

CERASTIUM TEXANUM (CARYOPHYLLACEAE) DOES NOT OCCUR IN TEXAS

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ABSTRACT

Cerastium texanum Britt. is typified by material collected by Charles Wright during the period March-April of 1852, while he was engaged in a Mexican Boundary Survey under the direction of Major W.H. Emory. Britton, in naming the species, apparently thought the collection site, "Hills, Blanco..." [handwritten label data attached to the collection concerned] was in Texas, perhaps in reference to Blanco, Texas, a well known locale in central Texas located in southern Blanco County. The village of Blanco was established in 1853, after Wright collected type material. A careful retracing of Wright's itinerary during his work with the Mexican Boundary Survey suggests that the species was probably collected in north-central México or possibly in closely adjacent New Mexico. Collections of *Cerastium texanum* are unknown from Texas. In addition to clarification of its typification, a map showing its distribution is provided, along with a key and distributional maps for the five species of *Cerastium* currently known to occur in Texas.

KEY WORDS: Caryophyllaceae, *Cerastium*, Texas, México, systematics

Cerastium is a relatively large, mostly Eurasian genus with 100 or more described species, some of these widely introduced elsewhere as weeds. According to Correll & Johnston (1970), Texas has seven native and/or introduced species of *Cerastium*, including *C. clawsonii* Correll (now known to be a species of *Linum*: cf. Hartman 1979; Johnston 1990), and *C. texanum* Britt., the latter presumably not occurring in Texas as noted in the above abstract, in spite of statements to the contrary (Correll & Johnston 1970; Good 1984). With these two species removed Texas can now be said to harbor five species of *Cerastium*: *C. axillare* Correll, *C. brachypodium* (Engelm. ex A. Gray) B.L. Robins., *C. fontanum* Baumg., (= *C. vulgatum* L. of Correll & Johnston), *C. glomeratum* Thuill., and *C. nutans* Raf.

A key to these five taxa, along with comments upon their occurrence, distribution, and synonymy, follows.

KEY TO TEXAS *CERASTIUM*

- 1. Flowers arranged in dense terminal glomerules, their pedicels mostly 1-3 mm long.....*C. glomeratum*
- 1. Flowers not as described in the above, their pedicels mostly 4 mm long or more. (2)
 - 2. Petals about equal to or shorter than the sepals..... (3)
 - 2. Petals decidedly longer than the sepals..... (4)
- 3. Flowers arising single in the leaf axils along much of the stem; bracts of the inflorescence without scarious margins. *C. axillare*
- 3. Flowers not as described in the above, mostly arising 2 or more from the leaf axils along the uppermost portions of the stem; bracts of the inflorescence with scarious margins.....*C. fontanum*
- 4. Leaves along lower portion of stem mostly 3 cm long or less; fruiting pedicels about as long as the capsules, straight or only slightly arcuate or recurved; common in eastern Texas.....*C. brachypodum*
- 4. Leaves along lower portion of stem mostly 4 cm long or more; fruiting pedicels much longer than the capsules and markedly recurved near their apices; rare species of western Texas. *C. nutans*

CERASTIUM AXILLARE Correll, Figure 1.

This taxon occurs in trans-Pecos Texas and closely adjacent México, mostly in shady igneous soils along ledges and seeps from 5000-6000 feet; March-May (September).

CERASTIUM BRACHYPODUM (Engelm. ex A. Gray) B.L. Robins., Figure 2.

Cerastium nutans Raf. var. *brachypodum* Engelm. ex A. Gray

Cerastium brachypodum is fairly common in east-central Texas, occurring in mostly disturbed calcareous soils; February-April.

Good (1984) recognized this taxon as a distinct species, as did Correll & Johnston (1970), although some workers would treat it as a variety of *Cerastium nutans*, as noted in the above synonymy. *Cerastium nutans* is reportedly “uncommon in Texas”, which seems to be the case for I have not examined specimens from the state as noted below, although it is fairly common in México and elsewhere in North America (Good 1984).

CERASTIUM FONTANUM Baumg., Figure 3

This is the name applied by European workers to what was formerly referred to as *Cerastium vulgatum* L. It is relatively uncommon in Texas, as indicated in Figure 3.

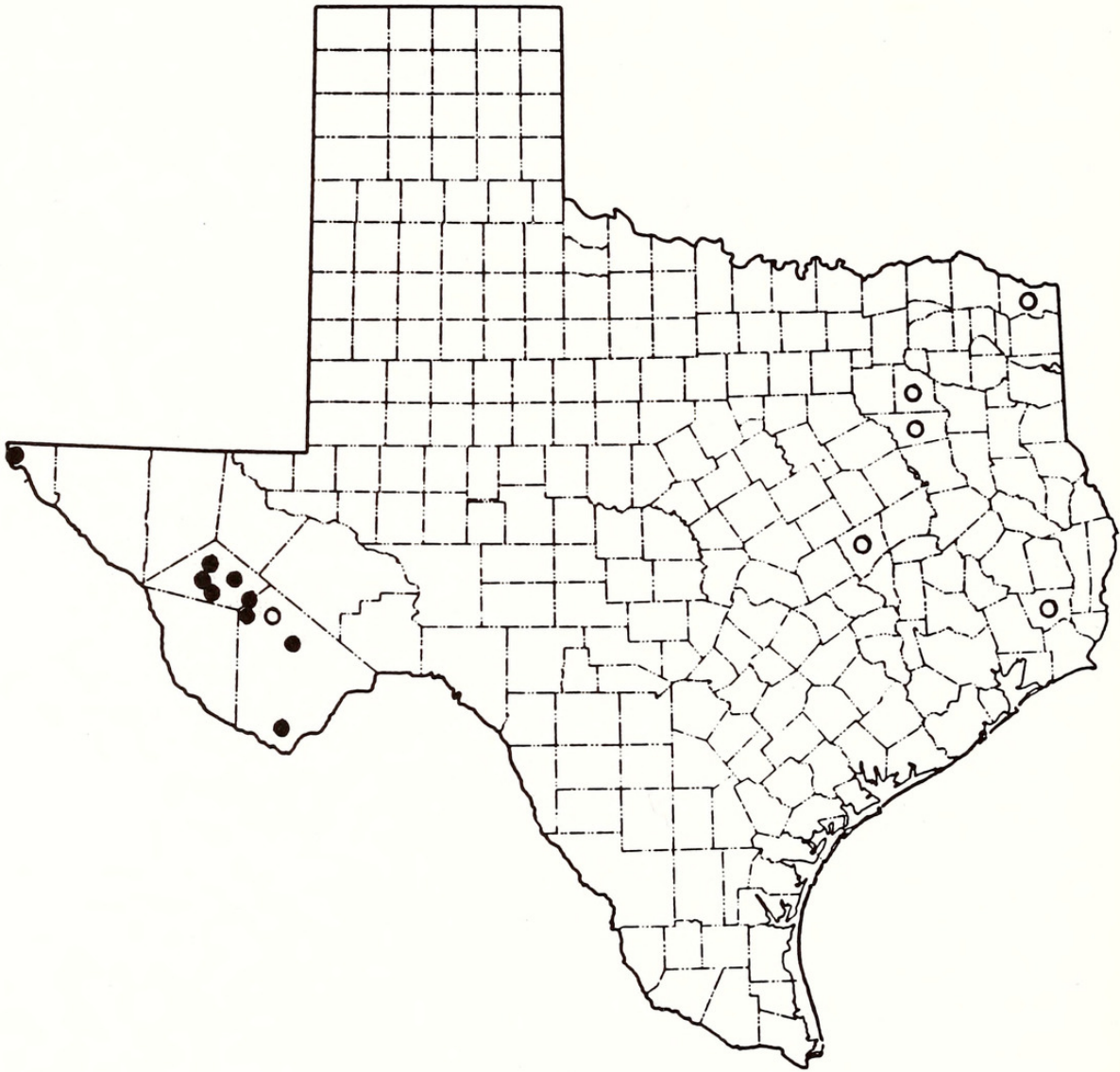


Figure 1. Distribution of *Cerastium axillare* (closed circles) and *C. fontanum* (open circles) in Texas.

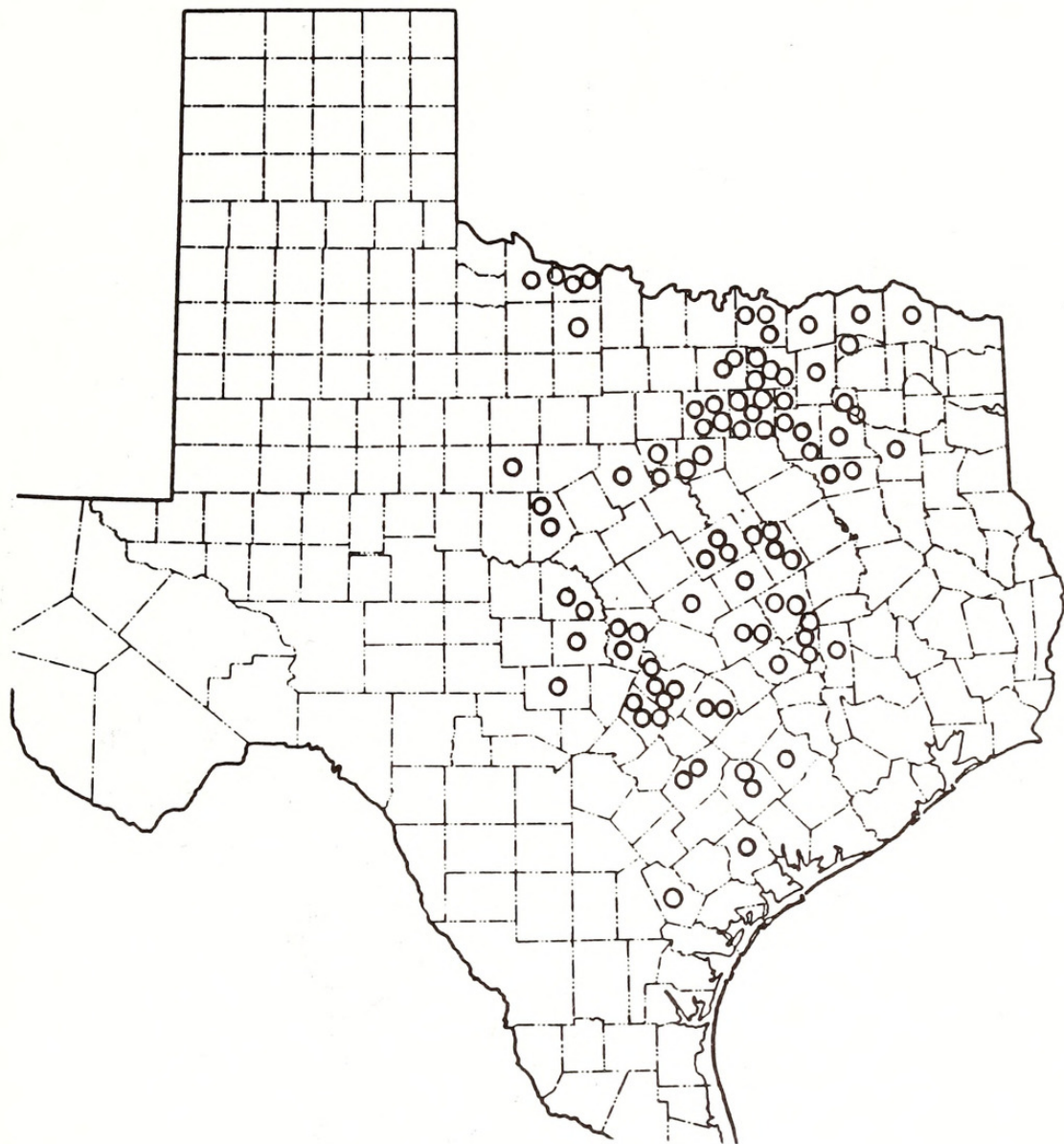


Figure 2. Distribution of *Cerastium brachypodium* in Texas.

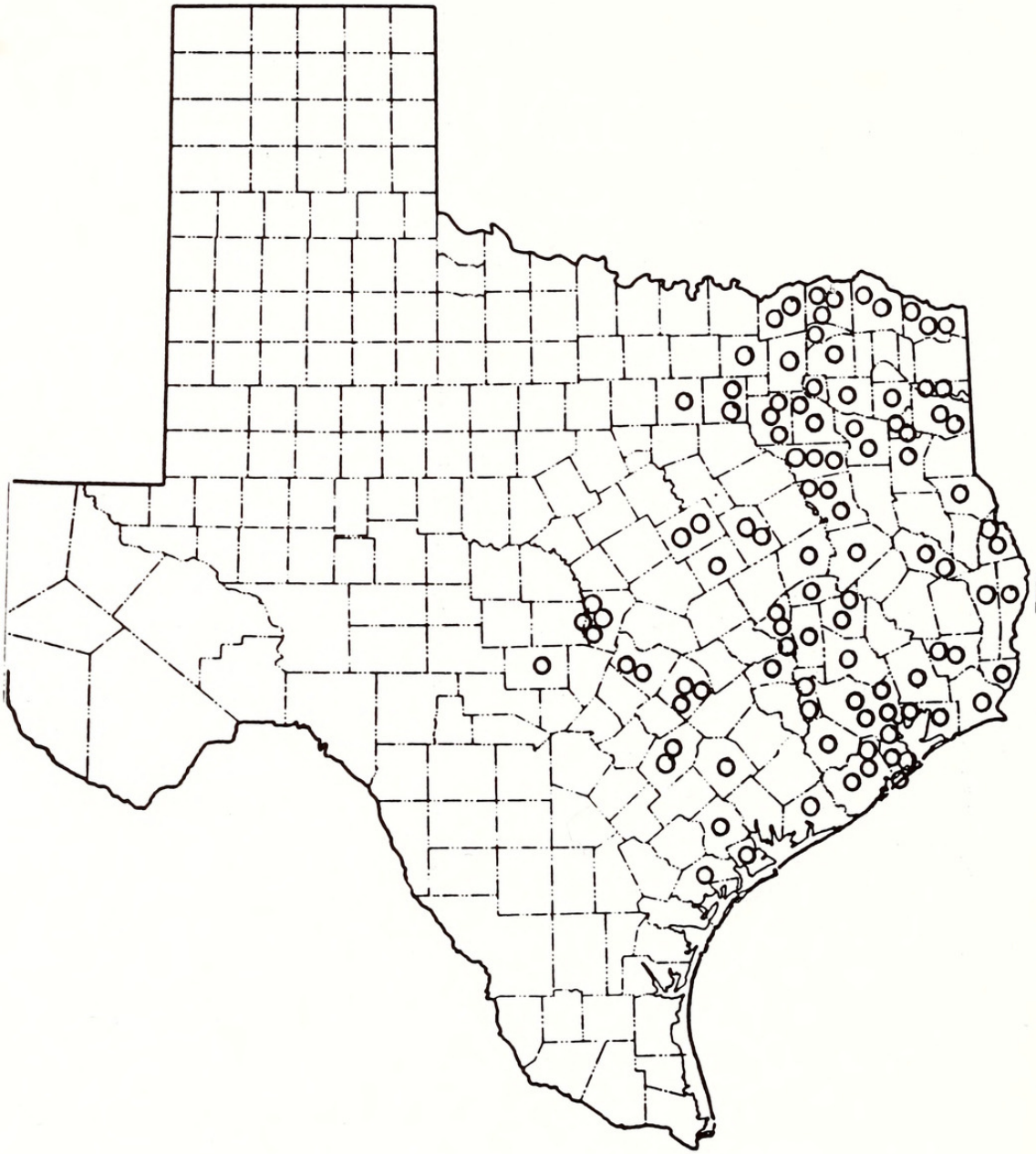


Figure 3. Distribution of *Cerastium glomeratum* in Texas.

CERASTIUM GLOMERATUM Thuill.

This introduced weedy species is typified by material from France (Good 1984) and is a relatively common weed in México and Central America, likewise in eastern Texas.

CERASTIUM NUTANS Raf.

According to Correll & Johnston (1970) this weedy species is common across much of the U.S.A. and parts of México, but is "uncommon in Texas." Indeed, I have not seen collections from the state.

CERASTIUM SPECIES RECOGNIZED FOR TEXAS BY CORRELL &
JOHNSTON BUT EXCLUDED FROM THE PRESENT ACCOUNT

CERASTIUM TEXANUM Britt., Bull. Torrey Bot. Club 15:97. 1888. TYPE: MEXICO (?). Chihuahua(?). "hills, Blanco", Mar-Apr 1852, *C. Wright* 69 (HOLOTYPE: NY!). In the protologue Britton notes that "This very distinct species is represented in the Torrey Herbarium by half a dozen fragments, and does not appear to have been distributed." All of the fragments are mounted on a single sheet, the holotype.

Stellaria montana Rose, Contr. U.S. Natl. Herb. 1:93. 1891. TYPE: MEXICO. Sonora: Alamos Mountains, *E.J. Palmer* s.n. (HOLOTYPE: US).

Good (1984) has given an excellent description and account of this taxon, including the above synonymy. Unfortunately he accredited its occurrence in Texas largely to Correll & Johnston (1970), not having seen specimens himself. No doubt he was also misled by the epithet of the species, along with ignorance as to its type locality. When he first described it, Britton applied the name "*texanum*" to the taxon, presumably under the assumption that the type material had been obtained from the hills about Blanco, Texas, or perhaps along the Blanco River of central Texas. But the material concerned, to judge from label data, was probably collected in northern México or New Mexico during April-May, 1852, while Wright was connected with the Mexican Boundary Survey. The village of Blanco, Texas, was not established until 1853 (Webb 1952) and there is no indication that Wright ever collected in the vicinity of this locality. Indeed, from what is known about the distribution of the species, Wright probably collected the type in northcentral Chihuahua during the period 17-23 April, 1852, during a brief side trip to that region out of El Paso, Texas. While detailed field notes from this phase of Wright's journey are lacking (Johnston 1940), one can infer the place or area of likely collection: a Mexican village or watercourse in this area with the name "Blanco". It is also possible, however, that Wright collected the species somewhere in southern New Mexico, for he also was in this area during the period Mar-Apr 1852, and this region also possesses populations of *C. texanum* (as indicated in Figure 4). Johnston (1940) notes that Wright spent the period March-April surveying the Rio Grande from El Paso, Texas to old Fort

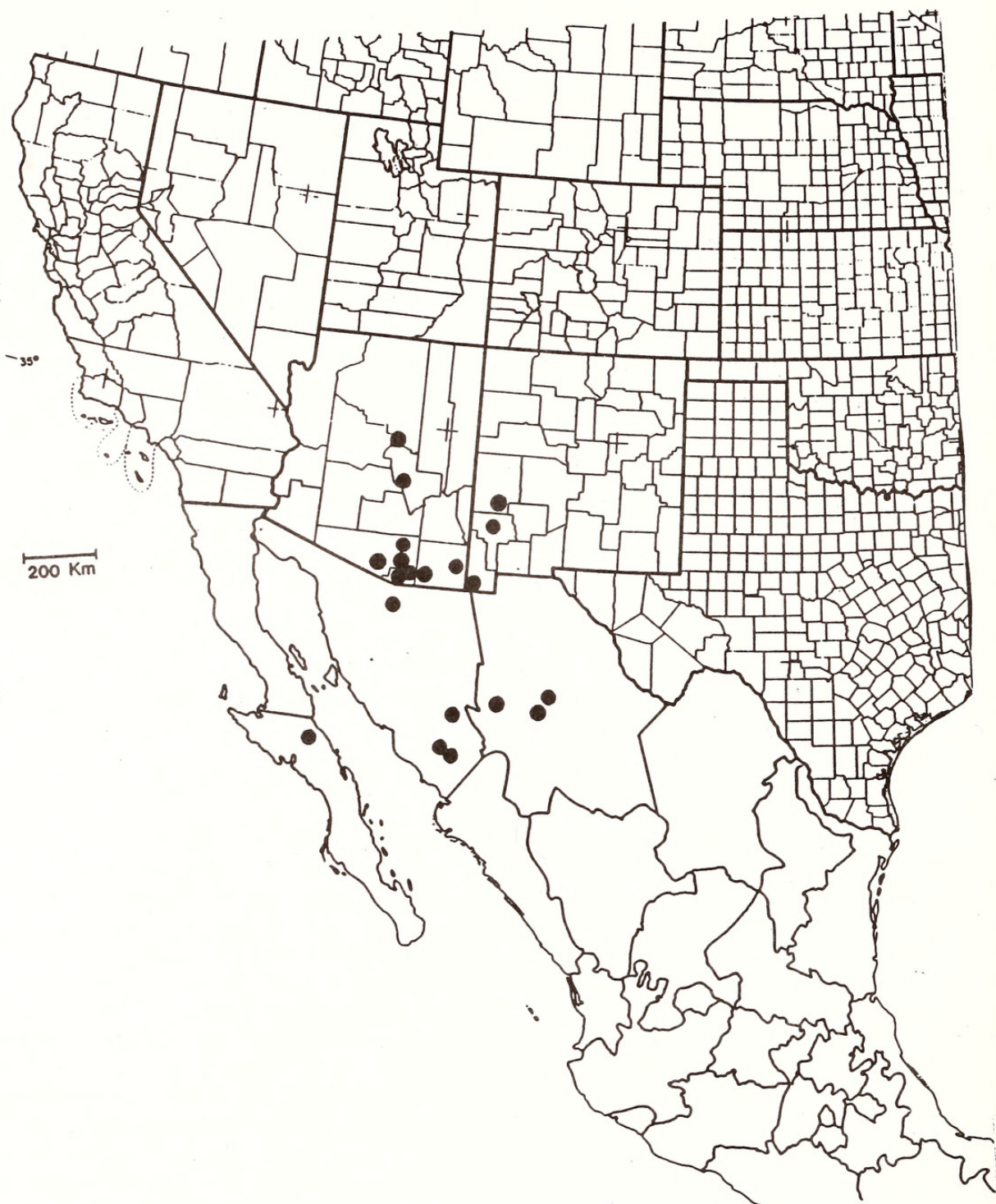


Figure 4. Distribution of *Cerastium texanum*.

Quitman in present day Hudspeth County, Texas, except for the venture to northcentral Chihuahua, México, mentioned in the above account. During the period 29-30 April, however, Wright did collect in the Organ Mountains of New Mexico.

CERASTIUM CLAWSONII Correll, *Wrightia* 4:25.1968.

As first noted by Hartman (1979), this taxon belongs to the genus *Linum* of the family Linaceae where it can be synonymized with *Linum hudsonioides* Planch. When Dr. Ron Hartman (currently at WYO) detected this error, I suggested that he call it to the attention of its author, D.S. Correll, and he did. Correll was not especially admonished by the revelation; indeed, he merely responded to Hartman, cheerfully I imagine, knowing his personality, that someone should set the record straight, but as a lame excuse he added that he was unfortunately misled as to its identity by some careless annotation on the type specimen to the effect that it was a species of *Arenaria*, which he knew it not to be!

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