EW YORK BUTANICAL GARDEN

CHANEKIA, A NEW GENUS IN THE LAURACEAE (a)

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In the identification of collections of Lauraceae obtained by the Carnegie-Michigan expeditions to the Yucatan Peninsula, and in studying other material from Mexico and Central America, certain species have been found which apparently represent an undescribed genus. In the course of the study, types and certain other specimens in the herbaria of Field Museum, Arnold Arboretum, and the University of California were examined.

CHANEKIA Lundell, gen. nov. (b)

Panniculae axillares vel pseudoterminales; flores in pedunculorum apice subumbellati vel racemosi, hermaphroditi; perianthii tubus infundibuliformis vel subconicus; limbi segmenta 6, subaequalia, inflexa; staminodia cyclorum I, II, et IV nulla; stamina cycli III fertilia, tubum circum gynaeceum formantia; filamenta crassa, biglandulosa; antherae 2-cellulae, extrorsae; ovarium glabrum; hypanthium accrescens, cupulare, dupliciter marginatum; bacca ellipsoidea vel ovoidea.

Trees; leaves alternate; panicles axillary or pseudoterminal, the peduncles solitary or rarely fasciculate; flowers subumbellate or racemose, perfect; hypanthium conspicuous, infundibuliform or subconical; perianth 6-parted, the segments inflexed, small, unequal, the 3 outer segments largest, enclosing the androecium except for a small apical aperture; stamens of series I, II, end IV absent; staminodia none; the 3 stamens of series III fertile, forming a tube surrounding the gynaeceum; filaments thick, biglandular; staminal tube obtuse-pyramidal, short; anthers 2celled, extrorse; pores apical, semi-exserted; ovary glabrous; style semi-exserted from the staminal tube or included; accrescent hypanthium cupular, double-margined; berry ellipsoid or ovoid.

Type species, Chanekia campechiana (Standl.) Lundell.
Chanekia is intermediate between Acrodiclidium and Misanteca. In Acrodiclidium the stamens of series I and II are reduced to foliaceous staminodia, whereas in Chanekia staminodia are absent. In Misanteca the anthers are exserted from the perianth, the stamens of series III are comnate to the apex, and the staminal tube is obtuse-cylindric, as contrasted with the included anthers, partially connate stamens, and obtuse-pyramidal staminal tube in Chanekia.

Because the floral characters were not given in the original descriptions, <u>Chanekia campechiana</u>, <u>C. mexicana</u>, and <u>C. misantlae</u> are here redescribed.

CHANEKIA CAMPECHIANA (Standl.) Lundell, comb. nov.

Ocotea campechiana Standl., Carnegie Inst. Wash. Publ.

461: 56. 1935.

Misanteca campechiana (Standl.) Lundell, Carnegie Inst. Wash. Publ. 478: ---. 1937.

A tree, height 8 to 25 m., diameter 35 to 45 cm.; branchlets minutely sericeous, canescent; petioles 4 to 10 mm. long, minutely sericeous; leaf-blades oblong-lanceolate or linear-lanceolate, 4 to 11 cm. long, 0.8 to 3 cm. wide, apex long caudate-acuminate, the acumen obtusish, base acute, coriaceous, minutely sericeous above, glabrate with age, minutely sericeous beneath; costa elevated, lateral nerves inconspicuous; inflorescence axillary, paniculate, 2 to 5.5 cm. long (including the peduncles), the peduncles solitary, minutely sericeous; flowers subumbellate; pedicels 1 to 2.5 mm. long, minutely sericeous; hypanthium obovoid-conical, 2 to 2.3 mm. long, about 2 mm. in diameter, fleshy, minutely sericeous; perianth 6-parted, the segments squamiform, thick, subequal, depressed triangular-ovate, 0.9 to 1.5 mm. wide, acutish, hairy inside; staminodia of series I, II, and IV absent; the 3 stamens of series III fertile, connate at base, forming a tube around the gynaeceum, pilose inside and at base outside; anthers 2-celled, extrorse; the pores apical, semi-exserted from the perianth; glands about equalling one-third the length of the stamen, squamiform, connate laterally at base with those of adjacent stamens; ovary glabrous, 1-celled; style glabrous, included or shortly exserted from the apex of the staminal tube.

Specimens examined: MEXICO: Campeche: Tuxpeña, Lundell 1295, type collection; Lundell 1380. GUATEMALA: Department of Petén: La Libertad, Lundell 3065, 3359, 3409; vernacular names "ektit", "dzol". Uaxactun, Bartlett 12339; vernacular name "copal-chi".

The species also occurs in British Honduras.

CHANEKIA PECKII (I. M. Johnston) Lundell, comb. nov.

Misanteca Peckii I. M. Johnston, Contr. Gray Herb. 70:

70. 1924.

BRITISH HONDURAS: Without locality, Peck 826, type (Gray Herbarium).

The writer has not seen the type, but the species is undoubtedly referable to Chanekia.

CHANEKIA CAUDATA Lundell, sp. nov.

Arbor, 7-metralis; petiolis 4--7 mm. longis, albido-

pubescentibus; folia lanceolato-oblonga, 5--9.5 cm. longa, 1.6--3.2 cm. late, apice caudato-acuminata, basi subacuta, adulta glaberrima, chartacea; inflorescentia axillaris, sub-umbellata-racemosa, 2--3.5 cm. longa (pedunculo incluso), pauciflora; pedicellis 3.5--5.5 mm. longia, glabris; flores albi, hypanthio subgloboso-turbinato, 1.8--2 mm. longo, 2.2 mm. diametro, carneo, glabro; perianthium 6-partitum, segmentis squamiformibus, crassis, subaequalibus, ca. 1.1 mm. latis; staminodia cyclorum I, II, et IV nulla; staminia cycli III fertilia, basi connata tubum pilosum circum gynaeceum formantia, antheris 2-cellulis, extrorsis; glandulae inconspicuae, squamiformes; ovarium glabrum, 1-cellulum, stylus glaber, breviter ex tubi apice staminalis exsertus; fructus ignotus.

A small tree, height 7 m., diameter 7.5 cm.; branchlets slender, densely pubescent, grayish; petioles 4 to 7 mm. long, canaliculate, pubescent with grayish hairs; leafblades lanceolate-oblong, 5 to 9.5 cm. long, 1.6 to 3.2 cm. wide, apex long caudate-acuminate, the acumen narrow, obtusish, oblique, base acutish, glabrous above except for a few hairs along the costa, glabrate beneath or with few scattered appressed hairs, costa prominent, lateral nerves inconspicuous, finely reticulate-veined, chartaceous; inflorescence axillary, subumbellate-racemose, 2 to 3.5 cm. long (including peduncles), the peduncles solitary, 3- to 6-flowered, the flowers white, drying brownish-black; pedicels alender, 3.5 to 5.5 mm. long, glabrous; hypanthium subglobose-turbinate, 1.8 to 2 mm. long, 2.2 mm. in diameter, fleshy, glabrous; perianth 6-parted, the segments squamiform, thick, equal or nearly so, ovate-orbicular, about 1.1 mm. wide, acutish, hairy inside; staminodia of series I, II, and IV absent; the 3 stamens of series III fertile, connate at base, forming a short tube around the gynaeceum, hairy inside and at base outside; anthers 2celled, extrorse, the pores apical; glands small, squamiform; ovary glabrous, 1-celled; style glabrous, shortly exserted from apex of staminal tube.

Type in the herbarium of the University of Michigan, C. L. Lundell 6183, collected in advanced forest on limestone along the Arenal-Valentin road, El Cayo District, British Honduras, June 21, 1936.

Additional specimens examined: BRITISH HONDURAS: Toledo District: Camp 32, British Honduras-Guatemala boundary survey, Schipp 1279.

CHANEKIA CORIACEA Lundell, sp. nov.

Arbor, 10-metralis, glabra; petiolis 6--10 mm. longis; folia lanceolata vel oblongo-lanceolata, 5.5--11 cm. longa, 1.9--3.8 cm. lata, apice acuminata, basi subacuta, coriac-

ea; infructescentiae axillares, pedunculis 1--3 cm. longis; hypanthium accrescens, cupulare, dupliciter marginatum, 1.6--2.3 cm. diam., ca. 1 cm. longum; bacca ellipsoidea, ca.

1.7 cm. longa, 1.2 cm. diam.

A tree, height 10 m., diameter 22 cm., entirely glabrous; petioles 6 to 10 mm. long; leaf-blades lanceolate or oblong-lanceolate, 5.5 to 11 cm. long, 1.9 to 3.8 cm. wide, apex acuminate, the acumen obtusish, base acutish, coriaceous, costa prominent, lateral nerves inconspicuous; infructescence axillary, bearing a single fruit; peduncle 1 to 3 cm. long, thick; the accrescent hypanthium very shallow, verrucose, cupular, double-margined, 1.6 to 2.3 cm. in diameter, about 1 cm. long; berry ellipsoid, about 1.7 cm. long, 1.2 cm. in diameter, abruptly short-apiculate.

Type in the herbarium of the University of Michigan, W. A. Schipp 1282, collected at Camp 31, British Honduras-

Guatemala boundary survey, altitude 700 m.

The herbarium label bears the following data: "Small tree in shady valley, also on hill top in open places; flowers white; fruits black with red pedicel. Occasional."

CHANEKIA MISANTLAE (Brand.) Lundell, comb. nov.

Acrodiclidium misantlae T. S. Brandegee, Univ. Calif.

Bot. 6: 497. 1919.

A small tree, entirely glabrous; branchlets, peduncles, and petioles drying black; petioles 5 to 14 mm. long; leafblades elliptic or narrowly elliptic-obovate, 4.5 to 12.5 cm. long, 2 to 4.8 cm. wide, apex obtuse, base cuneate, subcoriaceous, costa elevated beneath, lateral nerves inconspicuous, finely but prominently reticulate-veined; inflorescence axillary, 1.5 to 3.5 cm. long (including peduncles), the peduncles solitary, very slender 1- to 3flowered, the flowers drying brownish-black; pedicels slender, 3.5 to 7 mm. long; hypanthium subglobose-turbinate, 2 to 2.2 mm. long, 2.5 to 3.6 mm. in diameter, fleshy; perianth shallowly 6-parted, the segments squamiform, thick, subequal, depressed-orbicular, 1.1 to 1.9 mm. wide, rounded or obtuse-apiculate; staminodia of series I, II (?), and IV absent; the 3 stamens of series III fertile, connate at base, forming a short tube around the gynaeceum, the tube glabrous inside and outside; anthers 2-celled, extrorse, the pores apical; ovary glabrous, 1-celled; style glabrous, apparently included in the staminal tube; cupule double-margined, 9 mm. in diameter

Specimen examined: MEXICO: Vera Cruz: Misantla, Purpus

8145, type (Herb. Univ. Calif. no. 200935).

Because of the few flowers present on the type, only two were dissected. The character of the glands was not determinable from the material available. CHANEKIA MEXICANA (Brand.) Lundell, comb. nov.

Acrodiclidium mexicanum T. S. Brandegee, Univ. Calif.

Bot. 6: 497. 1919.

A small tree; branchlets, peduncles, and petioles densely fulvous-pubescent; petioles thick, 3 to 9 mm. long; leafblades lanceolate, 4 to 14 cm. long, 2 to 5 cm. wide, apex acute or acuminate, the acumen sometimes obtusish, base obtuse or acutish, brownish-green above and glabrescent with age, paler and pilose beneath, subcoriaceous, costs and lateral nerves slightly impressed above, prominent beneath; inflorescence axillary or subterminal, paniculate, 2 to 5.5 om. long (including peduncles), the peduncles solitary; flowers subumbellate, numerous; pedicels 2 to 3 mm. long, glabrous; hypanthium subconical, 2 to 2.2 mm. long, about 1.5 mm. in diameter, fleshy, glabrous; perianth shallowly 6-parted, the segments squamiform, thick, subequal, depressed triangular-ovate, 0.8 to 1 mm. wide; staminodia of series I, II, and IV absent; the 3 stamens of series III fertile, connate at base, forming a tube around the gynaeceum, pilose inside and at base outside; anthers 2-celled. extrorse; the pores apical, semi-exserted from the perianth; glands one-third the length of the stamen, small, squamiform; ovary glabrous, 1-celled; style glabrous, included or shortly exserted from the apex of the staminal tube.

Specimens examined: MEXICO: Vera Cruz: Zacuapan, Purpus 8081, type (Herb. Univ. Calif. no. 200978); Purpus 14335.

⁽a) Contribution from the Herbarium of the University of Michigan.

⁽b) The genus is named for Mercedes Chanek, the Maya plant collector.