

Pterocarpus marsupium Roxb. (Fabaceae) commonly known as Malabar kino, is a popular Indian medicinal plant has long been used commonly in ayurvedic system of medicine. It is native to India, Nepal, and Sri Lanka.^[1]

Traditionally, the plant material has been used as a cooling external application for inflammations and headache, as antipyretic, anti-helminthic, aphrodisiac, alexeteic and in biliousness, mental aberrations and ulcers^[2]. The flowers are used in fever, the gum is used in leucorrhoea and passive haemorrhage^[3]. Several chemical constituents like pterostilbene, epicatechin, pterosupin, marsupsin, etc., have been identified and isolated. *P. marsupium* extract shows promising results in cataract and hypertriglyceridaemia. *P. marsupium* is heavily exploited for its timber, resin and medicinal bark.

This plant has some unique features such as beta cell protective and regenerative properties apart from blood glucose reduction.^[4,5]

- ◆ Heartwood of Vijaysar is antibiotic and hypoglycaemic, and is used to control blood sugar.
- ◆ Kino gum, obtained from incisions in bark, has astringent, anti-diarrhoeal, and anti-haemorrhagic properties.
- ◆ Leaves are used externally to treat boils, sores, and other skin diseases, while flowers are febrifuge.

Pterocarpus marsupium (Vijaysar)

- ◆ **Common Name:** Vijaysar
- ◆ **Botanical Name:** *Pterocarpus marsupium* Roxb
- ◆ **Part used:** Heartwood, bark, leaves and gum (kino)

Grades of Extract Sunpure Offers:

- ◆ **For cosmetic uses:** *Pterocarpus marsupium* extract pterostilbene 50% - 90%
- ◆ **For diabetic uses:** *Pterocarpus marsupium* extract pterostilbene 5% - 45%



Uses of Pterocarpus

Skin health support

Pterocarpus may have supporting properties that can help to maintain healthy skin^[9].

Healthy blood sugar level management

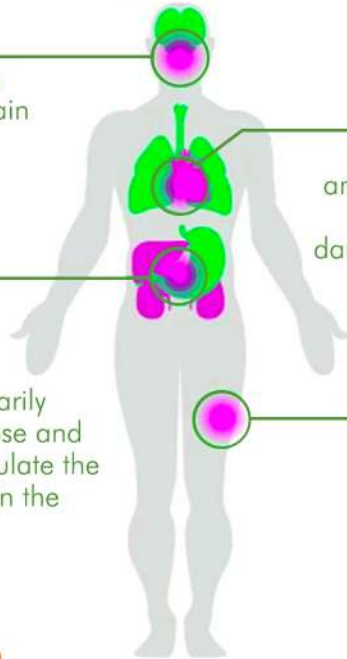
Studies show that pterostilbene may help support the body's natural ability to manage and regulate blood sugar levels, primarily due to its ability to regulate glucose and lipids. Pterostilbene may also regulate the level of glycosylated hemoglobin in the blood^[7].

Other commercial uses:

As in the form of 100 % Pure Vijaysar Herbal Wood Glass / Vijaysar Tumbler



As in the form of 100 % Pure Vijaysar Herbal Tea



Antioxidant activity

Pterostilbene also exhibits strong antioxidant activity^[8], which can support cells in the body from many types of damage. Studies show that pterostilbene inhibits the activity of cyclooxygenase (COX-1), which can cause many of the signs of oxidative stress.

Additional benefits

Miscellaneous uses of pterocarpus include the management of bruises, fractures and constipation.

(A) Flower in Stage



(B) Fruiting Stage



(C) Mature Fruit Stage



(D) Seeds



Different Stages of *Pterocarpus marsupium*

Applications

- 01 Antimicrobial ^[10,11]
- 02 Antidiarrheal ^[12]
- 03 Dental Health ^[13]
- 04 Intestinal Parasites ^[14]
- 05 Antifungal ^[15]
- 06 Lowers Total Cholesterol ^[16]
- 07 Hepatoprotective ^[17]
- 08 Genotoxic assessment ^[18]
- 09 Reduce Joints Pain ^[19]



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References:

01. "Pterocarpus marsupium". Natural Resources Conservation Service PLANTS Database. USDA. Retrieved 15 October 2015.
02. Sambath-Kumar R, Sivakumar T, Sundram RS, Sivakumar P, Nethaji R, Gupta M and Mazumdar UK. Antimicrobial and antioxidant activities of *Careya arborea* Roxb. Stem bark. Iran J. Pharmacol. Therapeut. 2006;5: 35 -41.
03. Pullaiah T. Medicinal plants of Andhra Pradesh (India). New Delhi: Regency Publications; 1999 .p.63.
04. WHO. Second Report of the WHO Expert Committee on Diabetes Mellitus. World Health Organization, Geneva 1980.
05. Chakravarthy BK, Gupta S, Gambhir SS and Gode KD. The prophylactic action of (-)-epicatechin against alloxan-induced diabetes in rats. Life Sci. 1981;29: 2043- 2047
06. Rai M.K, Pandey AK, Acharya D. Ethno-medicinal Plants Used by Gond Tribe of Bhanadeli. Journal of non-timber forest 2000; 7(3/4): 237-241.
07. Perera, H. (2016). Antidiabetic Effects of *Pterocarpus marsupium* (Gammalu). European Journal Of Medicinal Plants, 13(4), 1-14. doi: 10.9734/ejmp/2016/23930
08. Sanders A, Smit HF, Garssen J, Faber J, Holjer MA. *Pterocarpus marsupium* extract exhibits anti-inflammatory activity in human subjects. Planta Med. 2005; 71(5): 387-392.
09. Kumar, D. (2011). Anti-inflammatory, analgesic, and antioxidant activities of methanolic wood extract of *Pterocarpus santalinus* L. Journal Of Pharmacology And Pharmacotherapeutics, 2(3), 200. doi: 10.4103/0976-500x.83293
10. Joshi MC, Dorababu M, Prabha T, Kumar MM, Goel RK et al. Effects of *Pterocarpus marsupium* on NIDDM-induced rat gastric ulceration and mucosal offensive and defensive factors. Indian journal of pharmacology 2004;36(5): 296-302.
11. Gayathri M, Kannabiran K. Antimicrobial activity of *Hemidesmus indicus*, *Ficus bengalensis* and *Pterocarpus marsupium* Roxb. Indian journal of Pharmaceutical Science 2009; 71(5):578-581.
12. Dilpesh J, Patel I, Soma R. Anti-diarrhoeal activity of ethanolic heartwood extract of *Pterocarpus marsupium*. 2011;1:552-9.
13. Setia, R. (1984). Development, Structure and Histochemistry of Gum Cavities in *Pterocarpus marsupium* Roxb. and *Azadirachta indica* Juss. Flora, 175(5), 329-337. doi: 10.1016/s0367-2530(17)31456-1
14. Karou, D., Dicko, M., Sanon, S., Simpore, J., & Traore, A. (2003). Antimalarial activity of *Sida acuta* Burm. f. (Malvaceae) and *Pterocarpus erinaceus* Poir. (Fabaceae). Journal Of Ethnopharmacology, 89(2-3), 291-294. doi: 10.1016/j.jep.2003.09.010
15. Dhir GG, Govind M, Verma BR, Mishra S. Studies on the Antifungal Activity of *Pterocarpus Marsupium*: a Clinical Evaluation. Indian Journal of dermatology Venereology and Leprology 1982; 48(2):154-156
16. Rimando, A., Nagmani, R., Feller, D., & Yokoyama, W. (2005). Pterostilbene, a New Agonist for the Peroxisome Proliferator-Activated Receptor Isoform, Lowers Plasma Lipoproteins and Cholesterol in Hypercholesterolemic Hamsters. Journal Of Agricultural And Food Chemistry, 53(9), 3403-3407. doi: 10.1021/jf0580364
17. Rane GND. Hepatoprotective activity of *Pterocarpus marsupium* and *Butea koen-ex-Roxb*. Ind J Pharm Sci 1998; 5: 182-184
18. Mohammadi M, Gaikwad SS, Devasagayam T, Ghaskadbi SS. Genotoxic Assessment of *Pterocarpus marsupium* Extract. Journal of Complementary and Integrative Medicine. 2010;7(1):1-11
19. E, D. (2018). *Pterocarpus Marsupium* Importance in Various Activities - A Review. International Journal Of Trend In Scientific Research And Development, Volume-2(Issue-2), 845-852. doi: 10.31142/ijtsrd9550

