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NEW SPECIES OF *TALINUM* (PORTULACAEAE) FROM UTAH

N. Duane Atwood¹ and Stanley L. Welsh²

ABSTRACT.— Named and described is *Talinum thompsonii* Atwood & Welsh. The species is evidently most closely allied to *T. validulum* Greene from northern Arizona. The new species is known from the Cedar Mountain region of Emery County, Utah.

In the late summer of 1970 the authors, accompanied by Dr. Glen Moore, visited the summit of Cedar Mountain in Emery County, Utah. The mountain summit is protected from excessive erosion by the Buckhorn Conglomerate Formation of Jurassic age. Rounded silicious pebbles mark the surface, which is clothed by a pinyon-juniper woodland, interspersed here and there with ponderosa pine. Crevices in the conglomerate provide habitats where water accumulates from the impervious surface. The crevices are vegetated by those plants capable of survival through long drought periods, and it is there that we discovered a species of *Talinum*. The plants consisted of fleshy-leaved rosettes 2–4 cm broad, projecting only a few centimeters above the surface. Bright pink flowers were helpful in the discovery. The season was very dry, and few plants were found. Subsequent collections demonstrated that larger material was not exceptional when moisture was more abundant. The plants flower very late in the season, when most taxonomists have returned to other pursuits. This accounts, in part, for the long interval between initial discovery and this publication.

Attempts at identification were thwarted by lack of similar material in Utah and Arizona herbaria and by the real lack of information in contemporary keys to the Portulacaceae. Tentatively we settled on an identification as *T. validulum* Greene? Ultimate disposition of the plants as a new taxon awaited location of the type of that species at US. The type was taken in the Tusayan (now Kaibab) Forest Reserve, Coconino Co., Arizona, at 2013 m, 11 August 1912 by R. R. Hill. The type was bor-

rowed, through the kindness of the curator at the Smithsonian Institution, and compared with our material. The plants are strikingly similar but differ in stamen number, leaves that average longer, and larger flowers. The type specimens of *T. validulum* consist of three specimens and a slide containing a mounted, dissected flower. A note on the sheet indicates that there are 12 stamens, not 10, as in our specimens. The Cedar Mountain *Talinum* is described as follows:

Talinum thompsonii Atwood & Welsh, sp.
nov.

Planta similis *T. validulo* Greene in radicibus, caudicibus, et staturis sed in foliis et floribus majoribus et staminibus (10 nec 12) differt.

TYPE.— USA: Utah: Emery Co., Cedar Mountain, east of Castle Dale, T19S, R12E, S18, pinyon-juniper-ponderosa pine community, on conglomeritic rock, at 2288 m elev., 19 July 1981, N. D. Atwood & R. Thompson 8056 (Holotype BRY; isotypes NY, POM, US).

Perennial glabrous herbs from a fusiform or cylindrical, reddish, tuberous root and a short perennating rootcrown bearing branches of the season; stems spreading, rosettelike, forming caespitose clumps to 10 cm wide; leaves 0.8–3.2 cm long, fleshy, cylindroid, to 3 mm wide when pressed, with auriculate, clasping base; flowers (1) 3–6 in cymes, ca 1 cm wide; petals pink; sepals 4.3–4.8 mm long, ovate, reticulately veined, greenish or brownish, with scarios margins, abruptly acuminate apically, tardily deciduous; stamens 10; capsules 6–6.5 mm long, 3.2–3.8 mm wide,

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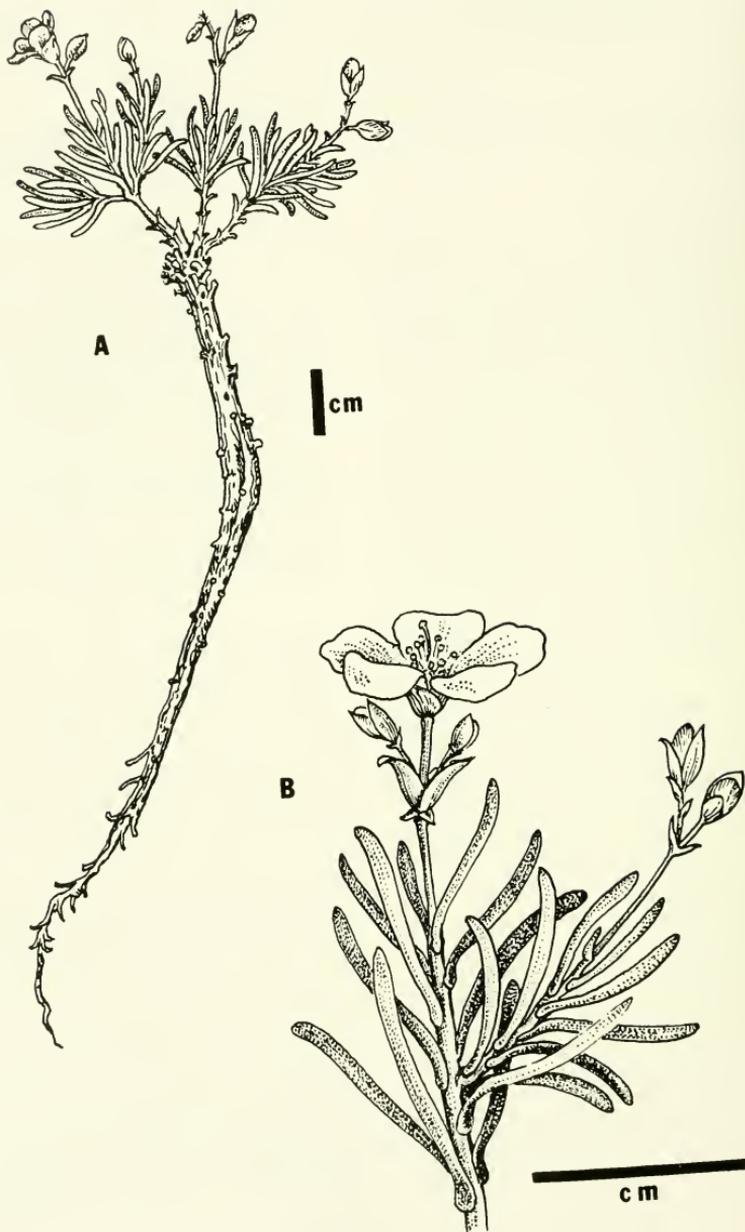


Fig. 1. *Talinum thompsonii* Atwood & Welsh. A, Habit. B, Detail of leaves and inflorescence.

keeled along the sutures apically; seeds grayish black, 1.2–1.3 mm long.

ADDITIONAL COLLECTIONS.—Utah. Emery Co., summit of Cedar Mt., ca 50 km SSW of Price, T19S, R11E, S13, Pinyon-juniper woods on conglomerate, 31 August 1970, S. L. Welsh, N. D. Atwood, & G. Moore 10781 (BRY); Ca 35 km due SE of Huntington, T19S, R12E, S7, 2166 m, S. L. Welsh & S. Clark 16134, 16166 (BRY).

This low, clump-forming fleshy plant with beautiful pink flowers occurs on fused silicious conglomeratic gravel of the Buckhorn Conglomerate Formation. It occurs with another rarity, *Hymenoxys depressa* (T. & G.) Welsh & Reveal, which is known from other sites in Emery County. However, the physical features of the summit of Cedar Mountain are hardly matched by any other in the vicinity.

The substrate is present over a large region, but it does not occur in the same context or at the same elevation in any other area. The extent of the formation on Cedar Mountain is relatively large, standing above the north rim of the San Rafael Swell proper. It is difficult to predict where the plant might be found elsewhere.

The plant is named for Robert (Bob) Thompson, long-time collector and botanical enthusiast, who works for the U.S. Forest Service in Price, Utah.

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