



**Salpick**<sup>™</sup>

**SALACIA  
RETICULATA**

**SALPICK**  
is a standardized extract  
prepared from *Salacia reticulata*  
root

**General Description :**

Botanical Name : *Salacia reticulata* Wight

Family : Celastraceae,

Common Name : Salacia, Saptarangi, Kotalahimbatu

Part Used : Root and stem

**Introduction :**

*Salacia reticulata* Wight commonly known as Kothala himbutu is a woody climber used widely in the Ayurvedic system to treat diabetes and obesity.

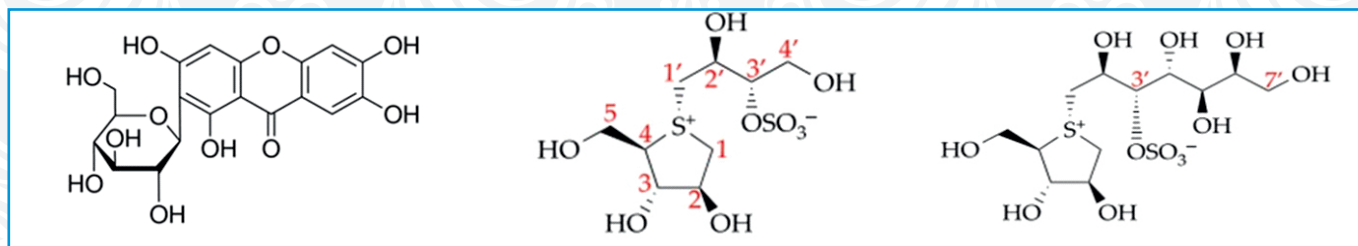
*Salacia reticulata* effectively improves insulin resistance, glucose metabolism and reduces obesity.





## Phytochemistry :

The major phytoconstituents of *S. reticulata* include mangiferin, salacinol, kotalanol and ponkoranol have proved as anti-diabetic principles. Among them Mangiferin, Salacinol and kotalanol are primarily believed to be responsible for its hypoglycaemic effect (1-2).



Mangiferin

Salacinol

Kotalanol

## Pharmacological action :

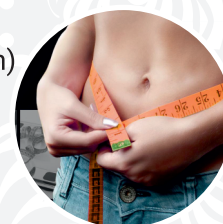
Studies indicate that *Salacia* extracts modulate multiple targets that influence carbohydrate and lipid metabolism including  $\alpha$ -glucosidase, aldose reductase, pancreatic lipase, peroxisomal proliferator-activated receptor- $\alpha$ , glucose transporter-4 mediated glucose uptake, and angiotensin II type 1 receptor. Furthermore, *Salacia* extracts exhibit free radical scavenging, antioxidant and hepatoprotectant activities. In human studies, *Salacia* extracts have been shown to decrease plasma glucose and insulin levels, decrease HbA1c, and modulate serum lipid levels with no adverse effects being reported. Similar results have been demonstrated in rat and mouse models as well as in vitro systems. 125mg/kg of a hot water extract (*Salacia Reticulata*) has been associated with a small weight loss in rats, which may have been due to attenuating nutrient absorption (3). Furthermore, low dose *Salacia reticulata* at either 0.3% or 1% of feed in spontaneously obese rats has been investigated for a period of 8 weeks, and without changes in food intake a dose-dependent loss of weight was seen in both dosage groups of obese rats and only the higher dosage group of lean rats (who ate less food than obese counterparts) (2). This study also noted suppression of liver fat and liver cholesterol levels in obese rats only (4).

## Side effects and toxicity :

No adverse toxicity was observed in the *Salacia* powder-treated groups with no observed adverse effect Level of  $\geq 400$  mg/kg body weight/day in both male and female SD rats (5)

## Available grades :

- ◆ *Salacia* extract (0.5% Salacinol)
- ◆ *Salacia* extract (1.0% Mangiferin)
- ◆ 20% Saponins
- ◆ 30% Tannins



## References

1. Katalanol a potent alpha glucosidase inhibitor with thiosugar sulfonium silphate structure from antidiabetic Ayurvedic medicine *Salacia reticulata*. Yoshikawa MMT, Yashiro K, Matsuda H. Chem Pharm Bull. 1998;46(8):1339-40.
2. Polyphenol constituents from *Salacia* species: quantitative analysis of mangiferin with alpha glucosidase and aldose reductase inhibitory activities. Yoshikawa MNN, Shimoda H, Takada M. Yakugaku Zasshi. 2001;121:5371-8.
3. *Salacia reticulata* and its polyphenolic constituents with lipase inhibitory and lipolytic activities have mild antiobesity effects in rats. Yoshikawa M, Shimoda H, Nishida N, Takada M, Matsuda H, J Nutr. 2002;132(7):1819-24.
4. *Salacia reticulata* inhibits differentiation of 3T3-L1 adipocytes. Tsutomu Shimada 1, Eiichi Nagai, Yukiko Harasawa, Michiru Watanabe, Kenichi Negishi, Tomoko Akase, Yoshimichi Sai, Ken-Ichi Miyamoto, Masaki Aburada. J Ethnopharmacol, 14; 136 (1):67-74.
5. A subchronic oral toxicity study of *Salacia reticulata* extract powder in rats. Yuriko Oda, Atsuko Yuasa, Fumitaka Ueda and Chihaya Kakinuma. Toxicol Rep. 2015;2: 1136-1144.



Head Office : 3rd Floor, Manipal Centre, 47, Dickenson Road, North Block, Bengaluru, Karnataka - 560 042.

Factory : No 29, Avverhalli Industrial Area, Dabaspeta, 562111, Karnataka, India

kindly email us at [info@manipalnatural.com](mailto:info@manipalnatural.com) | [www.manipalnatural.com](http://www.manipalnatural.com)