# A NEW SPECIES OF EUCNIDE (LOASACEAE) FROM CHIAPAS, MEXICO 

Billie L. Turner<br>Plant Resources Center<br>The University of Texas<br>Austin, TX 78712


#### Abstract

A new taxon, Eucnide chiapasana B.L. Turner, sp. nov., is described from the Tropical Deciduous Forest of Chiapas, Mexico. It is presumably most closely related to the more arid, $E$. hypomalaca, a species of the Sonoran Desert. Aphotograph of the holotype is provided, along with maps showing distributions of the taxa concerned.


KEY WORDS: Loasaceae, Eucnide, Eucnide hypomalaca, Eucnide arida, Mexico, Chiapas

Routine identification of Mexican plants has brought to light a previously undescribed species of Eucnide. Thompson and Ernst (1967) provided an excellent treatment of the genus, but unfortunately, none of the specimens of the present novelty was available at the time of their study. In their key to species the taxon will key to or near E. hypomalaca Standl., a species of the Sonoran Desert (Fig. 2). The two taxa differ in numerous morphological characters.

EUCNIDE CHIAPASANA B.L. Turner, sp. nov. Figure 1. Type: MEXICO. Chiapas. Mpio. Chiapa de Corzo, at the Rio Grijalva, 10 km W of Chiapa de Corzo along Mexican Highway 190, edge of cliff, Tropical Deciduous Forest, $500 \mathrm{~m}, 24 \mathrm{Feb} 1973$, D.E. Breedlove 33828 (holotype: TEX; isotype: CAS).

Resembling Eucnide hypomalaca Standl. but the leaves more nearly cordate with much broader blades ( $10-15 \mathrm{~cm}$ wide vs 3- 6 cm ), peduncles densely pubescent with numerous elongate, non-peltate hairs $1-2 \mathrm{~mm}$ long (vs mostly peltate and ca 1 mm long); anthers 4 -sided, ca 1.5 times as long as wide (vs reniform to ovoid and as long as wide), minutely pubesecent when first formed (vs not so).

Suffruticose perennial herbs to 30 cm high. Mid-stems 5-7 mm thick, densely pubescent with long, acicular trichomes, $1-2 \mathrm{~mm}$ long, beneath these a more densely array of short peltate hairs. Leaves at mid-stem ( $10-$ ) $15-20 \mathrm{~cm}$ long, $8-15 \mathrm{~cm}$ wide; petioles (3-)6-10 cm long; blades cordate (rarely not), pinnately nervate, pubescent above and below like the stems, the margins with ca 9 , broadly rounded, lobes, the sinuses $0.5-1.0 \mathrm{~cm}$ deep. Flowers 6-9 in terminal congested racemes 610 cm long, and as wide; peduncles relatively short, $1-2 \mathrm{~cm}$ long. Sepals, $1-2 \mathrm{~cm}$ long, $4-5 \mathrm{~mm}$ wide. Corollas reportedly white or "pale yellow" (Neill 5515 ), the petals 3-4 cm long, $1.5-2.0 \mathrm{~cm}$ wide, united at base for ca 2 mm . Stamens numerous (ca 200 or more), mostly exceeding the petals in length; anthers somewhat quadrate in shape, ca 1 mm long, 0.75 mm wide; young anthers minutely pubescent with glandular hairs, these shedding with age. Fruits obpyramidal, ca 1.5 cm long, 1.3 cm wide, densely pubescent like the stems; seeds ca 1 mm long.

Additional specimens examined. MEXICO. OAXACA. Mpio. Chiapa de Corozo, steep bank of Rio Grijaloa along Mexican Hwy 190 between Chiapa de Corzo and Tuxtla Gutz, $300 \mathrm{~m}, 3$ Dec 1971, Breedlove 22956 (CAS). Mpio. Ocozocoautla de Espinosa, head of the Rio de la Venta, near Derna, 800-1000 m, 3 Dec 1971, Breedlove 27401 (CAS); same locality, 24 Dec 1976, Breedlove 42864 (CAS); same locality, 11 Oct 1979, Breedlove 44383 (CAS); same locality, 16 Dec 1972,


Figure 1. Eucnide chiapasana B.L. Turner (holotype, TEX).


Fig. 2. Distribution of Eucnide chiapasana, E. hirta, and E. hypomalaca.
Breedlove \& Thorne 30302 (CAS); steep walled limestone canyon of Rio de Venta near Cascada El Aquacero, 15 km W of Ocozocuautla on Hwy 190, then $3 \mathrm{~km} \mathrm{~N}, 12$ Mar 1983, Neill 5515 (CAS).

Eucnide chiapasana is a very distinct species, as noted in the diagnosis. Hufford (1988) annotated all of the specimens cited above as E. hypomalaca, these similar to the latter in habit and flower size. The novelty is also superficially similar to the widespread and quite variable $E$. hirta, the latter readily distinguished by its narrow corollas and much fewer stamens. Distribution of all three taxa is shown in Figure 2.

A notable trait of Eucnide chiapasana is the anthers, which are elongate-quadrate, resembling the head of a rattlesnake when young, and possessing minute hairs that are deciduous with maturity. Such hairs were found on both of the types. The young anthers of $E$. hypomalaca are essentially ovoid and glabrous.

Hufford (1988) has provided a scanned electron micrograph of the seed from the isotype of Eucnide chiapasana (his Figs. 19 and 20, which are labeled as E. hypomalaca).

The species is named for the state of Chiapas, Mexico, to which it seems confined (Fig. 2).

## ACKNOWLEDGEMENTS

I am grateful to my colleague Guy Nesom for his review and helpful comments. Dot maps are based upon specimens on file at LL-TEX and CAS. A loan from the latter is much appreciated.

## LITERATURE CITED

Hufford, L.D. 1988. Seed morphology of Eucnide and other Loasaceae. Syst. Bot. 13: 154-167. Thompson, H.J. and W.R. Ernst. 1967. Floral biology and systematics of Eucnide (Loasaceae). J. Arnold Arb. 48: 56-88.


Turner, B. L. 2012. "A new species of Eucnide (Loasaceae) from Chiapas, Mexico." Phytoneuron 2012-22, 1-4.

View This Item Online: https://www.biodiversitylibrary.org/item/125856
Permalink: https://www.biodiversitylibrary.org/partpdf/174889

## Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

## Sponsored by

Missouri Botanical Garden

## Copyright \& Reuse

Copyright Status: Permission to digitize granted by rights holder
Rights: https://www.biodiversitylibrary.org/permissions

This document was created from content at the Biodiversity Heritage Library, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.

