

## RUTACEAE

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A pantropical family with ~150 genera and 1,600 species of trees or shrubs and occasionally herbs. In the Neotropics, there are ~50 genera and 452 species. Although the family is not normally associated with lianas, there is a species of *Zanthoxylum* (i.e., *Z. foliosum* Donn. Sm.) that consistently grows as a scrambling liana with long flexible stems. *Zanthoxylum foliosum* is found in Mexico (Chiapas, Hidalgo), Guatemala, Honduras, El Salvador, and Nicaragua, in moist forests above 1,200–1,500 m elevation. According to Standley and Steyermark (1946), this species is a pest where it grows abundantly, as it forms impenetrable tangles with prickles.

**Diagnosics:** Scrambling slender liana; stems armed with conical prickles, leaves alternate, compound, imparipinnate; leaflets aromatic, with translucent oil glands; flowers minute, white.

### General Characters

1. STEMS. Branches slender, armed with conical, sharp prickles, reaching > 10 m in length, cylindrical and up to ~1.5 cm in diam.; cross section simple with regular anatomy, with a large medulla and numerous narrow rays (Figure 219C).
2. EXUDATES. Watery or no visible exudate.
3. CLIMBING MECHANISMS. This species is a scrambler, with armed stems that help the plant to secure its position among the host plants.
4. LEAVES. Alternate, imparipinnately compound up to 30 cm in length; leaflets 15–41, sessile, opposite, sub-opposite or less often alternate, shiny, elliptic, coriaceous, with crenate-serrate margins and a round gland at the sinus, the blade aromatic due to the presence of translucent oil glands, the rachis narrowly winged with sparse prickles (Figure 219A); stipules absent.

5. INFLORESCENCE. Axillary or terminal paniculate thyrses, shorter than the subtending leaf, axes reddish, unarmed, flowers pedicellate, grouped in dichasia; bracts minute.
6. FLOWERS. Bisexual, ~5 mm long, cream, 4-merous; sepals and petals distinct; stamens 4, alternating with the petals, the filaments free; ovary superior, bicarpellate.
7. FRUIT. Of 1 or 2 basally connate follicles, with punctate verrucose exocarp.

**ZANTHOXYLUM** Linnaeus Sp. Pl. 270. 1753.

*Zanthoxylum* is a morphologically diverse genus with nearly all species representing trees or shrubs. For the purpose of this project, refer to the previous section which is entirely based on *Zanthoxylum foliosum*.



**Figure 219.** *Zanthoxylum foliosum*. **A.** Fertile branch. **B.** Portion of inflorescence. **C.** Stem cross section showing a large medulla and conspicuous vessels and rays. Photos by P. Acevedo.