

NEW SPECIES OF WESTERN PLANTS

BY ALICE EASTWOOD

Aquilegia emarginata Eastwood, spec. nov. Similis ad *A. truncato* F. & M., sed petalis emarginatis et ubique præter stamina glanduloso-pubescentibus; calcaribus incurvis.

Type: No. 232179, Herb. Calif. Acad. Sci., collected April 20, 1934, three miles south of Klamath Junction, Jackson Co., Oregon, by Alice Eastwood and John Thomas Howell, No. 1729.

In general appearance this resembles the common *A. truncata*, but the petals instead of being truncate at the apex are emarginate. *Aquilegia truncata* also is smooth while this is glandular-pubescent throughout, even to the flowers and fruit. Only the stamens are smooth. The spurs in bud curve inwards, later spreading.

Thelypodium stamineum Eastwood, spec. nov. Annum, elatum, paniculato-ramosum, pilosum, pilis simplicibus vel interdum furcatis; foliis irregulariter lobatis, lobis obtusis, alternantibus, decurrentibus rhachadi, infimis foliis 1 dm. longis; floribus parvis, viridibus; sepalis oblongis, obtusis, albo-marginatis, ca. 5 mm. longis, 1 mm. latis, parce pilosis; petalis linearibus, margine crispis, purpurascens, ca. 9 mm. longis, 0.5 mm. latis; antheris linearibus, basi sagittatis, superantibus calycem et corollam; siliquis filiformibus, divaricatis, longissimis 1 dm. longis.

Type: No. 232117, Herb. Calif. Acad. Sci., collected on the Victory Highway, 10 miles east of Battle Mountain, Nevada, June 10, 1933, by Alice Eastwood and John Thomas Howell, No. 165b.

This species is chiefly distinguished by the small greenish flowers with the exserted anthers. The numerous pods are long and thread-like, with the single row of seeds evident so as to be almost moniliform. The pubescence is more abundant at the base of the plant and is of white spreading hairs. The leaves vary, diminishing upwards, but apparently somewhat lobed. The racemes are bractless and the pedicels in fruit are about 5 mm. long. The sepals seem connivent in the obtuse buds, but later spread. The very narrow petals have strongly crisped margins and are purplish along the center. The stigma is very slightly 2-lobed.

Lotus Leonis Eastwood, spec. nov. Perennis, basi ramosus, canescens, appresso-pubescentibus; caulibus ascendentibus, dense foliosis, 1—1.5 dm. longis; foliis petiolatis, foliolis 3—5, subobovatis, 5—8 mm. longis, 3—5

mm. latis; umbellis axillaribus pedunculatis, 3-bracteatis vel sine bracteis, 5—10 floribus, pedicellatis; calyce campanulato, 5 mm. longo, segmentis deltoideis, attenuatis, circa 2 mm. longis; corolla straminea, 1 cm. longa, vexillo orbiculato-obovato, 5 mm. longo, ungue 2 mm., alis angustis, superantibus carinam; legumine immaturo, falcato, attenuato, appresso-pubescente.

Type: No. 227881, Herb. Calif. Acad. Sci., collected June 3, 1934, in the dry stream bed of Hackamore River, Hackamore, Modoc Co., California, elevation about 1600 m., by Leo Whitney, *No. 1920*, for whom it is named. It belongs to the aggregate under *Lotus Douglasii* Greene, but differs from all described in the densely leafy stems with internodes very short, the grey-green color of the plant, and the pale straw-color of the flowers.

Arctostaphylos obispoensis Eastwood, spec. nov. Frutex pallidus, 1—2 m. altus, erectus, ramosus; caulibus senioribus glabris, atro-purpureis, junioribus albo-tomentosis; foliis ovatis vel oblongis raro lanceolatis, apice mucronatis, basi cordatis vel truncatis, pallidis, læviter tomentosis, in senectute prope glabratis, maximis foliis circa 4 cm. longis et 2 cm. latis, petiolis 5 mm. longis; paniculis subsessilibus tomentosis, bracteis foliaceis lanceolatis acuminatis pedicellos superantibus; pedicellis prope glabris; floribus pallido-roseis, 7 mm. longis; fructu glabro plano-globo-roseo, circa 1 cm. diametro.

Type in Herb. Cal. Acad. Sci., No. 165817, collected by Alice Eastwood in flower, March 7, 1928, *No. 16843*, and in fruit, *Eastwood No. 15125*, May 17, 1928, Herb. Cal. Acad. Sci., No. 158925. The bushes grew in a serpentine area up Chorro Creek, near San Luis Obispo. Collections were made also by Eastwood and Howell, *No. 2278*, east of the Morro district on the new road to Atascadero, San Luis Obispo County, May 7, 1936.

This is closely related to *A. canescens* Eastwood and *A. auriculata* Eastwood and also approaches *A. pechoensis* Dudley. It is distinguished from *A. canescens* by the generally cordate bases of the leaves and the smooth fruits and from *A. auriculata* and *A. pechoensis* by the petiolate leaves. It is the dominant shrub growing in the serpentine area on the upper elevations of Chorro Creek and when in flower with the pale foliage and pink flowers (sometimes white), the effect is beautiful. The pubescence is white-tomentose, entirely without glandular or spreading hairs. The heart-shaped leaves and

general aspect of the shrubs are distinctive. However, this and the related shrubs might all be considered as subspecies under *A. canescens*.

Oreocarya capitata Eastwood, spec. nov. Perennis, ramosa ex caudice lignoso, ca. 2 dm. alta, strigosa, viridis; foliis aggregatis basi, lineari-lanceolatis, subacuminatis, 10—15 cm. longis, 1—5 mm. latis, viridibus, pilis appressis, pustulatis in senectute, pustulis albis, nitidis, tessellatis; foliis caulinis paucis, parvis, strigosis et hispido-ciliatis; inflorescentia capitata, superante folios; sepalis lineari-lanceolatis, 1—4 mm. longis, 1 mm. latis, divaricate hispidis; corolla alba, 8—10 mm. longa, lamina 8 mm. diametro, segmentis orbiculatis, fornicibus flavis, exsertis 2 mm.; staminibus supra medio tubæ, antheris linearibus, 3 mm. longis; nuculis dorso ovatis, obtusis, 4 mm. longis, 2.5 mm. latis, acute marginatis glabris et nitidis, ventro acute costatis, hilo basilare, parvo.

Type: No. 232041, Herb. Calif. Acad. Sci., collected by the author, No. 5969, on the Hermit Trail, Grand Canyon of the Colorado, Arizona, April 9, 1917. This specimen is in flower. A fruiting specimen, Herb. Calif. Acad. Sci. No. 232040, was collected by the author on the same trail, June 18, 1916. It was collected June 23, 1933, on the north side of the Grand Canyon on the Kaibab Trail to Roaring Springs, *Eastwood & Howell No. 1005*, Herb. Calif. Acad. Sci. No. 232039.

This species comes under the aggregate typified by *O. confertiflora* Greene. It differs from the type of which there is a duplicate in Herb. Calif. Acad. Sci. in different pubescence, the green color of herbage, the very narrow leaves, the white flowers, and a more hispid inflorescence. It is unlike any of the other species or varieties that are related in the color of the flowers.

“It has been fashionable in some quarters in modern times to decry both the importance and the value of systematic botany. Because of its validity, its human interest, its practical bearing on other phases of plant science, and on our everyday life, one suspects that some of its critics have lacked the breadth of view of leaders in science, and have been misguided in criticising that which they did not fully understand.”—Dr. E. D. Merrill, *Memoirs Brooklyn Bot. Gard.* 4: 57 (1936).