

Jones in 1903 (P): IDAHO, Salmon, *E. B. & L. B. Payson* 1786 (G, W); Challis, *Macbride & Payson* 3233 (G, W).

In taking up the name *O. minor* for Watson's variety *minutiflora*, I am using the oldest species name for the concept, and am combining NELSON'S and LEVEILLE'S *torta* with *minor* (*Nelsonii* of HELLER). NELSON'S specimens of *minor* are somewhat immature, and do not have the characteristic spreading branches of older plants. A distinction is made also in flower color, being given as yellow for *minor* and white for *minutiflora*. Careful study has failed to reveal any morphological characters, and dried plants do not show any color characters. I am convinced that the small-flowered plants of Wyoming and adjacent regions form one concept which is amply distinct from *alyssoides* for specific rank, but not divisible into *minor* and *torta* and *eastwoodae*.

3B. OENOTHERA MINOR var. *cusickii*, n. var.—Smaller-flowered than var. *typica*, having calyx tube 1 mm. long; calyx lobes and petals 1-1.2 mm.; style 1.5 mm.; capsules 10-18 mm. long. (Tubus calycis 1 mm. longus; lobis calycis et petalis 1-1.2 mm. longis; capsulis 10-18 mm. longis.)

Type, Malheur River and adjacent hills, June 6, 1901, *W. C. Cusick* 2545 (University of California Herbarium 35348; cotypes at Gray, Pomona, and Wyoming): WASHINGTON, Moxee to N. Yakima, *Griffiths & Cotton* 41 (US); Coulee City, *Piper* 3889 (P, US, WS); Junction Crab & Wilson Creeks, *Sandberg & Leiberg* 262 (C, G, WS); Wilson Creek, *Sandberg & Leiberg* in 1893 (C); Morgans Ferry, Yakima River, *Suksdorf* 310 (G): OREGON, Malheur, *Cusick* 1223 (G), cited as 1228 by Leveille, *Monogr. Onoth.*, 230, 1905 in his var. *torta*; Vale, Mathew Co., *Leiberg* 2051 (G); north end of Sumner Lake, *Eggleston* 6857 (US): IDAHO, Ft. Hall, *Coulter* in 1872 (US); a collection at Devil Creek, Owyhee Co., Idaho, by *Nelson & Macbride* 1747 (G, W) is intermediate between var. *cusickii* and var. *typica*. The variety *cusickii* has been included in *alyssoides* var. *minutiflora* and in *torta*.

4. OENOTHERA NEVADENSIS Kellogg, *Proc. Calif. Acad.* 2:224. fig. 70. 1863.—*Sphaerostigma nevadense* (Kell.) Heller, *Muhlenbergia* 6:51, with cover illustr., 1910; *Sphaerostigma tortuosum* Nelson, *Proc. Biol. Soc. Wash.* 17:95. 1904; *BOT. GAZ.* 40:61. 1905; *Oenothera gauraeflora* var. *vermiculata* Jones, *Contr. West. Bot.* 12:16. 1908; *O. gauraeflora* var. *caput-medusae* Leveille, *Monogr. Onoth.*, 226. 1905.

Annual, glabrate to finely and sparingly strigillose, especially on capsules, forming a small simple erect tuft, 2-5 cm. high, or in larger plants with several additional naked prostrate branches from 3-10 cm. long and each bearing a tuft or spike of leaves and flowers at the

tip; leaves narrowly oblanceolate, 10–35 mm. long, 3–7 mm. wide, glabrous, green, entire, not strongly veined, rounded or obtuse at apex, gradually narrowed at base to slender petioles 1–3 cm. long, or upper ones sessile; uppermost reduced to leafy bracts; inflorescence spicate, usually crowded, sometimes elongate; calyx tube lance-ovate, sparingly pubescent, ca. 3 mm. long; petals white, orbicular-ovate, 3.5–5 mm. long; stamens in 2 series, the longer alternating with and equaling the petals, the shorter two-thirds as long; anthers oblong, 1.5 mm. long; style about 6 mm. long, equal to or slightly exceeding petals, glabrous; stigma 0.5 mm. broad; capsules 10–12 mm. long, 1.5–2 mm. thick, quadrangular with ridge running along middle of each of the four faces, swollen at base, gradually narrowed toward slender beak, coiled and twisted, usually in dense masses; seeds pale gray, ca. 1 mm. long, linear-obovoid.

Type locality not given. Ranging through Washoe and Ormsby counties in Nevada and possibly in adjacent California: NEVADA, hills north of Carson, *Stretch* in 1865 (NY); Wadsworth, *Kennedy* 2053 (S); Empire City, *Jones* 3862 (C, P, US, W), no. 4 (G); between Truckee Valley and Spanish Springs Valley, *Brandege* & *Kennedy* in 1913 (C): Truckee Pass, *Kennedy* 766, type coll. *S. tortuosum* (C, S, W), 1592 (C), *Heller* 8647 (G, S); Reno, *Hillman* in 1894 (C), *Jones* in 1897, type coll. var. *vermiculata* (C, P, US), *Jones* in 1903 (P), *Cowgill* in 1901 (W), *Brandege* (S), *Heller* 9697 (G, S): CALIFORNIA (?), *Lemmon* 102 (NY): fortunately the habit is so striking that good figures have been given with two of the names given to this plant, and specimens have been available for the others, so there is no question as to synonymy.

5. *OENOTHERA ALYSSOIDES* H. & A., Bot. Beechey Voy. 340. 1838.—Annual, usually branching from base, central stem erect, others ascending, and curved at tip, closely and finely pubescent throughout or short-villous especially at base, often glandular; stems rather slender, 5–35 cm. high, simple or again branched; lowest leaves oblanceolate to ovate-lanceolate, 15–40 mm. long, 5–15 mm. wide, entire or remotely denticulate, acute to obtuse, gradually narrowed into slender petioles of about same length; cauline leaves gradually reduced, sessile; those of inflorescence still smaller, gradually becoming more bractlike; inflorescence racemose-spicate; calyx tube funnelform or sublinear, 3–8 mm. long; calyx lobes lance-ovate, 4–5 mm. long; petals white, 4–5 mm. long, orbicular-ovate; stamens glabrous, of two lengths, the longer ones somewhat shorter than the petals, with filaments 3.5 mm. long and anthers oblong and