

STUDIES IN THE THEACEAE, XI
KILLIPIODENDRON

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IN SEPTEMBER 1941, a specimen of Theaceae collected by J. Cuatrecasas in Colombia was brought to my attention for determination. At first it appeared to be a new species of *Freziera*, an annoying situation, since my recent synopsis of the genus was already in page-proof. Upon dissection, the floral structure agreed very well with *Freziera* in most respects. The ovary was five-celled, a character not too unusual in *Freziera*, but the individual loculi apparently possessed very few ovules. A cross-section of an immature fruit showed only two developing seeds. This ovule and seed condition was so contrary to all species of *Freziera* hitherto examined that a request for more ample material was dispatched to the collector. Recently, fruiting material of the same collection has been received. The mature fruit proves to be a fleshy berry rather than a thin-shelled capsule and develops only five ellipsoidal seeds rather than the hundreds of tiny reniform seeds typical of *Freziera*. These amazing differences in ovary, fruit and seeds form the basic characters for *Killipiodendron*.

It is a pleasure to dedicate this new genus to Mr. E. P. Killip of the United States National Museum at Washington, D. C., whose interest and outstanding work on the flora of Colombia are well known to all students of the South American flora.

Killipiodendron, gen. nov.

Flores dioeci. Sepala 5, quincuncialiter imbricata, persistentia, pergamentacea, margine scariosa (non glanduloso-denticulata). Petala 5, sepalis alterna, basi ima coalita, in aestivatione imbricata. Flores staminati non visi. Flores pistillati: Staminodia uniseriata, antheris plane deficientibus. Ovarium liberum, sensim in stylum attenuatum, 5-loculare; ovula in quoque loculo 2, placentae in loculum medium intrusae affixae; stigmata 5-partita. Fructus baccatus. Semen in quoque loculo solitarius (6-7 mm. longus et 2-4 mm. diametro), ellipticus.

Arbor ramis alternis. Folia disticha alterna, serrato-crenata. Flores in axillis foliorum, 1-pauci-fasciculati, pedunculis basi bracteatis, apice bracteolas 2 persistentes gerentibus.

TYPE SPECIES: *Killipiodendron colombianum* Kobuski.

Killipiodendron colombianum, sp. nov.

Arbor ramulis griseo-brunneis rugosis villosis subflexuosis. Folia oblongo-ovata, crasso-coriacea, rugosa, disticha, 14-17 cm. longa et 5-6 cm. lata, supra glabrescentia (juvenilia dense villosa), subtus ferrugineo-villosa praesertim in costa venisque elevatis, apice acuta, basi aequalia et subrotundata, margine denticulata subrevoluta, costa profunde canaliculata (ad

2 mm. diam.), venis 30⁺ paribus cum venulis profunde impressis, petiolis 2-3 cm. longis et 3-4 mm. diam. dense pubescentibus alatis, alis ad 2 mm. latis. Flores axillares, 2-3-fasciculati, in ramulis florigeris valde abbreviatis; pedicelli hirsuti, crassi, ca. 5 mm. longi, apice bracteolis 2 crassis, ovatis vel subrotundatis, concavis, 6-7 mm. longis et 5-6 mm. latis; sepala 5, imbricata, ca. 5 mm. longa et 5-6 mm. lata, pergamentacea, concava, rotundata vel ovata, margine scariosa, villosa, exteriora magis pubescentia; petala 5, imbricata, glabra, alba, subpergamentacea, ovata, ca. 6 mm. longa et 4-5 mm. lata, apice subacuminata; staminodia ca. 25, uniseriata; ovarium conicum, glabrum, ca. 3 mm. longum et 3 mm. diam., apice per stylum in stigma 5-partitum attenuatum, 5-loculare, loculis (ut videtur) 2-ovulatis. Fructus baccatus, globosus, niger, ca. 1 cm. plusve diam., 5-spermus; semina 5-7 mm. longa et 2-4 mm. lata, ellipsoidea, dorso convexa, ventre acuta.

DISTRIBUTION: South America (Colombia).

COLOMBIA: Dept. Huila, Cordillera Oriental, western slope between Gabinete and Andalusia, alt. 2200-2300 m., *J. Cuatrecasas* 8582 (TYPE, AA; isotype, US), March 24, 1940 (tree with distichous, coriaceous leaves; flowers white; fruit black).

The leaf-characters are very outstanding in this species. Very heavily coriaceous, the leaves are traced on the upper surface by a deeply channelled midrib and deeply impressed veins (30⁺ pairs) as well as sharply defined cross-veins. On the very young leaves a ferruginous pubescence covers the upper surface and persists on the upper midrib of some of the older leaves. Otherwise, the leaves are glabrescent above. The lower surface is invested over all with a ferruginous villous pubescence and the veins, including the secondary and cross-veins, are highly elevated. The petiole is 2-3 cm. long and 3-4 mm. in diameter, winged, with the wings up to 2 mm. wide. The leaf-scars, along with the abbreviated flowering stem, cause the branchlets to appear subflexuose.

The bracteoles are densely pubescent, somewhat longer than the calyxlobes and about equally as wide. There seems to be a gradation in the density of pubescence from the bracteoles to the inner lobes of the sepals. The ovary, fruit and seeds have been discussed in the early portion of this paper.

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