

## The Texas Species of *Limonium* (Plumbaginaceae)

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Only two sea-lavenders occur in Texas, so that no great taxonomic problem exists so far as this area is concerned. One of the two, however, is a member of a difficult complex. It has passed under a number of different names, and has not been accurately described nor delimited in any publications treating the genus. The following synopsis is based on 18 specimens (representing 17 collections) from Texas and 6 from Atlantic Coast states in the S.M.U. Herbarium, supplemented by descriptions of the eastern plants published by Blake, Fernald, Gray, and Small.

- 1a. Calyx lobes widely flaring, broadly triangular-ovate, rounded or barely pointed at tip; plants of alkaline depressions in the interior (Trans-Pecos).....1. *L. limbatum*
- 1b. Calyx lobes nearly erect, narrowly ovate-lanceolate, acute or acuminate; plants of beaches and flats on the Gulf Coast.....2. *L. carolinianum* var. *compactum*

1. *L. LIMBATUM* Small, Bull. Torr. Bot. Club 25: 317-318. 1898. Frequent in Pecos and Reeves counties; flowering late May-July.

2. *L. CAROLINIANUM* (Walt.) Britton var. *compactum* Shinnery, var. nov. Spiculae florigerae inter se 0.5-3.0 (rarius 4.0) mm. distantes. Calyx glaber vel plerumque ad nervos pilosus, lobis ovato-lanceolatis acutis acuminatisve. HOLOTYPE:  $\frac{1}{2}$  mile west of Rockport, Aransas Co., Texas, V. L. Cory 51236, November 26, 1945 (SMU). "Abundant in wet sandy soil." On sandy beaches or coastal flats, or between sand dunes, along the Gulf Coast from Cameron County to Jackson County (also Galveston County, according to records given by Blake). Flowering August-November. The following collections are cited as paratypes:

ARANSAS Co.: north of Aransas Pass, Fred A. Barkley 13778. Aransas Refuge, beach of San Antonio Bay, Cory 51168. Sandy grasslands near Gulf, between Rockport and Aransas, D. S. Correll 14137. Rockport, Geo. L. Fisher 48162. CAMERON Co.: east side of Loma Alto Lake, 8 airline miles northeast of Brownsville, Cory 51338 (slightly less densely flowered than any other of the type material). JACKSON Co.: 10 miles northeast of Point Comfort, Shinnery 24359. NUECES Co.: Padre Island, Eula Whitehouse 24548 (two sheets, including forms with glabrous and with pilose calyx tube, not otherwise distinguishable). SAN PATRICIO Co.: 4 miles southeast of Ingleside, Fred B. Jones 387. WILLACY Co.: Redfish Bay, Cory 36721.

One additional specimen from Cameron County, *G. L. Webster & R. L. Wilbur 3034*, is cited as not typical. It is in very early flower (collected June 24), and like the paratype cited above from the same county, has a less dense inflorescence than other Texas material, though still markedly less diffuse than Atlantic Coast specimens referred variously to var. *carolinianum* or to *L. Nashii* Small. In material of the latter at hand, the floral spikelets are mostly 3-10 mm. apart. All the published descriptions agree in stressing the

loose inflorescence or widely-spaced spikelets, and the original description of *L. Nashii* states that this is "of more slender and more graceful habit than that of *L. carolinianum*." The Texas material suggests the Pacific Coast *L. californicum* (Boiss.) Heller (at least one Texas collection was distributed under this name, and Small's 1903 *Flora* suggests that the species perhaps occurred east to Texas), which has short, wide, abruptly pointed calyx lobes and a smaller, denser, less branched inflorescence. Following Blake's 1916 synopsis, our plants have referred to *L. angustatum* (Gray) Small or to *L. Nashii* Small. The former, as noted by Fernald (1950) and suggested by the description in Gray's Synoptical Flora (1878), is a peculiar and localized Florida plant. Pubescence on the calyx tube, said to distinguish *L. Nashii*, seems to be of no importance for our material. Pubescence varies, about  $\frac{1}{4}$  of the examined specimens have completely glabrous calyx tube, and both extremes occur in the same populations, which otherwise are rather uniform in appearance and essential characters. Our plants do not grow in salt marshes, the usual habitat of the Atlantic Coast forms.

## REFERENCES

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