## Trib. 11. 1. Viscoideae-Eremolepideae.

*Viscoideae-Eremolepideae* Engl. in E. P. 111. 1. (1889) 189 et Nachtr. I. (1897) 137. Flowers in simple spikes or racemes. Placenta basal. Anthers 4-merous.

Subtrib. 11. 1a. *Viscoideae-Eremolepideae-Eremolepidinae*. *Viscoideae-Eremolepideae-Eremolepidinae* Engl. in E. P. Nachtr. I. (1897) 137 (*Eremolepidées* van Tiegh. in Bull. Soc. Bot. France XLIII. [1896] 249).

Leaves alternate. Seed with endosperm

26. **Antidaphne** Poepp. et Endl. Nov. gen. ac spec. II. (1838) 70, t. 199. - flowers unisexual. ♂ flowers without a perigone, with 3-5 threadlike stamens around a small, fleshy swelling (gibbosity); anthers ovate or oblong, themselves opening with longitudinal crevices. ♀ flowers with with the ovary ± extended into a perigone formed from 3 tepals, with a very short style and capitate stigma. False fruit (pseudocarp) berry-like, ovate; embryos surrounded by endosperm. - shrubs with thick, flat, spatulate leaves. Flowers very small, in axillary spikelets; ♂ spikelet spherical or ovate, with broad, imbricate arranged, deciduous at anthesis, scale-shaped bracts (Tragblättern); ♀ spikelet at the base with some scale-shaped bracts (Hochblattern). Flowers extended and alternate, carrying 3-5 tooth-shaped protruding sessile flowers, sometimes (section *Stachyphyllum*) attaining full growth at the end of a leafy branch.

δαφνη (Lorbeer, Laurus); A. viscoidea preferring to grow on Lauraceae.

2 Species in Andean South America and Venezuela.

Sect. I. *Euantidaphne* Engl. in E. P. Nachtr. I. (1897) 137. - Flowers monoecious.  $\varphi$  flowers formed from 3 tepals, the ovary completely adnate to the perigone. Spikes of the  $\varphi$  flowers terminal without foliage leaves. - 1 species, *A. viscoidea* Poepp., with broadly spatulate, nearly circular leaves and greenish flowers, in Andean Bolivia, Peru and Colombia, to 3000 m above sea level.

Sect. II. *Stachyphyllum* (van Tiegh.) Engl. in E. P. Nachtr. I. (1897) 138 (*Stachyphyllum* van Tiegh. in Bull. Soc. Bot. France XLII. [1895] 565). - Flowers dioecious. of flowers with 3 tepals fused to the ovary and at the end free tepals. Spike of the of flower at the end with some foliage leaves. - 1 species, *A. Fendleri* (van Tiegh.) Engl., in Venezuela, so far only with of flowers known.

27: **Eremolepis** Griseb. in Goetting. Abh. VI. (1854) 124. - Flowers unisexual, monoecious or dioecious. Tepals 3-4, more rarely 2 or 5, freely or ± united. ♂ flowers with very short tube, very short stamen, upright anthers with ovate thecae, each opening by a longitudinal crevice (pollen oblong, slightly 3-colpate) and with an obovate vestige of the ovary covered by a disk. ♀ flowers with oblong obovate receptacle, thin disk and short style with blunt or capitate stigma. False-fruit berry-like, ovate, with membranous interior layer; embryo nearly club-shaped, as long as the plentiful, horn-like endosperm, with conical, above the endosperm and over a somewhat protruding hypocotyl and 2 oblong, half cylindrical cotyledons. - Parasitic shrubs on dicotyledonous trees with alternate, oblong, 3-5-nerved leaves and small, spherical or oblong, unisexual spikes in the axils of the leaves. Flowers small, without prophylls, somewhat encompassed in fossulae (pits) of the spike axle, covered with scale-shaped bracts (Tragblättern).

ερημοζ (solitary), ; λεπιζ (scale).

6 species in Chile, Peru, Brasil and on Cuba.

Sect. I. *Ixidium* (Eichl.) Benth. in Benth. et Hook. f. Gen. 111. (1880) 215 (*Ixidium* Eichl. in Fl. brasil. V. 2. [1868] 130, t. 31). - Flowers 4merous, syntepalous.  $\sigma$  and  $\varphi$  flowering spikes on different branches of the same bush. False-fruit crowned by the persistent perigone sections. - 3 species: *E. Wrightii* Griseb., with oblong obovate leaves on somewhat pressed together branches, on *Hufelandia pendula* Nees, in eastern Cuba; *E. Schottlii* (Eichl.) Engl., less branched out, bracts (Tragblätter) not deciduous,  $\sigma$  spikes at the apex with some sterile flowers, in Brazil (Fig. 96 D-G).

Sect. II. *Basicarpus* (van Tiegh.) Engl. in E. P. Nachtr. I. (1897) 138 (*Basicarpus* van Tiegh. in Bull. Soc. Bot. France XLII. [1895] 562). - Flowers 4merous, monoecous.  $\sigma$  flowers in spherical spikelets, individually in the axils of scalely bracts (Tragblatter), with free Tepalen.  $\varphi$  flowers in the axils of deciduous scalely bracts (Tragblatter); Tepals free to the ends, united with the ovary, finally deciduous. Axle at the end with some foliage leaves. - *E. Glaziovii* (van Tiegh.) Engl., with narrow, blunt leaves, in Brazil.

Sect. III. *Eueremolepis* Engl.in E. P. III. 1. (1889) 191. - ♂ and ♀ floral spikes on different bushes. Perigone segments of the false fruit (pseudocarp) deciduous. - 1 or 2 genera in Chile: *E. punctulata* (Clos) Griseb. emend. Benth.¹), with thick warty branches, short, thick internodes, short pedicellate, ovate leaves and short spikes, in southern Chile, on various trees (Fig. 96 *A-C*).

Flower spikes on different shrubs. Sections of the perigone of the false fruit dropping. - 1 or 2 species in Chile: *E. punctulata* (Clos) Griseb. emend. Benth.<sup>1</sup>), also closely papillose branches, short internodes, thicken, short petiolate, ovate leaves and short spikes, in southern Chile, on various trees (Fig. 96 AC).

28. **Eubrachion** Hook. f. Fl. antarct. II. (1846) 291 (*Eubrachium* O. Ktze. in Post et O. Kuntze, Lexic. gen. Phaner. [1903] 210). - Flowers unisexual, monoecious, both sexes on the same spikelet. Perigone 3-parted, in the σ flowers on tubinate axis, in the φ flowers fused to the ovary. Stamens fused to the perigone, only partly free; anthers short, with separate, parallel locules dehiscing at the side. Receptacle ovate. Disk fleshy. Style thick and very short, with blunt stigma. False-fruit berry-like, spherical to obovate, crowned by the persistent sections of the perigone, with thin, sticky central layer and crusty interior layer. Embryo terete with half-terete cotyledons and stepping out far from the spherical endosperm hypocotyl. - Small shrubs with terete branches and spiraly arranged, shieldlike attached, oblong, later deciduous scale leaves. Spikelet covered with broad, concave, imbricately arranged scale leaves, the upper φ flowers covering the middle sessile σ flowers; all flowers very small, sessile.

<sup>&</sup>lt;sup>1</sup>After Bentham in Benth. et Hook. f. Gen. III. (1880) 215 Grisebach had indicated the name *E. punctulata* as a synonym under *Lepidoceras punctulatum* Clos (in C. Gay, Fl. chilena III. [ 1854 ] 165 t. 32 f. 1), one of the mentioned *Lepidoceras* species is described as a different plant (Lechler n. 843), during (which time) *E. verrucosa* Griseb. (Philippi n. 196) is collapsed with *Lepidoceras punctulatum*. The plant wrongly determined by Grisebach is called *E. angustifolia* Benth.; it is known only as male flowers: "hi 5-meri sunt floribus singulis intra bracteam bracteolis 2 late cymbiformibus carinatis stipatis." = "- H. Harms.

Important Literature: Eichler in Fl. brasil. V. 2. (1868) 132-134. - I. Urban in Englers Bot. Jahrb. XXIV. (1897) 31.

1 species, *E. ambiguum* (Hook. et Arn.) Engl. A 3-5 dm high, blackish-brown shrub, with which particularly from above and underneath the flowering spikes stands bracts (Hochblättern) new branches emerge, on various dicotyledonous trees <sup>1</sup>), in southern Brazil, in Uruguay and Argentina; a variety, var. *jamaicense* Krug et Urban, in the mountains Jamaica (Fig. 97); Fawcett and Rendle, Fl. Jamaica III. 1. (1914) 102. In addition the species is pointed out in Hispaniola; I. Urban in Ark. för Bot. XX. A. Nr. 15. (1926) 25.

Subtrib. II. 1b. Viscoideae-Eremolepideae-Lepidoceratinae.

Viscoideae-Eremolepideae-Lepidoceratinae Engl. in E. P. Nachtr. I. (1897) 137 (Lepidocératées van Tiegh. in Bull. Soc. Bot. France XLIII. [1896] 249).

Leaves alternate. Flowers dioecious, in axillary racemes. Seeds without endosperm.

29. **Lepidoceras** Hook. f. Fl. antarct. 11. (1846) 293 (*Myrtobium* Miq. in Linnaea XXV. [1852] 652). - Flowers unisexual, dioecious; perigone with 4-parted seam, in the σ flowers with very short tube. σ flowers with 4 stamens attached at the base of the perigone; Filaments threadlike, rather long; anthers small, ovate. Disk fleshy. φ flowers with short style and blunt, nearly capitate stigma. False-fruit berry-like, ovate or spherical; embryo spherical-ovate with very short hypocotyle and thick fleshy cotyledons. - Richly branched shrubs without adventive attachment roots [epicortical roots], with small, alternate, leather-like, flat, leaves provided with a fine prick point (therefore the generic name). σ flowers in axillary racemes, which before flowering, with their scale-shaped bracts (Tragblättern) look almost like cones, then however stretch after dropping the bracts (Tragblättern). φ flowers in racemes, at whose base stands deciduous (easily dropping) bracts (Niederblätter), while the bracts (Tragblättern) of the flowers are 3-4X longer than the receptacle, become foliage leaf-like and only at the upper end are provided with a membranous prick point.

1 or 2 closely related species in Chile (south to Chiloe) and in southern Peru, especially fast-growing (wachsend) on Myrtaceae (Fig. 98): *L. Kingii Hook*. f. (Chiloë) und *L. Dombeyi Hook*. f. (Peru); both of Clos (in C. Gay, Fl. chilena III. [1854] 166 t. 32 f. 2) combined under the name *L. squammifer* Clos (*squamiferum*).

<sup>&</sup>lt;sup>1</sup>) After Hauman and Irigoyen, Catal. Phanér. Argentine, in Anal. Mus. Hist. Nat. Buenos Aires XXXII. (1923-1925) 49, observed exclusively on Myrtaceae.

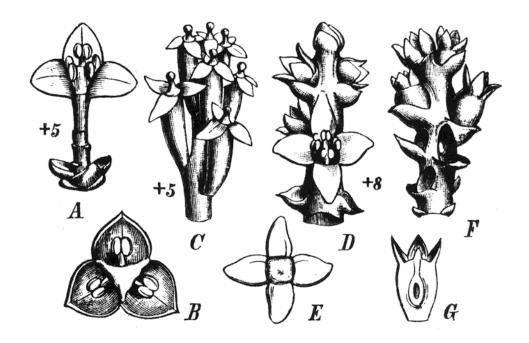


Fig. 96. A-C Eremolepis punctulata (Clos) Greseb. A  $\sigma$  spices, lower flower removed;  $B \sigma$  flower;  $C \circ \text{spike}$ .  $D \circ \text{spike}$ ;  $D \circ \text{sp$ 

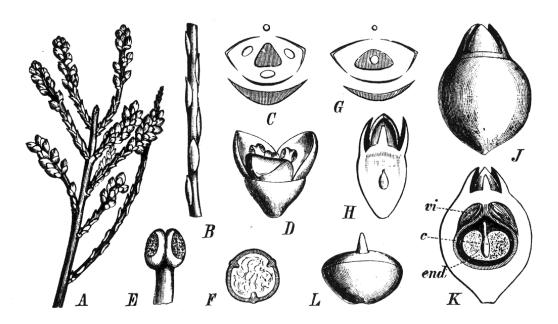


Fig. 97. *Eubrachion ambiguum* (Hook. et Am.) Engl. A portion of a branch with several flowering branchlets and only one leafy branch; B portion of the basal leafy branch; C diagram of the  $\sigma$  flower;  $D \sigma$  flower; E a stamen; E pollen; E diagram of the E flower; E flower in longitudinal section; E fruit, E in longitudinal section; E embryo. - from E. P. 1. Aufl.

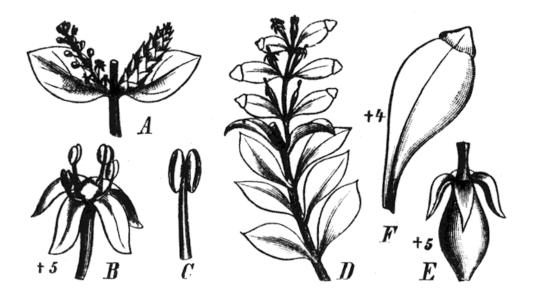


Fig. 98. Lepidoceras squamiferum Clos. A. Small portion of a  $\sigma$  plant with 2 inflorescences, right a  $\sigma$ , still completely of bracts (Tragblättern) covered raceme, on the left of a stretching raceme, from which the upper bracts have already dropped;  $B \sigma$  flower; C a stamen; D a foliage branch of the  $\varphi$  plant, with  $\varphi$  inflorescence in the axils of upper foliage leaves;  $E \varphi$  flower; F bract (Tragblatt) with the membranous apex. - from E. P. 1. Aufl.