

ASCLEPIADACEAE

Frerea indica Dalzell (= *Desmidorchis dalzellii* M.R. Almeida)

Distribution : INDIA: Maharashtra: Ahmednagar (Randha falls), Pune (Junnar: Shivneri fort; Purandhar: Vajirgad; Mulshi: Dongarwadi, Pimpri lake), Raigad (Shivtharghal), Satara (Mahabaleshwar: Kate's point; Sajjangad), Nasik (Trymbakeshwar, Anjaneri hills). Endemic.



Frerea indica Dalzell

Photo Courtesy: S.R. Yadav

Habitat : Grows at ca 1000 m on exposed bare rocks of hill slopes and on cliffs forming large patches. Thrives on gravelly soil.

Population status / Cause for RET : Critically Endangered. Major causes are loss of habitat and also inefficiency of the complex pollinating mechanism. The plant is exploited for its elegant flowers designated as one of the ten most attractive flowers.

The plant sheds its leaves and condenses the stem into thick succulent knots with silver grey upper surface during drought period which appears like silvery worms and as vultures pick on these resulting in detachment of some branches.

Few plants were introduced in pots in the experimental garden, BSI, Pune.

In Naoroji Godrej Center for Plant Research, Maharashtra, Satara, plants have been propagated through cuttings and seeds and many plants have been raised. More than 100 pots of the species are maintained in Shivaji University, Kolhapur.

Description : A trailing or pendulous herb, perennial, fleshy, glabrous. Stems branched with mark of scars of fallen leaves; nodes slightly swollen; internodes fleshy, shining, glabrous; sap watery. Leaves opposite, decussate, exstipulate, lamina elliptic-

oblong, 3-6 x 1-2.5 cm, acute, subacute or obtuse-mucronate at apex, fleshy, shining, glabrous on both sides; petioles terete, 4-10 mm long, with flap-like structure. Flowers extra-axillary, solitary; bracts 1-1.5 x 0.5 mm, deltoid, glabrous; pedicels arising from between the petioles, stout, curved, terete, ca 5 mm long, glabrous. Calyx 5-lobed, valvate, ca 3 x 1.5 mm, ovate-deltoid, divided 2/3 way down, apex acute, fringed with fine deep purple hairs on the edges. Corolla fleshy, rotate, 2-2.5 cm across, yellowish-green on the outer side, deep purple on the inner, with an irregularly shaped yellow blotch in the centre of each lobe; lobes valvate, divided less than 1/2 way down, deltoid, acute, fringed with fine deep-purple hairs on the edges. Corona staminal, biseriate; outer bowl-shaped with five short, broad, truncate lobes, slightly divided at the apex, 1-2 mm high; inner five lobed, arising from the inner side of outer corona, ca 1.5 mm long, linear, apex acute, incurved, resting on the anther. Stamens five, ca 1.5 mm long. Pollinia five, pollen masses solitary in each anther cell, yellow, waxy with pellucid layer attached by light-brown caudicles, wide to a dark-brown corpuscle. Gynostegium ca 3 mm long. Follicles paired or single, 6.3-8.2 x 0.4-0.6 cm, linear-lanceolate, curved at apex. Seeds many, ca 8 x 3.5 mm, oblong, flat, dark brown with light brown margin ca 0.5 mm wide; coma silky white, 1-3 cm long.

Fl. : September - December; *Fr.* : December - January.

Parts used locally : *Frerea indica* Dalzell with showy flowers have demand as a pretty succulent horticulture plant for indoor decoration.

Commercial / Ex-Im data : Not available.

Legal : It was included earlier in Appendix II but has since been deleted on 19.7.2000. Included in the Negative List of Exports.

References :

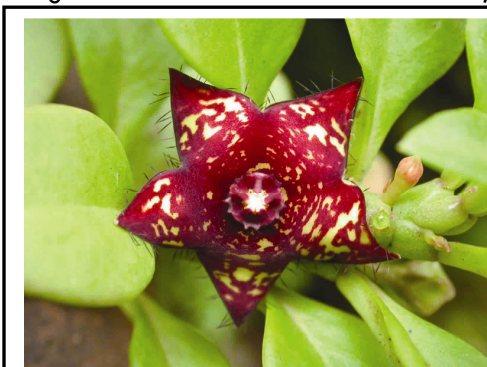
Jain, S.K. & A.R.K. Sastry (1980). Threatened Plants of India. A State-of-the-Art Report. P. 41.

Mishra, D.K. & N.P. Singh (2001). Endemic and Threatened Flowering Plants of Maharashtra. Pp.154-157.

Nayar, M.P. & A.R.K. Sastry (1987). Red Data Book of Indian Plants. Vol. 1, pp. 72-73.

Selvam, A.B.D. (2012). Pharmacognosy of Negative Listed Plants. Pp. 80-95.

Walter. K.S. & H.J. Gillett (1998). 1997 IUCN Red List of Threatened Plants. Pp. 66.



Frerea indica Dalzell

Photo Courtesy: S.R. Yadav