

Sedum craigii

A New Species and Section of *Sedum* from Chihuahua

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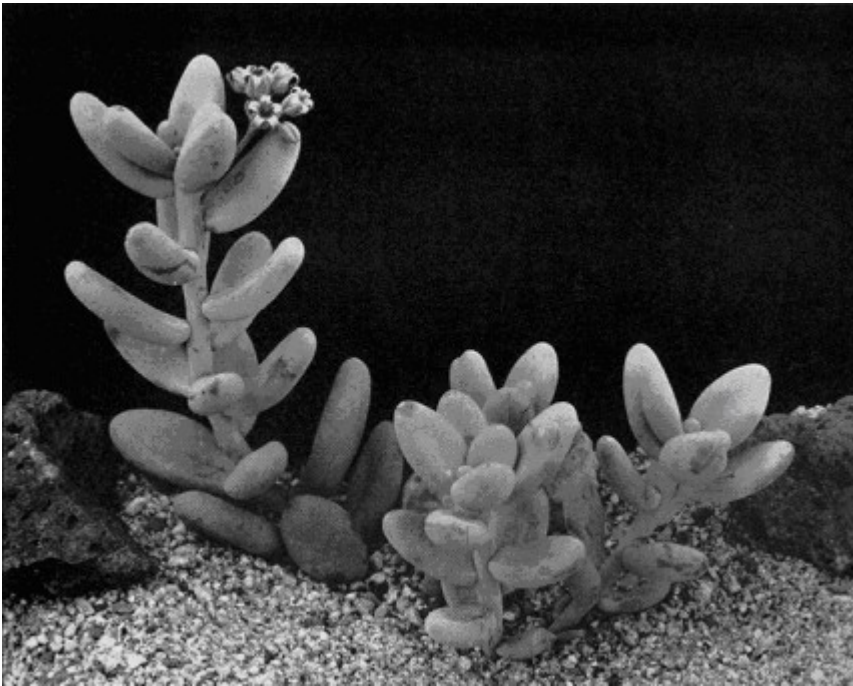


FIG.77. *Sedum craigii*. Photo by J.R. Brown.

In Mexico there occur a number of stonecrops which possess certain characteristics which are used for separating genera of the *Echeverioideae* from *Sedum*. The inflorescence is axillary in some of these species as in the *Echeverioideae*. The petals are erect in others, but the inflorescence is terminal. Despite such conditions, these species are similar in having the petals distinct to the base as is the usual condition in *Sedum*. The species to which I refer constitute a group which appears connected with the typical subgenus of *Sedum* by other species intermediate in character. At the same time plants of this group exhibit various specializations which distinguish them from the other subgenera of *Sedum*. Berger's sections *Pachysedum*, *Dendrosedum*, *Fruticisedum* and *Leptosedum* include the species which I have in mind. Fröderström referred them to his groups *Dendroideum*, *Oxypetalum*, *Bourgaei* and *Conzattii*. Walther (this Journal 2:457, 1931) included many of these species in his section *Bergerosedum*. I prefer to regard this series of species as belonging to several sections which together constitute a subgenus, that is a group equivalent in rank to *Gormaniana*, for discussion of the status of which see Bull. Torr. Club 69 (1): 27-40 (1942). The species of this series are all native either in Mexico, Central America or northern South America. Distinguishing characteristics of this subgenus are the perennial stems which are terete and sometimes rather woody, the alternate persistent leaves and the somewhat shrubby habit. For this group of species I

take up the sectional name of Berger, *Pachyseudum*, the concept of which I emend to include various species of the sections *Dendrosedum*, *Fruticisedum* and *Leptosedum*. The proper name thus is subgenus *Pachyseudum* (Berger) Clausen, stat. nov. (Sect. *Pachyseudum* Berger, in Engl. & Prantl, Nat. Pflanzenfam. ed. 2, 18a:447, 1930). The sections of subgenus *Pachyseudum* are so distinctive that each may be regarded as constituting a separate genus if desired, but sharp lines cannot be drawn between such potential segregate genera, while phylogenetic relationships can be expressed just as well by considering the little genera as sections of a subgenus of *Sedum*.

The plant which is the subject of this discussion first came to my attention through the agency of R. V. Moran. In October, 1942, he sent me a small cutting with a query regarding the genus to which it belonged. This was a difficult question to decide. The leaves were thick and succulent, extremely glaucous and alternate. Placed in some earth, the cutting took root and soon produced a small axillary inflorescence. The habit and lateral peduncle at once suggested *Graptopetalum*, but the petals were distinct to the base, recurved at the apex and almost immaculate, characteristics more of *Sedum* than of *Graptopetalum*. The erect petals, recurved at the apex, suggested *Lenophyllum*, but in that genus the leaves are definitely and regularly opposite on the lower part of the stem. Further, in *Lenophyllum* the flowers are almost sessile and arranged in elongate, spike-like cymes. Also, the epipetalous stamens arise near the middle of the petals and the carpels are connate for about one fifth their length in *Lenophyllum*, while in the new plant the carpels were distinct, not connate, and the epipetalous stamens were free almost from the bases of the petals. This plant could not belong to *Lenophyllum* and it seemed even more distinct from *Echeveria* and *Villadia*. Actually it seemed as near to *Sedum* as to any of these other genera. It afforded no new or unique features not already found in some existing species of *Sedum*.

The axillary inflorescence is a characteristic of *Sedum pachyphyllum*, *S. treleasei* and *S. cremnophila*, among others. The erect petals, recurved at apex, are a feature of *S. wrightii*, another species also known from Mexico, and various oriental species. These, the most distinctive features of the unknown plant, thus occur in other species of *Sedum*. Accordingly, I prefer to describe the new plant as a species of *Sedum*, creating for it a new section of the subgenus *Pachyseudum*. For notes regarding the original collection of this plant and for permission to publish the following description, I am grateful to R. T. Craig. Also, I wish to thank Reid Moran for originally sending me the cutting which he had obtained from the collection of Mr. J. R. Brown.

CRAIGIA, sectio nova subgeneris *Pachyseudum* generis *Sedum*, inflorescentiis axillaribus; floribus petalis erectis, recurvatis ad apicem, distinctis ad basin; foliis alternis, crassis, carnosis. Species typica est SEDUM CRAIGII R. T. Clausen, sp. nov., perennis, caule carnosio, procumbente, foliis alternis, sessilibus, carnosis, planis vel aliquando concavis ventraliter, convexis dorsaliter, oblongo-ellipticis, sursum inflexis, obtusis, 2-5 cm. longis, 0.9-2.2 cm. latis, 0.5-0.8 cm. crassis, subpurpureis, glaucis; inflorescentiis axillaribus et floribus in cymis, pedunculis 1.0-3.5 cm. longis, subpuniceis, bracteis floreis linearibus, 2-4 mm. longis, pedicellis 4-7 mm. longis; sepalis elliptico-linearibus, subacutis, 4-5 mm. longis; petalis oblongo-lanceolatis, acutis, minimum angustioribus ad basin, erectis usque ad bessem longitudinis, divaricatis et recurvatis ad apicem, albis obscure striato-subpuniceis, 7-8 mm. longis; staminibus 4-6 mm. longis, antheris subflavo-albis; squamis obovato-reniformibus, emarginatis, albis, 0.6 mm. longis, 0.8 mm. latis; pistillis erectis, 5-6 mm. longis. Typus est collectio Reid Moran, n. 1478, in herbario Cornell University, Ithaca, N. Y. Species ab R. T. Craig in Chihuahua, Mexico originaliter collecta est.

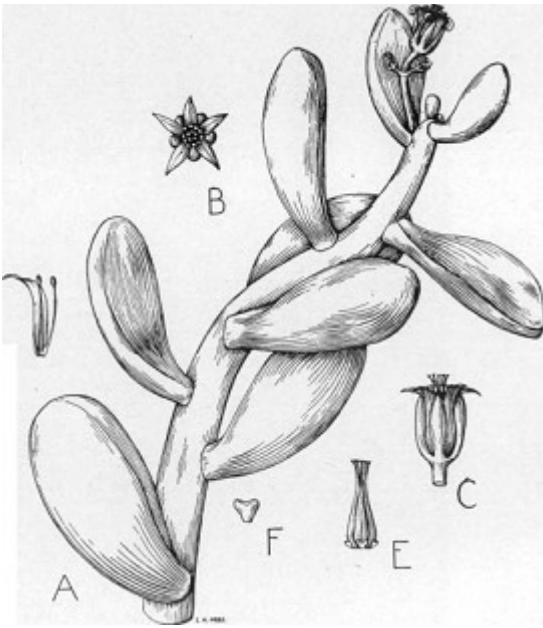


FIG. 78. *Sedum craigii*. Drawings by Miss E. M. Abbe from a cutting from the type collection. A. Habit sketch (x 1). B. Flower from above (x 2). C. Flower from side (x 2). D. Petal and two stamens (x 2). E. Carpels (x 2). F. Nectar scale (x 4).

My reason for naming and describing this new species derives from the fact that we need some definite record of and means of designating this interesting plant. Its precise status must yet be determined by further observation and cytological studies. The most distinctive characteristics of *Sedum craigii* are the thick glaucous leaves, the axillary inflorescence and the erect petals which are spreading and recurved only at the apex. By this combination of features, it can be separated from all other known species of *Sedum*.

Dr. R. T. Craig has furnished the following information about the original collection of the species. "This plant was collected by us on the canyon wall of the Barranca de Cobre of the Rio Urique branch of the Rio Fuerte in S. W. Chihuahua at ap. 7000 feet. The flora at the brink of the Barranca shows two types, that found over the edge on the canyon wall, a 3-4000 foot cliff, shows succulents, few cacti and plants usually found at lower and warmer levels. That back from the brink showed no succulents, more cacti, pines and typical higher level vegetation. This can possibly be accounted for by the fact that there is a very strong draft of warm air up from the canyon. Collected by Lindsay Craig expedition, April 4, 1939." See page II to 74 of the JOURNAL for a fuller account of the habitat.

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