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232G. ESCALLONIACEAE

Family description by M.J.M. Christenhusz & M. Weigend.

Evergreen shrubs and trees, rarely herbs. Leaves simple, alternate, pinnately (rarely palmately) veined, often coriaceous, dentate (or lobulate), often glandular. Inflorescences axillary or terminal, solitary flowers or terminal racemes or cymes. Flowers 5-merous; calyx connate; petals free; stamens free; nectary-disc present; ovary inferior. Fruit a capsule; seeds small, rarely winged. Many species accumulate aluminium. 9-10 gen. Mesoamerica, South America, Réunion, eastern Himalayas and southern China to northeast Australia and New Zealand.

A heterogenous group that is sometimes divided into several families. The relationships within the family are poorly understood, but in molecular studies they appear to form a well-supported monophyletic clade. The family was previously included in the Saxifragaceae or Grossulariaceae, based on similarities in floral structures, but recent studies place it into its own family and order (Escalloniales). Escalloniales are still not placed with certainty but are likely close to Asterales and Aquifoliales in Asterids II (Stevens, 2001).

Bibliography: Gornall, R.J., et al. *Anat. Dicotyledons*, ed. 2, 4: 41-87 (1998).
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1. Escallonia Mutis ex L. f.

Stereoxylon Ruiz et Pav.

By M.J.M. Christenhusz & M. Weigend.

Evergreen shrubs to much-branched small trees, 0.2-17 m, decumbent or erect. Branches glabrous or pubescent, often with both simple and pluriseriate, gland-tipped trichomes. Leaves alternate, entire, obovate or elliptic, sessile or short-petiolate, the venation

pinnate, the base cuneate to decurrent, the margins entire, crenate or serrulate, the apex acuminate to obtuse; stipules absent. Inflorescences axillary or terminal, racemose or thyrsoidal, with 1-100 flowers or more; bracts 1-2, inconspicuous, deciduous. Flowers 5-merous, bisexual; hypanthium cup-shaped; calyx lobes spreading, sometimes recurved in fruit, triangular to triangular-ovate; petals free, linear spatulate or obovate to elliptical, white, yellowish or pink to dark red, the base cuneate, the apex acuminate, not fused but forming a campanulate or tubular corona; stamens 5; ovary inferior, 2-3-locular; disk flat to convex; placentae 4-5; style 1, rarely bifid, long, the stigmas capitate or 2-3-lobed. Fruit a dry many-seeded, inferior, ovoid, septicidal capsule, opening with 2-3 apical valves; seeds ellipsoid to fusiform, striate. 39 spp. Tropical montane and cool temperate regions. Mesoamerica, Andean South America, southern Brazil, Uruguay, Chile, Juan Fernández Islands, Argentina.

Bibliography: Sleumer, H. *Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect.* 58(2): 6-146 (1968).

1. Leaves small, 0.5-2(-3.5) × 0.3-1.5 cm, coriaceous; flowers solitary, terminating short, lateral branches; petals greenish white or pale yellow with greenish apices.

1. *E. myrtilloides*

1. Leaves larger, (2-)6-9 × (1-)1.5-2.5 cm, herbaceous; flowers in branched, bracted, terminal plumes; petals white, sometimes with a pale flush of pink. **2. *E. paniculata***

1. *Escallonia myrtilloides* L. f., *Suppl. Pl.* 156 (1781). Lectotype (designated by Fernández Alonso y Amaya, 1991): Colombia, *Mutis 13* (LINN-275.1!). Illustr.: Romoleroux y Freire Fierro, *Fl. Ecuador* 73: 75, t. 21 (2004). N.v. Cipreso, CR.

Escallonia berberifolia Kunth, *E. chloropetala* Diels, *E. densa* Planch. et Linden, *E. myrtilloides* L. f. var. *patens* (Ruiz et Pav.) Sleumer, *E. patens* (Ruiz et Pav.) Killip, *E. poasana* Donn. Sm., *E. tortuosa* Kunth, *Stereoxylon patens* Ruiz et Pav.

Shrubs to 3 m, usually terrestrial, rarely epiphytic or trees up to 20 m; bark grey to reddish brown, exfoliating, flaky, often twisted, glabrescent, especially the young shoots slightly angular, finely pubescent and sparsely covered with pluriseriate, gland-tipped trichomes; trunk (0.03-) 0.10-0.30 (-1) m in diameter at breast height, the wood very

hard; branches more or less horizontal, differentiated into dolicho- and brachyblasts. Leaves (0.7-)0.9-2(-2.8) × (0.4-)0.6-0.8(-1.2) cm, membranaceous to coriaceous, obovate-spatulate, oblong or (narrowly) elliptic, the base cuneate, the margins dentate, serrate or crenulate, with hyathode teeth, rarely (sub-)entire, the apex rounded, rarely acuminate to obtuse; petioles 0.5-1 mm. Inflorescences terminal on brachyblasts with 1-2(-3) flowers; pedicels 2-6 mm; bracts 2.8-0.5 × c. 0.8 mm, caducous, obovate. Flowers 10-15 mm in diameter, campanulate; hypanthium 2-3 mm; calyx lobes 2.2-5 × 2.5-3.5 mm, triangular, erect; petals 10-10.5 × c. 3.5 mm, obovate from a cuneate base, white, sometimes purplish, the margins crenulate; filaments 6-6.5 mm, flattened, the anthers 2.5 × 1-1.2 mm; disc nectary 5-7-lobed; ovary 2-2.5 × 3.5-4 mm, inferior, externally with 5 fine ribs; style 5-7 mm, filiform from a conical base, with 2 stigmatic lobes. Capsules 4-5 × 5-8 mm, globose to depressedly globose; seeds c. 1 × 0.5 mm, striate. *Upper cloud forests, subpáramos, páramos. CR (Solomon 5317, MO); P (de Nevers y Charnley 6680, MO). 2400-3800 m. (Mesoamerica, Colombia, Venezuela, Ecuador, Peru, Bolivia, Argentina.)*

Two varieties are sometimes recognized within *E. myrtilloides*, only var. *patens* occurs in our area. It is distinguished from the typical variety by somewhat larger leaves and petals, but the size ranges given by Sleumer (1968) are not exclusive. Population studies in the field and perhaps molecular studies will be required to investigate the justification of the two varieties in the future.

2. *Escallonia paniculata* (Ruiz et Pav.) Roem. et Schult., *Syst. Veg.* 5: 328 (1819). *Stereoxylon paniculatum* Ruiz et Pav., *Fl. Peruv.* 3: 16 (1802). Holotype: Peru, Ruiz & Pavón s.n. (MA). Illustr.: Ruiz et Pavón, *Fl. Peruv.* 3: t. 238 (1802).

Escallonia floribunda Kunth, *E. paniculata* Phil. var. *floribunda* (Kunth) J.F. Macbr., *E. philippiana* Kuntze.

Terrestrial shrubs or trees to 10 m; branches spreading in layers. Leaves (2-)6-9 × (1-)1.5-2.5 cm, glabrous, herbaceous, oblong to lanceolate, the base acuminate, the margins finely denticulate, the apex acuminate; petioles up to 1.2 cm. Flowers small, in branched, bracted, terminal plumes; pedicels glabrous; calyx lobes up to 1 mm, acute; petals 2-3 × 1.3-2 mm, free, spreading, not forming a tube, spatulate, white, sometimes

with a pale flush of pink; stamens with filaments c. 2 mm, the anthers 1 mm, yellow; nectary-disc creamy white; style 2-3 mm. Fruits c. 3 mm across, green, drying brown, the calyx and style persistent. *Along roads and streams at high elevations in primary or secondary cloud forests. CR (Morales 3404, MO); P (Hammel 6180, MO). (1200-)900-2500 m. (Mesoamerica, Colombia, Venezuela, Ecuador, Peru, Bolivia.)*

This species is native in Costa Rica but not in Guatemala where it is cultivated.