

NEPENTHACEAE

Nepenthes khasiana Hook.f.

Common / Local names: Ksete-phare, Memangkoksi, Tiewrakot, Tiew-rakot (Khasi), Kalashpatri, Gatapatri (Bengali); Monkey cups, Pitcher plant, Demon flower (English).



Nepenthes khasiana Hook.f.

Description: Undershrubs or shrubs, erect, prostrate or scandent, up to 4m high, climbing by leaves, dioecious. Leaves alternate, consisting of a basal lamina with excurrent tendrillar midrib, bearing at apex a pitcher; lamina elliptic-lanceolate, 20-50 x 3-10 cm, narrower and cuneate at both ends; sessile, often subamplexicaul, tendrillar stalk 2-7 cm long; pitchers coloured, subcylindric, contracted towards mouth, with 2 longitudinal ribs or wings in front, 15-29 x 4-7 cm, with an ovate-suborbicular lid. Inflorescence racemes or panicles, 15-60 cm long, terminal or subterminal; peduncles terete, 10-25 cm long. Flowers actinomorphic, greenish-red, c.8 mm across. Tepals 3-4, in 2 whorls, elliptic or elliptic-oblong, pubescent outside, glabrous within, nectariferous. Male flowers: stamens 2-24, filaments connate, anthers bilocular. Female flowers: carpels 3-4, ovary superior, pubescent, ovules many; style 1; stigma discoid. Fruit a capsule, ovoid-oblong, 2-3 x 0.5-0.8 cm. Seeds numerous, minute, testa membranous produced into a filiform wing at either end; embryo straight.

Fl. & Fr.: June – October.

Habitat: The plant grows in open rocky slopes amidst grass, forest edges and dense humid primary forests in the altitude between 1000 - 1500 m. In the rocky places the plant become

stunted, whereas in dense forests and forest edges it grows more and climbs over bushes and trees. The pitcher traps insects to compensate nitrogen deficiency in the soil.

Chromosome: $2n = 80$ [Nongrum *et al.*, J. Crop Sci. Biotech. 15(2): 101-105. 2012].

Distribution: India: Meghalaya (Khasia & Jaintia hills) – Endemic.

Medicinal uses: The fluid of unopened pitcher are used by Khasi and Garo tribes as eye drops to cure cataract and night blindness, and in treating stomach troubles, diabetes and gynecological problems. The pitcher with its contents is made into a paste and is applied on affected parts of leprosy patients.

Notes: This is the only carnivorous plant species found in Meghalaya and it is endemic and endangered. The major threats are deforestation for jhum cultivation, coal mining, road construction, landslides, grazing, over-exploitation from wild for trading, etc. It is under cultivation in Botanical Survey of India, Shillong and Yercaud. The Meghalaya State Forest Department (Silviculture) has set up ex-situ germplasm conservation of the plant at Umian (Barapani), Forest Research Station. It is also in the germplasm collection centre in the Garden of Medicinal Plants of University of North Bengal, Siliguri, Darjeeling District, West Bengal.

The species has been listed in Appendix I of CITES and included in Negative List of Exports and 'Schedule VI' of the Wild Life (Protection) Act 1972 of India.