

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

MARANTACEAE

By Pedro Acevedo-Rodríguez (Jul 2020)

A pantropical family of robust herbs with 29 genera and about 550 species. Marantaceae vines in the Neotropics are restricted to the genus *Ischnosiphon* where 8 species out of a total of 36 are scrambling herbs. They are predominantly found in humid forest understory in the Guianas and the Amazonian region in South America.

Diagnosics: Typical monocot morphology but with long cylindrical, slender, fragile stems, distinguished by the pulvinate, petiolate leaves and paired flowers.

General Characters

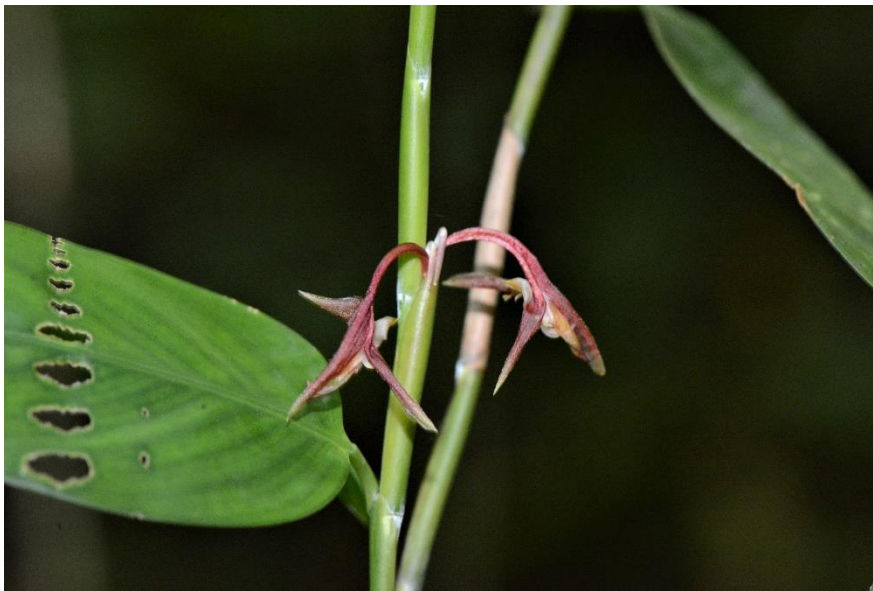
1. **STEMS.** Stems are cylindrical in cross section, slender, < 1 cm in diam., lower portion with overlapping leaf sheaths.
2. **LEAVES.** Leaves simple, alternate, distichous; blades elliptic, or oblong-lanceolate, commonly asymmetrical at base and apex; venation finely pinnate; petioles short, stout.
3. **INFLORESCENCES.** Axillary, ascending, short, cylindrical, spicate, with two flowers per node; bracts persistent, covering the base of flowers.
4. **FLOWERS.** Zygomorphic, bisexual; sepals 3, free; petals connate at base forming a tube with the staminodes and the style; stamen 1; staminodes 2, petaloid; ovary inferior, trilocular, but only one locule fertile, with a single ovule.
5. **FRUITS.** A narrow-ellipsoid capsule with a single seed.

USES

Stems of *Ischnosiphon gracilis* (Rudge) Koern. are used for basketry weaving by the Kaiabi tribe of the Xingu Indigenous Reserve located in the southern portion of the Brazilian Amazon (de Athayde, et al. 2006). The Ticunas from the Peruvian Amazon used the stems of various species of *Ischnosiphon* for the confection of various utilitarian items such as a cassava press (*tipitís*), sifters, and baskets (Brañas, et al. 2016).

GENERIC DESCRIPTION

ISCHNOSIPHON Koernicke, Nouv. Mém. Soc. Imp. Naturalistes Moscou 11: 346. 1859.



Ischnosiphon gracilis, photo by P. Acevedo

Robust, rhizomatous herbs, much-branched at base, some species scrambling vines; stems cylindrical, slender, commonly rigid, reaching 8 m in length, ascending and later hanging, with verticels of short, ascending branches.

Leaves cauline, alternate, distichous, the blades 15-35 cm long, chartaceous,

with finely, non-prominent, pinnate venation; petioles pulvinate with an elongated sheath at base. Inflorescences axillary or terminal on short lateral branches. Flowers zygomorphic, bisexual; sepals 3, free, often pinkish-yellowish; petals connate at base forming a tube with the staminodes and style; stamen 1; staminodes 2 petaloid; ovary inferior, trilocular, but only one locule fertile, with a single ovule. Fruit a small, narrowly ellipsoid, 1-seeded capsule.

Unique features: Culms are slender, smooth, scrambling and later hanging down; flowers small, in pairs at the inflorescence nodes.

Distribution: A neotropical genus of 36 species distributed from Nicaragua south to southern Brazil; climbing species distributed in wet forests in the Guianas and the Amazon basin.

RELEVANT LITERATURE

Athayde, S.F. de, G.M. da Silva, J. Kaiabi, M. Kaiabi, H.R. de Souza, K. Ono, E.M. Bruna.

2006. Participatory research and management of *arumã* (*Ischnosiphon gracilis* [Rudge] Köern., Marantaceae) by the Kaiabi people in the Brazilian Amazon. *Journal of Ethnobiology* 26: 36-59.

Brañas, M.M., C.C., Núñez Pérez and R. Zárate Gómez. 2016. Identificación de especies del género *Ischnosiphon* utilizadas por dos comunidades Ticuna del Perú para elaborar sus tejidos tradicionales. *Ciencia amazónica (Iquitos)* 6 (2): 116-123.

Kennedy, H. and F.R. Ganders. 2001. Marantaceae. In: W.D. Stevens, C. Ulloa Ulloa, A. Pool and O.M. Montiel (eds), *Flora de Nicaragua*. Monographs in Systematic Botany from the Missouri Botanical Garden. 85(2) 1168-1189.



Figure 1. Scrambling culm of *Ischnosiphon gracilis*, with verticil of short lateral branches and axillary inflorescence. Photo by P. Acevedo.