

***ERIGERON SARACACHIENSIS* (ASTERACEAE),
A NEW SPECIES FROM NORTH-CENTRAL SONORA**

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ABSTRACT

The new species ***Erigeron saracachiensis*** Nesom is described from the Ciénega de Saracachi area in vicinity of Cucurpe, north-central Sonora. It is hypothesized to be a member of sect. *Polyactis*, with center of diversity in northwestern Mexico. Type photos and maps showing the geography are included.

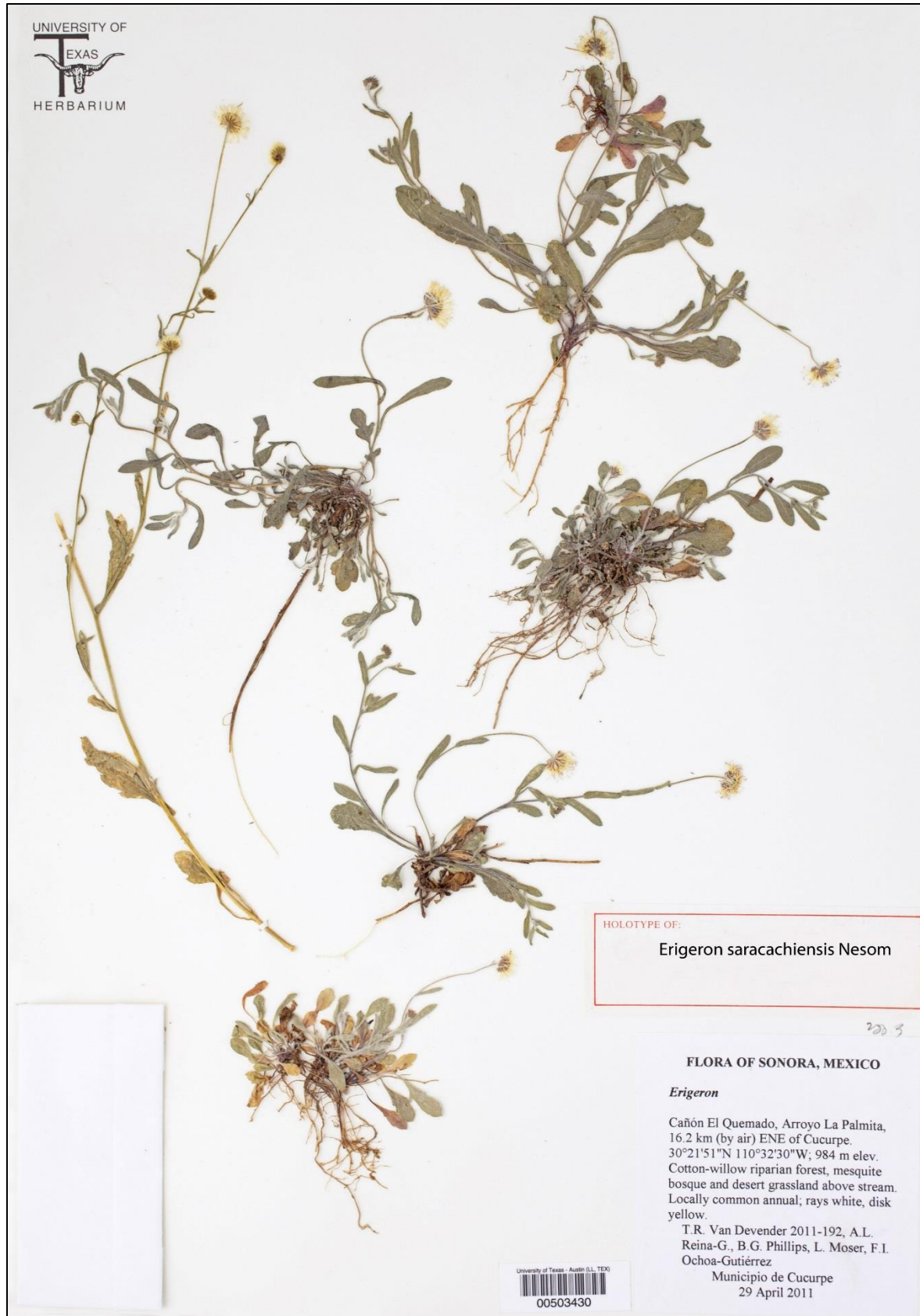
A collection from north-central Sonora is of plants outside the bounds of any currently known species of *Erigeron*.

Erigeron saracachiensis Nesom, **sp. nov.** **TYPE: MEXICO. Sonora.** Mpio. Cucurpe.: 16.2 air km ENE of Cucurpe, Cañón El Quemado, Arroyo La Palmita, 30° 21' 51" N, 110° 32' 30" W, cottonwood-willow riparian forest, mesquite bosque and desert grassland above stream, 984 m, 29 Apr 2011, *T.R. Van Devender 2011-192* et al. (holotype: TEX; isotypes: TEX). Figures 1 and 2.

Similar to species of *Erigeron* sect. *Polyactis* in its small achenes with 8 fragile bristles breaking off at the base and in its white, filiform ray ligules that probably reflex at the tube-throat junction; distinct in its combination of slender rhizomes, low habit of decumbent stems, strap-shaped and basally subclasping cauline leaves, densely hirsute-villous, eglandular vestiture of stems and leaves, and very small heads.

Delicate **perennials** from slender, lignescent rhizomes. **Stems** decumbent to ascending, 8–28 cm long, irregularly branching below the middle, hirsute-villous with a mixture of spreading and descending to ascending hairs 0.3–0.8 mm long, eglandular. **Leaves** basal and cauline; basal persistent, blades obovate to narrowly obovate, 1–3 cm long, 4–11 mm wide, basally attenuate to a petiolar region 1.5–3 cm long, margins entire or usually with 1–2 pairs of shallow teeth; lower cauline like the basal but quickly becoming narrowly oblanceolate to narrowly oblong and epetiolate, distal-most distinctly subclasping, both surfaces moderately to densely hirsute to hirsute-villous, eglandular, margins eciliate. **Heads** solitary on ebracteate or bracteate peduncles 2–4 cm long. **Involucres** 6–8 mm wide (pressed); phyllaries in 2–3 series of equal to subequal length, longest ca. 3 mm, minutely stipitate-glandular distally, midregion with a broad orange oil duct, margins white-scarious. **Ray florets** ca. 50–90, ca. 5–6 mm long, ligules white or white with purple tinge, filiform (0.5–0.8 mm wide), not reflexing but probably (as predicted) to do so with maturity. **Disc corollas** narrowly cylindric, 1.5–1.8 mm long, lobes yellow, tube white, indurate proximally, abruptly constricted to a much narrower proximal tube 0.2 mm long. **Achenes** ca. 1.0 mm long, flat, 2-nerved, sparsely strigose; pappus bristles ca. 8, 1.5 mm long, fragile at the base and easily broken off, outer pappus a minute series of slender squamellae or bristles 0.1 mm long.

The very small achenes and especially the 8, basally caducous pappus bristles are diagnostic features of *Erigeron* sect. *Polyactis* (Nesom 1989, 2008) and northwestern Mexico is the center of diversity for the section. *Erigeron saracachiensis* is the 22nd species of the section, the first new one to be added since the 2008 summary. The heads of the type all are relatively immature, with ray floret ligules yet to reflex at the tube-throat junction, as is characteristic of sect. *Polyactis*, but the hypothesis of relationship predicts this behavior.

Figure 1. *Erigeron saracachiensis*, holotype (TEX).

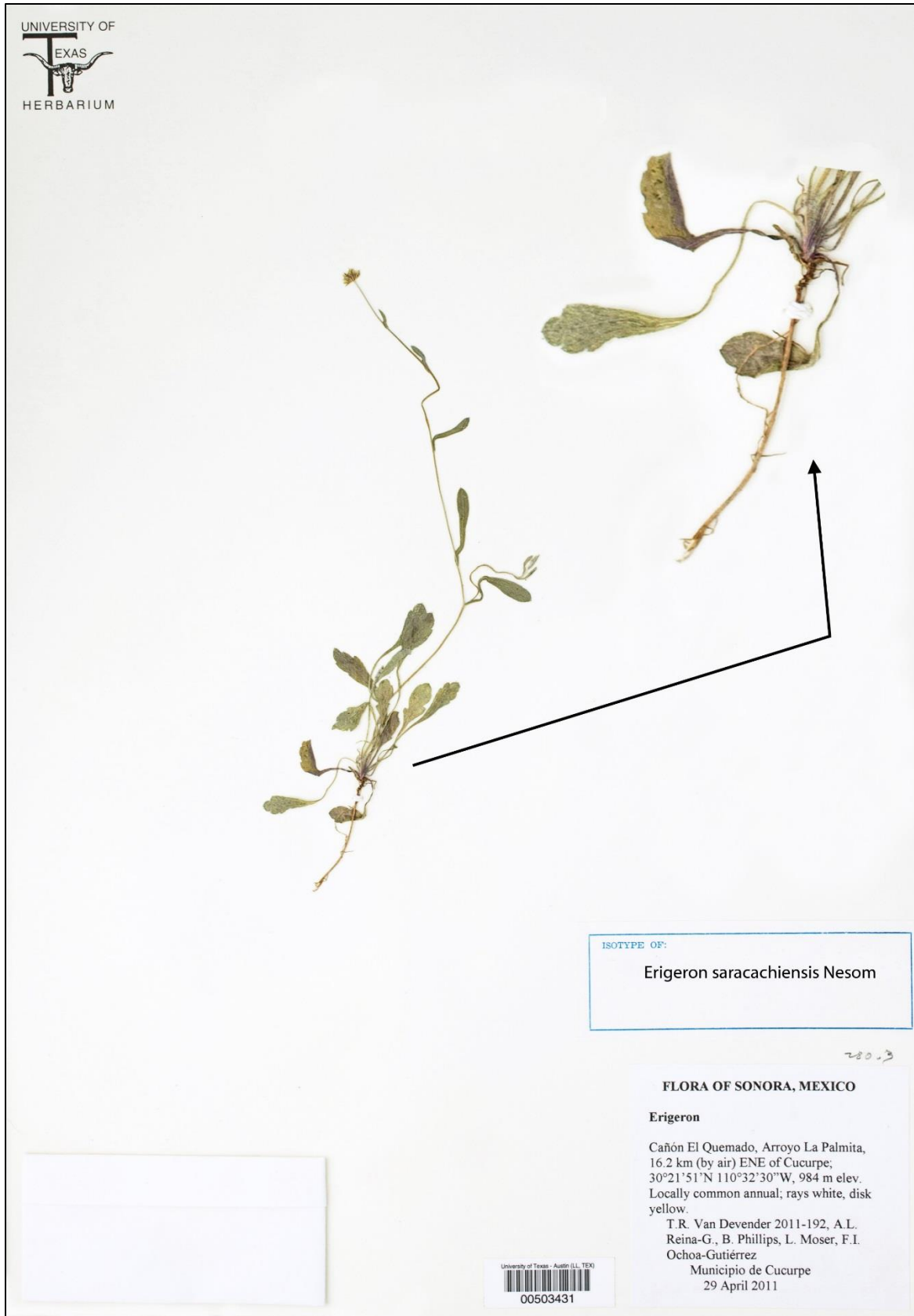


Figure 2. *Erigeron saracachiensis*, isotype (TEX).

Cañón El Quemado (the type locality) is within the Ciénega de Saracachi area (Van Devender et al. 2013), east-northeast of Cucurpe (Figs. 3, 4) — it leads into the broader San Miguel river canyon. The collection data are generalized but it does not appear that the *Erigeron* was growing in a specialized habitat, thus it may occur more widely in the region, perhaps in areas of steep relief in the low mountains between Arizpe and Cucurpe.

In 2010, the Ciénega de Saracachi area was nominated to be a Sonoran Área Natural Protegida to preserve its natural values and to develop ecotourism land use options. The type collection was made during a biological inventory on Sky Island Alliance's Madrean Archipelago Biodiversity Assessment (MABA) Expedition.



Figure 3. Location of Cucurpe, Sonora, near the type locality of *Erigeron saracachiensis*.

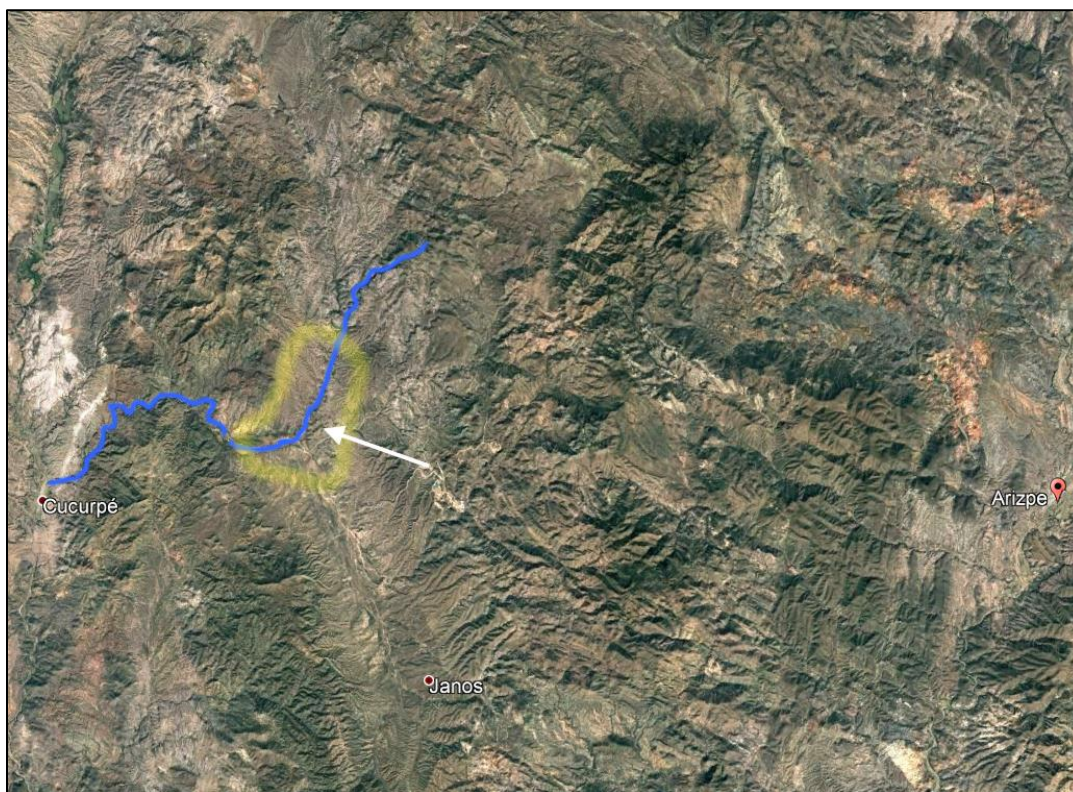


Figure 4. Type locality (arrow) of *Erigeron saracachiensis*. The blue line is the Rio San Miguel; the yellow ring outlines the Ciénega de Saracachi area.

ACKNOWLEDGEMENTS

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