

## DENDROPHTHORA: ADDITIONS AND CHANGES

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In the wake of my *Dendrophthora* monograph (Wentia 6, 1961) a few corrections and additions are now in order.

### 1. INFLORESCENCE TYPES

Through an inexcusable oversight in proof reading the numerical designations of the inflorescence types (op. cit., p. 15) have been confused. As the subgeneric division of my treatment is based on inflorescence typology, I offer the correct relationship below, with apologies.

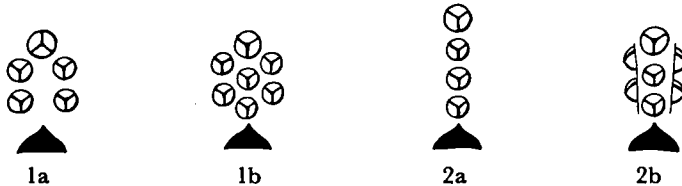


Fig. 1. Corrected inflorescence designations for *Dendrophthora* and *Phoradendron*.

### 2. IMPORTANT RANGE EXTENSIONS

#### a. *D. martinicensis* Kujit.

Dr. Richard A. Howard of the Arnold Arboretum kindly showed me some collections of this species, now in his Herbarium, of *D. martinicensis* from St. Lucia, British West Indies. This mistletoe was previously known only from Martinique. The collections mentioned are the following:

Howard 11616, St. Lucia, forest between Quillesse and Piton St. Esprit. Flowers and fruit creamy white. (A)

Proctor 17745, St. Lucia, 0.5 mi. s.w. of Piton Troumassée, c. 2150 ft. Locally common parasite on various forest trees. (A)

Proctor 21571, St. Lucia, summit of Morne Tabac, elev. 2200-2250 ft. Montane rain-forest. (A)

#### b. *D. squamigera* (Benth.) Kuntze

Williams & Williams 18517, Honduras, Dept. Morazán, Rancho Quemado, above San Juancito. 2100 m. Parasite on *Podocarpus oleifolius*, in cloud forest (US).

First report from Honduras. The plant differs from typical *D. squamigera* in having a rather slender form and frequently 3 or 4 fertile internodes per inflorescence. The collection also represents the first case of a gymnospermous host for this mistletoe.

c. *D. lindeniana* v. Tiegh. and *D. paucifolia* (Rusby) Kuijt

Dodson & Thien 1339, Ecuador, Prov. Zamora, road from Loja to Zamora; km 12-14. 2800 m (MO, UBC).

Dodson & Thien 1853, Ecuador, Prov. Tungurahua, Chaupi. 2400 m. (MO, UBC).

These species, *D. lindeniana* and *D. paucifolia*, respectively, are new to Ecuador.

d. *D. costaricensis* Urb.

This species is by no means restricted to Costa Rica. Its great geographic range has been obscured by the fact that many specimens have rested under the name *Phoradendron crispum* Trelease, Gen. *Phor.* p. 77, 1916. Having now studied the type of the latter species I have no doubt that it belongs to *D. costaricensis*. *Phoradendron crispum* Trel. thus must be added as a heterotypic synonym to *D. costaricensis*. The additional specimens, deposited especially at the Chicago Natural History Museum and the Smithsonian Institution, are too numerous to be listed here. Suffice it to say that they document a geographic range from northern Panama to El Salvador and Guatemala. The types of both *P. crispum* and *D. costaricensis* were collected on the slopes of Volcán Irazú, Costa Rica.

3. PHORADENDRON VIRGATUM Trelease, Field Mus. Pub. Bot. 13 (2):390. 1937.

The type, Killip & Smith 24350, is quite typical *Dendrophthora mesembryanthemifolia* Griseb. ex Urb. Because this collection was not recognized as the type of *P. virgatum*, it was listed under *D. mesembryanthemifolia* in the *Dendrophthora* monograph. *P. virgatum* Trel. thus becomes a heterotypic synonym of *D. mesembryanthemifolia*, and the following two specimens are to be added to the latter species:

Killip & Smith 24350, Peru, Dept. Junin, Carpapata, above Huacapistana, 2400 m (F, NY, US).

Macbride 3343, Peru, Mito, about 9000 ft. Common on various shrubs (F, NY).

4. A NEW SPECIES FROM ECUADOR

***Dendrophthora dodsonii* Kuijt, n. sp.,**

Planta robusta; internodia 3-7 cm longa, superne conspicue applanata, deinde teretia; folia obovata, obtusa, basi cuneata, ad 8 cm longa et 4 cm lata; petioli 4-6 mm longi. Cataphylla in ramulis sterilibus lateralibus bina, magna, in inflorescentiis desinentia. Appendices basales mediae. Inflorescentiae solitariae, axillares, 25-50 mm longae, internodiis fertilibus 2-3. Flores more 2b seriatim dispositi, usque ad 5 vel 6 pro serie, axi intumescente toti immersi. Dispositio florum probabiliter dioeca.<sup>1)</sup>

A fleshy mistletoe of dark green coloration, with long (3-7 cm) internodes terete at origin but flattened conspicuously just below the nodes, becoming completely terete with age. Vegetative laterals with

<sup>1)</sup> I am indebted to Dr. Karel U. Kramer, Utrecht, for the Latin diagnosis.

one pair of large, flaring cataphylls about 5 mm above axil. Basal appendages of a median position; prophylls inconspicuous. Leaves up to  $8 \times 4$  cm, obovate, obtuse, with cuneate base extending into a petiole 4–6 mm long. Venation pinnate, the midrib extending into the leaf apex. Inflorescence without cataphylls, single, axillary, 25–60 mm long, with 2–3 fertile internodes 15–20 mm long each, swollen, bearing 5 or 6 flowers per series sunken in cavities, in 4 series corresponding to the 2b pattern (see Fig. 1); peduncle ca. 7 mm long. Inflorescence apex blunt. Flowers 3-, sometimes 4-parted, regularly oriented in a  $\frac{1}{2}$  fashion (cf. Kuijt, *Wentia* 6:14. 1961); when 4-parted of a  $\frac{2}{3}$  orientation. Probably dioecious, the type apparently pistillate. Fruit not seen. Fig. 2.

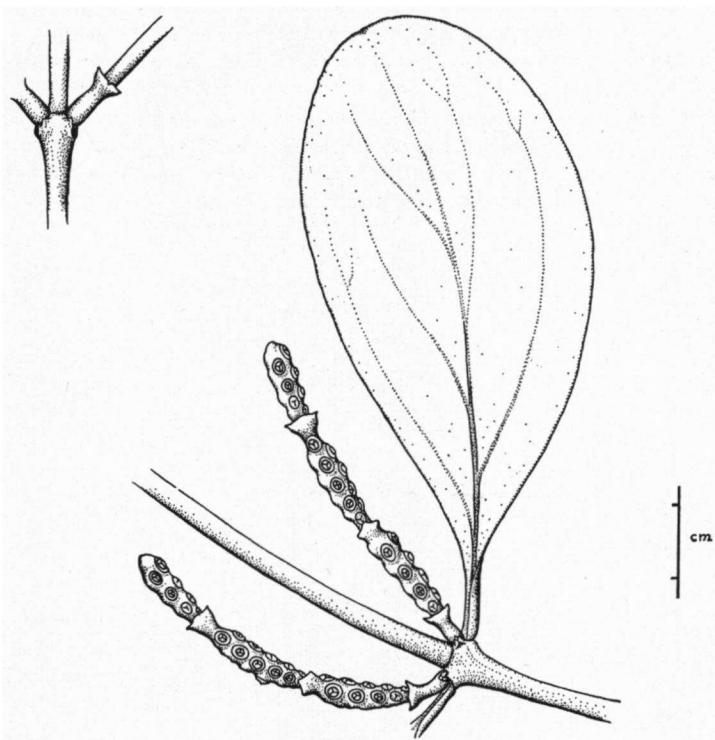


Fig. 2. Habit and cataphylls of *Dendrophthora dodsonii*.

TYPE: C. H. Dodson and L. B. Thien 1498, Ecuador, Prov. Loja, road from Loja to La Tuna; km 14–34; elev. 1600–2600 m. Parasite on small tree. Nov. 21, 1961. (UBC; holotype at MO).

I take pleasure in naming this striking new species for Dr. Calaway H. Dodson, student of orchids and their pollination, now at the Missouri Botanical Garden.

A definite assignment of this species to *Dendrophthora* is at present impossible as the specimen appears to be pistillate. The only clear-cut difference between *Dendrophthora* and *Phoradendron* is the unilocular vs. bilocular condition, respectively, of the anther. It seems reasonably certain, however, that we are concerned with a *Dendrophthora*. It is in this genus that the only comparable inflorescence type is found, namely in the Caribbean species *D. tetrastachya* and *D. sessilifolia*. It must be pointed out that the latter pair of species is quite anomalous in *Dendrophthora*. Nevertheless, since nothing in *Phoradendron* approaches this plant, there is little danger in naming the collection as a new species, even if the possibility of a future transfer cannot be excluded.

Whether or not this species is related to *D. tetrastachya* and *D. sessilifolia* is an open question. There exists the possibility of recognizing these three mistletoes as a separate subgenus, with *D. dodsonii* as the only continental representative. On the other hand, the unusual 2b inflorescence type may have arisen twice or more in different places in the genus. For example, *D. dodsonii* and *D. ambigua* Kujit show a considerable amount of similarity in their vegetative parts. Significantly, the great structural variation in the spike of the latter species includes an occasional inflorescence part of the 2b type.