

DALECHAMPIA L.

Reference: Webster, Grady L. Dalechampia [in] Flora of Panama, Euphorbiaceae. Ann. Missouri Bot. Gard. 54: 308-316. 1968. Webster, G. L., & W. S. Armbruster. A synopsis of the neotropical species of Dalechampia (Euphorbiaceae). Bot. J. Linn. Soc. 105: 137-177. 1991.

Monoecious subshrubs, perennial herbs, or vines; stems and foliage with stinging hairs; leaves alternate, stipulate, mostly palmately veined or lobed; inflorescences pseudanthial, terminal on axillary short-shoots, with a bilabiate involucre of two showy bracts; male cymules 3-flowered, inserted below the female pleiochasium (umbellate cyme) of 8-10 flowers; bracteoles of female flowers forming a resinous gland; flowers apetalous, disk absent; male sepals 3-6, valvately separating in dehiscence; stamens mostly 10-50, filaments connate; female sepals 5-12, dentate to lacerate, persistent in fruit; ovary 3-locular; styles connate in an elongated column; fruit capsular; seeds round, ecarunculate.

Over 100 species, primarily neotropical, but with a secondary center in Madagascar, and a few species in Africa and Asia.

Dalechampia is particularly set apart from other Euphorbiaceae in its unique bilabiate pseudanthium that is very different in detail

from zygomorphic (cyathia) pseudanthia in the Euphorbieae. In contrast to the cyathium of Euphorbieae, in which a single female flower is terminal, and the 4 or 5 bracts are almost completely fused, the pseudanthium of Dalechampia has the cymule of 3 female flowers proximal to the radially branching cymule of male flowers, and the 2 bracts are quite separate. Although at least 5 species occur in Mexico, only D. scandens and another very rare species reach our area. Plukenetieae--Dalechampiinae.

1. Involucral bracts 3-lobed, at anthesis mostly whitish or yellowish-white, abaxially copiously pubescent, tips acuminate, margins dentate; pistillate sepals gland-tipped; stems distinctly twining. D. scandens

1. Involucral bracts unlobed, green at anthesis, nearly glabrous, tips obtuse-apiculate, margins entire or subentire; pistillate sepals not gland-tipped; stems not distinctly twining. D. heteromorpha

Dalechampia scandens L. Sp. Pl. 1054. 1753.

Deciduous thorn forests or woodlands, usually in disturbed areas, 0-1200 m.

Sin., Nay., Jal., Col.(?), Mich., Gro., Oax., Ver., Tamps., Tab., Camp., Yuc., Q. R., Chis.; Centr. Amer.; W. Ind. (Lesser Antilles, Surian, Herb. Jussieu, P, the holotype and basis for the plate of Plumier, Pl. Amer. Fasc. 5: pl. 101); S. Amer.

Nay., Mpio. San Blas, Miramar, 1 km from beach (Feddema 962); Mpio. Nayar, Jesús María (Norris & Taranto 13935); La Nopalera (Flores-Franco 2792); 5 km SW of Huaynamota (Flores-Franco 3046); Mpio. Tepic, 20-30 km towards Jalcocotan (Télliez 11135, DAV); Mpio. Compostela, 1.5 mi W of Mazatán (Feddema 1114); Mpio. Santa María del Oro, Arroyo Salitre (Acevedo & Sosa 1069); Mpio. Ahuacatlán, Tetitlán, ca 15 km NW of Ahuacatlán (Feddema 522); Mpio. Mezquitic, La Guayabas, W of San Andrés Cohamiata (Bauml & Voss 1685, DAV); Mpio. El Tuito, 25 km S of Puerto Vallarta (A. Pérez 1868); Mpio. Tomatlán, 8 km N of Cruz de Loreto (Rzedowski & McVaugh 1327); Mpio. La Huerta, Estación Biol. Chamela (Lott 1553, Magellanes 315), Arroyo Colorado (Guadalupe Ayala 401, DAV); Cuixmala, Rancho El Paraíso (Lott 3442); Mpio. Autlán de Navarro, La Resolana, Puerto de los Mazos (Wilbur 2323); Mpio. Cihuatlán, 4 mi N of Bahía Navidad (McVaugh 20842); 5 km SW Cihuatlán (McVaugh 20842); Mich., 11-13 km SW of Apatzingán (Dieterle 4306).

Monoecious twining vine; stems herbaceous, hispid-puberulent at tips; leaves 3 (-5)-lobed halfway or more, 3-13 cm long, 3-18 cm

broad, copiously pubescent above; lobes elliptic to obovate, abruptly mucronate or acuminate, margins denticulate or nearly entire; lamina paler and more densely pubescent beneath; base of lamina with lanceolate stipels 1-3 mm long; petioles 2-12 cm long; stipules lanceolate, 3-8 mm long, becoming reflexed; inflorescence peduncles 2.5-6 cm long; bracts creamy white to pale greenish at anthesis, 3-lobed to the middle, mostly 2-3 cm long, copiously pubescent (especially on the abaxial surface); lobes acuminate, denticulate (sometimes glandular-denticulate); male involucre bilabiate, bracts connate, resiniferous bracteoles laminar and entire; male flowers usually 9 or 10, stamens 25-35; female sepals 8-12, deeply pectinate-lacerate, in fruit 5-9 mm long, becoming armed with stinging hairs; style 4-8 mm long, pseudo-stigma peltate, 0.8-1.3 mm across; capsules 8.5-10 mm broad; seeds smooth, usually brown-and-gray mottled, 3-4.5 mm broad.

A number of varieties have been described for this widespread species, but our plants are referable to var. scandens. Plants from our area with conspicuously glandular-serrulate involucral bracts have been separated as D. scandens var. fimbriata (H.B.K.) Muell. Arg., based on a specimen from Campeche (Humboldt & Bonpland, P!). Although no specimens have been collected in Colima, the species surely occurs there.

Dalechampia cf. **heteromorpha** Pax & Hoffm. in A. Engler, Das Pflanzenr. IV. 147. XII (Heft 68): 26. 1919.

Evergreen rain forests or semi-deciduous forests, below 500 m.

Nay., Ver., Chis.; Guatemala, Nic., Costa Rica (Río Grande, San Ramon, Brenes 14414 (K, the lectotype), Panama.

Nay., Mpio. Ruiz, steep canyon with seasonal evergreen forest at mouth of barranca of Río San Pedro, 2-3 km E of El Venado on road from Ruiz to Jesús María, 90 m (Breedlove & Almeda 45236).

Monoecious sprawling vine; stems herbaceous, retrorse-puberulous; leaves unlobed, the blade ovate, narrowed to a minutely apiculate tip, open-cordate at base, 7-11 cm long, 5-7 cm broad, glabrous on both faces except along the midrib and veins; margins entire (with minute glandular teeth); petioles 3-6 cm long; stipules lanceolate, 2-3 mm long; inflorescence peduncles mostly 2.5-5.5 cm long; involucral bracts green even at anthesis, unlobed, 1.5-2.5 cm long and broad, obtuse or acute at the tip, nearly glabrous, margins entire or subentire; male involucel bilabiate, bracts connate, resiniferous bracteoles laminar and entire; male flowers 8 or 9, stamens 20-25; female sepals 7-11, linear-lanceolate, 4.5-5 mm long, with a few narrow lobes, armed with stinging hairs;

style 3-6 mm long, glabrous, pseudo-stigma concave, 0.5-1 mm across; capsules 6.5-8.5 mm long, minutely hispidulous and strigose; seeds smooth, 3-3.7 mm broad.

The single collection of this plant from Nayarit is very distinctive in have entirely unlobed leaves; however, forms with simple leaves are known from Chiapas and Guatemala. It is possible that 3-foliolate plants may be encountered in our area. Although the Nayarit plant is unusual in some respects (notably the elongated fruiting peduncles, one of which is 19 cm long!), it seems best referred to Dalechampia heteromorpha Pax & Hoffm., following Webster & Armbruster (1993), although that species is very close to D. cissifolia Poepp. of South America. The geographic disjunction of the Nayarit population from the nearest stations in Veracruz and Chiapas is remarkable, and it may prove to be recognized at the subspecific level.