

***SCLERANTHUS ANNUUS* (CARYOPHYLLACEAE) NATURALIZED IN TEXAS**

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ABSTRACT

Scleranthus annuus is here reported as naturalized in Van Zandt County of northeastern Texas, where it has formed relatively dense colonies. Establishment of the species in Texas is an expansion from many known localities in Oklahoma, Louisiana, and Arkansas.

Scleranthus annuus L. (Caryophyllaceae) is a native of Europe, Asia, and North Africa (Thieret & Rabeler 2005). It is known through much of the rest of the temperate world as an introduced species and common weed. It grows in many types of habitats and often occurs in disturbed sandy areas, roadsides, weedy areas, and lawns. Common names of the species are German knotgrass (Wunderlin 1998) and annual knawel (Thieret and Rabeler 2005).

We report *Scleranthus annuus* as new to the spontaneous flora of Texas, vouchered by the following specimen. **Texas.** Van Zandt Co.: 0.1 mi S of jct of Hwy 64 and Old Kaufman Rd, along the banks of the City of Canton Lake Dam at Cherry Creek Park, 10 Apr 2016, *S. Hill s.n.* (BAYLU). Figures 1, 2.

The *Scleranthus annuus* population in Van Zandt County consists of several hundreds of individuals on a frequently mowed dam on the edge of City of Canton Lake [a reservoir] within Cherry Creek Park. The plants occur on clay soil and densely carpet the area. Associated flora include *Soliva sessilis*, *Sherardia arvensis*, *Trifolium dubium*, *Houstonia pusilla*, *Oxalis stricta*, and *Galium aparine*.

Scleranthus annuus is mapped in Kartesz (2016) as occurring in the states bordering Texas (Arkansas, Oklahoma, and Louisiana) and its establishment in Texas is hardly unexpected. Records nearest to Van Zandt County are Marshall County, Oklahoma, approximately 160 km to the northwest, and Caddo Parish, Louisiana, about 190 km to the east. The species is also known from Vernon and Cameron parishes of southwest Louisiana, both bordering Texas.

The species is apparently absent from Coastal Plain of Arkansas (the southwest region of the state). With the exception of Manitoba, *Scleranthus annuus* is naturalized in the southern providences of Canada, south into the northwest USA (California, Idaho, Oregon, and Washington); and eastern USA west to Minnesota, Nebraska, Kansas and Oklahoma (not including Iowa) (Kartesz 2016). The species is widely naturalized across the world, including Mexico, Costa Rica, Ecuador, South Korea, Kenya, South Africa, and New Zealand (Thieret & Rabeler 2005).



Figure 1. *Scleranthus annuus*, Van Zandt Co., Texas. Photo by Sonnia Hill, 10 April 2016.



Figure 2. *Scleranthus annuus*, Van Zandt Co., Texas. Photo by Sonnia Hill, 10 April 2016.

The plants are annual or biennial with erect to prostrate stems 2–25 mm long. They typically flower from winter to fall. Leaves vary from 3–24 mm in length. The flowers are usually equal to or exceed the length of the subtending bracts. The hypanthium is strongly 10-ribbed in fruit and 1.2–2 mm wide. Sepals are spreading to erect in fruit and do not overlap. Fruits range from 3.2–5 mm wide, which includes the sepals.

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