

A NEW KARWINSKIA (RHAMNACEAE) FROM NORTHERN COLOMBIA.

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The following is part of a taxonomic study of the flora of the semi-arid areas on the Caribbean Coast and the lower Magdalena Valley in northern Colombia, South America, in which the senior author has been engaged for many years.

During the last ten months he has had the opportunity of critically studying his own botanical gatherings as well as those made by several other collectors and botanists who have visited that section of Colombia and the adjoining areas in northern Venezuela and Panama. This part of the study has been made possible through a Fellowship grant from the John Simon Guggenheim Memorial Foundation, to the Directors and Trustees of which he is deeply indebted. The senior author also wishes to acknowledge very gratefully the courtesies extended to him by the Chairman of the Department of Botany, the Curator in Charge of the division of Phanerogams, the Associate Curators and other staff members of the United States National Herbarium, Smithsonian Institution, Washington, D.C.

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KARWINSKIA COLOMBIANA Dugand & M.C. Johnston, sp. nova -
Arbuscula usque ad 5 m. alta, trunco basi usque ad 27 cm. diam.
Cortex ramulorum annotinorum grisei-brunneus, lenticellatus.
Ramuli hornotini oppositi, graciles, fusci, propter ipsorum
intorsionem eodem fere plano jacentes, tempore florendi flagel-
lifformes 6-9 cm. longi, 0.5 - 1 mm. crassi, internodiis 3 ad 5
praediti, sparsim minuteque hirtelli aut inferioris internodiis
glabrati. Petioli ob torsionem internodiorum eodem fere plano
omni porrecti potius quam sane decussati. Folia inter se haud
remota marginibus persaepe sese attingentia, lamina membranacea
basi rotundata, margine integerrima, glandulis punctiformibus
microscopicis nigris interdum oblongis secus marginem numerosis,
inter nervos transversales sparsissimis vel nullis et circa
laminae apicem fere nullis. Laminarum magnitudo atque figura a
foliis nodorum proximalium ad illa e nodis distalibus ramulorum
hornotinorum orta variat: proximalia folia enim laminam saepe
suborbicularem interdum fere obovatam praebent 10-17 mm. longam,
10-15 mm. latam, saepius apice emarginatam vel rotundatam; illa
e medianis internodiis orta ovatam figuram 25-45 mm. longam, 20-
25 mm. latam apice subacutam vel obtusam vel rotundatam exhibent;
folia summa ex internodiis quarto et quinto oriunda anguste ovata
sunt, 35-62 mm. longa, 17-28 mm. lata apice acutissima vel brevi-
ter acuminata vel acute apiculata; omnia supra atroviridia in

sicco saturate olivacea vel fuscescentia, subtus valde pallidiora subglauca nervis pinnatis conspicuis at vix prominulis ornata. Folia intermedia atque distalia ramulorum hornotinorum nervis secundariis 6-8 tenuibus utroque latere e costa media sub angulo 20-45° divergentibus strictis vel leniter arcuatis et fere usque ad marginem eleganter parallelibus, juxta eam campodromis. Nervi tertiarii ceterique crebri, tenerrimi, oculo armato conspicui arctique reticulati subpellucidi. Petiolus 4-7 mm. longus primum juventute minute parceque hirtellus denique glabratus. Stipulae subulatae, hirtello-pilosulae, ca. 1 mm. longae, caducae.

Cymae umbelliformes axillares 2-4-florae, pedunculo 1-3 1/2 mm. longo sparse minuteque hirtello, pedicellis ad anthesin 2-3 mm. longis, postea ad 4-5 mm. protractis, sparse minute hirtellis denique glabratis. Cupula floralis 2-3 mm. lata, pilosula; sepala deltoidea 1-1 1/2 mm. longa; petala albida ca. 1 mm. longa. Ovarium ut videtur biloculatum, loculo utroque uniovulato.

Type Collection: COLOMBIA: Departamento del Magdalena: valle del Río Cesare (parte occidental), al oeste de Los Venados (10° N., 73° 42' W.); llanuras subxerofíticas de sabana abierta con "matas de monte" esparcidas (grupos aislados de árboles, arbustos y bejucos), 60 m. sobre el nivel del mar, Abril 23, 1963, A. Dugand 6326 (holotype US; isotypes: COL and others to be distributed).

The only other collection seen by us is COLOMBIA, Departamento del Magdalena, valle del Río Cesare (parte occidental), bosque subserial tropofítico cerca del Caño Sagarriga, al oeste de Los Venados (10° lat. N., 73° 45' long. W.), 70 m. alt., Abril 21, 1963, A. Dugand 6294 (COL, US, etc.)

This is a small tree with declining branches found rather scatteringly in the small, isolated patches of woodland (locally known as "matas de monte") that dot the otherwise open savannas on the semi-arid plains west of the Río Cesare, a tributary of the Magdalena River in northern Colombia. The flowers when collected were green color, with the petals paler, almost whitish.

In most species of *Karwinskia*, the whiplike early-season flowering branches proceed to elongate, producing a dozen or more sterile nodes. This occurs while the drupes at the early nodes are maturing. The leaves at these sterile nodes are more remote, longer, proportionately narrower, firmer and less membranous than those of the flowering nodes. Unfortunately we do not yet have of this new species, *K. colombiana*, material showing these later stages. In comparing the new species to its close relative, *K. Calderonii* Standley of Central America, it is necessary to select only the early, flowering specimens of the latter species. Such specimens show, as contrasted to *K. colombiana*, longer, proportionately narrower (more lanceolate) leaves, those of the most proximal node of the branchlet being 15-45 mm. long and 10-23 mm. broad, of the middle nodes 33-64 mm. long and 13-24 mm. broad, and of the fourth or fifth node 39-80 mm. long

and 16-26 mm. broad; the blades of the middle and distal nodes show more (usually 9 to 12 pairs) lateral nerves than those of K. colombiana and the nerves have a greater tendency to exhibit the alternating stripes of darker and lighter coloration so characteristic of the Mexican Karwinskias. The petioles are 8-11 mm. long, thus longer than those of K. colombiana. Each cyme has 8 to 15 flowers, versus the 2 to 4 flowers found in each cyme of K. colombiana. With all these distinctions, K. colombiana is an adequately distinct species, at least as distinct as various population-complexes which have been considered to be species in Mexico.

Not only is Karwinskia colombiana the first species of this genus to be recorded from Colombia; it is also the first record of Karwinskia for South America. A report of the genus from the Bolivian Chaco was based on a collection of Rhamnidium elaeocarpum.

NOTAS SOBRE LA FLORA DE COLOMBIA Y PAISES VECINOS

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La serie de artículos que inicio con estas notas ha de contener algunas de las observaciones más importantes que he hecho en muchos años de excursiones botánicas y de estudios taxonómicos, muy particularmente las que afectan la taxonomía o la nomenclatura de las especies que componen la flora del piso cálido de Colombia, con especialidad la de la Costa del Caribe y la correspondiente llanura infero-magdalénica. En algunos casos estas observaciones atañen también a la flora de los regiones inmediatamente vecinas en el litoral caribe (Venezuela y Panamá) y aun la de países más lejanos del continente suramericano o de la América Central.

Forman parte de un estudio que inicié hace muchos años, interrumpido en demasiadas ocasiones por circunstancias diversas, que contempla no sólo la taxonomía de las especies, sino también el aspecto sinecial de ellas en cuanto sean componentes de colectividades definidas (sinecias: formaciones, asociaciones) en el territorio que ha sido teatro principal de mis actividades. Dicho territorio hállase comprendido grosso modo en la llanura costera de Colombia, limitada por el Mar Caribe o de las Antillas, y que se extiende desde el litoral hasta aproximadamente 9° 30' de latitud septentrional, desde la parte norteña del Departamento de Bolívar hasta la península de la Guajira, incluyendo las llanuras que bordean el Bajo Magdalena hasta su desembocadura, y las que se dilatan entre este río y el Cesare.

El estudio critico de mis colecciones ha recibido impulso extraordinario, en muchísimos casos definitivo, gracias a mi estada de más de un año en el Instituto Smithsonian, de Washington, E.U.A., en cuyo herbario (United States National



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