

## **BARTONIA VIRGINICA (GENTIANACEAE) NEW TO THE FLORA OF TEXAS**

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### **ABSTRACT**

*Bartonia virginica* (Gentianaceae) is documented as new to the flora of Texas. A population was found in a lower seepage slope pitcher plant bog in Tyler Co., Texas.

*Bartonia virginica* (L.) Britton, Sterns, & Poggenb., commonly known as yellow screwstem, was first collected in Tyler Co., Texas, in September 2004. In a recent review of herbarium collections, Eric Keith (Raven Environmental Services, Huntsville, Texas) brought our attention to his annotation of the specimen as *B. virginica*, noting that it represents the first record for the flora of Texas. The species has not previously been reported for the state (Correll and Johnson 1970; Hatch et al. 1990; Turner et al. 2003; Kartesz 2015).

**Voucher: Texas.** Tyler Co.: Temple Inland Timber Corporation Land, Compartment 1504, 1 mi W of Warren, Texas and 2 mi S on powerline, lower seepage slope pitcher plant bog at sandhill base, 21 Sep 2004, *Singhurst, Bridges, and Pagoulatos* 13252 (BAYLU, TEX-LL).

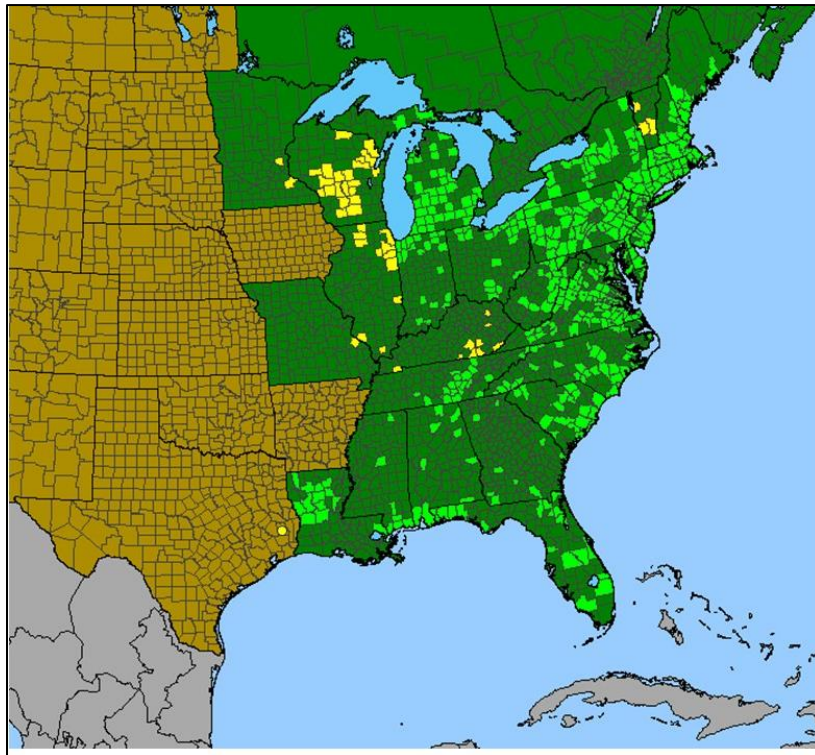


Figure 3. *Bartonia virginica* range extension in southeastern Texas is represented by a yellow dot in Tyler County. Distribution map from BONAP (2015).

*Bartonia virginica* (Wikipedia 2023; Weakley et al. 2024) is distributed throughout eastern North America but is centered around the Atlantic coastal plain, with scattered inland populations. It has been found from Quebec and Nova Scotia west to Minnesota and south to Florida and Louisiana, reaching its western range limit in eastern Minnesota, where it is very rare and listed as endangered (BONAP 2015). The species is restricted to sphagnum bogs and wet meadows, primarily in acidic bogs with *Sphagnum* or *Polytrichum* mosses.

The Texas population (Figs. 1, 2, and 3) was found just south of Black Creek, 1.6 miles southwest of Warren in Tyler County. Approximately 20-25 *Bartonia* plants were found in a lower seepage slope-yellow pitcher plant (*Sarracenia alata*) bog at the base of a sandhill along a powerline that is mowed at least once a year. The mowing regime is maintains a diverse array of open herbaceous bog flora and is keeping many woody shrubs and trees from overgrowing the site. Vascular plants documented at the site, following the nomenclature of Weakley et al. (2024), include these: *Acer rubrum* var. *trilobum*, *Aletris aurea*, *Anchistea virginica*, *Andropogon dealbatus*, *A. glomeratus*, *A. perangustatus*, *Anthaenantia texana*, *Aristida palustris*, *A. virgata*, *Aronia arbutifolia*, *Axonopus fissifolius*, *Boltonia diffusa*, *Burmannia capitata*, *Carex glaucescens*, *Centella erecta*, *Cephalanthus occidentalis*, *Chaptalia tomentosa*, *Coleataenia anceps*, *C. tenera*, *Coreopsis linifolia*, *Dichantheium acuminatum* var. *acuminatum*, *D. ensifolium*, *D. macrocarpon*, *D. scabriusculum*, *D. scoparium*, *Drosera capillaris*, *Edrastima uniflora*, *Eleocharis tuberculosa*, *Eragrostis elliotii*, *E. spectabilis*, *Eriocaulon decangulare*, *Eryngium integrifolium*, *Eupatorium capillifolium*, *E. glaucescens*, *E. leucolepis*, *E. rotundifolium*, *Eurybia hemisphaerica*, *Fuirena breviseta*, *Gelsemium sempervirens*, *Helianthus angustifolius*, *Hexasepalum teres*, *Hypericum cistifolium*, *H. crux-andreae*, *Hypoxis hirsuta*, *Ilex coriacea*, *Ilex vomitoria*, *Juncus scirpoides*, *J. trigonocarpus*, *Juncus validus*, *Kelloggloa brachyantha*, *K. verrucosa*, *Lachnocaulon anceps*, *Liatris acidota*, *L. pycnostachya*, *Linum curtissii*, *Lorinseria areolata*, *Ludwigia linearis*, *L. sphaerocarpa*, *Lycopodiella appressa*, *Lycopus rubellus*, *Lyonia ligustrina* var. *foliosiflora*, *Magnolia virginiana* var. *australis*, *Marshallia angustifolia*, *Mitreola sessilifolia*, *Morella caroliniensis*, *Osmunda spectabilis*, *Paspalum praecox*, *P. setaceum*, *Pinus taeda*, *Pogonia ophioglossoides*, *Polygala cruciata*, *Polypremum procumbens*, *Pseudolycopodiella caroliniana*, *Rhexia mariana*, *R. petiolata*, *Rhynchospora capitellata*, *R. chalarocephala*, *R. fascicularis*, *R. filifolia*, *R. glomerata*, *R. gracilentia*, *R. inexpansa*, *R. oligantha*, *R. pusilla*, *R. rariflora*, *Rubus pensilvanicus*, *Sarracenia alata*, *Schizachyrium scoparium* var. *divergens*, *Scleria muehlenbergii*, *S. triglomerata*, *Scutellaria integrifolia*, *Smilax laurifolia*, *S. rotundifolia*, *Sophranthe pilosa*, *Tamala palustris*, *Utricularia juncea*, *Viola lanceolata*, *Xyris ambigua*, *X. baldwiniana*, *X. curtissii*, *X. difformis*, *X. iridifolia*, *X. jupicai*, *X. louisianica*, and *X. torta*.

#### ACKNOWLEDGEMENTS

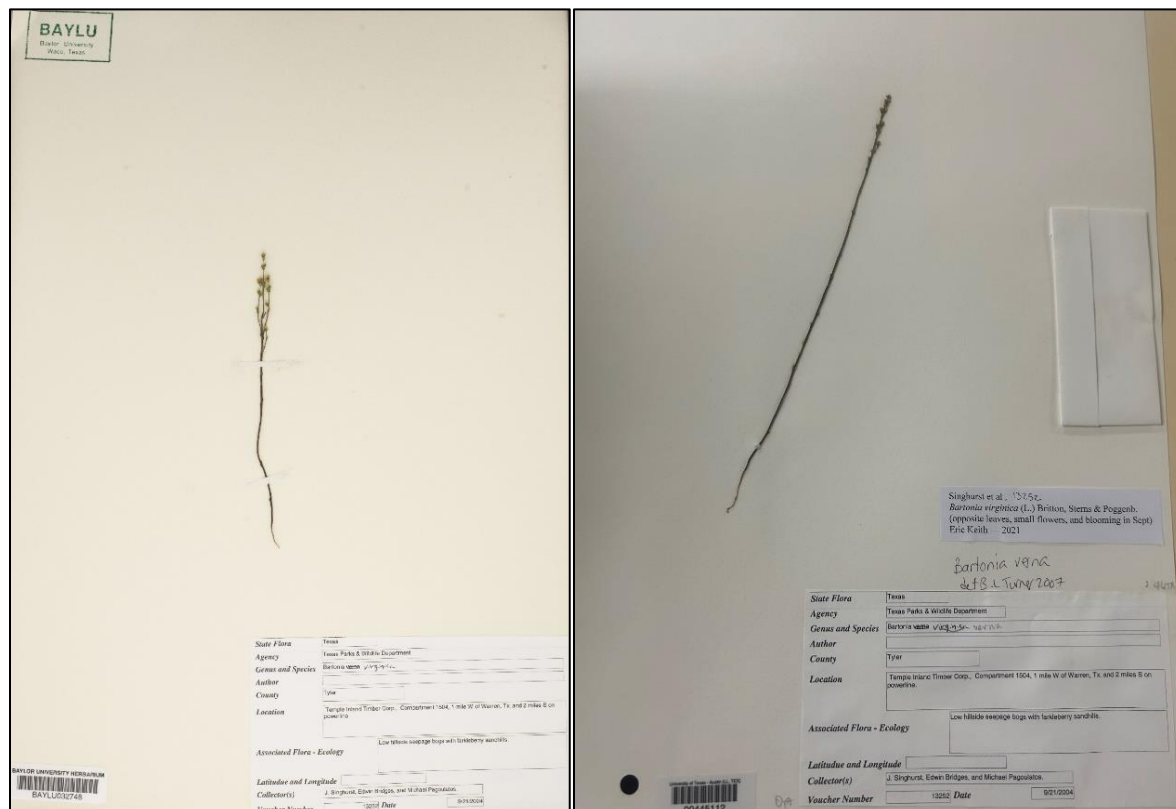
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Figures 1 and 2. *Bartonia virginica* collections from Tyler Co., Texas — at Baylor University Herbarium (BAYLU) (left) and University of Texas Herbarium (TEX-LL) (right).