

Salacia Reticulata Quality Assurance

Salacia reticulata is processed at ISO/HACCP certified botanicals dedicated manufacturing facility in India. Direct contracting agreements obtained through the Government of India facilitates the constant and assured supply of raw materials of right quality for our extraction. Bio Actives Salacia Reticulata Extract is unique for to its bio assay standardization IC_{50} (half maximal inhibitory concentration) as a measure of product standardization.



Specification	
Description	: Pale brown to brown color powder
Loss on drying	: Not more than 6.0%
Ash content	: Not more than 20.0%
Heavy metal	: Not more than 20.0ppm
Arsenic	: Not more than 1.0ppm
Lead	: Not more than 10.0ppm
Tapped Bulk Density	: Between 0.25 and 0.80 g/ml
Loose Bulk Density	: Between 0.20 and 0.60 g/ml
Sieve Test (40mesh)	: Not less than 100.0%
α -glucosidase inhibition(IC_{50})	: Not more than 75.0 μ g/ml
α -amylase inhibition(IC_{50})	: Not more than 35.0 μ g/ml
aldolase inhibition(IC_{50})	: Not more than 100.0 μ g/ml
Microbiological profile	: As per JPN food regulation

IC_{50} is the effectiveness of a compound in inhibiting biological or biochemical function. This quantitative measure indicates how much of our Salacia extract (inhibitor) is required to inhibit the enzyme activity. In our product we are standardizing the enzyme inhibitory activity of : Alpha Glucosidase enzyme.



SALACIA RETICULATA



What's Salacia Reticulata

Salacia Reticulata has been used extensively in Ayurveda the Indian system of medicine, since centuries especially for the treatment of diabetes. Traditionally, Ayurveda suggests drinking water left overnight in a mug carved from salacia for treatment of diabetes.



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The statements and product shown here have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure, or prevent any disease.

SALACIA RETICULATA EXTRACT

BIO ACTIVES JAPAN CORPORATION

SALACIA PRODUCTION PROCESS (seed to shelf traceability system)

Identification of right variety and species of Salacia reticulata from Indian forests (HPLC profiling)



1

Government of India Forest Division Permission obtained to slice branches and roots of Salacia reticulata



2

Cleaned and sliced blocks of Salacia reticulata before processing



3

Dedicated ISO/HACCP certified botanical extraction facility for process extraction and purification



4

State of the art equipments for processing and formulation

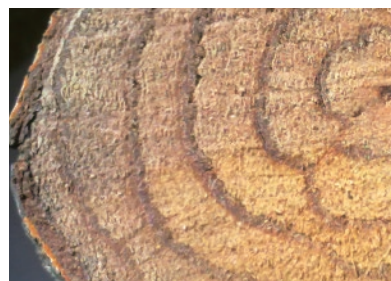


5

Advanced technology applied Quality check and assurance system



6



Salacia Reticulata Properties

- Supports healthy blood glucose levels naturally by inhibiting carbohydrate breakdown and prevents surge in blood glucose levels post meals.
- Supports cholesterol lowering and maintenance of healthy lipid levels.
- Mangiferin, kotalanol and salacinol, have been identified as the anti-diabetic principles of S. reticulata through pharmacological studies.

Salacia Reticulata Clinical Indications

Salacia Reticulata acts by inhibiting the key intestinal enzymes, alpha-glucosidase and alpha-amylase. These enzymes are responsible for breaking down complex carbohydrates into absorbable simple sugars like glucose. Inhibition of these two enzyme activities leads to decreased glucose absorption into the blood and suppression of postprandial hyperglycemia, leading to improved glycemic control.

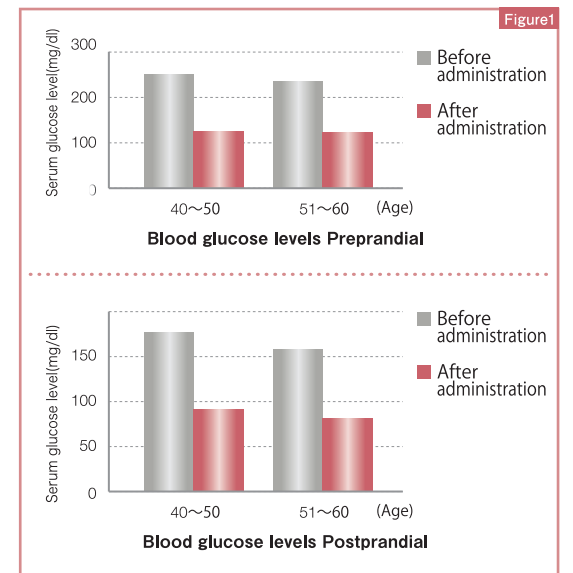
Clinical Indications

Clinical Study: Diabetes Control

DIABETES MANAGEMENT

Thirty patients with type 2 diabetic patients (NIDDM) between 40~60 years were selected and administered with 500 mg of twice daily of Salacia Reticulata Extract. Each subject was investigated for the levels of blood glucose in pre and postprandial before and after administration for over a period of 30 days. All patients were requested to discontinue other diabetes medications during the course of the study. Studies revealed a significant reduction in the average fasting blood glucose levels in the subjects. In additional evaluation of postprandial blood glucose levels also showed significant reduction. (Figure 1)

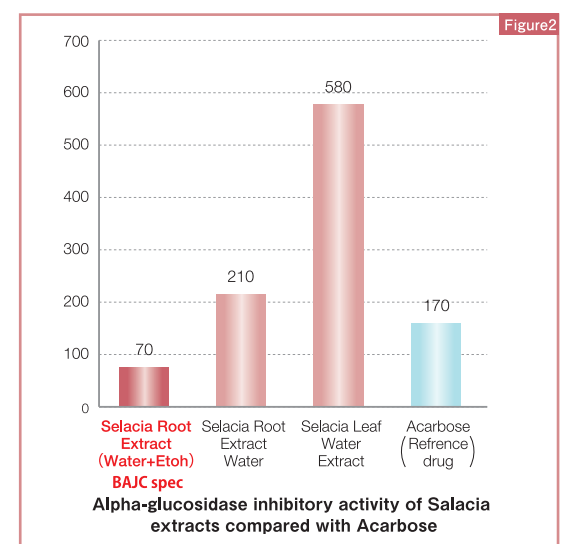
(Ayurveda Medical College, Bangalore, India)



ALPHA-GLUCOSIDASE INHIBITORY ACTIVITY

The anti-diabetic property of Salacia is credited to its intestinal alpha-glucosidase inhibitory activity. Study was conducted to evaluate various extracts of Salacia plants for alpha-glucosidase inhibitory activity in vitro as against Acarbose a commercial alpha-glucosidase inhibitor. Results indicated a comparative inhibitory activity for most extracts of Salacia reticulata. The study demonstrated one of the mechanisms in which the phyto-extract effectively inhibits α -glucosidase activity.

(Ayurveda Medical College, Bangalore, India)



LIPASE INHIBITORY ACTIVITY

In vitro studies conducted using Salacia Extract showed pancreatic lipase inhibitory properties at various different concentrations tested. The inhibitory rate was 2.9%, 3.4%, 16.7%, and 53.6% at a concentration of 0.1, 1, 10 and 100 μ g/mL solution (final concentration), respectively.

(Investigation of active inhibition effect for pancreatic lipase by using Indian Herbs. Report No:11022, Bio Actives Japan, 2011)