

## PUNICACEAE

by

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Small trees or shrubs; top of branches and branchlets usually converted into spines. Leaves entire, opposite or fascicled on short-shoots. Stipules wanting. Flowers solitary or clustered, showy, hermaphrodite, actinomorphic, sessile or subsessile. Bracts small. Receptacle tubular, prolonged above the ovary, with a disk-like ring inside. Sepals 5—7, free, persistent, triangular or ovate-lanceolate, fleshy. Petals 5—7, alternating with the sepals, obovate, imbricate, deciduous. Stamens numerous, free, inserted in the upper part of the receptacle, above the disk-like ring; filaments filiform; anthers versatile, 2-celled, with longitudinal dehiscence. Ovary inferior, many-locular, the loculi in 2—3 superposed rows; styles united; stigma slightly lobed. Ovules anatropous, numerous in each loculus; those of the lower loculi axile, those of the upper loculi parietal. Fruit a globose, several-locular berry crowned by the calyx, with a thick coriaceous coat and membranaceous septa. Seeds numerous, outer layer of the testa thick, inner layer bony. Endosperm wanting. Embryo straight; cotyledons convolute.

Only one genus with two species of which one originally from eastern Europe to the Himalaya, but nowadays cultivated and subsynchronous in all tropical regions.

**Punica** Linnaeus, Spec. Plant. 472. 1753

Characters and distribution as the family.

**Punica granatum** L.

LINNAEUS, Spec. Plant. 472. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 242. 1860; BOLDINGH, Fl. D.W. Ind. Isl. 1: 143. 1909; URBAN, Symb. Ant. 4: 437. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 303. 1913; Fl. D.W. Ind. Isl. 2: 82. 1914; URBAN, Symb. Ant. 8: 473. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 22. 1925; QUESTEL, Fl. Isl. St. Bartholomew 163. 1941; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 115, fig. 159. 1954; GOODING *et al.*, Fl. Barbados 306. 1965; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 223, fig. 162. 1971; ADAMS, Flowering plants of Jamaica 507. 1972.

Glabrous shrub or small tree, up to 6 m tall, often much-branched from near the base; branches often ending in a spine and provided with foliated or leafless, axillary spines; branchlets tetragonous when young, becoming terete in age. Leaves opposite or nearly so, often fascicled, entire; the blade coriaceous, oblong, elliptic, oblanceolate or lanceolate, acute, obtuse, or emarginate and apiculate at the apex, acute or obtuse at the base, 1—8 × 0.5—2.5 cm, about 3-times as long as wide, the midvein prominent underneath, the side-nerves connected by a continuous, submarginal nerve running at about 2 mm from the margin; petiole 2—3 mm long. Flowers 1—5 together at the top of the branchlets, subsessile. Bracts oblong, 3 × 1.5 mm, acuminate at the apex. Receptacle 1.5—2.5 cm long, red, blackish when dry, turbinate to subcampanulate. Sepals triangular, 6 mm long, red, thick. Petals broadly elliptic, rounded or very obtuse at the apex, shortly clawed bright scarlet, 1.5—3 × 1—2 cm. Stamens with 6—10 mm long filaments; anthers roundish, cordate at the base, about 1 × 1 mm. Ovary c. 1 cm long; style columnar, surpassing the stamens in length; stigma capitate, slightly lobed. Berry globose, up to 9 cm in diam., crowned by the upper part of the receptacle and the calyx, longitudinally splitting, coat leathery, red to pale yellow or violet, often spotted; septa membranaceous. Seeds angular, embedded in a crimson or pinkish, acid or sweet, farinose watery pulp (outer integument); inner integument horny.

Probably original from the region between the Balkan peninsula and Himalaya; introduced and planted nowadays in all tropical and subtropical countries.

Cultivated in Aruba, Bonaire, and Curaçao; cultivated and subsponaneous after cultivation in Saba, St. Eustatius, and St. Martin.

Vernacular names: granaatappel (Leeward Group).  
pome granate tree (Windward Group).

ARUBA: Savaneta (Stoffers 1897, fl. Jan.).

BONAIRE: Kralendijk (Arnoldo 430, fl. Dec.).

SABA: The Bottom (Boldingh 2239, st. July).

St. EUSTATIUS: without loc. (v. Groll-Meyer 77 st.); Oranjestad (Boldingh 541, fl. June; 87 fl. May).

St. MARTIN: near Cole Bay Hill (Boldingh 3021, st. Aug.).