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A NEW ANNUAL *ERIOGONUM* (POLYGONACEAE) FROM SOUTHERN NEVADA AND ADJACENT CALIFORNIA

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The Eriogonum deflexum complex has been the object of intensive field study on my part, and the subject of a major revision in my series of papers on the genus (Reveal, 1968a). Since that revision appeared, one additional species, *E. scabrellum* Reveal has been reported (Reveal, 1968b). Now, another may be described:

Eriogonum bifurcatum Reveal, sp. nov.

A E. insigne S. Wats. (subgeneris Ganysmae) plantis (0.5-)1-4 dm altis et 3-15 dm latis, caulibus 0.3-0.8(-3) cm longis, inflorescentiis apartis, involucris paucis et late separatis differt. Herba annua, (0.5-)1-4 dm alta et 3-15 dm lata, glabra; caules basi (raro caulina), laminis rotundo-cordatis, (0.5-)1-3 cm longis et latis, interdum reniformis et 1-4 cm latis, albotomentosis subter, floccosis et viridis supra, petiolis 1-4 cm longis; caules breves, 0.3-0.8(-3) cm longi; bracteae 1-2(-3) mm longae; inflorescentiae apertae et late effusae, 1-4 dm altae et 3-15 dm latae, ramis inferne trichotomis, superne dichotomis; pedunculi erecti, 0-5 mm longi; involucra turbinata, 2-2.5 mm longa, 1.3-2 mm lata, 5-lobata, bracteolis linearioblanceolatis, 2-2.5 mm longis, pedicellis 2-2.5(-3) mm longis; perianthia alba, 1.5-2 mm longa, tepalis dissimilibus, extimis tepalis obovatis cum cordatis basi, 0.9-1.1 mm latis, intimis tepalis lanceolatis, 0.5-0.7 mm latis; stamina 2-3 mm longa, filamentis pilosis basi, antheris roseis vel purpureis, 0.5-0.6 mm longis; achaenia infuscata, 2-2.3 mm longa; n=20.

Low spreading herbaceous annual (0.5-)1.5-4 dm high, 3-15 dm across, the plants nearly glabrous throughout, arising from a slender, tan, woody taproot; leaves strictly basal (rarely with reduced leaves at the first node in the larger plants), the leaf-blade round-cordate, (0.5-)1-3 cm long and wide, occasionally reniform and 1-4 cm wide, densely white-tomentose below, less so to floccose and green above, the margin entire, plane or infrequently with a wavy margin in some, the apex rounded, the base mostly cordate, the petiole 1-4 cm long, tomentose, the petiole-base triangular, 4-6 mm long, tomentose without, glabrous within; flowering stems short, often concealed by the leaves, green, glabrous and glaucous, not fistulose, 0.3-0.8(-3) cm long; bracts scale-like, ternate, 1-2(-3) mm long, tan,

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glabrous without, slightly tomentose within, connate at the base; inflorescences open, broadly spreading, 1-4 dm high, 3-15 dm across, glabrous and glaucous, trichotomously branched at the first node, dichotomously branched above with a peduncled involucre in the fork of each of these dichotomes, the involucres racemosely arranged and widely spaced on the ultimate branches, these branches gradually shortening toward the tip of the in-florescence, usually less than 5 involucres per branch segment; peduncles erect, up to 5 mm long in the forks of the branches, often nearly or quite sessile toward the tips of the ultimate branches; involucres erect, sessile (or nearly so) on the branches or peduncled in the forks of the branches, turbinate, 2–2.5 mm long, 1.3–2 mm wide, the 5 obtuse teeth 0.4–0.5 mm long with a thin hyaline margin, glabrous within and without, the bractlet linearoblanceolate, 2-2.5 mm long, minutely fringed with gland-tipped cells and sharp acute ones, the pedicel 2–2.5(-3) mm long, glabrous, 10–20 flowered; flowers white with greenish to reddish midribs and bases, 1.5-2 mm long, glabrous within and without except for a few scattered microscopic glands along the midribs within, the tepals dissimilar, the outer whorl of tepals obovate, deeply cordate at the base, 0.9-1.1 mm wide, the inner whorl of tepals lanceolate, 0.5-0.7 mm wide, slightly shorter than the outer whorl, united about ¼ the length of the flower; stamens exserted, the filament 2-3 mm long, sparsely pubescent basally, the anther red to reddish-purple, oblong, 0.5-0.6 mm long; achenes light brown, 2-2.3 mm long, the globose base tapering to a long, 3-angled beak: n=20.

Type.—On low rolling hills 1 mile east of the California-Nevada state line along, and south of, Nevada Highway 52, associated with *Atriplex*, T. 24 N., R. 8 E., sec. 23, at 2525 ft elevation, Pahrump Valley, Nye Co., Nevada, 13 June, 1970, *Reveal* 2283. Holotype, US! Isotypes, to be distributed.

Representative collections.—CALIFORNIA: Inyo Co.: Dry Well, Pahrump Valley, 15 May, 1941, Abrams 14248 (CAS, GH); Stewart Valley, 0.3 mile west of the California-Nevada state line along, and south of, California Highway 127, T. 24 N., R. 8 E., sec. 22, at 2500 ft elevation, 13 June, 1970, Reveal 2284 (NTS, US); Dry Well, Pahrump Valley, 15 May, 1941, Wolf 10614 (CAS, GH, OKL, RSA, UC). NEVADA: Nye Co.: Pahrump Valley, 5 miles west of Pahrump, T. 20 S., R. 53 E., sec. 30, at 2550 ft elevation, 12 June, 1970, Reveal 2272 (NTS, US); 1 mile east of the California-Nevada state line, 12 June, 1970, Reveal 2274 (NTS, US).

The Pahrump Valley Buckwheat, *Eriogonum bifurcatum*, is a member of the *E. deflexum* complex. It is most closely related to *E. insigne* and some difficulties will be encountered in attempting to distinguish between immature specimens of the two species as they are similar in their general appearance at this early stage of development. However, the large, mature plants are strikingly different. *Eriogonum insigne* is tall, often more than a meter in height, with the branches of the inflorescence strict and narrow forming a crown less than 5 dm across. In *E. bifurcatum* the plants are short, with the branches of the inflorescences often forming a low, somewhat flat-topped crown often more than a meter across. In the field the two species are vastly different even though the two share many technical features in common. April 22, 1971]

The geographical distribution of the two species, as now understood, is distinct. *Eriogonum insigne* is known to the north and east of Pahrump Valley in Nye and Clark counties, Nevada (and elsewhere). *Eriogonum bifurcatum* is known only from Pahrump and Stewart valleys in Nye County, Nevada, and Inyo County, California.

In my revision of *Eriogonum deflexum*, this new species may be added to the key on page 19 as follows:

Involucres erect on peduncles, sessile or peduncles less than 5 mm long.

Stems short, less than 3 cm long, often hidden by the basal leaves; plants (0.5–)1.5–4 dm high and 3–15 dm across, the crowns often spreading and flat-topped; Pahrump and Stewart valleys, Nye Co., Nevada, and Inyo Co., California.

E. bifurcatum

Stems long, (0.5-)2-20 cm long, the mature plants with stems not hidden by the basal leaves; plants (0.5-)3-10(-12) dm high and 1-5 dm across, the crowns strict and erect; southwestern Utah, southern Nevada, and southeastern and extreme southern California.

E. insigne

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