

GUIDE TO THE GENERA OF LIANAS AND CLIMBING PLANTS IN THE NEOTROPICS

STEGNOSPERMATACEAE

By Pedro Acevedo-Rodríguez (Jul 2020)



S. cubense, photo by P. Acevedo

A neotropical family of a single genus of erect or scrambling shrubs, distributed from western Mexico south to Nicaragua, and the Greater Antilles; found in thickets, dry forests, seasonally dry forests, and secondary plant formations between 30-500 m elevations.

Diagnostics: Scrambling vines with short, alternate, hanging branches; stems blackish, lenticellate, cross section with successive cambia that produce concentric rings of xylem and phloem; leaves alternate, simple, spirally disposed, coriaceous; fruit a valvical capsule.

General Characters

1. **STEMS.** Cylindrical, with scanty secondary growth, reaching 5-10 m in length and less than 1 cm in diam.; cross sections with *successive cambia* that produce continuous concentric arcs of xylem and phloem, dissected by numerous narrow rays (fig. 1a); bark is relatively smooth, charcoal gray with numerous small, light lenticels (fig. 1b).

2. EXUDATES. No visible exudate.
3. CLIMBING MECHANISMS. Climbing *Stegnosperma* are scrambling vines, with short, alternate, hanging branches.

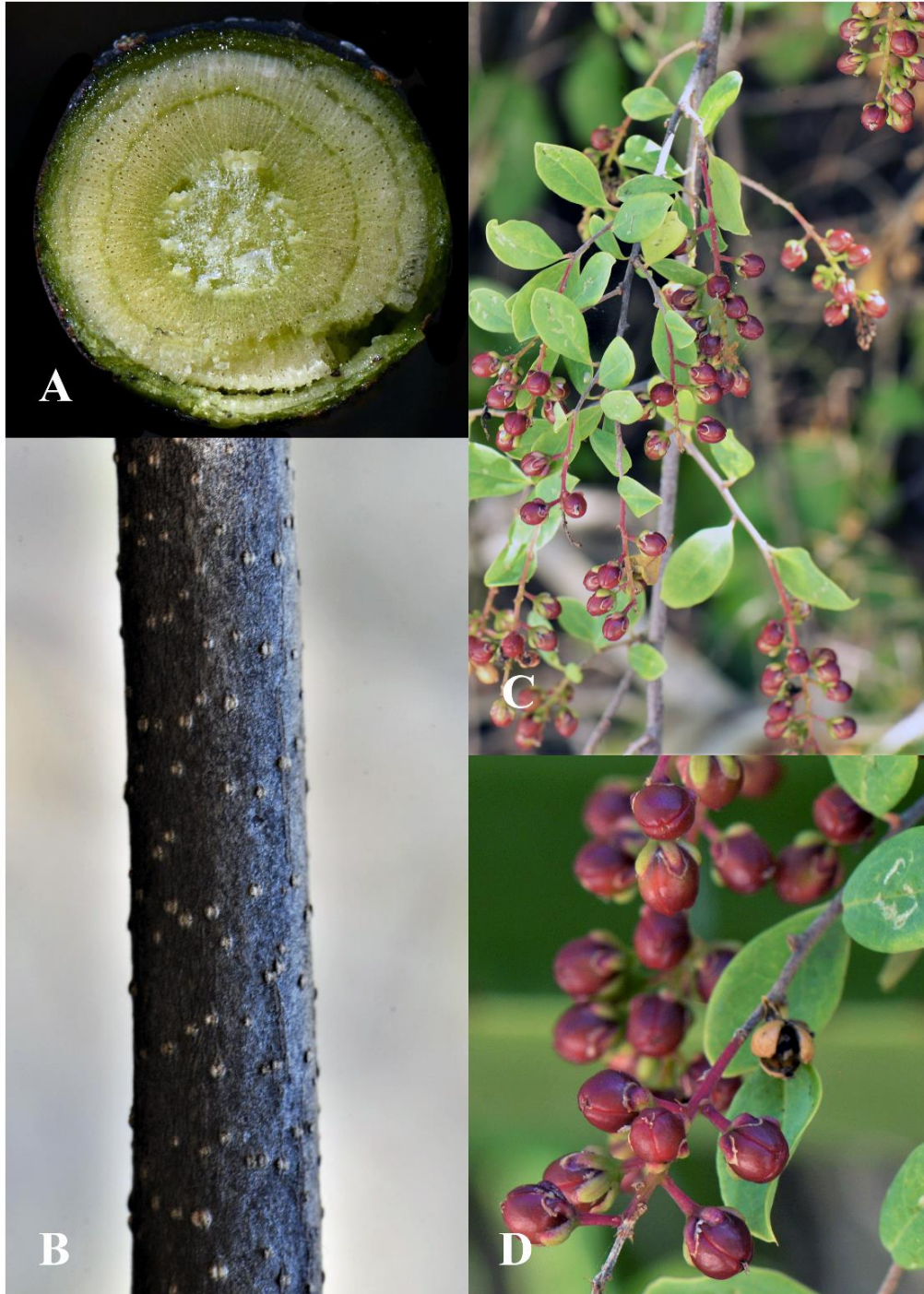


Figure 1. *Stegnosperma cubense*. **A.** Stem cross section with successive cambia. **B.** Stems showing dark, smooth, and lenticellate bark. **C.** Hanging fruiting branch. **D.** Capsules. Photo by P. Acevedo.

4. LEAVES. Alternate, exstipulate, coriaceous, simple, entire, elliptic to spatulate; petioles short, glandless.
5. INFLORESCENCE. Axillary racemes or distal on short lateral branches.
6. PEDICELS. Long.
7. FLOWERS. Bisexual, actinomorphic; calyx of 4 free, petaloid sepals; corolla absent; stamens 13-20, the filaments free; ovary partly inferior, 4-locular, with a single basal ovule per locule, the style short, stout, with 4, divaricate to reflexed stigmatic branches.
8. FRUIT. Coriaceous, indehiscent, with persistent spreading sepals at the base.

GENERIC DESCRIPTION

STEGNOSPERMA Bentham, Bot. Voyage Sulphur 17. 1844.



S. cubense, photo by P. Acevedo

Erect or scandent shrubs; glabrous or pubescent. Stems with scanty secondary growth reaching less than 1 cm in diam., and up to 10 m in length; cross section with successive cambia producing concentric rings of xylem and phloem, that are dissected by numerous, narrow rays; bark is relatively smooth, charcoal gray to reddish brown with numerous small, lenticels. Leaves alternate,

spirally arranged, simple; petioles short, articulate near the base. Inflorescences of axillary racemes or terminal on short lateral branches; bracts and bracteoles minute, persistent. Calyx of 5 free sepals; corolla of 5 deciduous petals; stamens 10; ovary superior, syncarpous, with 3-5

uniovulate carpels, the styles free, as numerous as the carpels. Fruit a globose valvicular capsule, dehiscent from the apex toward the base; seeds 1-5, globose.

Distinctive features: Scrambling vine with alternate leaves; stem cross sections with successive cambia.

Distribution: A genus of 3 species, 2 of which are scrambling vines, distributed from western Mexico south to Nicaragua, and the Greater Antilles; found in thickets, dry forests, seasonally dry forests, and secondary plant formations between 30-500 m elevations.

RELEVANT LITERATURE

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PICTURE VOUCHERS

Figure 1.
A-D. *Stegnosperma cubense* A. Rich. (Acevedo 17364).