

A NEW *ERYTHROCHITON* (RUTACEAE) FROM ECUADOR

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Erythrochiton giganteus Kaastra & Gentry, sp. nov.

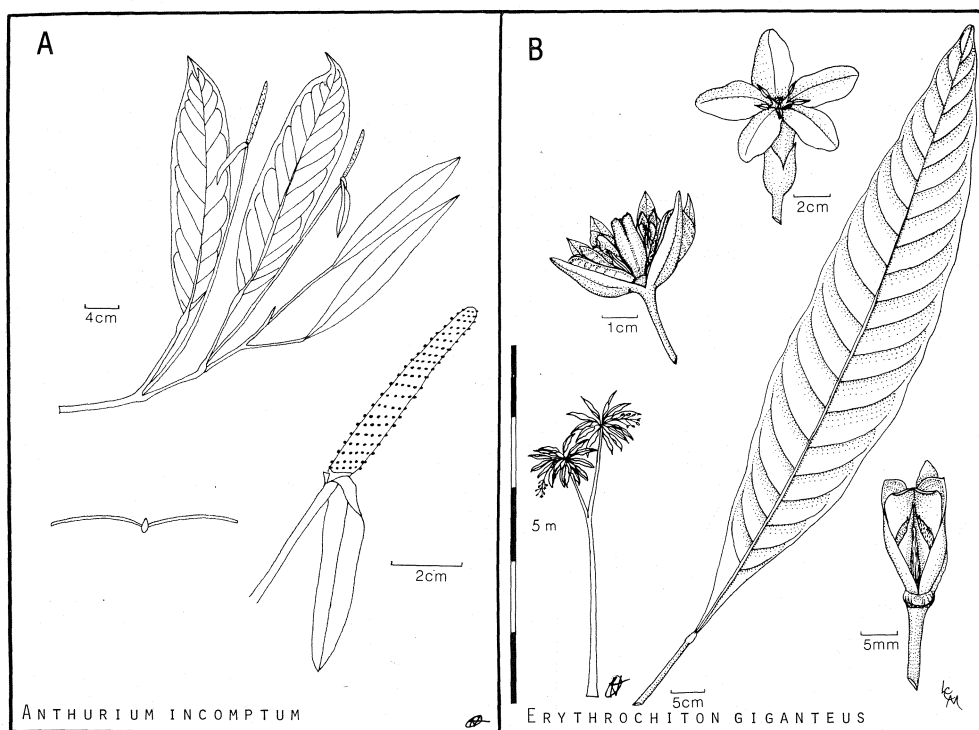
Plate 1-B

Petiolus 13-22 cm longus et 0.7 cm diametro. Lamina folioli circa 65-150 cm longa et minimum 20-25 cm lata. Inflorescentia 50-100 cm longa. Calyx et petala alba.

Unbranched shrub or treelet 2-3.5 m tall and up to 8 cm in diameter. Leaves clustered at apex of trunk, 1-foliolate, the petiole 13-22 cm long and 7 mm in diameter, semi-terete, canaliculate towards the base, thickened to the tip, the leaflet-blade oblanceolate to narrowly obovate, gradually diminishing towards the cuneate-attenuate base, acuminate at the apex, 65-150 cm long, 20-25 cm wide, chartaceous, sparsely punctate. Inflorescence ca. 50-60 cm long (acc. to label up to 100 cm), very narrowly paniculate with the flowers clustered at the tips of short-shoot side branches. Calyx 2.5-3.0 cm long, 1.3-1.7 cm in diameter, consisting of 5 more or less unequal coherent sepals, the free teeth triangular and 5-10 mm long, the apices hard and apiculate, the sepals glandular, adaxially minutely pubescent with appressed hairs 0.2 mm long and provided with club-shaped papillae 0.05 mm long. Petals 6-7 cm long, connate in a tube 4 cm long and 3-5 mm in diame-

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ter, conspicuously papillate-glandular, otherwise mostly glabrous, minutely tomentose adaxially just above the stamen tube. Stamens 5, 2 fertile and 3 subfertile (probably varying), the filaments connate in a tube which is adnate to the corolla, the fertile ones 5 cm long, the subfertile ones 3.5 cm long; anthers linear, recurved at the tip, V-shaped and appendaged at the base, the tip truncate, introrse, glabrous except the margin, at least 1 cm long and 2 mm thick. Ovary 5-parted, 2.5 mm long, 1.8 mm wide, minutely papillose, the ovules 2, superposed, the persistent thread-like style projecting 2 cm beyond calyx after anthesis, the stigma capitate and 5-lobed. Fruits consisting of 5 free mericarps, the laterally compressed mericarps subobovoid, ca. 2 cm long, enclosed by the persistent calyx, the seeds irregularly trigonal, 8-9 mm long, 5-6 mm wide, muricate and conspicuously tomentose.

TYPE: *ECUADOR*: Los Ríos: Km. 12, road from Patricia Pilar to 24 de Mayo, Montañas de Ila, cloud forest on western slope, area of virgin forest just being logged, 30 May 1976, fl., *Dodson 6099* (HOLOTYPE: MO, ISOTYPE: SEL, fragment U).

ADDITIONAL COLLECTIONS EXAMINED: *ECUADOR*: Los Ríos: Río Palenque Biological Station, km. 56, Quevedo-Santo Domingo, deep rain forest, 4 Jul 1972, fl. & fr. *Dodson 4326* (SEL, xerox and fragment U). Otherside of Río Palenque following road along river after crossing Río Bimbe and Río Waija, mature forest, 170 m, 7 Oct. 1976, fr., *Dodson & Gentry 6530* (MO, SEL, xerox U). *BOLIVAR*: Chazo Juan, 600 m, 22 Oct. 1943, fr. *Acosta Solis 6543* (F, 2 sheets).

This species is extremely abundant locally in forest understory from 170-600 m in western Ecuador. It is most closely related to *E. brasiliensis* Nees from which it is easily distinguished by its much larger leaves. The calyx of *E. giganteus* is more coriaceous and broader and less deeply lobed than in *E. brasiliensis*; when fresh it is white rather than red as in *E. brasiliensis*.

Two other species of *Erythrochiton* occur in western Ecuador - *E. brasiliensis* and *E. carinatus* Little, both of which have much smaller leaves than *E. giganteus*. *Erythrochiton carinatus*, which belongs to section *Toxosiphon* characterized by separated sepals (also in flower?) and the calyx densely tomentulose within, is known only from 500 m altitude in El Oro Province; *E. brasiliensis* is widely distributed from Colombia and Venezuela to Surinam, western Ecuador (El Oro and Chimborazo Provinces), Peru, and Brazil.