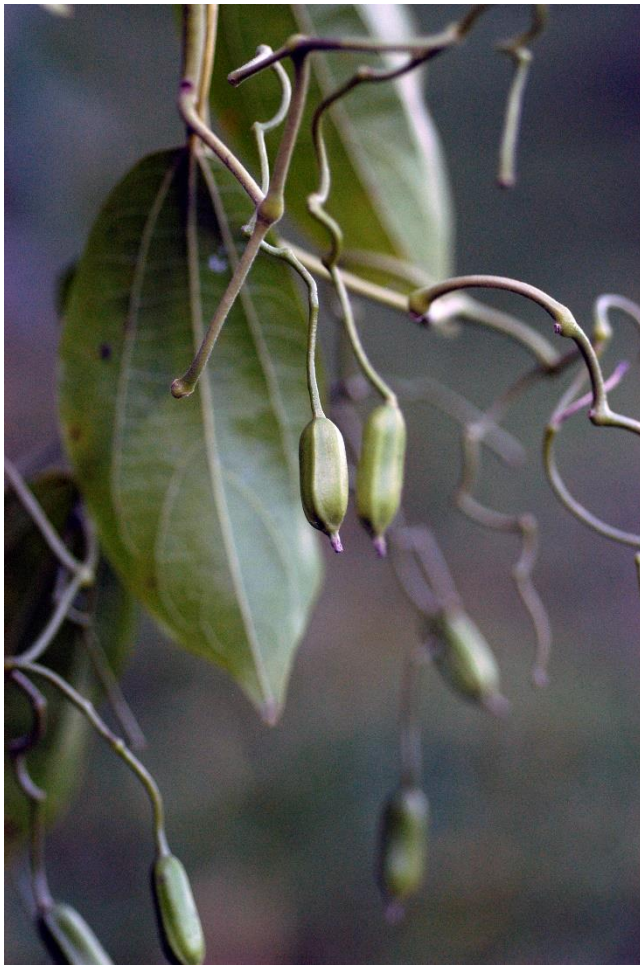


# GUIDE TO THE GENERA OF LIANAS AND CLIMBING PLANTS IN THE NEOTROPICS

## HERNANDIACEAE

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*Sparattanthelium amazonum*, photo by P. Acevedo

with ranalian smell.

A small pantropical family of trees, shrubs or lianas, with 4 genera and about 73 species. Climbers are found in the Old World genus *Illigera* Bl. with 28 species and the neotropical genus *Sparattanthelium* Mart. with about 12 species. The latter is found in continental tropical America from Mexico to central-eastern Brazil, occurring in moist, non-flooded forests scrubs at low elevations.

**Diagnosics:** Scrambling lianas with long hanging branches, leaves alternate, simple, 3-veined from base and with entire margins; stem cross sections simple, unscriptive, with conspicuous rays. Vegetatively similar to species of Menispermaceae but petioles not pulvinate, also similar to *Ampelozizyphus* (Rhamnaceae) but distinguished by the leaves

## General Characters

1. **STEMS.** Woody with moderate secondary growth, cylindrical (fig. 1c, c, d), 5-10 m long and 2-6 cm in diam.; cross sections with *regular* vascular anatomy, rather indistinctive, with a large medulla and conspicuous rays (fig. 1c, d); bark smooth, greenish gray (fig. 1b).
2. **EXUDATES.** Watery or no visible exudates.
3. **CLIMBING MECHANISMS.** Scramblers (fig. 1a) aided by recurved inflorescence axes (fig. 3b), sometimes remaining as woody hooks.
4. **LEAVES.** Alternate, simple, 3-veined from base and entire margins (fig. 2a, b), chartaceous to coriaceous; exstipulate; petioles short, glandless, nearly cylindrical (fig. 2b).
5. **INFLORESCENCE.** Axillary, dichasial cymes, often with twisted axes.
6. **FLOWERS.** Bisexual, actinomorphic (unisexual or zygomorphic in non-climbing genera); calyx of 4-5 free sepals; corolla absent; stamens 4-5, opposite the sepals, of similar length, the anthers opening by longitudinal valves; ovary inferior unilocular, with a single pendent ovule, the style stout, the stigma capitate.
7. **FRUIT.** A dry ellipsoid, smooth or costate drupe.

## GENERIC DESCRIPTION

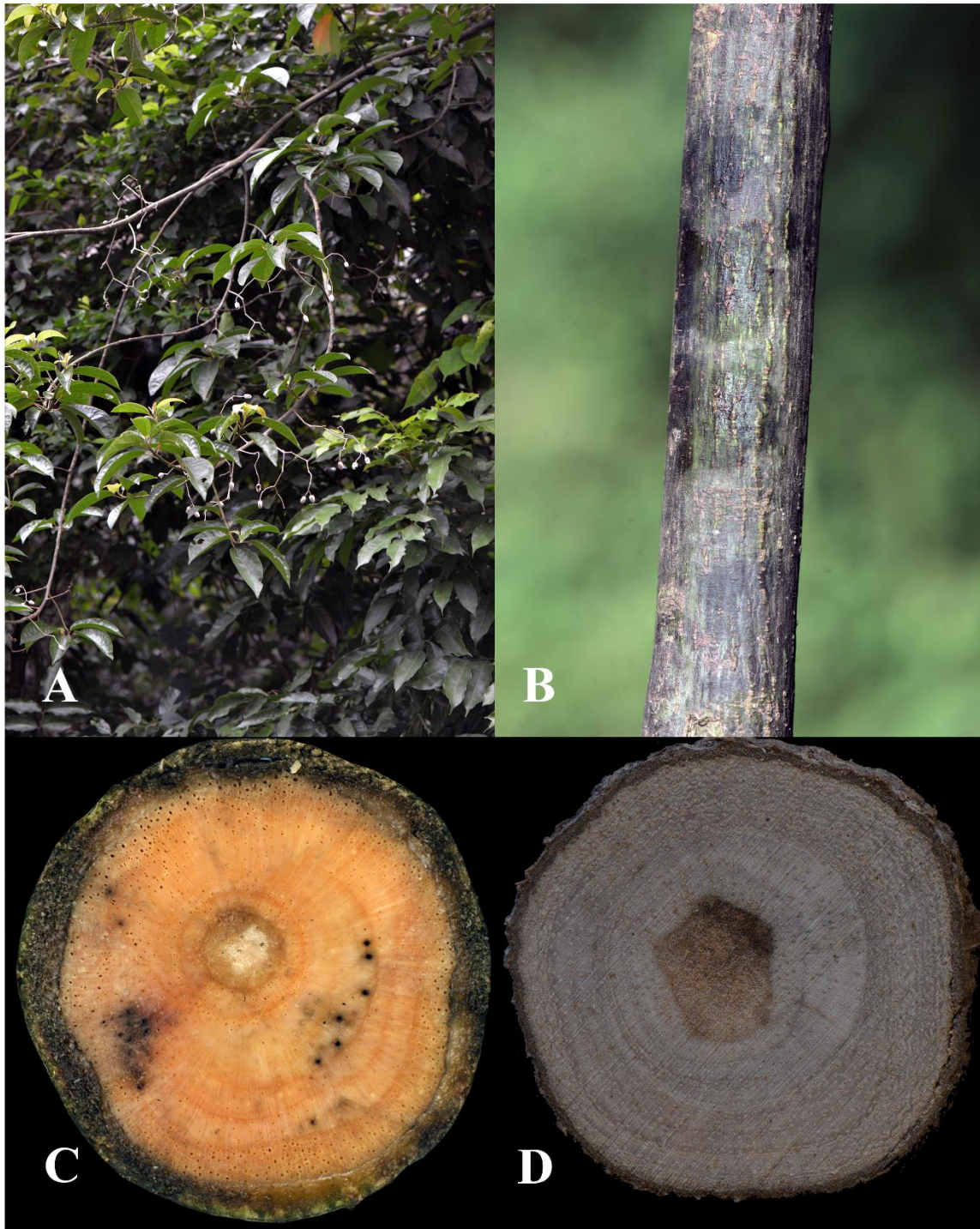
**SPARATTANTHELIUM** Martius, Flora 24 (2, Beibl.): 40. 1841.

Unarmed scrambling lianas with long hanging branches or sometimes shrubs or small trees, reaching 5-10 m in length. Stems glabrous or pubescent, slightly angled or cylindrical, unarmed, reaching 2-6 cm in diam.; bark blackish or grayish green, smooth or lineate. Leaves alternate, chartaceous to coriaceous, elliptic, oblong to nearly oblanceolate, with three main veins from base, the apex short-acuminate or acuminate, the base rounded, obtuse or truncate, the margins entire; petioles 1-3 cm long, cylindrical, non-pulvinate. Inflorescence axillary dichasial

cymes. Flowers whitish, bisexual; hypanthium conical, similar in color to the calyx; sepals free, 4-5, commonly pubescent; stamens shorter than the opposite sepals; corolla absent; ovary inferior, unilocular, with a single pendulous ovule, the style stout, terminal, the stigma capitate. Drupe dry, ovoid or ellipsoid, 5-costate-angled, 1-1.5 cm long, commonly glaucous at maturity; seed one, with convoluted, folded cotyledons.

**Distinctive features:** Scrambling unarmed lianas; leaves alternate, stipulate, simple, with entire margins and 3-veined from base, sometimes with *ranalian* smell; petioles non-pulvinate, cylindrical; inflorescence axes twisted and prehensile. Similar to *Ampelozizyphus* (Rhamnaceae), but this genus does not have a *ranalian* smell and have elongated paniculate inflorescences with greenish flowers.

**Distribution:** A neotropical genus of 12 species distributed from Mexico to south and eastern Brazil in lowland, moist, non-flooded forests.



**Figure 1.** **A** Scrambling habit with lateral hanging branches of *Sparattanthelium* sp. **B.** Smooth, grayish green bark of *Sparattanthelium* sp. **C.** Cross section of mature stem (fresh) of *Sparattanthelium* sp. with conspicuous rays and large vessels. **D.** Cross section of young stem (dried), of *Sparattanthelium amazonum* with large angular medulla and disperse xylem parenchyma. Photos by P. Acevedo.



**Figure 2.** **A.** Trinerved leaf of *Sparattanthelium sp.* **B.** Unarmed branch of *Sparattanthelium sp.* Photos by P. Acevedo.



**Figure 3.** A. Inflorescence of *Sparattanthelium amazonum*. B. Infructescence with twisted, prehensile axes of *Sparattanthelium amazonum*. Photos by P. Acevedo.

## RELEVANT LITERATURE

- Mori, S.A. and J.L. Brown. 2002. Hernandiaceae. In S.A. Mori et al., Guide to the Vascular Plants of Central French Guiana. Part 2. Mem. New York Bot. Gard. 76(2): 344-347.
- Hoffman, B. and S. Ruyschaert. 2017. Lianas of the Guianas. A guide to woody climbers in the tropical forests of Guyana, Suriname and French Guiana. L.M. Publisher, The Netherlands. 623 pages.
- Kubitzki K. 1993. Hernandiaceae. In: Kubitzki K., Rohwer J.G., Bittrich V. (eds), Flowering Plants Dicotyledons. The Families and Genera of Vascular Plants, vol 2. Springer, Berlin, Heidelberg.

## PICTURE VOUCHERS

Figure 1.

A-C. *Sparattanthelium* sp. (Acevedo 17024).

D. *Sparattanthelium amazonum* Mart. (Acevedo 15082).

Figure 2.

A-B. *Sparattanthelium* sp. (Acevedo 17024).

Figure 3.

A-B. *Sparattanthelium amazonum* Mart. (Acevedo 15082).