

SYNOPTICAL STUDY OF *RHODODON* (LAMIACEAE)

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ABSTRACT

Rhododon, endemic to Texas, is treated as having two species: *R. ciliatus* (Benth.) Epling, and *R. angulatus* (Tharp) B.L. Turner, *comb. nov.* The latter taxon was originally positioned in the genus *Stachydeoma* by Tharp in 1945 after the erection of *Rhododon* by Epling in 1939. Tharp was unaware of Epling's establishment of *Rhododon*, typical elements of which had previously resided in *Stachydeoma*. A key to the two species of *Rhododon* is provided, along with complete synonymies and maps showing the distribution of each.

KEY WORDS: Lamiaceae, *Rhododon*, *Stachydeoma*, *Hedeoma*, Texas

Rhododon was established as a monotypic genus by Epling in 1939. The type species, *R. ciliatus* (Benth.) Epling, was originally described by Bentham as *Keithia ciliata* Benth., based upon material collected in Texas by Berlandier in 1828. Bentham (Nov. 1848) subsequently transferred the species to *Hedeoma* where it was retained as *H. ciliata* (Benth.) Benth. *ex DC.*, in spite of the existence of *H. ciliata* Nutt. (Apr. 1848), which occasioned the replacement name, *H. texana* Cory, in 1936. Earlier, however, Small in 1903 had transferred *Keithia ciliata* into his newly erected *Stachydeoma*, which apparently contained two disparate elements, neither of which was selected by Small to typify his genus. Epling (1939) corrected this oversight with the erection of *Rhododon*, typifying *Stachydeoma* with *S. graveolens* (Chapm.) Small, a Floridean endemic.

Tharp (1945), when undertaking his study of *Stachydeoma* for Texas, was unaware of Epling's *Rhododon* and maintained three taxa within *Stachydeoma*, *S. ciliata* and two newly described species, *S. angulata* Tharp and *S. duvalii* Tharp. Subsequent workers have more or less ignored *Rhododon*, although Irving (1980) excluded *R. ciliata* from his concept of *Hedeoma*, in effect accepting Epling's *Rhododon*, but treating this as monotypic, in spite of Tharp's two newly described species, both of which Irving thought synonymous with *R. ciliatus*.

I have gone over the *Rhododon* problem in some detail, studying specimens of the genus both in herbaria and in the field. My treatment recognizes *Rhododon* as distinct from *Stachydeoma*, accepting two species, *R. ciliatus* (including *S. duvalii*) and *R. angulatus*, the former occupying deep sandy soils in east central Texas, the latter occurring in coastal relic dunes in southern Texas, as shown in Figure 1.

A key to the species follows, along with brief descriptions and complete synonymies.

1. Midstem leaves broadly ovate to ovate-elliptic, mostly 1.5-2.0 times as long as wide; calyx lobes merely ciliate, their surfaces essentially glabrous, the marginal hairs mostly 0.5 mm long or less; flowers arranged in interrupted spikes; coastal relic dunes in southernmost Texas. *R. angulatus*
1. Midstem leaves elliptic to oblanceolate, mostly 2.0-3.5 times as long as wide; calyx lobes pubescent both along their margin and upon their surfaces, the hairs, at least some or most of them 1-2 mm long; flowers usually arranged in dense spikes, rarely interrupted; east-central Texas. *R. ciliatus*

RHODODON ANGULATUS (Tharp) B.L. Turner, *comb. nov.* BASIONYM: *Stachydeoma angulata* Tharp, *Brittonia* 5:304. 1945. TYPE: U.S.A. Texas: Aransas Co., Rockport, 2 Jul 1939, *B.C. Tharp 43991* (HOLOTYPE: TEX!).

Tharp (1945) provided an adequate description of this species, along with a photograph of the holotype. He also constructed a key to the several taxa recognized, but emphasized in this several characters which I have not drawn upon.

Rhododon angulatus is a rarely encountered taxon. I visited the type locality in May of 1994 to ascertain its relative commonness in the area concerned. As indicated in the specimens cited below, I first collected the species in June of 1964, 5 miles north of Aransas Pass, growing upon large stabilized sand dunes along the east side of state highway 35. At that time I encountered only two plants in the immediate vicinity, both growing upon the dunes concerned. My revisit to this site in 1994 was most disappointing, for all of the prominent dunes along the roadway had been leveled for highway expansion and commercial development.

I did, however, locate *Rhododon angulatus* in similar dune sands along the roadway that circles the Aransas County airport, about 1 km west of the earlier site. None of the plants was in flower at the time, but I counted several hundred or more over an acre or less, nearly all in deep sandy soils among and upon seemingly stabilized dune sands. Since the relic dunes in this region harbor a number of interesting plants, especially *Rhododon angulatus*, some effort should be made by conservancy agencies to protect at least a few such areas.

ADDITIONAL SPECIMENS EXAMINED: U.S.A. Texas: Aransas Co., "On sandy bank south of Aransas County Airport," 8 Jul 1957, *Correll & Johnston 17613* (LL); 5 mi N of Aransas Pass, roadside, growing in live oak mott, 16 Jun 1964, *Turner 5030* (TEX).

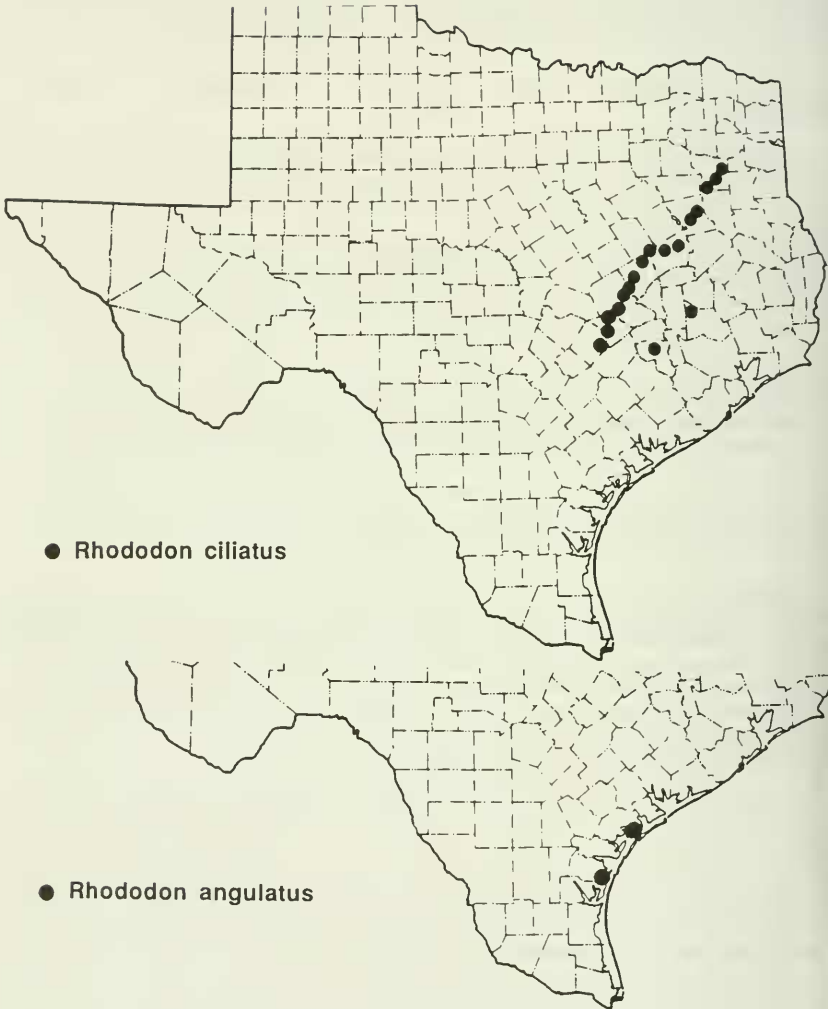


Fig. 1. Distribution of *Rhododon* spp. Upper map, *R. ciliatus*; lower map, *R. angulatus* (based upon records at BRIT, LL, TEX).

RHODODON CILIATIS (Benth.) Epling, Rep. Spec. Nov. Beih. 115:14. 1939.
= *Hedeoma ciliata* (Benth.) Benth. in DC., *Prodr.* 12:245. Nov 1848. [not *H.*
ciliata Nutt.]. = *Stachydeoma ciliata* (Benth.) Small, *Fl. S.E. U.S.* 1041. 1903,
1937. = *Hedeoma texana* Cory, *Rhodora* 38:405. 1936. TYPE: U.S.A. Texas:
w/o county, 1828, *Berlandier s.n.* (HOLOTYPE: K).
Stachydeoma duvalii Tharp, *Brittonia* 5:306. 1945. TYPE: U.S.A. Texas:
Austin Co., 4 mi NW of Bellville, 22 Jun 1923, *B.C. Tharp 43992*
(HOLOTYPE: TEX!).

This taxon has been adequately described by Tharp (1945). He separated from this, however, material collected in Austin County having interrupted spikes (the latter character approaching that of *Rhododon angulatus*), calling this *Stachydeoma duvalii*. Except for the interrupted spikes, nearly all of the characters of the latter are those of *Rhododon ciliatus* and I have little hesitancy in treating these as synonymous.

Rhododon ciliatus is linearly widespread and abundant in eastcentral Texas, where it is largely restricted to the deep white sandy soils of the Carrizo formation (*cf.*, McBryde 1933), although occasional populations occur elsewhere, as shown in Figure 1.

LITERATURE CITED

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Tharp, B. 1945. Noteworthy plants of Texas - III. *Stachydeoma* as represented in Texas. *Brittonia* 5:304-307.
McBryde, J. 1933. The vegetation and habitat factors of the Carrizo sands. *Ecol. Monographs* 3:247-297.