NEW RECORDS FOR THE FLORA OF ARIZONA

BRASSICACEAE

Nerisyrenia camporum (A. Gray) Greene (Fig. 1). This species has been found as a volunteer in a residential yard in Mesa, Arizona. This Chihuahuan Desert native has not been previously reported in Arizona. While other *Nerisyrenia* species are limited to gypsum soils, *N. camporum* is more widespread and tolerates a variety of soil types. Its reported range extends from southeastern New Mexico and southern Texas, to the Mexican states of Chihuahua, Coahuila, Durango, and Nuevo León (Bacon 1978).

The single plant has flourished over two growing seasons on natural rainfall in native desert soil, flowering prolifically from early spring until the advent of summer heat. It is apparently an obligate out-crosser, since it sets no seed. When I first observed the plant, it was about 20 cm high and wide, with neat, attractive flowers and grey foliage. In its third spring, it has reached over a meter across with stems up to 7.4 decimeters. A voucher specimen (*M. Caisse s.n.*, 6 May 2011) is deposited at ASU.

How the seed from which this plant grew arrived in this location is a mystery. The small size of the seed and lack of long-distance dispersal mechanisms argues for human dispersal, probably accidental and possibly through the import of some product from the native range of the species.

ACKNOWLEDGMENTS

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Figure 1. *Nerisyrenia camporum.* A, close up of flowers. B, habit.

MALVACEAE

Malacothamnus fasciculatus (Nutt. ex Torr. & A. Gray) Greene - chaparral mallow or bush mallow (Fig. 2). This species is known from the coastal ranges of California, in coastal-sage scrub and chaparral, and northern Baja California and Sonora, Mexico, in dry matorral (Bates 1993, Fryxell 1988). It was collected at Spur Cross Ranch Conservation Area, in Maricopa County, in Sonoran Desert Scrub, Arizona Upland habitat. One individual was found April 29, 2010, on an island in Cottonwood Creek, N33º53.655' W111º56.669, elevation 729 m (2,392 ft) (*S. Hunkins & K. Smith 717*, DES). Three more plants were found June 18, 2011, approximately 0.8 km (0.5 mi) downstream from the first site, at the confluence with Cave Creek (*S. Hunkins & K. Smith 740,* DES). Associated species include *Prosopis velutina* Wooton, *Acacia greggii* A. Gray, *Celtis pallida* Torr., *Ambrosia monogyra* (Torr. & A. Gray) Strother & B.G. Baldw., *A. ambrosioides* (Cav.) Payne, *Sphaeralcea ambigua* A. Gray, *Lycium exsertum* A. Gray, *Artemisia ludoviciana* Nutt., *Avena fatua* L., *Bromus rubens* L., *B. diandrus* Roth, and *Cynodon dactylon* (L.) Pers. Steven R. Hill, specialist in Malvaceae, confirmed the identification.

With its pink to lavender flowers *Malacothamnus fasciculatus* resembles *Sphaeralcea ambigua* ssp. *rosacea* (Munz & Johnston) Kearney. The two can be distinguished mainly by their fruits. *Malacothamnus fasciculatus* has 1-seeded, smooth-sided, completely dehiscent fruit segments, while the other taxon has 2-seeded fruit segments that are smooth and dehiscent above and net-veined and indehiscent below. A less reliable difference, but one helpful in field identification, is in the leaf shape. The leaves of *M. fasciculatus* tend to be round in outline, while the leaves of *S. ambigua* ssp. *rosacea* tend towards triangular.

The nearest known collection, from an area where this species still occurs, is approximately 400 km (250 mi) west, in the vicinity of Riverside, California. Specimens were also collected in the Santa Cruz Valley, Sonora, Mexico (*C. V. Hartman 44, G. Thurber 700 & 709*) in the mid to late 1800's but no collections appear to have been made in that area since that time. The genus, *Malacothamnus*, as well as the species, *M. fasciculatus* have not been previously reported in Arizona (Shreve and Wiggins 1964, Kearney and Peebles 1969, Fryxell 1994, SEINet 2011, USDA NRCS 2011, pers. comm. curators of ARIZ, ASC, ASDM, ASU, CCH, DES, GCNP, MNA, NAVA, and TEUI 2011).

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Figure 2. *Malacothamnus fasciculatus*. A, habit. B, close up of flower.