

**A NEW SPECIES OF DECACHAETA (ASTERACEAE:
EUPATORIEAE), FROM OAXACA, MEXICO****Billie L. Turner**

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ABSTRACT

A new species, **Decachaeta serboana** B.L. Turner, sp. nov. is described from Oaxaca Mexico. It is closely related to the more wide spread *D. incompta*. A photograph of the type is provided, along with a revised key to the Mexican taxa. A map showing the distribution of *D. incompta* and *D. serboana* is presented. *Phytologia* 93(3):346-350 (December 1, 2011)

KEY WORDS: Asteraceae, Eupatorieae, *Decachaeta*, *D. incompta*, Mexico, Oaxaca.

Routine identification of Mexican comps has prompted the present paper.

DECACHAETA SERBOANA B.L. Turner, sp. nov. Fig. 1

Decachaetae incomptae (DC.) King & H. Rob. similis sed differt foliis tenuioribus glabris, capitulis minoribus (2-3 mm in altitudine vs. 4-5 mm), flosculis paucioribus (3-5 vs. 8 vel plus), et receptaculis glabris (vs. pubescentibus).

Perennial herbs or straggling shrublets to 1.5 m high. **Stems** glabrate or nearly so, straight to somewhat fractiflex above. **Leaves** alternate, thin, ovate-lanceolate to somewhat deltoid-lanceolate, 10-30 cm long, 7-18 cm wide; petioles 1-10 mm long; blades pinnately nerved, glabrous above and below, the lower surfaces minutely punctate, their margins markedly dentate-lacerate. **Capitulescence** a terminal,

bracteate, cymose panicle 15–30 cm long, 15–25 cm wide, the ultimate peduncles 1–2 mm long, viscid-puberulent. **Heads** narrowly campanulate, 3–4 mm long, ca 1.5 mm wide. **Receptacles** ca 0.5 mm across, epaleate, glabrous or sparsely pubescent. **Involucres** 2–3 mm long, ca 1.5 mm wide, markedly atomiferous-glandular to nearly glabrate; bracts ca 8, 2–4 seriate, gradate, their apices broadly acute to obtuse. **Florets** 3–4(5) per head; corollas white, 5-lobed, ca 2 mm long, the throats indistinct. **Stamens** with terminal appendages broader than long. **Achenes**, ca 1 mm long, 4-sided, sparingly hispid with ascending hairs; pappus of ca 20–25 setaceous bristles 1.5–2.0 mm long.

TYPE: MEXICO. OAXACA: **Mpio. Santiago Textitlan**, “sur de Tierra y Libertad camino a Zaniza,” pine-oak forests, ca 1830 m, 15 Nov 2006, *Silvia H. Salas M.* 6086 [con A. Nava y A. Sanchez] (Holotype: TEX).

ADDITIONAL SPECIMENS EXAMINED: MEXICO. OAXACA: **Mpio. San Juan Lachao**, 34.5 km N of Mixtepec, on road from Puerto Escondido to Oaxaca. “Half-shaded, wet slope along a stream,” 1850 m, 13 Nov 1997, *Yahara et al.* 1130 (TEX). **Mpio Santa Cruz Itundujia**, “La Estaca, sobre brecha, a 1.66 km en LR (N) de la Agencia de Morelos,” ca 1500 m, 11 Oct 2007, *Gutierrez* 2430 (TEX). **Mpio. Santiago Textitlan**, “Paraje arriba de Rio Tronco rumbo a Rio Palo,” cut-over pine-oak forests in red soil at mouth of arroyo, ca 1781 m, 4 Nov 2006, *Olazo* 816 (TEX); “Paraje Rio Aguacate,” ca 1875 m, 14 Dec 2006, *Olazo* 1123; “Arriba de Barranca Nube,” pine-oak forests (16° 41' 38" N, 97° 15.5' 01" W), ca 1891 m, 27 Dec 2006, *Salinas* 1322 (TEX). **Mpio. Santiago Juxtlahuaca**, “Senda para el rio y sacada de san Juan Pinas.” ca 1375 m, 22 Nov 1995, *Calzada* 20506 (TEX).

In my treatment of *Decachaeta* for The Comps of Mexico (Turner 1997), *D. serboana* will key to *D. incompta* (DC.) King & H. Rob., the latter readily distinguished by its larger, usually markedly pubescent leaves, and larger heads having more numerous florets. Distribution of the two species is shown in Fig. 2.

The species name is an acronym of the Socieda para el Estudio de los Recursos Bioticos de Oaxaca (SERBO). This organization has helped fund the collection of numerous plants from the area concerned.

A revised key to the Mexican species of *Decachaeta*, with the addition of the present novelty, follows:

1. Leaves along upper stems alternate.....(2)
1. Leaves opposite throughout.....**D. perornata**

2. Leaves not glandular-punctate beneath.....**D. haenkeana**
2. Leaves clearly glandular-punctate or atomiferous-glandular beneath.....(3)

3. Petioles winged throughout.....(6)
3. Petioles without wings.....(4)

4. Pappus a ring or crown of minute bristles 0.2 mm long or less; receptacle plane, glabrous or nearly so.....**D. pyramidalis**
4. Pappus of bristles 2-5 mm long; receptacle convex, pubescent.....(5)

5. Involucral bracts 12-15; florets 10-12 per head.....**D. ovatifolia**
5. Involucral bracts 6-10; florets 6-10 per head.....**D. scabrella**

- 6(3). Phyllaries narrowly acute; corollas lavender; Cps...**D. ovandensis**
6. Phyllaries acute to rounded; corollas white to pinkish.....(7)

7. Leaves pubescent beneath (rarely not); involucres 4-5 mm long; widespread.....**D. incompta**
7. Leaves glabrous beneath; involucres 2-3 mm long; sw Oax.....
.....**D. serboana**

ACKNOWLEDGEMENTS

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LITERATURE CITED

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Turner, B.L. 1997. *Decachaeta*, in Comps of Mexico. Phytologia Memoirs 11: 90-93.

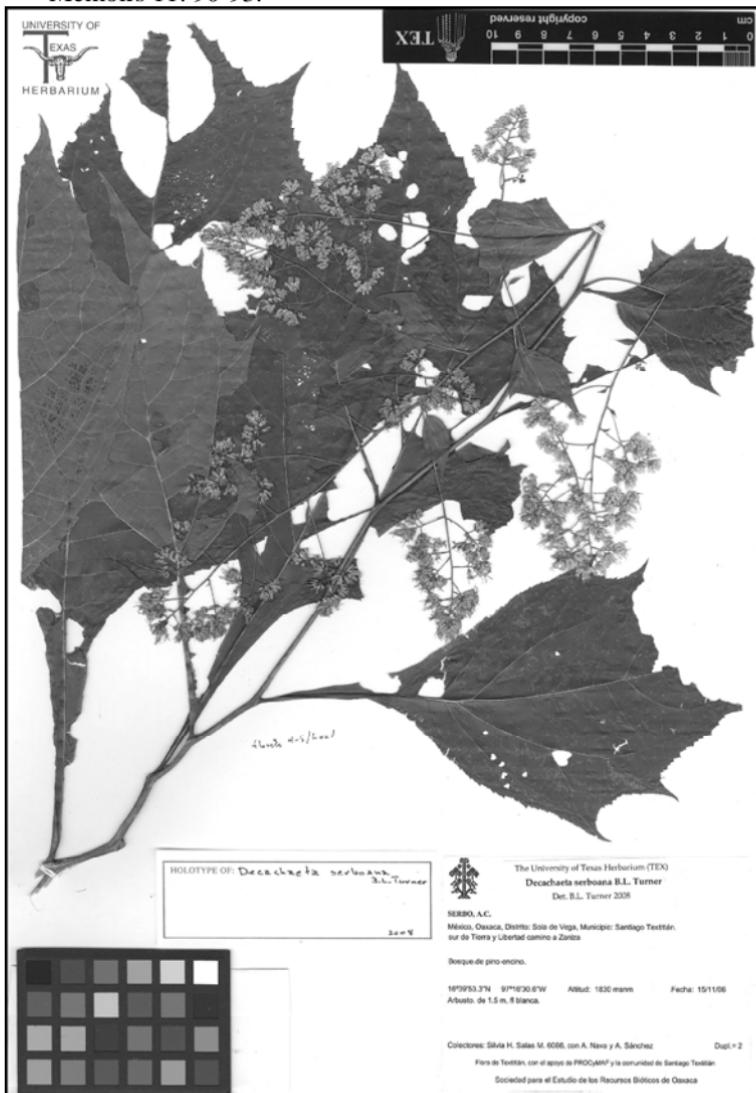


Fig. 1. Holotype of *Decachaeta serboana*.

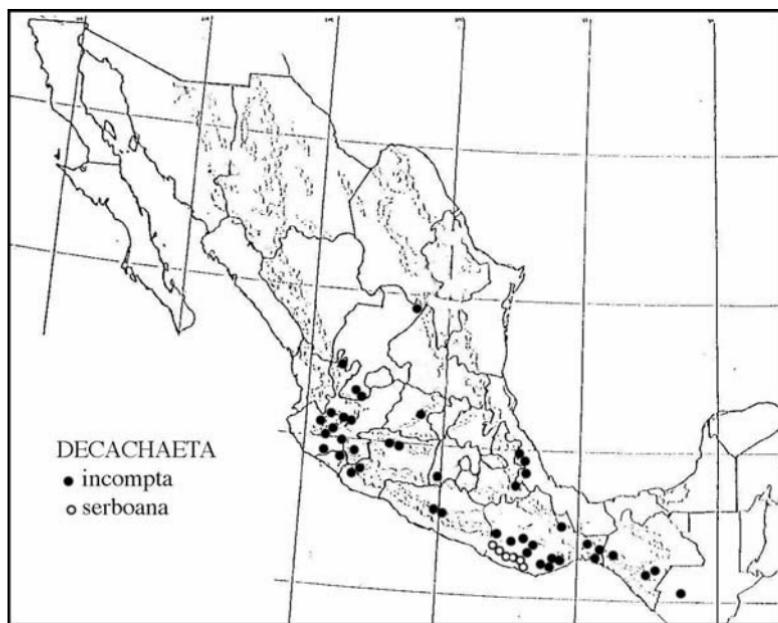


Fig. 2. Distribution of *Decachaeta incompta* and *D. serboana*.