

ADELIA L.

Dioecious trees or shrubs; twigs often spinescent, without latex; indumentum simple, non-glandular; leaves alternate, petiolate, with inconspicuous stipules, pinnately or palmately veined, eglandular, entire; inflorescences axillary, glomerulate; flowers apetalous; male flowers pedicellate; sepals 4 or 5, valvate; disk annular, thickened; stamens 8-17, monadelphous at least at base, filaments slender, longer than the anthers; female flowers long-pedicellate; sepals mostly 5 or 6, reflexed at anthesis, persistent; disk annular; ovary 3-locular, pubescent, locules 1-ovulate; styles free or basally connate, deeply lacerate; fruit capsular; seeds smooth, ecarunculate.

A neotropical genus of about 10 not always easily separable species. Adelieae.

1. Leaves pinnately veined; fruiting pedicels not distinctly articulate; branches often spiny. Adelia barbinervis

1. Leaves 3-veined at base; fruiting pedicels distinctly articulate at or above the middle; branches not spiny.

Adelia oaxacana

Adelia barbinervis Schlecht. & Cham. Linnaea 6: 362. 1831.
Ricinella barbinervis (Schlecht. & Cham.) Muell. Arg. Linnaea 34:
154. 1865; DC. Prodr. 15, part 2: 730. 1866.

In Nueva Galicia known only from a two sites; in the Sierra de Manantlán, in disturbed forest of Quercus and Guazuma, at ca 900 m.

Jal., Oax., Ver. (Papantla, Schiede 1131, B, destroyed),
S.L.P., Tab., Camp., Yuc., Chis.; Guatemala, Honduras.

Jal., Mpio. Puerto Vallarta, entre El Hundido y Las Huásimas (González T. 602); Mpio. Cuautitlán, Sierra de Manantlán, 2 km by road SW of Lagunillas de Ayotitlán (Judziewicz et al. 5221, WIS).

Dioecious shrub or tree to 6 m high; twigs distally angled, older terete, pubescent, sometimes spiny at tips; leaves obovate- or elliptic-lanceolate, 4-9 cm long, 2-3.5 cm broad, cuspidate-acuminate (acumen less than 1 cm long), cuneate at base, pinnately veined ; lateral veins 5-7, arching or almost straight; adaxially glabrous except along veins, abaxially glabrescent except along midrib and veins (rarely tomentose), with axillary tufts of hairs; margins entire; petioles mostly 2-5 mm long, pubescent; stipules narrowly lanceolate, pubescent, 1-2 mm long, early deciduous; inflorescences axillary; male glomerules mostly with

10-15 flowers; male pedicel 3.5-5 mm long, pubescent, jointed near the middle; calyx splitting into 3-5 sepals c. 2 mm long, hirsutulous on both faces; disk entire, flat, angled, 1.5-2 mm broad, strigose-pubescent; stamens (8-) 12, filaments c. 2 mm long, slender, basally connate; pistillode 0.5-1 mm high, bifid or entire, sericeous; female pedicel 15-30 mm long, slender, more or less curving in fruit, not articulated above the base; sepals 5 or 6, lanceolate, acuminate, adaxially sparsely hirsutulous, entire, in fruit 3-5 mm long; disk densely tomentose; ovary tomentose; styles dilated and lacerate, c. 1.5 mm long; fruits subglobose, shallowly lobed, strigose; cocci dorsally ribbed, 6-7 mm across; columella 3-pronged at top, 3-3.5 mm long; seeds plumply ellipsoid to subglobose, smooth, pale, 3.5-4.5 mm long.

Both species of Adelia appear to be of restricted distribution in Nueva Galicia. Adelia barbinervis appears to occur in more mesic habitats, and in fact in eastern Mexico and Central America it is found in rain forest. It is extremely closely related to A. triloba (Muell. Arg.) Hemsl. subsequently described from southern Central America, scarcely differing except in its shallowly lobed gynoeceium. The specimen from near Puerto Vallarta is unusual in having leaves densely tomentose beneath.

Adelia oaxacana (Muell. Arg.) Hemsley, Biol. Centr. Amer. Bot. 3: 129. 1883. Ricinella oaxacana Muell. Arg. Linnaea 34: 154. 1865; DC. Prodr. 15, part 2: 731. 1866.

Thorn woodland or short-tree deciduous forest, up to 500 m.

Jal., Col., Oax. (Río de las Vueltas, Liebmann, C, the holotype).

Jal., Mpio. Tomatlán, 20 km SE of Tomatlán (McVaugh 25290); Mpio. La Huerta, Estación de Biología, Chamela (Lott 1611; Magallanes 3958, TEX) edge of Buho Vereda, Cerro Colorado, Bullock 1276); Mpio. Tecalitlán, 10 km NW of Tepalcatepec (Rzedowski 17500); Col., Mpio. Manzanillo, 14 mi NW of Santiago (McVaugh 15758).

Dioecious tree or arborescent shrub 1.5-6 m high; spines not evident; twigs terete, pubescent; leaves elliptic to ovate, (2-) 4-10 (-14) cm long, 2-4 (-10) cm broad, acute, entire, subcordate at base, 3-veined from the base with ca 5 lateral veins on each side; above scattered-hirsutulous with simple hairs, beneath tomentose; petiole 3-25 mm long, pubescent; stipules lanceolate, pubescent, 4-8 mm long; male inflorescences unknown; female flowers 1-3 in axillary clusters; pedicel (1-) 3-4.5 cm long in fruit, articulated at or above the middle; sepals 5 or 6, often unequal, lanceolate, hirsutulous

on both faces, 2.5-3 mm long; ovary sericeous-tomentose; styles c. 1.5 mm long, highly dissected; fruits sericeous, shallowly lobed, not carinate; cocci 7-8 mm long; seeds globose or subglobose, smooth, dark grey, 3.7-4.2 mm in diameter.

At present, Adelia oaxacana is known only from Jalisco, Colima, and Oaxaca, but it seems probable that it will be found in areas of thorn woodland in intervening areas. The leaves of specimens from the Chamela area are considerably larger than those described from Oaxaca by Mueller, but otherwise the characters are concordant.