

OXALIDACEAE

by

A. L. STOFFERS

(Instituut voor Systematische Plantkunde, Utrecht)

Herbs, usually provided with a rhizome or corm, or rarely woody plants. Leaves alternate or subopposite, sometimes all basal, trifoliolate, digitately or pinnately compound or rarely uni-foliolate by suppression of the lateral leaflets. Leaflets predominantly obcordate or obreniform. Stipules present or wanting. Inflorescence consisting of simple or compound cymes. Flowers hermaphrodite, actinomorphic or slightly zygomorphic. Sepals 5, imbricate, free or slightly connate, herbaceous or membranaceous. Petals 5, contorted. Stamens 10, or rarely 5 or 15; filaments united at the base, unequal; the longer ones episepalous, often with appendages on the back, the shorter ones epipetalous and sometimes sterile; anthers 2-celled, with longitudinal dehiscence, dorsifixed, versatile. Ovary superior, 5-locular, 5-angular; styles 5, coherent or free, various in length; stigmas terminal or introrse, entire or cleft. Ovules 1 to several in each locule, anatropous, pendulous. Disk absent. Fruit a loculicidal capsule or a berry. Seeds often striate. Embryo straight. Endosperm fleshy.

About 1000 species in 8 genera, almost cosmopolitan, chiefly in the tropics and subtropics of the southern hemisphere.

Oxalis Linnaeus, Spec. Plant. 433. 1753

Annual or perennial herbs or undershrubs; the herbs sometimes provided with a rhizome or corm. Leaves alternate, occasionally rosulate, mostly 3-foliolate; the leaflets photostastic, sessile or the terminal stalked. Inflorescence consisting of 1- to many-flowered cymes in the leaf-axils. Flowers sometimes cleistogamous, yellow, white or pink. Sepals 5, free or slightly connate. Petals 5, often more or less unguiculate. Stamens 10; filaments glabrous or pilose, united at the base into a short tube, those of the epipetalous stamens much shorter than of the episepalous ones, the latter often provided with dorsal appendages. Ovary 5-locular; styles 5, free, glabrous or pilose; stigmas small, capitate. Ovules 1 to many in each locule. Fruit a loculicidal, 5-locular capsule. Seeds tuberculate or ridged.

About 850 species, chiefly in subtropical regions.

Key to the species:

1. Flowers pink to violet; acaulescent herbs; leaflets up to 3.5 cm long.....
..... *O. corymbosa*
Flowers yellow; creeping herbs; leaflets up to 1.5 cm long..... *O. corniculata*

***Oxalis corymbosa* DC.**

DECANDOLLE, Prodr. 1: 696. 1824; FAWCETT & RENDLE, Fl. Jamaica 4(2): 157, fig. 49. 1920; WILLIAMS, Fl. Trinidad & Tobago 1: 114. 1929; GOODING *et al.*, Fl. Barbados 222. 1965; ADAMS, Flowering plants of Jamaica 377. 1972; FOURNET, Fl. Guadeloupe & Martinique 1461, fig. 693, 693 bis. 1978; — *Oxalis martiana* ZUCCARINI, Denkschr. Akad. Muench. 9: 144. 1825; GRISEBACH, Fl. Br. W. Ind. Isl. 133. 1859 ['1864']; DUSS, Fl. phan. Ant. franç. 133. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 98. 1909; Fl. Ned. W. Ind. Eil. 228. 1913; URBAN, Symb. Ant. 8: 757. 1921; QUESTEL, Fl. Isl. St. Bartholomew 125. 1941; LEON & ALAIN, Fl. Cuba 2: 368. 1951; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 100. 1954; Gekw. en nutt. pl. Ned. Ant. 210. 1971; — *Ionoxalis martiana* (ZUCC.) SMALL, Fl. S. E. Unit. States 665. 1903; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 431. 1924.

Perennial, acaulescent herbs; leaves and scapes arising from coated, scaly bulbs. Leaves trifoliate; petiole as long as the scape, up to 40 cm long, pubescent; leaflets sessile or nearly so, ciliate, suborbicular or orbicular-obovate, emarginate at the apex, 2—4 cm long and 2.5—5 cm wide, dark green, with scattered hairs above, pale green and more or less pubescent beneath. Inflorescence consisting of umbel-like, compound, usually many-flowered cymes; the scape up to 40 cm long, villous. Flowers violet or rose-purple; pedicels 1—3 cm long, appressed-pubescent. Sepals ovate-lanceolate, 4.5—6 mm long and 1—1.5 mm wide, appressed-pubescent each bearing two thick, apical tubercles. Petals cuneate-obovate, rotundate-retuse at the apex, 12—15 mm long and 4—5 mm wide. The longer filaments pubescent, without appendages, about 7 mm long; the shorter ones glabrous, about 3 mm long. Ovary elongate, pubescent, 3 mm long; styles 5, distinct, pubescent, 2 mm long; stigmas capitate. Capsule erect, narrowly ellipsoid, 9—11 mm long.

A native of tropical America, Florida and West Indies; introduced into the tropics of the Old World.

SABA: Great Rendez-Vous, 475 m (Stoffers 3086, fl. Ap.); Rendez-Vous, 600 m (Arnoldo 3253, fl. Dec.; Stoffers 3260, fl. May); slope of The Mountain, at "Under the Cliff", 680 m (Stoffers 3213, fl. May); between Crispine and Small Rendez-Vous, 375—450 m (Stoffers 2933, fl. Ap.); Hellsgate (Suringar s.n., fr. Ap. [L]); St. John's (Suringar s.n., fl. Ap. [L]).

***Oxalis corniculata* L.**

LINNAEUS, Spec. Plant. 435. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 133. 1859 ['1864']; URBAN, Symb. Ant. 4: 312. 1905; BOLDINGH, Fl. D.W. Ind. Isl. 1: 98. 1909; Fl. Ned. W. Ind. Eil. 228. 1913; FAWCETT & RENDLE, Fl. Jamaica 4(2): 156. 1920; WILLIAMS, Fl. Trinidad & Tobago 1: 115. 1929; LEON & ALAIN, Fl. Cuba 2: 368, fig. 150. 1951; GOODING *et al.*, Fl. Barbados 222. 1965; ADAMS, Flowering plants of Jamaica 376. 1972; FOURNET, Fl. Guadeloupe & Martinique 1462, fig. 694. 1978; — *Oxalis corniculata* LINNAEUS var. *pubescens* GRISEBACH, Fl. Br. W. Ind. Isl. 133. 1859 ['1864']; — *Xanthoxalis corniculata* (L.) SMALL, Fl. S. E. Unit. States 667. 1903; BRITTON

& MILLSPAUGH, Bahama Fl. 197. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 431. 1924.

Annual or perennial herb with branched stems; stems decumbent, often creeping and rooting at the nodes, branches ascending, pubescent to villous or nearly glabrous. Leaves tri-foliolate, petiolate; petiole 1—10 cm long, villous to nearly glabrous; leaflets sessile, broadly obovate, about 1 cm long and 8—14 mm wide, ciliate and commonly with scattered hairs to somewhat villous on both surfaces. Stipules adnate to the petiole, ciliate, 1.5—2 mm long. Inflorescence consisting of axillary, usually few-flowered cymes, the peduncle as long as the petiole. Flowers yellow, sometimes cleistogamic; pedicels about 3 mm long, pubescent to hirsute. Sepals membranaceous, lanceolate, obtuse, ciliate towards the apex and the base, bearded at the top and pubescent in the basal part, 3—4 mm long and c. 1 mm wide. Petals oblanceolate to cuneate, 7—10 mm long and c. 1.5 mm wide. Staminal filaments connate at the base into an about 1 mm long tube, glabrous; the larger ones about 2 mm long, without dorsal appendages, the shorter ones about 1 mm long, widened towards the base; anthers about 0.5 mm long. Ovary cylindrical, acuminate, pilose, 3 mm long; styles thick, hirsute, 1 mm long. Capsule oblong, appressed-pubescent, erect, 1—1.8 cm long. Seeds about 5 in each locule, ovoid, somewhat flattened and acute, 1—1.5 × 1 mm, transversely ridged, brown.

Originally from central and southern Europe, nowadays widely spread in both hemispheres.

Common, usually on shady waste places.

SABA: Windwardside (Arnoldo 656, st. Aug.); Hellsgate (Suringar s.n., fl. Ap. [L]); St. John's (Suringar s.n., fl. Ap. [L]); Rendez-Vous, 600 m (Arnoldo 3254, fl. Dec.); Booby Hill, 300 m (Boldingh 1620, fl. July); lower part of Bottom Mountain, 250 m (Boldingh 1400, fl. July); between The Bottom and Mary's Point, 100—200 m (Boldingh 1515, fr. July); without loc. (Suringar s.n., fl. Ap. [L]).

ST. EUSTATIUS: slope of The Quill near Glass Bottle (Boldingh 1206, fr. June); slope of The Quill (Suringar s.n., fl. Ap. [L]).

ST. MARTIN: hills along northern side of Cul de Sac (Boldingh 3001, fl. Aug.); mountain between Mont des Accords and Sentry Hill, 0—200 m (Boldingh 2868, st. Aug.).