

**A NEW SPECIES OF *PITTOCAULON* (ASTERACEAE, SENECEONEAE)  
FROM OAXACA, MEXICO**

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**ABSTRACT**

*Pittocaulon calzadanum* B.L. Turner, *spec. nov.* is described and illustrated. It is a tree 3-5 m high with fore-shortened stems, rayless white heads and pinnate leaves and is known from only a restricted area of Oaxaca, México (Mpio. Santos Reyes Tepejillo). The species does not appear to be especially closely related to yet other taxa of *Pittocaulon*, and future workers might treat the species as belonging to a monotypic genus.

**KEY WORDS:** Asteraceae, Senecioneae, *Pittocaulon*, systematics, México, Oaxaca

Routine identification of Mexican Asteraceae has revealed the following novelty.

***PITTOCAULON CALZADANUM*** B. L. Turner, *spec. nov.* Figure 1. TYPE: MEXICO. Oaxaca: Distr. Santiago, Juxtlahuaca, Mpio. Santos Reyes Tepejillo, 3 km N of Santos Reyes Tepejillo "a Corral de Piedra" (17° 27' N × 97° 57' W), ca. 1770 m, 21 Apr 1995, J.I. Calzada 19872 (HOLOTYPE: TEX; Isotypes: to be distributed).

*Arbor* 3--5 m alta. *Caules* terminales non angustati, cicatricibus foliorum delapsorum notati; cortex semisucculenta, textura interior lignea, cellulis resiniferis inspersa. *Folia* alterna; petioli 3--5 cm longi; laminae latae, ovato-ellipticae, pinnatinerviae, 10--20 cm longae, 3--7 cm latae, tomentosae; margine irregulariter lobatae. *Capitulescentia* paniculato-corymbosa 50--100-cephala, aut triangulata aut ovata, pedunculis ultimis tomentosis, saepius 3--8 mm longis. *Involucra* cylindro-campanulata; bracteae interiores 8, lanceolatae, 6--7 mm longae, 1--2 mm latae, tomentosae aetate glabratae, marginibus chartaceis candidis. *Receptaculum* circa 2.5 mm longum, alveolatum, paleis nullis. *Flosculi* radiantes nulli. *Flosculi disci* cujusque capituli 8; corollae candidae, glabrae, 7--9 mm longae, lobis irregularibus 2--3 mm longis, ut videtur lactiferis. *Achenia* (immatura) columnaria, circa 2.5 mm longa, glabra;



carpopodia bene evoluta, annulata; pappi setae capillares, numerosae candidae, 6--7 mm longae, marginibus (praecipue inferne) scabridiusculae.

Tree 3-5 m high. Stems (terminal), abruptly fore-shortened, the bark semisucculent, and the interior with hard woody tissue, the latter suffused with resinous cells. Mature leaves alternate, densely velvety-tomentose, deciduous at anthesis, leaving a pronounced scar; petioles 3-5 cm long; blades broadly ovate to deltoid, pinnately nervate, 10-20 cm long, 3-7 cm wide, moderately tomentose on both surfaces, the margins irregularly lobate. Capitulescence a terminal, ovoid or trianguloid, corymbose panicle of numerous (50-100) heads, the ultimate peduncles tomentose, mostly 3-8 mm long. Involucres cylindrocampaulate, the inner bracts 8, lanceolate, 6-7 mm long, 1-2 mm wide, tomentose, glabrate with age, the margins white-chartaceous. Receptacle ca. 2 mm across, epaleate, alveolate. Ray florets absent. Disk florets 8-10 per head; corollas reportedly white, glabrous, 7-9 mm long; tubes 4-5 mm long; the throat 2-4 mm long, irregularly lobed, the lobes 2-3 mm long, apparently lactiferous. Achenes (immature) columnar, ca. 2.5 mm long, glabrous; carpopodia well-developed, annulate; pappus of numerous white capillary bristles 6-7 mm long, the margins minutely scabridulate, especially below.

Label data describe the tree as 3 m high having white corollas and yellow stamens. It also states that the plant occurs in tropical deciduous forests and is "mass bien escasa". Calzada, who collected the type, revisited the site and tree concerned in July of 1995 (*Calzada s.n.* [TEX]) so as to collect mature leaves (not shown in Figure 1); leaf measurements in the present description were obtained from this collection. José Panero, who also visited the site concerned, states (pers. comm.):

The new *Pittocaulon* is a very remarkable plant. It is a small tree of the tropical deciduous forest. It can grow to 5 m tall. The leaves are kind of gray-green, somewhat silvery. The plant is an inhabitant of rocky, limestone outcrops. I first saw the plant in March of this year and asked Ismael [Calzada] to collect it. At first, I thought it was going to be a weird *Parthenium*, later I was surprised to see it was a *Senecio*.

It grows with *Fraxinus purpusii*, *Conzattia multiflora*, *Xylosma flexuosum*, *Schoepfia angulata*, *Erythrina petrea*, *Croton* sp., *Jatropha* sp., *Bunchosia trifoliata*, *Quercus glaucoides*, among others.

As noted by Panero, this is a remarkable *Pittocaulon*, the latter a generic segregate from *Senecio* first proposed by Robinson & Brettell (1973), who recognized five species in the genus, all confined to south-central México. Jeffrey (1992) also recognized the genus as distinct, emphasizing its subumbellate inflorescences, cortical resin ducts and palmately veined leaves. Barkley (1985), however, retained *Pittocaulon* in *Senecio* (s.l.) although he now accepts its generic status (pers. comm.). *Pittocaulon calzadanum* has a corymbose-paniculate capitulescence, pinnately veined leaves, eradiate heads, and relatively deeply lobed, white corollas. In short, a very different looking *Pittocaulon* than those described to date. When I first examined the plant I took it to be, because of its narrow white discoid heads, a species of *Digiticalia*, but the woody habit, abruptly foreshortened stems, semisucculent bark and attainment of anthesis before the leaves appear, strongly suggest that it belongs to the *Pittocaulon*





Figure 1. *Pittocaulon calzadanum*, from holotype.

alliance, although some workers, because of its differing capitulescence, pinnately veined leaves, narrow involucre, and rayless white corollas might treat it as a monotypic genus.

It is a pleasure to name this remarkable new species for J. Ismael Calzada, premier collector working out of UNAM, who first collected the taxon concerned.

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