

NOTES

GLAUCIUM CORNICULATUM (PAPAVERACEAE) IN TEXAS

In May 1993, the senior author was informed by her friends, Don and Jo Robison, about an unusual population of wildflowers growing on their ranch. The population has been growing in the same field since the early 1960s when it first appeared with a cultivated batch of cotton seed (D. Robison, pers. comm.). The cotton was eventually replaced with sorghum alum and other grasses in order to graze cattle and the plant has continued to remain despite grazing upon by cattle during periods of severe drought.

Thousands of these individuals were observed by the senior author growing in a sandy field. The majority of the plants, however, were toward the end of their blooming period and had already developed their fruits (long linear capsules full of tiny black seeds). The senior author took the plant to be a poppy, however, one that she was unfamiliar with.

This plant was later identified as *Glaucium corniculatum* (L.) Rudolph by the junior author by comparison with herbarium collections at TEX. Fortunately, there was already a collection (O'Kennon & Cheatham s.n.) of *Glaucium* from Texas. This specimen, however, was incorrectly identified (as *G. flavum*, a perennial species with yellow petals and glabrous capsules).

In the years since 1993, Texas experienced a drought and few, if any, of the *Glaucium* in the Garza population had bloomed, preventing further observations by the senior author. In April 1997 sufficient rains brought the *Glaucium* population to bloom allowing the senior author to both observe and photograph (Fig. 1) the population. Later, perhaps as a result of the rains, a third population of *Glaucium* was brought to the attention of the junior author (Bill Henderson, pers. comm.). This population was collected at the Balcones Canyonlands National Refuge. An estimated 100 plants were observed growing in a circular area of about 30 feet in diameter. Two individuals were blooming and five were in fruit, but the majority of the plants were in a juvenile phase too young to flower.

The genus *Glaucium* is native to Southern Europe, the Mediterranean, Hungary and South Central Russia. It has become adventive in California, Kansas, Montana, Nevada, New York, Oregon and Pennsylvania (Barkley 1986; Hickman 1993; Kiger 1997). It is immediately distinguished from other Texas genera in the Papaveraceae by its fruits which are straight, unribbed, linear, capsules up to 25 cm long. *Glaucium corniculatum* is a wholly pubescent annual, 30–40 cm tall, caulescent, with clear yellow sap, cauline deeply pinnate unprickled leaves, inflorescence of a solitary flower that has two free sepals and four petals. The petals are a vivid scarlet color, two of them

are wider than the other but all are of equal length (3–4 cm). At the base of each petal is a purple pattern that extends toward the tip about 1/3 the length. The pattern is oval, 10 mm wide and lined with a creamy feather-like design (Fig. 1).

Although collected in Texas as early as 1986 (Keeney 5906) and recently reported in Texas (Jones et al. 1997), and North America (Kiger 1997), *Glaucium corniculatum* has yet to be officially documented in the state. Presented here is an updated key to the genera of Papaveraceae in Texas, a listing of known voucher specimens, and a photo of the flower (Fig. 1).

Below is a revised key to the genera of Papaveraceae in the Manual of the vascular plants of Texas (Correll & Johnston 1970).

1. Acaulescent herbs; petals 8 or more, not crumpled in the bud; stigmas over the valves of the capsule. **Sanguinaria**
1. Caulescent herbs or (of subcaulescent) confined to the Trans-Pecos; petals 4 to 6, mostly crumpled in the bud; stigmas over the placentae. 2
 2. Perianth and stamens borne on the rim of the hypanthiumlike expansion of the receptacle; sepals united into a calyptra; fruit conspicuously ribbed. **Eschscholzia**
 2. Perianth and stamens strictly hypogynous; sepals not united into a calyptra; fruit not ribbed. 3
 3. Herbage prickly; flowers on short pedicels; capsule dehiscent from the apex by 4 to 6 valves. **Argemone**
 3. Herbage not prickly; flowers on long pedicels. 4
 4. Stigmatic disk present; capsules short and turgid, to 5 cm long, dehiscent by means of small openings just beneath the truncate summit. **Papaver**
 4. Stigmatic disk absent; capsules linear up to 25 cm long, dehiscent longitudinally from the apex. **Glaucium**

***Glaucium corniculatum* (L.) Rudolph, Fl. Jen., 13. 1781. *Chelidonium corniculatum* L., Sp. Pl. 1:56. 1753.**

Voucher specimens. **TEXAS. Garza Co.:** community of Justiceburg, on Farm Rd. 3519 on the way to Lake Alan Henry, Don and Jo Robison Ranch, SE corner of Garza Co., ca. 3 mi from Kent Co. line, in field on N side of dirt road, 10 May 1993, *Kirkpatrick s.n.* (TEX). **Kerr Co.:** W of Hunt on TX 39, dry creek bed on N side of road, 2 May 1993, *O'Kennon & Cheatham s.n.* (TEX). **Travis Co.:** Balcones Canyonlands National Refuge, 0.2 mi along dirt road NE from intersection with Cow Creek road, dirt road is 3.4 mi N along Cow Creek Road from 1431, just after large yellow house (30° 33' 50" N, 98° 07' 70" W), 3 May 1997, *J.K. Williams et al. 150* (TEX). **San Saba Co.:** along the Cherokee Creek on the William Clark farm at Bend, on the edge of an over grazed field, 11 May 1986, *Keeney 5906* (BRIT); SE of the William Clark house on the east side of the Cherokee Creek at Bend (1654 plants present), 9 May 1987, *Keeney 6642* (BRIT).

The following partial list of species from the Travis county population



FIG. 1. Photo of *Glaucium corniculatum* (L.) J.H. Rudolph. Photo by Z. Kirkpatrick.

emphasizes the weedy nature of the vegetation at this site: *Argemone albiflora* Hornem., *Buglossoides arvensis* (L.) I.M. Johnston*, *Callirhoe involucrata* (Torr.) A. Gray, *Centaurea melitensis* L.*, *Cirsium texanum* Buckl., *Convolvulus equitans* Benth., *Cucurbita foetidissima* Kunth, *Evax* sp., *Gaura calcicola* Raven & Gregory, *Glandularia bipinnatifida* (Nutt.) Umber, *Lamium amplexicaule* L.*, *Lepidium virginicum* L., *Marrubium vulgare* L.*, *Medicago lupulina* L.*, Hill., *Oenothera trilobata* Nutt., *Physalis cinarens* (Dunal) A. Hitch., *Plantago rhodospermum* Dcne., *Rapistrum rugosum* (L.) All.*, *Ratibida columnaris* (Sims.) D. Don., *Salvia farinacea* Benth., *Verbena halei* Small. * = naturalized species.

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