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NEW TAXON IN *PSACALIUM* (ASTERACEAE: SENECIONEAE) FROM OAXACA, MEXICO

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Abstract: A new peltate-leaved taxon of *Psacalium*, **Psacalium putlanum**, is described and illustrated from southwestern Oaxaca, Mexico. It appears to be closely related to the widespread *P. peltigerum*. Additionally, the closely related *P. peltigerum* var. *latilobum* Pippen of Guerrero is elevated to specific rank as **P. latilobum** (Pippen) B.L. Turner. A phototype and drawing of *P. putlanum* are provided, along with a map showing the distribution of the taxa concerned.

Keywords: Asteraceae, Senecioneae, Psacalium, Psacalium peltigerum, Mexico.

The following names and/or taxa are proposed, both related to *Pasacalium peltigerum*, as noted in the account that follows:

Psacalium putlanum B.L. Turner, **sp. nov.**, Figs. 1, 2, 3.

TYPE: **MEXICO**. OAXACA: Distrito Putla, Mpio. Santa Cruz Itundujia, Camino al Agua del Plantanal a 2.31 km en LR (S) de la Agencia de Iturbide. Selva baja caducifolia, 16° 41' 47.45" N, 97° 34' 17.8" W, ca. 1110 m, *Kenia V. Gutierrez 2792* [con M. Trujillo y H. Cruz] (HOLOTYPE: TEX).

Psacalium peltigerum (B. L. Rob. & Seat.) Rydb. similes sed caulibus dense gossypino-pubescentibus, foliis crassioribus, capitulis minoribus (bracteis involucralibus 5–6 mm longis vs. 7–8 mm), faucibus corollarum 1–2 mm longis (vs. caventibus) et acheniis 5- nervatis (vs. 9-nervatis).

ROBUST HERBS 0.6–1.2 m high, arising from thick ligneous roots. STEMS stiffly erect, perennial, 0.6–1.0 cm thick at mid-stem, bearing 2–3, distantly spaced leaves, densely cottony pubescent, especially below. LEAVES alternate, peltate, the petioles 6–30 cm long, pubescent like the stems; blades thickened and deeply incised, the divisions 4-12 cm long, 2-5 cm wide, pinnately veined, their margins irregularly serrate. CAPITULESCENCE a terminal, corymbose panicle, 50-60 cm high, the ultimate peduncles 1-3 cm long. INVOLUCRES narrowly campanulate, ca 3 mm wide, the bracts 5, 5-6 mm long, glabrous, ebracteate or nearly so. FLORETS 4-5, ray florets absent. COROLLAS creamy white, glabrous, ca. 8 mm long; tubes 1-2 mm long; throats 1-2 mm long; lobes 3-4 mm long. ANTHERS pale brown, ca. 3 mm long, appendages lanceolate. ACHENES black, glabrous, 5-ribbed; pappus of numerous, tawny-white, persistent bristles, 5-6 mm long.

The novelty is clearly related to *Psaca-lium peltigerum* and *P. hintonii* (Pippen) H. Rob. & Brettell, of more northerly climes (Fig. 3), and will key directly to the former taxon in the accounts of both Pippen (1968) and Robinson and Brettell (1973). It is readily distinguished from *P. peltigerum* by a number of characters, as noted in the above diagnosis. The following key well help in their identification:

1.	Stems glabrous, or glabrate	P. f	peltigerum
1.	Stems sparsely to densely puberulent		(2)
2.	Leaves with broad linear lobes; stems densely cottony-pubescent	Р.	putlanum
2.	Leaves with deltoid lobes; stems sparsely puberulent	Ρ.	latilobum

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FIG. 1. Holotype of Psacalium putlanum (TEX).



FIG. 2. Habit, capitula, achene, and pappus bristle of *Psacalium putlanum* (drawn from holotype).

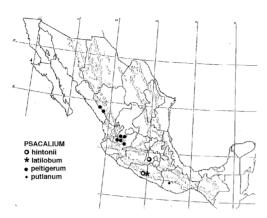


FIG. 3. Distribution of the *Psacalium* peltigerum complex.

The species is named for the Distrito Putla, whence the type

ADDITIONAL SPECIMEN EXAMINED: **MEXICO**. OAXACA: A 300 m en LR (N) de la colonia Agua del Platanal, Agencia de Iturbide, ca 968 m, 18 Jun 2008, *Gutierrez 2743* (TEX).

Psacalium latilobum (Pippen) B.L. Turner, stat. nov.

Based upon *Psacalium peltigerum* var. *latilobum* Pippen, Contr. U.S. Natl. Herb. 34: 431. 1968.

The type of this taxon is from southcentral Guerrero (Fig. 3) and appears to be as distinct as *Pasacalium hintonii*, which Robinson and Brettell (1973) elevated to specific rank from its varietal position within *P. peltigerum*.

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LITERATURE CITED

- Pippen, R. W. 1968. Mexican "Cacalioid" genera allied to *Senecio* (Compositae). Contr. U.S. Natl. Herb. 34: 365–447.
- Robinson, H. and R. D. Brettell. 1973. Studies in the Senecioneae (Asteraceae). III. The genus *Psacalium*. Phytologia 27: 254–264.