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NEW VARIETY OF *MENTZELIA MULTICAULIS* (LOASACEAE)
FROM THE BOOK CLIFFS OF UTAH

Kaye H. Thorne¹ and Frank J. Smith²

ABSTRACT.—Described is *Mentzelia multicaulis* (Osterh.) Goodman var. *librina* Thorne & F. J. Smith.



Fig. 1 *Mentzelia multicaulis* (Osterh.) Goodman var. *librina* Thorne & F. J. Smith: A, Branch. B, Seed. C, Habit.

Mentzelia multicaulis (Osterh.) Goodman is a suffrutescent perennial endemic to Uintah, southeastern Duchesne, eastern Carbon, and

northeastern Emery counties in Utah and western Rio Blanco County, Colorado. The plant is characterized by a diffusely branched

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stem to 3 dm tall, simple, pinnatifid leaves with narrow lobes, and scarcely winged seeds ca 2 mm long. An undescribed phase of the species was discovered during investigations of the flora of the Book Cliffs in Emery County, Utah. The plants were growing at the base of the barrier island sandstones of the Mesa Verde group of formations, especially below the Black Hawk Member, but more specifically on the Blue Gate Member of the Mancos Shale Formation on fine-textured saline substrates. The western margin of the Book Cliffs is isolated both spatially and geologically from the body of distribution for the species in the Uinta Basin.

The undescribed material differs from *M. multicaulis* var. *multicaulis* in its more robust habit of growth, trilobed leaves, rarely 4–5 lobed, and winged seeds 3–3.5 mm long. The cauline leaves are predominantly trilobed, with the pair of lateral lobes near the base of the blade, and with the terminal lobe very long and narrow. It is described as follows.

Mentzelia multicaulis (Osterh.) Goodman var. *librina* Thorne & F. J. Smith var. nov. A. var. *multicaulis* in plus robustioribus (2.5–4.5 dm nec 2–3 dm) foliis plerumque trilobatis, seminibus alatis (3–3.5 mm nec minus 3).

TYPE: USA: Utah. Emery Co., T16S, R14E, S5, NE1/4, SE1/4, Book Cliffs, Horse Canyon, ca 13 km SE on Hwy 124 from East Carbon, ca 0.4 km on road to cliff base, *Atriplex*, *Stanleya*, and *Eriogonum* community, southwest aspect, 1,890 m, 18 Aug 1985, F. J. Smith 2702 (Holotype BRY; isotypes to be distributed).

ADDITIONAL SPECIMENS: Utah. Carbon Co., T15S, R14E, S17, NW1/4 SW1/4, Columbia, E end of town, 0.6 km S along railroad tracks, *Eriogonum* and *Atriplex* community, SSW aspect, 1,890 m, 15 Sep 1985, F. J. Smith 2712; T15S, R14E, S20 NW1/4 of NW 1/4, Columbia, East end of town, along railroad tracks to exposed shale. *Atriplex*, *Eriogonum* comm. 15 Sep 1985, F. J. Smith 2711; T16S, R14E, S32 SW 1/4 of SW1/4, Horse Canyon, Geneva Mine, dirt road north to railroad tracks, 1 km north to exposed shale. *Atriplex*, *Elymus*, *Stanleya* comm. ca 1,890 m, 9 Sep 1985, F. J. Smith 2710; Emery Co., same locality as the type, 9 Sep 1985, F. J. Smith 2709; T19S, R15E, S17, ca 19 km NNW of Green River, Beckwith Plateau, 2,073 m, pinyon-juniper community, sandy soil, lightly grazed, Mesa Verde Group, 29 Jun 1977, S. L. Welsh & K. Taylor 15218 (all BRY).