

APIACEAE

by

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Annual or perennial herbs, rarely shrubs, with hollow stems. Leaves alternate or rarely opposite, simple or variously compound; petioles usually sheathing at the base. Stipules minute or wanting. Inflorescence consisting of many-flowered, simple or compound umbels, heads or spikes; umbels and umbellules often involucrate. Flowers hermaphrodite or polygamous, actinomorphic or subzygomorphic, epigynous. Calyx of small teeth around the upper edge of the ovary or wanting. Petals 5, the apex often inflexed, valvate, sometimes wanting. Stamens 5; filaments inserted below the stylopodium (disk); anthers versatile. Ovary inferior, 2-locular, crowned by a conspicuous stylopodium; styles 2, free; stigmas small. Ovules solitary in each locule, pendulous, anatropous. Stylopodium 2-parted, subglandular. Fruit a schizocarp, crowned by the persistent stylopodium and the calyx, marked by longitudinal ribs between which oil-glands or tubes (vittae) in the grooves, and separating mostly from a filiform carpophore into 2 mericarps; the latter 1-seeded, indehiscent. Seed adnate to the pericarp. Endosperm abundant. Embryo minute.

Nearly 3000 species in 270 genera in the temperate and subtropical regions chiefly in the northern hemisphere; only a few species in the tropics.

Key to the genera:

1. Inflorescence involucrate-capitate with obsolete rays and pedicels; basal leaves simple, serrate-dentate, upper leaves opposite, deeply toothed. *Eryngium*
Inflorescence distinctly umbellate with evident rays and/or pedicels; leaves simple or compound. 2
2. Leaves simple, peltate; umbels simple. *Hydrocotyle*
Leaves pinnately compound with linear or capillary segments; umbels compound; aromatic plants. *Foeniculum*

Eryngium Linnaeus, Spec. Plant. 232. 1753

Annual or perennial herbs, rarely undershrubs. Leaves lobed or dissected, rarely entire, margin usually spiny-toothed. Inflorescence consisting of dense head or spikes. Flowers

hermaphrodite, bracteate; the outer bracts forming a spiny- or star-shaped involucre, the central bracts often wanting. Calyx-teeth rigid, acute, acuminate or obtuse at the apex, midrib prolonged into a short or longer spine. Petals erect with an inflexed apex. Stylopodium with thickened margin, surrounding the base of the style. Fruit subglobose, ovoid or obovoid, slightly compressed, often lepidote; ribs equal, scarcely or very slightly prominent; vittae usually 5, often inconspicuous. Carpophore wanting.

About 220 species in temperate and tropical regions of both hemispheres.

Eryngium foetidum L.

LINNAEUS, *Spec. Plant.* 232. 1753; GRISEBACH, *Fl. Br. W. Ind. Isl.* 308. 1860 ['1864']; DUSS, *Fl. phan. Ant. franç.* 324. 1897; BOLDINGH, *Fl. D.W. Ind. Isl.* 1: 150. 1909; URBAN, *Symb. Ant.* 4: 472. 1910; BOLDINGH, *Fl. Ned. W. Ind. Eil.* 312. 1913; URBAN, *Symb. Ant.* 8: 511. 1921; CHEESMAN, in *Fl. Trinidad & Tobago* 1: 468. 1947; LEON & ALAIN, *Fl. Cuba* 4: 79, fig. 26. 1957; GOODING *et al.*, *Fl. Barbados* 319. 1965; ADAMS, *Flowering plants of Jamaica* 557. 1972; FOURNET, *Fl. Guadeloupe & Martinique* 1153, fig. 564. 1978.

Biennial, glabrous herb, up to 80 cm high, with a firm taproot; stems dichotomously branched, the main axis abbreviate above each joint, the lateral axes elongate and the ultimate one terminating in the inflorescence. Basal leaves simple, petiolate; blades lanceolate, oblanceolate, obovate-lanceolate or spatulate-oblanceolate, 4—25 × 1.5—5 cm, obtuse or rounded at the apex, tapering into the petiole at the base, margin coarsely toothed with mucronate teeth, midrib consisting of all parallel nerves which diverge regularly towards the margin at sharp angles; petioles 0.5—0.8 cm long, clasping at the base. Lower bracts similar to the basal leaves but smaller and more deeply toothed or with 3—5-lobed apex, the lobes acuminate and mucronate; upper bracts 3—5-partite or -fid, spinescent. Inflorescence consisting of terminal, dense-flowered cylindrical flowerheads, 0.5—1.5 × 0.2—0.5 cm; involucre consisting of 5—6, unequal, free bracts, leaf-like, lanceolate or linear, subulate, entire or with spiny teeth, up to 3 cm long. Sepals lanceolate, 0.5—1 mm long. Petals elliptic-oblong, 0.5—0.7 mm long, white, the apex somewhat narrowed, inflexed, 0.4 mm long. Stamens 5; filaments filiform, 1—1.2 mm long; anthers broadly oblong, 0.4 mm long, with lateral dehiscence. Styles 2, filiform, 1 mm long; stigma minute. Fruit subglobose, 1—2 mm long, densely covered with vesicular scales.

Tropical and subtropical continental America and the West Indies; introduced into the Old World tropics.

On waste and cultivated grounds.

SABA: between The Bottom and Mary's Point, 100—200 m (Boldingh 1537, fl. & fr. July); slope of The Mountain near Windwardside, 600 m (Boldingh 2176, fl. & fr. July); id., 400—475 m (Stoffers 3330, fl. & fr. May); Windwardside (Arnoldo 579, fr. Aug.); along the road to Windwardside (Arnoldo 598, fl. Aug.); Ladder Gut, 0—100 m (Stoffers 2821, fl. Ap.; 2825, fl. & fr. Ap.); along road from The Bottom to Crispine (Stoffers 2943, fl. & fr. Ap.); Booby Hill, 400 m (Stoffers 4279, fl. & fr. Aug.).

ST. MARTIN: Mount Paradise, 200—400 m (Boldingh 3205, fl. Sept.); top of the hills on the northern side of Cul de Sac, 200—300 m (Boldingh 2985, fr. Aug.).

Foeniculum Adanson, *Fam. Plant.* 2: 101. 1763

Annual or perennial, erect, glabrous herbs; stems striate. Leaves pinnately decomposed with linear or capillary segments. Inflorescence consisting of compound umbels; involucre and involucels wanting. Flowers hermaphrodite, yellow. Sepals obsolete. Petals lanceolate with narrowed and incurved apex. Stamens 5. Stylopodium large, conic. Fruit ovoid-oblong, glabrous; mericarp strongly 5-ribbed; vittae solitary in the grooves. Seed slightly concave.

Four species, natives of the Old World; introduced into America.

Foeniculum vulgare Mill.

MILLER, *Gard. Dict.* ed. 8. 1768; DUSS, *Fl. phan. Ant. franç.* 325. 1897; BOLDINGH, *Fl. D.W. Ind. Isl.* 1: 150. 1909; *Fl. Ned. W. Ind. Eil.* 312. 1913; BRITTON & MILLSPAUGH, *Bahama Fl.* 313. 1920; FAWCETT & RENDLE, *Fl. Jamaica* 5(3): 429. 1926; QUESTEL, *Fl. Isl. St. Bartholomew* 164. 1941; ARNOLDO, *Gekw. en nutt. pl. Ned. Ant.* 66. 1954; LEON & ALAIN, *Fl. Cuba* 4: 87, fig. 31B. 1957; GOODING *et al.*, *Fl. Barbados* 319. 1965; ARNOLDO, *Gekw. en nutt. pl. Ned. Ant.* 242. 1971; ADAMS, *Flowering plants of Jamaica* 559. 1972; — *Anethum foeniculum* LINNAEUS, *Spec. Plant.* 263. 1753.

Perennial, aromatic herb, up to 2 m high, entirely glabrous. Leaves up to 50 cm long, 3—4-pinnate; segments filiform, 5 cm long; petiole broad, sheathing. Inflorescence consisting of terminal, compound umbels; peduncles up to 15 cm long; umbels large, 9—25-rayed, the rays rather stout and up to 8 cm long; pedicels 2—10 mm long. Sepals wanting. Petals ovate to oblong, about 1 mm long, apex strongly incurved, yellow. Stamens 5; filaments subulate, 1.2—1.4 mm long; anthers versatile, roundish, 0.5 mm long, with lateral dehiscence. Fruit linear, nearly terete, ribbed, 6—8 × 2 mm.

Indigenous in the Mediterranean; cultivated all over the world; escaped from cultivation on Saba.

SABA: Windwardside (Arnoldo 645, fl. & fr. Aug.); The Bottom (Boldingh 1840, fl. & fr. July); between Windwardside and Hellgate (Boldingh 1669, fl. & fr. July); Saddle, 400 m (Stoffers 3398, fl. & fr. May).

Hydrocotyle Linnaeus, *Spec. Plant.* 234. 1753

Hydrocotyle hirsuta SWARTZ, *Prodr.* 54. 1788 is mentioned by Boldingh in *Fl. Ned. W. Ind. Eil.* 312. 1913 and *Fl. D.W. Ind. Isl.* 2: 84. 1914. In the second publication he refers to 'Symb.'. In *Urban, Symb. Ant.* 4: 472. 1910 and 8: 511. 1921 the species is cited as occurring in Curaçao. However, up to now the specimen(s) is (are) not found in the herbaria visited by the present author (B, K, L, U).