STUDIES IN THE ARALIACEAE OF NICARAGUA, AND A NEW WIDESPREAD SPECIES OF OREOPANAX¹

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ABSTRACT

New information on the Araliaceae arising from the preparation of an account of the family for the *Flora de Nicaragua* is reviewed in the wider context of studies for the *Flora Mesoamericana*, and **Oreopanax nicaraguensis** is described.

During the preparation of an account of the Araliaceae for the forthcoming *Flora de Nica-ragua* we have encountered a number of problems, but as the concise format of that work prevents their wider discussion, some explanatory notes are presented here together with the description of a new species. These decisions were taken in the context of a broader study of the family in Central America, and this will appear in due course in *Flora Mesoamericana*.

OREOPANAX DECNE & PLANCH.

The considerable difficulties in separating the entire-leaved species of Oreopanax have been noted by various authors, notably A. C. Smith (1936) and L. O. Williams (1966). In Nicaragua, the entire-leaved specimens are easily divided into two groups, one of which is referable to O. capitatus (Jacq.) Decne & Planch., which, in our opinion, must also include O. liebmannii Marchal. The other appears to be a new species, here described as O. nicaraguensis. Oreopanax liebmannii has generally been separated from O. capitatus on the basis of its narrow leaves and smaller staminate and hermaphrodite capitula, but it has proved quite impossible to maintain this distinction in our area, there being a complete range in leaf shape and capitulum size. Oreopanax capitatus has a very wide distribution from Mexico to Brazil and the West Indies and A. C. Smith (1936) has drawn attention to the difficulty of separating O. liebmannii in the southern part of its range (Costa Rica and Panama), and throws doubts upon its specific status. We are in complete agreement with this view and include O. liebmannii within the synonymy of O. capitatus.

Copenhagen in his original description, together with others from Paris and Leningrad. There are two sheets of Liebmann no. 14 at Copenhagen, one of which has two separate branches, one bearing staminate heads, the other hermaphrodite heads, with the locality recorded as Donguia (a probable misspelling for Donaguia in Mexico). We designate this as the lectotype. The other sheet from Donaguia bears a staminate branch, while packets hold part of a hermaphrodite inflorescence and several leaves. A third sheet from Copenhagen bears a specimen of a staminate inflorescence labelled no. 11, and three separate leaves, one of which is labelled no. 12. One leaf closely resembles those of Liebmann no. 11 from Donguia and probably has been incorrectly mounted on this sheet. The flowering branch (no. 11) on this sheet does not match the Donguia specimens very closely, whereas the other two leaves may be from another species. The locality for no. 11 on this sheet is quoted as "?" and that for no. 12 is Alpatlahua. The specimen from Paris, Hahn from 'Forêt de Perote', is a staminate branch that does not resemble the Donguia specimens very closely; we have not seen the sheet from Leningrad.

All the specimens of *Oreopanax* we have seen from Nicaragua with palmately lobed leaves are referable to *O. geminatus* Marchal. Comparison of type material of *O. geminatus* with *O. lachnocephalus* Standley and with other specimens from Honduras shows many similarities. These species have been separated mainly by the presence or absence of peduncles, but examination of the type material of the former (*Oersted no. 7* from Segovia, Nicaragua), which is preserved at Copenhagen, disclosed the presence of a few pedunculate capitula. We therefore propose the inclusion of *O. lachnocephalus* within *O. gemi*-

Marchal cited specimens of O. liebmannii from

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natus, thus confirming the tentative suggestion made by L. O. Williams (1966). A new species of *Oreopanax* is described here from Nicaragua. It has also been found to the south of our area in Costa Rica and Panama, but, as yet, has not been collected in Guatemala or Honduras. The *Oreopanax* species of Nicaragua can be separated by the following key:

- la. Leaves digitate, inflorescence racemose
- *O. xalapensis* (Kunth) Decne & Planch. 1b. Leaves simple, entire or lobed, inflorescence
 - - 2b. Leaves entire, styles of hermaphrodite flowers 5–12.
 - 3a. Peduncles glabrous, leaf bases obtuse to cordate, disc fleshy, forming a cup O. nicaraguensis M. J. Cannon & J. F. M. Cannon
- Oreopanax nicaraguensis M. J. Cannon & J. F. M. Cannon, sp. nov. TYPE: NICARAGUA. DEPT. DE JINOTEGA: Camino a Aranjuez, Santa Elena, 13°01'24"N, 85°54'57"W, alt. ca. 400 m. Arbol 40 m de alto frutos morados, Nov. 1983. Hermaphrodite inflorescence, Vega & Quezada 197 (holotype, BM; isotypes, HNMN, MO). Figures 1, 2.

Oreopanax capitato (Jacq.) Decne & Planch. affinis, sed foliis latissimis, venatione 5-7 nervia, stylis in cupula insertis, differt, O. obtusifolio L. Williams accedens, sed foliis supra nitidis, apice acuminatis, stylis in cupula insertis, inflorescentia compactissima, fructibus majoribus, distinguenda. Arbor ad 40 m alta, rare scandens, omnio glabra vel inflorescentia tantum pubescens, pilis stellatis sessilibus longe ramosis. Folia simplicia, laminis $7-16 \times 7-14$ cm, suborbicularis vel late ovatis vel rhombo-ovatis, apice acuminatis acumine brevi, plus minusque rotundato vel acuto, basi rotundatis vel cordatis, e basi conspicue (3-)5-7(-9) nervis, coriaceis, supra saepe nitidis; petiolus 4-15 cm longus, striatus, basi paulum incrassatus. Inflorescentia mascula plus minusque umbellata vel paniculata, bracteis infraramis 2-3(-10) cm longis cuspidatis, vel nullis, ramis pedunculisque striatis, glabris vel stellatopubescentibus, pedunculis 4-8 mm longis, crassis, bracteis subpedunculis 2-4 mm longis, latissime ovatis, breve cuspidatis; capitulum ad 5 mm diametro, subglobosum, bracteis suborbicularis; calyx obconicus, limbo late lobato vel undulato; petali 1.5 mm longi, deltoidei; stamina filamento 1.5 mm longo, anthere 1.5 mm longo, oblongo; stylus 1. Inflorescentia fructifera compactis, plerumque plus minusque umbellatis rarissime paniculatis, ramis 4-6 cm longis, pedunculis 5-20 mm longis, crassis, bracteis subpedunculis ad 3 mm

longis apice acutio. Fructus $6-10 \times 4-6$ mm, ovoideus vel subglobosus, carnosus, 2-5(-8) in quoque capitulo, bracteis subfructibus 5-8 mm longis, suborbicularis, ab initio ciliatis sub maturitatione emarginatus et marginis suberosis; discus carnosus urceolatus; styli (6-)7(-9), 2-3 mm longi, in cupula inserti, liberi vel basi crassi et contigui, apice arcuato reflexi. Semina albumine ruminato.

Trees to 40 m tall, or rarely vines, glabrous throughout or the inflorescence only pubescent, the hairs stellate, sessile, long-branched. Leaves entire, blade 7–16 \times 7–14 cm, suborbicular to broadly ovate or rhomboid ovate, tip with a short more or less rounded or acute acumen, base rounded to cordate, conspicuously (3-)5-7(-9)nerved from the base, coreaceous, upper surface shiny; petioles 4-15 cm long, striate, somewhat swollen at the base. Staminate inflorescence more or less umbellate or paniculate, bracts subtending branches 2-3(-10) mm, cuspidate or absent, branches and peduncles striate, glabrous or stellate pubescent, peduncles 4-8 mm long, stout, bracts subtending peduncles 2-4 mm long, very broadly ovate, shortly cuspidate, heads to 5 mm diam., subglobose, bracts sub-orbicular; calyx obconic, limb broadly lobed or undulate; petals 1.5 mm long, deltoid; filaments 1.5 mm long, anthers 1.5 mm long, oblong; styles 1. Fruiting inflorescence compact, usually more or less umbellate, very rarely paniculate, branches 4-6 cm long, peduncles 5-20 mm long, stout, bracts subtending peduncles to 3 mm, apex acute. Fruits $6-10 \times 4-6$ mm, ovoid to subglobose, fleshy, 2-5(-8) per head, bracts subtending fruits 5-8 mm long, suborbicular, at first ciliate, emarginate and cork-edged when mature; disc fleshy, urceolate, styles 2-3 mm long within a cup, (6-)7(-9), free or swollen and touching at the base, the apices arcuate-reflexed. Endosperm ruminate.

The new species differs from the common and widespread O. capitatus (Jacq.) Decne & Planch. by its very broad leaves, the leaf venation, the styles within a cup-shaped hollow at the apex of the fruit, and its compact, large-fruited inflorescence. It differs from O. obtusifolius L. Williams by the shiny upper leaf surface, the acuminate leaf apices, the styles within the cup-shaped hollow and the larger fruited, more compact inflorescence. While O. obtusifolius seems to be found to the north of the region in Mexico, Belize, Guatemala and Honduras, O. nicaraguensis appears to have a more southerly distribution in Nicaragua, Costa Rica, and Panama.



FIGURE 1. Oreopanax nicaraguensis, holotype, showing fruits, Vega & Quezada 197 (BM).



FIGURE 2. Oreopanax nicaraguensis, paratype, showing flowers, Stevens & Henrich 20278 (BM).



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