloba TSN 183269, Taxonomic Serial No : 183269, Retrieved (9, 23, 2015) from the URL:
http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=183269

Background

The ginkgo tree is one of the oldest types of trees in the world. Ginkgo seeds have been used in traditional Chinese medicine for thousands of years, and cooked seeds are occasionally eaten. Extracts are usually taken from the ginkgo leaf and are used to make tablets, capsules, or teas. Occasionally, ginkgo extracts are used in skin products. Ginkgo leaves are light green in the summer and turn to golden yellow in the fall. This monograph will address the unique aspects of golden leaf Ginkgo biloba and make some references to the green leaf extract for comparison.

Scientific Name and Taxonomy

Ginkgo biloba (Ginkgoaceae)

Common names: Maidenhair tree, Japanese Silver Apricot, Yinhsing (yin-hsing)

Synonyms: Salisburia adiantifolia. ⁽¹⁾

Reference

(1) Integrated Taxonomic Information System Database®, Ginkgo biloba TSN 183269, Taxonomic Serial No.: 183269, Retrieved (9, 23, 2015) from the URL :
http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=183269

Botanical Description

Ginkgos are large trees, normally reaching a height of 20–35 m (66–115 ft), with some specimens in China being over 50 m (160 ft). The tree has an angular crown and long, somewhat erratic branches, and is usually deep rooted and resistant to wind and snow damage. Young trees are often tall and slender, and sparsely branched; the crown becomes broader as the tree ages. During autumn, the leaves turn a bright yellow, then fall, sometimes within a short space of time (one to 15 days). A combination of resistance to disease, insect-resistant wood and the ability to form aerial roots and sprouts makes Ginkgos long-lived, with some specimens claimed to be more than 2,500 years old. ⁽¹⁾

Reference

(1) Agroforestry Database 4.0, Orwa et al. (2009), World Agroforestry Center (ICRAF), Retrieved (9, 23, 2015) from the URL:
http://www.worldagroforestry.org/treedb/AFTPDFS/Ginkgo_biloba.PDF



Geo-localization

Ginkgo biloba is native to China, Japan, Taiwan, and Turkey. ⁽¹⁾

References

[\(1\) Ginkgo Biloba, L.](#)

Linnaeus, Carl von

Tropicos® Botanical Garden Database, Missouri Botanical Garden. Published In: Mantissa Plantarum 2: 313–314. 1771

(2) Agroforestry Database 4.0, Orwa et al. (2009), World Agroforestry Center (ICRAF). Retrieved (9, 23, 2015) from the URL : http://www.worldagroforestry.org/treedb/AFTPDFS/Ginkgo_biloba.PDF

Management and Harvesting

Golden leaf Ginkgo leaves are harvested during the peak of the autumn season. Some herbal traditions recommend the use of leaves that are harvested at this later point in the season, when the medicinal properties of the plant are believed to be at their strongest.⁽¹⁾ The golden yellow leaf extract of *Ginkgo biloba* prepared by Mirko Beljanski, PhD is significantly different from all other green leaf extracts of this plant that one may find on the market.

Reference

[\(1\) Phenolic compounds and antioxidant activity of extracts of Ginkgo leaves.](#)

Kobus, J., Flaczyk, E., Siger, A., Nogala-Kałucka, M., Korczak, J. and Pegg, R. B. (2009) Eur. J. Lipid Sci. Technol., 111: 1150–1160. doi: 10.1002/ejlt.200800299.

Traditional Use

Historically, the extract of green ginkgo leaves has been used to treat a variety of ailments and conditions, including asthma, bronchitis, fatigue, and tinnitus (ringing or roaring sounds in the ears).

Reference

[\(1\) Ginkgo](#)

Subhuti Dharmananda, Ph.D. and Heiner Fruehauf, Ph.D.,

Institute for Traditional Medicine, Portland, Oregon <http://www.itmonline.org/arts/ginkgo.htm>

No information is available regarding traditional use for the golden yellow *Ginkgo biloba* leaf extract.

Modern Use

The green leaf extract is best known and used today for its potential to keep memory sharp. Laboratory studies have shown that ginkgo improves blood circulation by opening up blood vessels and making blood less sticky. It is also an antioxidant.⁽¹⁾

Since the 1980's, the extract of golden leaf Ginkgo has been used for as a treatment for post-radiotherapy fibrosis. In human skin, fibrosis caused by radiotherapy contains very active ribonucleases (RNase).



Research shows that golden leaf Ginkgo normalized to a large extent the excessive RNase activity in an extract of irradiated human skin cells, but did not affect activity of normal human plasma RNase.⁽²⁾

References

(1) [Health Library](#)

2015

University of Maryland Medical Center (UMMC), Retrieved 23 Sep 2015.

Published in the Internet: <https://umm.edu/health/medical/altmed/herb/ginkgo-biloba>

(2) [Human Skin Fibrosis RNase Search for a Biological Inhibitor-Regulator](#)

E. Causse, T. Nawrocki, M. Beljanski

Deutsche Zeitschrift für Onkologie, 26, 5, 1994, pp. 137-139.

Toxicity

A major culprit in allergic reactions to Ginkgo biloba is the component ginkgolic acid, which is a toxin. This component can cause severe allergic reactions, and in the case of the green leaf extract may also increase the risk of cancer when consumed in large amounts, according to eMedTV. Ginkgo supplements should contain less than 5-ppm ginkgolic acid⁽²⁾. Typical result for Beljanski's yellow leaf extract is 1.7ppm. ^(1,2)

References

(1) [Ginkgo \(Ginkgo Biloba\)](#)

2015

Mayo Clinic, Retrieved in 2015 form: <http://www.mayoclinic.org/drugs-supplements/ginkgo/safety/hrb-20059541>

(2) [Ginkgo](#)

2011

United States Pharmacopoeia Convention (USA 33) Revision Bulletin, Official November 1, 2011

Mechanism of Action

Dr. Beljanski's demonstrated in several experiments that his original yellow leaf Ginkgo extract acts as a regulator of cell enzymes called ribonucleases. In a healthy cell, the normal function of these enzymes is to trim and finalize the messages copied from the DNA, a process that is essential for the overall health of the human body. In some conditions of extreme physical stress, these enzymes can become deregulated (or disrupted). Ultimately, this can have a damaging effect on the health of cells and bodily tissues. Ginkgo biloba golden leaf extract, through its regulatory or normalizing effect on cellular enzymes, enhances the natural cell repair process and helps the tissues to remain healthy, even when they are exposed to extreme physiological stresses. ⁽¹⁾

Reference

(1) [Human Skin Fibrosis RNase Search for a Biological Inhibitor-Regulator](#)

E. Causse, T. Nawrocki, M. Beljanski

Deutsche Zeitschrift für Onkologie, 26, 5, 1994, pp. 137-139.



Side Effects/Contraindication

Ginkgo appears to be safe when taken by healthy adults by mouth in suggested doses

With green leaf Ginkgo the most concerning potential complication is bleeding, which has been life threatening in a small number of reports. ⁽¹⁾

Reference

[\(1\) Ginkgo \(Ginkgo Biloba\)](#)

2015

Mayo Clinic, Retrieved in 2015 form: <http://www.mayoclinic.org/drugs-supplements/ginkgo/safety/hrb-20059541>

Allergies and Warnings

As noted above, ginkgolic acids are allergenic, but the level of these acids in commercial Ginkgo extracts is tightly regulated.

Statement of the manufacturer (Natural Source International, Ltd.)
that there are no GMO or BSE/TSE issues.

No GMO/BSE/TSE issues with Beljanski's Ginkgo V[®] (Natural Source International, Ltd.)

Dosage/Administration

Protocols have been published. ⁽¹⁾

Reference

(1) Morton Walker, D.P.M. (2012) *Cancer's Cause, Cancer's Cure*. Austin, TX: Hugo House Publishing;

Author Information

This information is based on a systematic review of scientific literature edited and peer-reviewed by contributors to The Beljanski Foundation.