

## CRASSULACEAE

by

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Herbs or undershrubs, mostly fleshy or succulent. Leaves alternate, opposite or in whorls, simple or compound. Stipules wanting. Inflorescence cymose. Flowers actinomorphic, hermaphrodite. Sepals free or connate, persistent. Petals as many as the sepals, free or more or less united. Stamens as many as or twice as many as the sepals, free or adnate to the petals. Ovaries one-carpellary, superior, usually as many as the petals, free or partly united at the base, with a scale at the base of each ovary; styles subulate or filiform, one per carpel. Ovules numerous, arranged in two rows along the ventral suture. Fruit generally a follicle, dehiscent along the ventral suture. Seeds few to many, small, punctulate. Endosperm scanty or wanting. Embryo terete.

About 1400 species in more than 30 genera in temperate to warm regions.

**Bryophyllum** Salisbury, *Parad. Londin.* t. 3. 1805

Erect, fleshy, perennial herbs, sometimes somewhat woody at the base. Leaves opposite, simple or imparipinnate. Inflorescence consisting of cymes or panicles, opposite the branches. Flowers nodding. Sepals generally connate, valvate. Corolla more or less campanulate or urn-shaped, shortly 4-lobed. Stamens 8, adnate to the corolla-tube, exserted; filaments filiform; anthers 2-celled, with longitudinal dehiscence. Ovaries 4, free or partly united. Ovules many. Follicles 4. Seeds numerous.

Over 20 species, natives of tropical Africa; one species widely distributed throughout the tropics.

**Bryophyllum pinnatum** (Lam.) Oken

OKEN, *Allgem. Naturgesch.* 3: 1966. 1841; S. KURZ, *Journ. As. Soc. Bengalen* 40(2): 52. 1871; URBAN, *Symb. Ant.* 4: 258. 1905; BOLDINGH, *Fl. D.W. Ind. Isl.* 1: 77. 1909; *Fl. Ned. W. Ind. Eil.* 199. 1913; FAWCETT & RENDLE, *Fl. Jamaica* 3(1): 249, fig. 105. 1914; URBAN, *Symb. Ant.* 8: 245. 1920; BRITTON & MILLSAUGH, *Bahama Fl.* 152. 1920; BRITTON & WILSON, *Sci. Surv. Porto Rico & Virgin Isl.* 5: 338. 1924; WILLIAMS, *Fl. Trinidad & Tobago* 1(5): 309. 1932; QUESTEL, *Fl. Isl. St. Bartholomew* 112. 1941;

LEON & ALAIN, Fl. Cuba 2: 213, fig. 89b. 1951; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 32, fig. 41. 1954; GOODING *et al.*, Fl. Barbados 171. 1965; ADAMS, Flowering plants of Jamaica 310. 1972; — *Cotyledon pinnatum* LAMARCK, Encycl. 2: 141. 1786; — *Bryophyllum calycinum* SALISBURY, Parad. Londin. t. 3. 1805; GRISEBACH, Fl. Br. W. Ind. Isl. 303. 1860; DUSS, Fl. phan. Ant. franç. 319. 1897; — *Kalanchoe pinnata* (Lam.) PERSOON, Syn. Plant. 1: 446. 1805; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 136, fig. 41. 1971.

Glabrous, fleshy herb, up to 1.5 m high, often somewhat woody at the base. Leaves strongly varying in size, petiolate; the lower ones simple, elliptic, crenate; the uppermost pinnately compound; leaflets oblong to elliptic, rounded at the apex, crenate, 7—13 cm long, the terminal leaflet larger than the lateral ones; petiole semi-amplexicaulous. Inflorescence consisting of paniced cymes, strongly varying in size, up to 1 m long. Calyx oblong-campanulate; tube up to 3.5 cm long, its lobes ovate-triangular, up to  $1 \times 1$  cm, acuminate at the apex. Corolla reddish; tube up to 4 cm long, constricted below the middle, the base of the tube with short, thickish, glandular hairs outside; the lobes triangular, acute, up to  $1.5 \times 1.5$  cm. Stamens 8; filaments free above the constriction of the corolla-tube, 2.5—3 cm long; anthers 3 mm long, cordate at the base. Ovaries obovoid-oblong, free or connate at the very base, glabrous, 11—14 mm long, passing into the 2—3 cm long styles. Fruit not seen.

Probably native of tropical Africa; now widely distributed throughout the tropics.

In dry, sunny or slightly shaded places, very common in fields abandoned from cultivation.

Under dry conditions the plant is able to produce young plants from the notches of the leaves and leaflets.

Vernacular names: yerba di suerta, yerba di bruna, wonderblad,  
kalabana (Leeward Group).  
leaf of life (Windward Group).

SABA: top of the cliff near the sea-side of Booby Hill (Boldingh 1607, fl. July); Great Hill, 400 m (Boldingh 1379, st. July); Booby Hill, 600 m (Arnoldo 3294, fl. Dec.); without loc. (Burgers 493, fl. Feb.).

ST. EUSTATIUS: road along the lower part of Signal Hill (Boldingh 120 a, st. May); Cultuurvlakte, near Golden Rock (Suringar s.n., fl. Ap. [L]).