

DIOSCOREACEAE

Dioscorea deltoidea Wall. ex Griseb.

Common English names : Dioscorea, Elephant's foot, Yam.

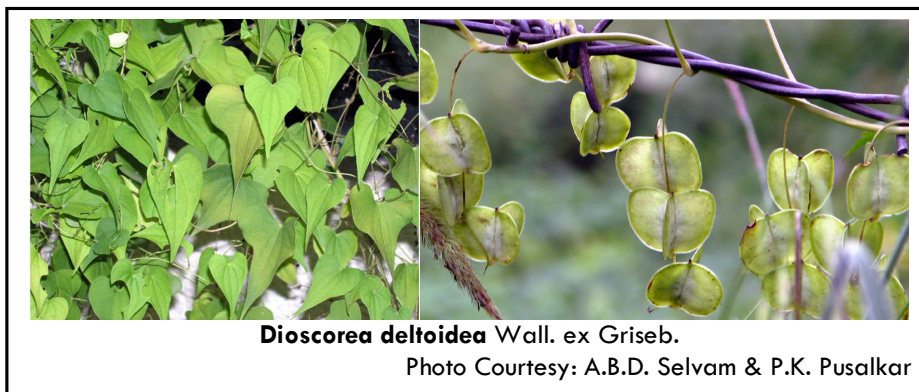
Vernacular names : Garh.: Gun, Kin, Shingli mingli.

Trade name : Bahrahkanda, Elephant's foot.

Distribution : INDIA: Temperate Himalayas - Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Punjab, Arunachal Pradesh; AFGHANISTHAN; CHINA; PAKISTAN; NEPAL; BHUTAN; THAILAND; CAMBODIA, LAOS and VIETNAM.

Habitat : Generally found in forest and open fields on *Berberis*, *Zanthoxylum* and *Prinsepia utilis* Royle at altitudes 1000 - 3200 m in Himalayas.

Population status/Cause for RET : Endangered. Decline in population is due to indiscriminate collection for the medicinal value of the rhizomes. It is difficult to cultivate this plant commercially due to its very slow growth.



Description : Perennial, dioecious, twining climbers, glabrous. Roots tuberous. Rhizome horizontal, irregular, ginger shaped. Stem twining to left. Leaves alternate, 5-12 x 4-11 cm, usually ovate or ovate-lanceolate or subdeltoidly cordate, apex acute to acuminate, base deeply cordate, glabrous above, pubescent on nerves beneath, 7-9-nerved; petioles as long as blade. Male spikes 6-35 cm long, solitary, rarely in pairs, slender; flowers small, in clusters; perianth segments broadly oblong; stamens 6. Female spikes 8-16 cm long, solitary, broader than leaf; flowers few. Capsules 1.5-2.5 × 2.5-5 cm, orbicular, deltoid or obtusely quadrate. Seeds winged.

Medicinal properties and other uses : It has been found effective in rheumatic diseases, ophthalmic disorders, etc. It is also used as a vermifuge and anthelmintic for purging out intestinal worms, a fish poison and to kill lice. The rhizome of this plant is one of the richest sources of Diosgenin, a steroidal sapogenin, which is the major base chemical for preparation of several steroidal hormones including sex hormones, cortisones and an active ingredient in the oral contraceptive pill. It is also used for washing silk, wool and also dyeing.

Commercial / Ex-Im data : It is estimated that India's annual demand at 700 t in 1997 (TRAFFIC INDIA 1998). The dried plants were sold at INR20-65/kg (USD0.5-1.9/kg), the fresh plants at INR12-30/kg (USD 0.3-0.8/kg). The current market rate of rhizome of this plant is Rs. 10 to 15 per kg.

Legal : Listed in Appendix II of CITES. Included in the Negative List of Exports.

References :

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