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# FIELDIANA: BOTANY

*A Continuation of the*  
BOTANICAL SERIES  
*of*

FIELD MUSEUM OF NATURAL HISTORY

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VOLUME 31

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NOTES ON THE FLORA OF COSTA RICA, I  
WILLIAM C. BURGER

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A NEW *EURYSTYLES* FROM NICARAGUA  
ALFONSO H. HELLER

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NEW SPECIES IN THE PALM GENUS  
*SYAGRUS* MART., II  
S. F. GLASSMAN

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A REVISION OF THE FAMILY GEASTRACEAE  
PATRICIO PONCE DE LEON

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NOTES ON THE  
FLORA OF COSTA RICA, I

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## Notes on the Flora of Costa Rica, I

A number of woody plants collected by Dr. Alexander F. Skutch in the General Valley were recently forwarded to the Field Museum of Natural History. These include a new species of *Macrolobium* (Leguminosae; Caesalpinioideae, tribe Amherstieae). This is the first record of the genus occurring in Costa Rica and the northernmost collection of the genus in continental North America.

### ***Macrolobium costaricense* W. Burger, sp. nov. Figure 1.**

Arbor 12 m. alta, ramulis glabris vel minute puberulis. Folia 2-6 foliolis, petiolus 5-28 mm. longus, petiolus et rhachis canaliculati; foliolum glabrum vel minute puberulum super costam, 22-108 mm. longum, 13-38 mm. latum, subsessile, ellipticum basi inaequilaterale superne acuminatum apice ipso plerumque retuso. Inflorescentiae usque ad 5 cm. longae, portatae in ramulis foliosis vel in ramulis aphyllis, pedunculus 3-6 mm. longus, pedicellus glabrus ca. 5 mm. longus, bracteolae glabrae ca. 6 mm. longae plerumque persistentes. Hypanthium ca. 3.5 mm longum, stipes (sub hypanthio) glabrus ca. 4.5 mm. longus; sepala glabrata 5-8 mm. longa, 2-3 mm. lata, obovata; petalum sessile usque ad 15 mm. longum margine undulato; filamenta usque ad 15 mm. longa, in parte inferiore villosula; stigma capitellatum, stylus usque ad 12 mm. longus; ovarium marginibus sparse puberulis lateribus glabris, ca. 3 mm. longum, 1 mm. latum, pars libera gynophori ca. 3 mm. longa. Fructus non vidi.

Tree 12 m. tall with smooth brown bark, branchlets glabrous or minutely puberulous. Stipules deciduous, about 1.5 mm. long, subulate and acuminate, minutely puberulent. Leaves with 1-3 pairs of leaflets, petiole 5-28 mm. long, rachis not extended beyond the terminal leaflets, petiole and rachis together 22-58 mm. long, deeply canaliculate above (adaxially) and puberulent within, glabrous to sparsely puberulent on the outer and lower surfaces; leaflet glabrous or minutely puberulent along the upper surface of the midvein, 22-108 mm. long, 13-38 mm. wide, subsessile, elliptic, inequilateral at the base, the apex acuminate with a usually retuse tip; the midvein plane or slightly impressed above, prominent below, the secondary veins obscure above and prominent below. Inflorescences to 5 cm. long with 5 to 10 flowers, borne on new leafy shoots and older (5 mm. diameter) leafless branchlets, the axis with scattered minute hairs, the peduncle 3-6 mm. long, pedicel glabrous about 5 mm. long; bracteoles glabrous about 6 mm. long, usually persisting. Hypanthium glabrous about 3.5 mm. long on a stipe 2-3 mm. long; sepals glabrous, 5-8 mm. long, 2-3 mm. wide, obovate; petal sessile, to 15 mm. long, with an undulate margin; filaments to 15 mm. long, villosulose along the lower half, the anther about 1.5 mm. long (dry); stigma capitellate and somewhat

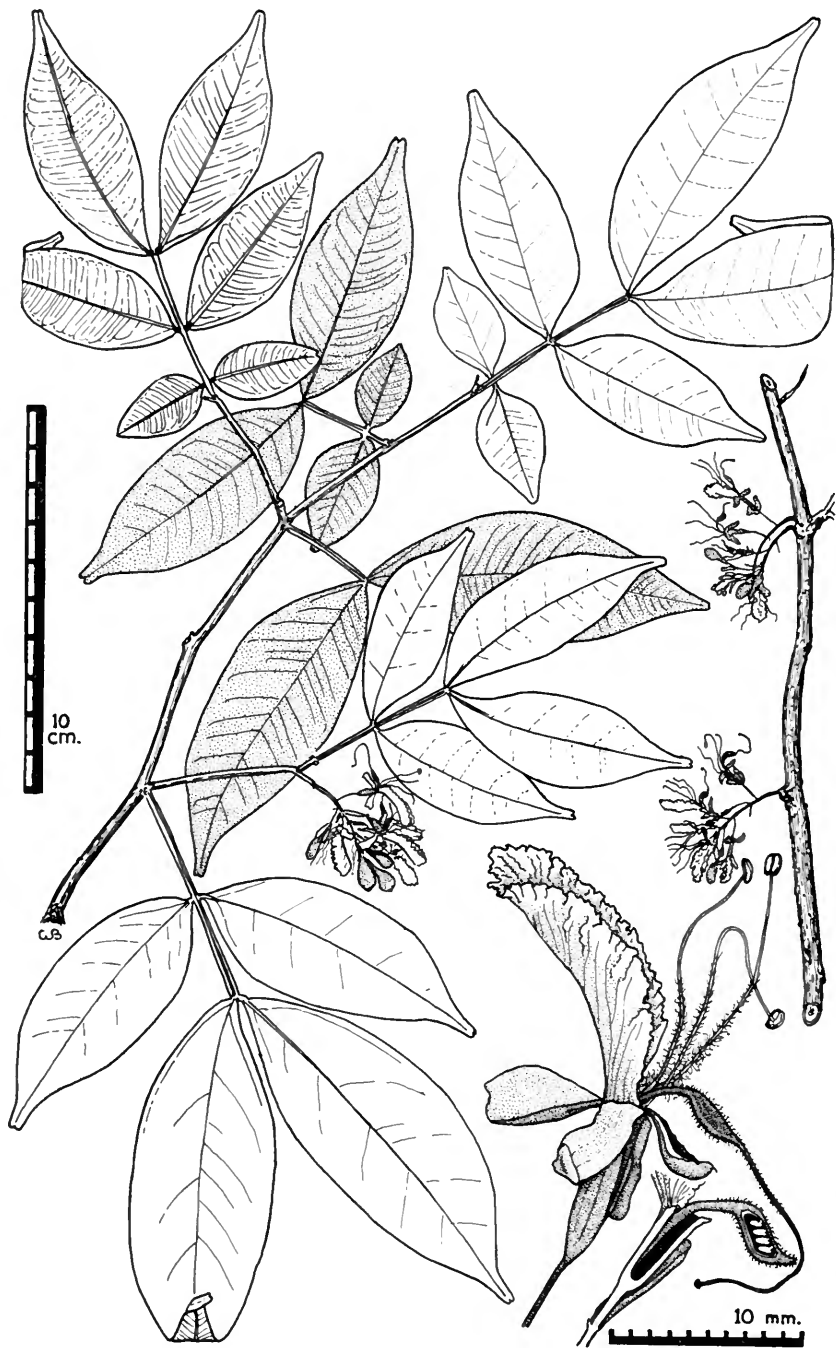


FIG. 1. *Macrolobium costaricense*.

flattened apically, style to 12 mm. long, puberulous on the lower part; ovary about 3 mm. long and 1 mm. broad, puberulous along the margins and glabrous on the lateral surfaces, the free portion of the gynophore about 3 mm. long. Fruit said to be 2- or 3-seeded and opening explosively.

COSTA RICA: Tree 12 m. high, with smooth brown bark; flowers white in August; pods 2-3 seeded, split explosively, in January. On rocky stream banks. Valley of El General, 760 m. 1965-1966. *Alexander F. Skutch 5493* (TYPE in Field Museum of Natural History).

This species is a member of the section *Stenosolen* according to the revision of Cowan (in Mem. N. Y. Bot. Gard., 8: 257-342. 1953). *M. modicopetalum* of northern Panama, the nearest species geographically may be the species most closely related to *M. costaricense*. *M. modicopetalum* differs from the new species in having leaves with only a single pair of much larger leaflets, inflorescences with smaller peduncles and pedicels, and flowers with non-capitellate stigmas. Following the keys of Cowan's revision the new species has closest affinity with *M. trinitense*. It differs from the Trinidad species in lacking uncinata trichomes, having fewer and somewhat narrower leaflets, smaller inflorescences, and a puberulent gynoeceium.

Only one specimen of this species has been received and the illustration is based on this. Dr. Skutch writes in a recent letter that the type specimen comes from a small tree that evidently suffered some injury in the past and leans over the edge of a high bank beside the Peña Blanca River in front of his home in the General Valley. The type was collected in flower in August 1965; the same tree was not flowering in August 1966. The location of Dr. Skutch's farm is approximately 9°20' N × 83°35' W at 750 m. alt.





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