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PRIONOSCIADIUM TURNERI, A NEW SPECIES FROM COLIMA, MEXICO (APIACEAE, APIOIDEAE)

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ABSTRACT

The current status and brief history of the genus *Prionosciadium* S. Wats. is summarized, and an additional taxon, ***P. turneri*** Constance & Affolter, *spec. nov.*, from Colima, México, is described and illustrated.

KEY WORDS: Apiaceae, Colima, gypsum, México, *Prionosciadium*

The endemic Mesoamerican genus *Prionosciadium* was proposed by Sereno Watson in 1888 on the basis of the three taxa *P. pringlei* S. Wats. and *P. madrense* S. Wats., both described from Pringle collections, and *P. mexicanum* (L.) S. Wats., transferred from *Angelica* L. and eventually synonymized under *P. thapsoides* (DC.) Mathias. The root of the generic name, *prion* [a saw], derives from the sierran habitat of the Pringle collections rather than from the characteristic serration of leaf blades and winged rachises.

Two years later, Coulter & Rose (1900, p. 148) noted that, "Recent collections have remarkably increased it [*Prionosciadium*], no less than twelve additional species being described and with indications of still others." In the following decade, Rose (1905, 1906, 1909) added seven species.

Mathias & Constance reduced several described species to synonymy and added a new one to achieve a total of sixteen species and one variety in *North American Flora* (1945). Nearly 30 years later, the same authors proposed two additional taxa (1973). Number of species has remained static for the past 20 years.

The first attempted arrangement, or "synopsis of specific groups" (Coulter & Rose 1900), divided the constituent taxa then known into two major categories, depending upon whether or not the main rachis and its primary branches are conspicuously winged with serrate wings. That primary division of the key remains in place today, and serves to explain why lower leaves are so essential in identifying the species. Since the plants often reach a height of several meters, these leaves are frequently unrepresented in herbarium specimens. Lack of lower leaves, or the lack of attention to them, is responsible for this belated recognition of the following taxon.

PRIONOSCIADIUM TURNERI Constance & Affolter, Figure 1.

Prionosciadium turneri Constance & Affolter, *spec. nov.* TYPE: MEXICO. Colima: shaded northern slopes on low mountain ridge, ca. 20 km SSW of Colima, gypsum outcrops with begonias, ca. 400 m, spring 1978, *Billie L. Turner s.n.* (HOLOTYPE: UC!; Isotypes: MEXU!,TEX). (From garden-grown material, C-2053).

Plantae graciles leviter succulentae glaucaeve inflorescentia foliisque minute papillosis; folia basalia triangulo-ovata 1-2-pinnata divisionibus lanceolatis vel ovatis acuminatis serratis labatisve, petiolo rhachidive exalatis; folia caulina opposita petiolis gracilibus vagina breve angusta inconspicua; involucrum plerumque deficiens bracteolis involucellorum filiformibus; radii subaequales, pedicellis fertilibus paucis; flores flavescentes disco prominenti ovario plus minusve scaberulo; fructus late ovalis, costis dorsalibus prominentibus lateralibus anguste alatis; vittae pleures.

Plants slender, slightly succulent and glaucous, 6-15 dm tall from a massive odorless white caudex, the inflorescence and foliage minutely papillose (Figure 1d); basal leaves triangular-ovate, 1-2 dm long and broad, 1-2-pinnate, the leaf divisions lanceolate to ovate, acuminate, 1.5-6.0 cm long, 0.5-2.5 cm broad, mucronulate-serrate and often lobed toward base; petiole slender, unwinged above the short oblong sheath, 6-12 cm long; cauline leaves opposite, like the basal, slender-petiolate, the sheaths short, narrow, inconspicuous; inflorescence of terminal compound umbels; involucre of 1 or 2 filiform bracts or lacking; rays 7-12, spreading-ascending, subequal, 2.0-4.5 cm long; umbellets 10-20-flowered; involucel of 2-6 filiform bractlets 3-5 mm long; fertile pedicels 2-5, 2-3 mm long; flowers pale yellow, the styles 1.5 mm long, the disk prominent, the ovary papillose; fruit broadly oval, 4.0-4.5 mm long, 3 mm broad, rounded to truncate at apex and base, ± papillose, the dorsal ribs prominent, the lateral broadly winged, the wings nearly as broad as the body; vittae 1-3 in intervals, 4-6 on commissure; seed dorsally compressed in transection, the face broadly sulcate; cotyledons ovate, obtuse, 15-25 mm long, 8-10 mm broad; chromosome number, $n = 22$.

PARATYPES: MEXICO. Colima: mountain summits near pass ca. 11 mi SSW of Colima on Manzanillo road, occasional on rocks in ravine, deciduous woodland, 500 m, 19 Jul 1957, *McVaugh et al. 15,566* (MICH,UC); abundant on open grassy summits and bluffs, 10 Aug 1957, *16,057* (MICH,UC).

The complete lack of any winged rachis, the slender-petiolate cauline leaves, the papillose ovaries, and the small fruit appear to separate this from any other species in the genus. It was grown at Berkeley from seed generously supplied by Dr. Turner in 1978, and it is still growing (if rarely fruiting) seventeen years later. It was first thought it might be *Prionosciadium acuminatum* B.L. Rob.., which has also been in cultivation in the same period (C-1871), but it lacks the strongly winged leaf rachises, the reddish-brown petals, and the milky juice of that species.

The figure was prepared by Charlotte Mentges Hannan. The chromosome count was obtained by the late Dr. Tsanlang ["T. L."] and FeiMei Chuang.

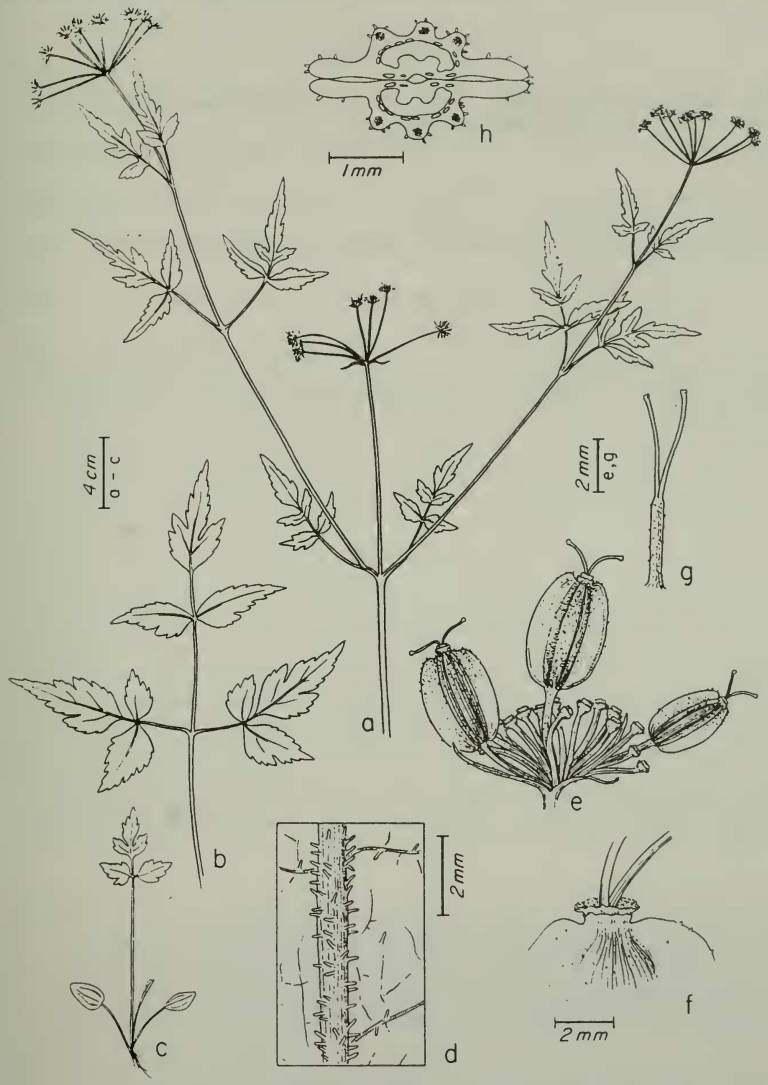

Figure 1. *Prionosciadium turneri*, a. partial inflorescence; b. lower cauline leaf; c. seedling; d. detail of lower leaf surface, showing papillae; e. fruiting umbellet; f. apex of fruit; g. carpophore; h. fruit transection. (a-d from type collection, e-h from *McVaugh et al. 16,057*).

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