

TICODENDRACEAE: A NEW FAMILY OF FLOWERING PLANTS

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ABSTRACT

A new family is described to accommodate the genus *Ticodendron*. The unusual characters of this monotypic genus, with only *T. incognitum*, have been discussed by us elsewhere (Gómez-Laurito & Gómez P., 1989), analyzed by several experts in their special fields, and reported elsewhere in this issue of the *Annals*.

The discovery and description of new families of flowering plants is uncommon these days; only about 16 of a total 372 recognized by Cronquist (1981) were described since 1950. Many of the most recent new families, e.g., Alzateaceae (Graham, 1984) and Cecropiaceae (Berg, 1978), are taxonomic segregates of long-known entities. Others such as Saccifoliaceae (Maguire & Pires, 1978) and the most recent new family, Lacandoniaceae (Martínez & Ramos, 1989) were known almost from the beginning to be very close to long-established families (Gentianaceae and Triuridaceae, respectively). Such familiae novae as Tepuianthaceae (Maguire & Steyermark, 1981) and the new family described below for *Ticodendron* are rarer beasts, whose placement, even as to order, relies on detailed studies by numerous specialists looking at a variety of characters from wood anatomy to pollen ultrastructure. Results of these studies of *Ticodendron* are reported in a series of papers in this issue of the *Annals*.

Ticodendraceae Gómez-Laurito & Gómez P. fam. nov. Magnoliophytarum. TYPUS: *Ticodendron* Gómez-Laurito & Gómez P.

Arbor dioicus vel raro polygamodioicus. Ramulis teretibus, cicatricibus teretibus stipulorum delapsorum notatis. Stipulae subulatae, circundatae, caducae. Petiolis supra sulcatis. Foliae alternae; lamina elliptico-ovata, subcoriacea, margine in parte superiore serrata, nervis secundariis 8–13 paribus. Inflorescentia mascula 1.5–4 cm longa, simplex vel ramificata, aliquando flos feminea coronata. Stamina numerosa, 2–4 verticillata disposita; bracteae 3 mox deciduae; filamenta 2–3 mm longa; antherae oblongae, 2 mm longae, basifixae; thecae geminatae, longitudinaliter dehiscentibus, conectivo subulato producto. Granula pollinis triplicata, minute spinulata, plerumque suboblata. Flos feminea solitariae extremitatis surcolorum dispositae. Bracteae 3, mox deciduae. Ovarium inferum in perian-

thum tubus inclusum, bicarpellatum, quadriloculare utroque loculo 1; placentatio axillis; ovula hemitropa, apicallis, pendula, crassinucellata, unitegumentata. Fructus drupaceus monospermus. Embryo oleosus, cotyledonibus rectus.

Dioecious or less commonly polygamodioecious trees. Twigs terete with the scar of stipules evident. Stipules subulate, encircling the stem, caducous. Petioles grooved above. Leaves alternate, blades elliptic-ovate, subcoriaceous, the margins serrate on the upper part, with 8–13 secondary veins. Male inflorescence 1.5–4 cm long, simple or branched, sometimes crowned by a solitary female flower. Stamens many, arranged in 2–4 verticels surrounded by 3 deciduous bracts. Filaments 2–3 mm long; anthers oblong, 2 mm long, geminate, attached by the base, the connective with an apiculate appendage, longitudinally dehiscent. Pollen triplicate, minute spinulate, mostly suboblata. Female flowers solitary on pedicels, surrounded by 3 early-deciduous bracts. Ovary inferior, bicarpellate, included in the perianth tube, 4-locular with 1 ovule in each locule; ovules hemitropous on axile placenta, apical, pendulous, crassinucellate, unitegmic. Fruit drupelike, 1-seeded. Embryo oily with straight cotyledons.

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