

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

## ERYTHROPALACEAE

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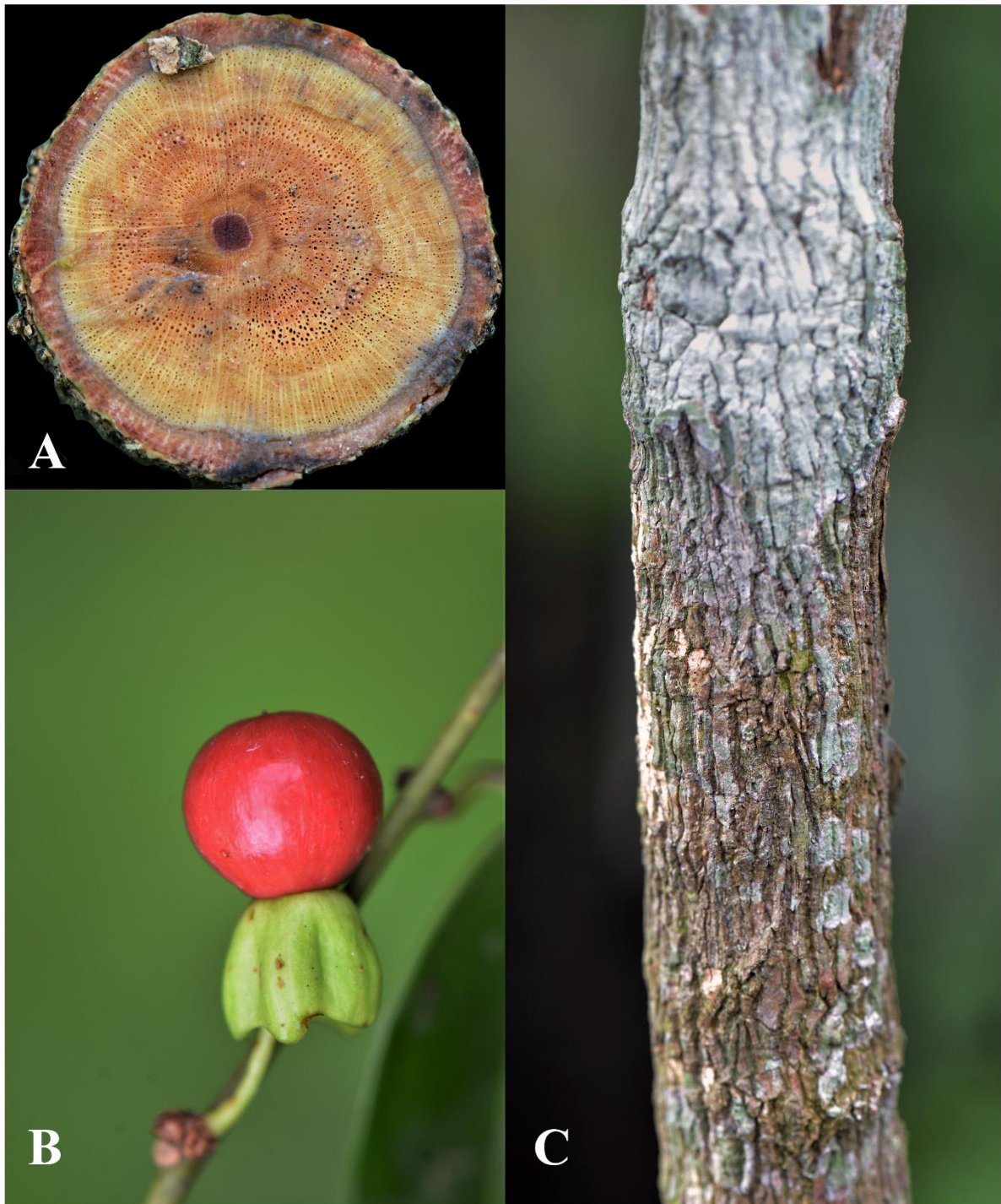
*Heisteria scandens*, photo by P. Acevedo

Pantropical but predominantly neotropical family, with 4 genera and about 40 species of trees, treelets or less often scrambling shrubs or lianas. Climbers in the Neotropics belong to the genus *Heisteria*, with 2 species consistently recorded as lianas. The genus is most diverse in humid forests at low elevations.

***Diagnostics:*** Scrambling lianas with cylindrical stems; leaves simple, alternate, distichous, coriaceous with cartilaginous, undulate or entire margins, and pinnate venation, lamina commonly with conspicuous discoloured laticifers; exstipulate; drupes subtended by an acrescent calyx.

## General Characters

1. STEMS. Stems slender 3-4 cm in diam., cylindrical; cross section simple, with *regular* anatomy; xylem, with numerous narrow rays and conspicuous wide vessels radially disposed.
2. EXUDATES. Scanty, inconspicuous.
3. CLIMBING MECHANISM. Shrubs with sub-twining branches or scrambling lianas.
4. LEAVES. Leaves simple, alternate, with lighter entire margins, and pinnate venation; petioles ca. 1 cm long, adaxially canaliculate, glandless; stipules absent.
5. INFLORESCENCES. Axillary few-flowered cymes.
6. FLOWERS. *Actinomorphic*, bisexual; pedicelled. Calyx minute, 5-dentate, green; petals 5, free, white, ovate-lanceolate, acute, adaxially pubescent; stamens with free filaments, 5 in one series or 10 in two unequal series, the outer stamens adnate to the petals; ovary superior, 10-sulcate at the base, 3-carpellate, unilocular, with a single pendent ovule.
7. FRUITS. A late dehiscent, fleshy drupe, ellipsoid or sub-globose, < 1 cm long, maturing red, red-orange or black, subtended by a persistent acrescent, reflexed, green calyx (fig. 2b).



**Figure 1.** *Heisteria scandens*. **A.** Stem cross section xylem with radially disposed vessels. **B.** Red, subglobose drupe with persistent acrescent, reflexed calyx. **C.** Stems with fissured bark. Photos by P. Acevedo.

## GENERIC DESCRIPTION

**HEISTERIA** Jacquin, Enum. Syst. Pl. 4. 1760.



*H. scandens*, photo by P. Acevedo

Glabrous, trees, treelets, clambering lianas, or shrubs with weakly twining branches, unarmed, the lianas commonly with lateral spreading branches; stems cylindrical, reaching 5-20 m in length and about 4 cm in diam.; cross sections simple, with regular anatomy, xylem ring-porous in *H. scandens*, with visibly wide vessels and numerous multiseriate rays (fig.

1a); bark beige-brown, fissured (fig. 1c). Leaves alternate, distichous, simple, coriaceous, with cartilaginous, undulate or entire margins, and pinnate venation, lamina commonly with conspicuous discoloured laticifers; petioles furrowed; exstipulate. Inflorescences of axillary few-flowered cymes. Flowers pedicellate, bisexual, actinomorphic; calyx green, minute, 5-dentate; petals 5, free, white, ovate-lanceolate, adaxially pubescent; stamens 5 or 10 (depending on the species) numerous, the filaments free; ovary superior, 10-sulcate at the base, trilocular, unilocular, with a single ovule, the stigmas 3, minute. Fruit a fleshy drupe, ellipsoid to globose, < 1 cm tall, red or black when ripe.

**Distinctive features:** Erect shrubs with scrambling branches or scrambling lianas; leaves alternate, simple, with cartilaginous, undulate or entire margins, and pinnate venation, lamina commonly with conspicuous discoloured laticifers; exstipulate; drupes subtended by an acrescent calyx.

**Distribution:** A genus of about 39 species, 36 of which are distributed in the Neotropics and 3 in West Tropical Africa; two species in the Neotropics consistently reported as climbers; *Heisteria*

*scandens* Ducke from Nicaragua to southern Brazil, and *H. pentandra* (Benth. ex Reissek) Engl. in Venezuela and the Brazilian Amazon; humid, non-flooded, lowland forests.



**Figure 2.** Scrambling habit with plagiotropic lateral branches in *Heisteria scandens*. Photo by P. Acevedo.

## RELEVANT LITERATURE

Sleumer, H.O. 1984. Olacaceae. Flora Neotropica Monographs Vol. 38: 1-158.

## PICTURE VOUCHERS

Figure 1.

A-C. *Heisteria scandens* Ducke (Acevedo 17023).

Figure 2.

A. *Heisteria scandens* Ducke (Acevedo 17023).