

## DISCOVERY OF *SPIRAEA HYPERICIFOLIA* (ROSACEAE) NATURALIZED IN TEXAS

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### ABSTRACT

*Spiraea hypericifolia* (Rosaceae) is reported as naturalized along roadsides and in woods edges in Cass and Harrison counties of the Pineywoods of east Texas.

**Key Words:** Rosaceae, *Spiraea*, Texas, USA, Pineywoods

Continuing floristic study in the Pineywoods of east Texas has resulted in the discovery of naturalized populations of *Spiraea hypericifolia* L. (Rosaceae).

Voucher specimens: **TEXAS. Cass Co.:** Texas Hwy 43, 1.7 miles N of Killdare Junction, open xeric sandhill ca. 40 m from roadside right of way, associated flora included *Quercus incana*, *Q. stellata*, *Prunus pumila*, *Hymenopappus artemisiifolius*, *Croptilon divaricatum*, *Helianthemum georgianum*, *Lechea mucronata*, *Lechea tenuifolia*, *Aristida desmantha*, *Schizachyrium tenerum*, 5 Jan 2011, *Holmes, Singhurst, & Mink 15330* (BAYLU); same location [peak flowering], 3 Mar 2011, *Holmes 15337* (BAYLU); same location [leaf collection], 25 May 2011, *Holmes, Singhurst & Mink 15498* BAYLU); **Harrison Co.:** 0.95 E of Loop 390 and Texas Hwy 43 [Marshall] on Texas Hwy 43, mesic pine-oak forest ca. 30 m from roadside right of way, associated flora included *Pinus taeda*, *Quercus falcata*, *Quercus nigra*, *Ulmus alata*, *Pinus serotina*, *Ilex vomitoria*, *Ligustrum sinense*, *Schizachyrium scoparium*, *Smilax bona-nox*, 4 Mar 2011, *Singhurst et al. 18735* (BAYLU).

The genus *Spiraea* consists of 80–100 species of shrubs mainly of temperate eastern Asian distribution. They are important ornamentals, with many having escaped cultivation since their incorporation into horticulture began in 1736 (Vines 1960). Approximately 35 species are mentioned in USDA, NRCS (2011) as occurring in North America, a total that includes hybrids but not subspecific entities. Of these, approximately 12 species are considered North American natives.

Until now, no *Spiraea* has been reported as occurring outside of cultivation in Texas (Cory and Parks 1937; Vines 1960; Gould 1962; Correll & Johnston 1970; Hatch et al. 1990; Johnston 1990; Turner et al. 2003). Jones et al. (1997) cited in their checklist of the vascular plants of Texas three species and two hybrids of *Spiraea* as being cultivated. The species reported here (*S. hypericifolia*) was not among those listed in that work. Elsewhere in the USA, *S. hypericifolia* has been reported as occurring in Mississippi in USDA, NRCS (2011). It is a native of Asia.

For comparison, six *Spiraea* species are reported in Louisiana by Thomas and Allen (1998), three of which occur in parishes adjoining Texas. Four species are reported in Arkansas by Smith (1988), while none are known from Oklahoma (USDA, NRCS, 2011).

The Texas specimens were determined by use of several keys (Bailey 1949; Lu & Alexander 2003; Businský 2011), none of which is adapted for native and naturalized occurrences of *Spiraea* in North America. Inflorescence type has been one of the traditional features for separating *Spiraea* species, with the main discriminator relying on one-flowered pedicels (simple inflorescences) or branched pedicels (compound inflorescences) (Businský 2011). *Spiraea hypericifolia* has sessile leafless umbels of white flowers with unbranched pedicels. Bailey (1949) characterized it as "one of the most beautiful and free-flowering of the early spring spireas."

It appears that the Texas plants arrived at the locations by natural means since there is no evidence that either site is an old homestead. The Cass Co. site consisted of seven clumps, while three clumps were at the Harrison Co. site. We observed no young plants of *Spiraea hypericifolia* at either locality. Judging from the invasive potential of at least some *Spiraea* species (e.g., *S. japonica* L.), these Texas populations necessitate monitoring efforts to determine latent distributional expansion, before eradication becomes problematic or impossible.

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