IBERIS UMBELLATA (BRASSICACEAE) AND CYNOGLOSSUM AMABILE (BORAGINACEAE) ADVENTIVE IN TEXAS

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ABSTRACT

Recent field studies in north Texas have resulted in the discovery of the two species here reported as adventive to the state. These include *Iberis umbellata*, a native of southeast Europe, and *Cynoglossum amabile*, a native of Asia. Both species are commonly used as garden ornamentals; both are reported here from a limestone glade in Soldier Springs Preserve in urban Weatherford, Parker County.

Iberis (Brassicaceae) is a genus of about 27–30 species (Rollins 1993; Al-Shehbaz 2010) of annuals, perennial herbs, and evergreen subshrubs native to Europe and southwest Asia. One species, *I. umbellata* L., a native of southeastern Europe, was reported by Al-Shehbaz (2010) as introduced to temperate North America, likely as a garden escape. The currently reported distribution in North America includes Quebec and Nova Scotia west to Ontario, Minnesota, Iowa, Wisconsin, Michigan, Ohio, Pennsylvania, New Hampshire, New York, and Maine in the east and British Columbia, Montana, California, Utah, and New Mexico in the west. Fourteen plants of *I. umbellata* were present at the location in Soldier Springs Preserve.



Figures 1–2. *Iberis umbellata* in flower at Soldier Springs Preserve, Parker Co., Texas.



Figure 3. *Iberis umbellata* in flower in front-right of *Schizachyrium scoparium* clump (just left of center) in a limestone glade at Soldier Springs Preserve, Parker Co., Texas.

Voucher. **Texas**. Parker Co.: Soldier Springs Preserve, 0.1 mi N of the junction of Mockingbird Ln and Mosley Ct on Mosley Ct, W side of Mosley Ct (32° 44' 37.18"N, 97° 48' 35.20"W), limestone glade, 14 plants found, 21 May 2016, *J. Singhurst* and *R. Singhurst* 21041 (BAYLU). Figures 1-3.

Cynoglossum (Boraginaceae) is a genus of about 55 species of biennials, perennials, and rarely annuals distributed worldwide. USDA NRCS (2016) records six species as being introduced into the USA and three species as native. Presently, *C. amabile* Stapf & J.R. Drumm., known as Chinese forget-me-not or Chinese hound's tongue, is mapped as being introduced in Massachusetts, New Hampshire, New York, Vermont, and Wisconsin (Kartesz 2016; USDA, NRCS 2016). The following specimen documents the occurrence of *C. amabile* in Texas. Thirty-seven plants of *C. amabile* were discovered in clay-loam soils of a limestone glade.

Voucher. **Texas**. Parker Co.: Soldier Springs Preserve, 0.1 mi N of the junction of Mockingbird Ln and Mosley Ct on Mosley Ct, W side of Mosley Ct (32° 44' 37.53" N, 97°48' 35.49" W), limestone glade, 37 plants found, 21 May 2016, *J. Singhurst & R. Singhurst 21042* (BAYLU). Figure 4.



Figure 4. Cynoglossum amabile in flower at Soldier Springs Preserve, Parker County, Texas.

Because both species are common garden ornamentals, it is probable that they originated at the locations in Texas as garden escapes. Soldier Springs Preserve is in urban Weatherford, Texas and adjacent to a neighborhood from which *Cynoglossum amabile* could have drifted over from a garden source. The glades where the species occurred are typical of north-central Texas in having gentle slopes, whitish soil, and surfaces strewn with small to medium-sized rocks (generally less than 30 cm) (Fig. 3). Typical vegetation of such sites includes *Aristida purpurea*, *Bouteloua curtipendula*, *B. hirsuta*, *B. rigidiseta*, *Erioneuron pilosum*, and *Schizachyrium scoparium*. Other associated species include *Bifora americana*, *Calylophus sp.*, *Centaurium texense*, *Cercis canadensis*, *Dalea aurea*, *D. reverchonii*, *Dysodiopsis tagetoides*, *Evax prolifera*, *Forestiera pubescens*, *Galium virgatum*, *Grindelia* sp., *Hymenoppaus sp.*, *Iva angustifolia*, *Juniperus ashei*, *Lindheimeri texana*, *Linum sp.*, *Mentzelia oligosperma*, *Mimosa* sp., *Muhlenbergia reverchonii*, *Opuntia sp.*, *Pediomelum cyphocalyx*, *P. linearifolium*, *P. reverchonii*, *Plantago sp.*, *Quercus fusiformis*, *Q. buckleyi*, *Rhus aromatica*, *R. glabra*, *Salvia engelmannii*, *Silphium albiflorum*, *Sisyrinchium ensigerum*, *Stenaria nigricans*, *Stillingia texana*, *Thelesperma filifolium*, *Torilis arvensis*, and *Yucca pallida*.

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