

野坂志朗*: 北海道石狩国夕張岳産ユウパリミセバヤと
その近縁種について

Shirô NOSAKA*: A new subspecies of *Sedum pluricaule* from
Mt. Yûpari, Prov. Ishikari, Hokkaidô, together with a
comment on allied species

A strange *Sedum* was collected on 'Rôsoku-iwa (cereiform rock)', Mt. Yûpari, Prov. Ishikari by Hiroshi Ezawa on August 9, 1970. After a careful examination on the *Sedum* specimens, it was proved that the very *Sedum* was a new subspecies of *Sedum pluricaule* of Sakhalin and Amur.

*Sedum pluricaule*¹⁾ Kudo in Journ. Coll. Agr. Hokkaido Imp. Univ. 12(1): 40. 1923.

S. Telephium L. *δ. pluricaule* Maximowicz in Bull. Acad. St.-Pétersb. 29(1): 142. 1883.

subsp. **ezawae** Nosaka, subsp. nov.

Caulis suberectus vel basi leviter ascendens, 2-4 cm altus. Folia radicalia rosulatum denseque disposita. Folia caulina crassa, opposita, sessilia, obovata vel spathulato-obovata rare oblanceolata, 5-12 mm longa, (2.5-) 3.5-5.0 (-6.0) mm lata, saepe purpurascens et purpureopunctata, margine integerrima. Cyma laxiflora, 3-7, subrotundata, usque 2.5 cm in diametro. Flores hermaphroditi, pedunculis usque 4 mm longis, gracilibus. Sepala lanceolata vel oblongo-lanceolata vel lineari-lanceolata, 2-3.2 mm longa, 0.5-0.8 mm lata, apice acuta. Petala dilute roseo-purpurea, epunctata, oblongo-ovata vel ovato-oblonga vel ovata, (3.0-) 3.5-4.2 mm longa, 1.2-2.3 mm lata, uninervia, apice acuminatim acuta. Stamina 10, quorum 5 petalis alternata, cetera 5 quam anteriora leviter breviora, petalis opposita et bases petalorum adnata, antheris atropurpureis, cordato-orbicularibus, filamentis plano-filiformibus saepe dilute purpurascens. Squamae hypogynae deltoideo-trapezoides, ca. 0.6 mm longae, ca. 0.8 mm latae. Pistilla 5, oblongo-fusiformia,

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1) *Sedum* sect. *Telephium* subsect. *Humilicaulia* (Praeger) Borissova in Fl. URSS 9: 64. 1939; in Novit. Syst. Pl. Vasc. 6: 116. 1970.

ca. 3 mm longa, ca. 0.6 mm crassa.

Haec subspecies, caulibus paucioribus brevioribus, foliis minoribus, cymis laxifloris, sepalis majoribus, petalis minus acuminatis et leviter minoribus epunctatisque, squamis hypogynis deltoideo-trapezoidibus a subsp. *pluricaule* facile est distinguenda.

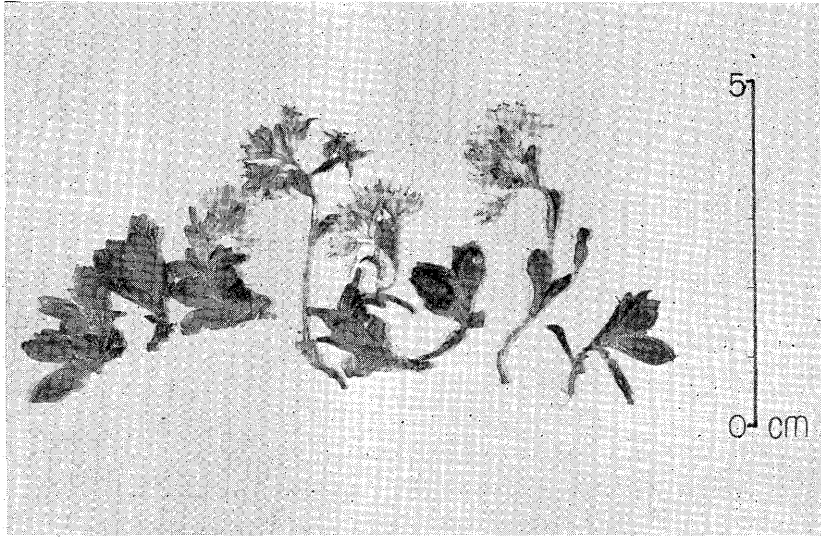


Fig. 1. *Sedum pluricaule* Kudo subsp. *ezawae* Nosaka (In Rôsoke-iwa montis Yûpari. H. Ezawa, 9 Aug. 1970).

Nom. Jap. Yûpari-misebaya (Ezawa et Nosaka, nom. nov.).

Hab. In Rôsoke-iwa montis Yûpari, prov. Ishikari (H. Ezawa, 9 Aug. 1970.—holotypus in Herb. TNS).

The new subspecies has characters intermediate between *S. pluricaule* subsp. *pluricaule* and *S. hidakanum*; it differs from the former in having less caespitose stems, smaller leaves, loosely flowered cymes, less acuminate smaller petals and shorter filaments, while it is distinguished from the latter in having less caespitose stems, somewhat broader cauline leaves, larger sepals, dilute rose-purple (not white) flowers, broader petals, and much shorter stamens which are conspicuously shorter than petals and are about equal in length to sepals. On the other hand, the present plant is related also to *S. takasui* and *S. cyaneum*; the plant differs from the

former by having prominently nerved broader cauline leaves, shorter petals and much shorter stamens, while it is distinguishable from the latter²⁾ by having smaller petals, larger but narrower sepals, broader and shorter deltoid-trapezoid hypogynous scales.

*S. cauticola*³⁾ also is an ally to the present plant, but the former has much caespitose stems and petioled serrate leaves which are almost orbicular in outline.

In 1934, Miyabe and Tatewaki⁴⁾ published *Sedum yezoense*, and stated its affinity to *S. takasui* and *S. pluricaule*. But later, Ohwi (1953)⁵⁾ united it with *S. pluricaule*, while Tatewaki and Kawano (1958)⁶⁾ reraised it as a variety of *S. pluricaule*, and made the following statement: "*S. yezoense* has hitherto been regarded as identical with *S. pluricaule* by Ohwi and others. At a glance it looks similar each other in all appearance. But the form of leaves of these plants are

different. The leaves of Sakhalin plants are obovate to often elliptic, rounded at the apex; on the other hand, those of Yezo plants oblong to oblanceolate, obtuse or subacute at the apex, subattenuate at the base". This treatment was followed by Ohwi's later works⁷⁾. The present writer re-

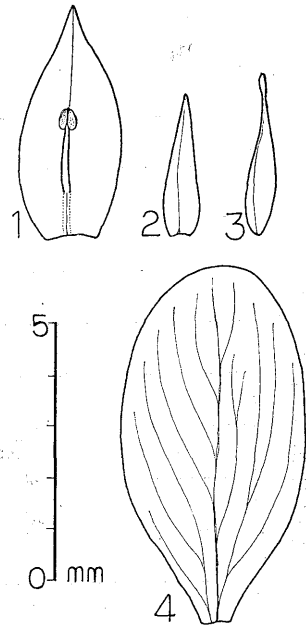


Fig. 2. *Sedum pluricaule* subsp. *ezawae* 1. Petal with a stamen. 2. Sepal 3. Pistil. 4. Cauline leaf.

2) Ex descriptione.

3) This specific epithet has often been spelt as '*cauticolum*' in concord with the neutral gender of *Sedum* as though it were an adjective. However, '*cauticola*' is a noun, and the species name must thus be *Sedum cauticola*.

4) Miyabe, K. and Tatewaki, M.: Contributions to the flora of northern Japan IV. in Trans. Sapporo Nat. Hist. Soc. 13(4): 379. 1934.

5) Ohwi, J.: Flora of Japan (ed. 1), 1953.

6) Kawano, S.: Notationes de plantis Japoniae borealis fragmentales 2. in Acta Phytotax. Geobot. 17(4): 103-104. 1958.

7) Ohwi, J.: Flora of Japan (rev. ed.). 1965. Flora of Japan (Engl. ed.). 1965.

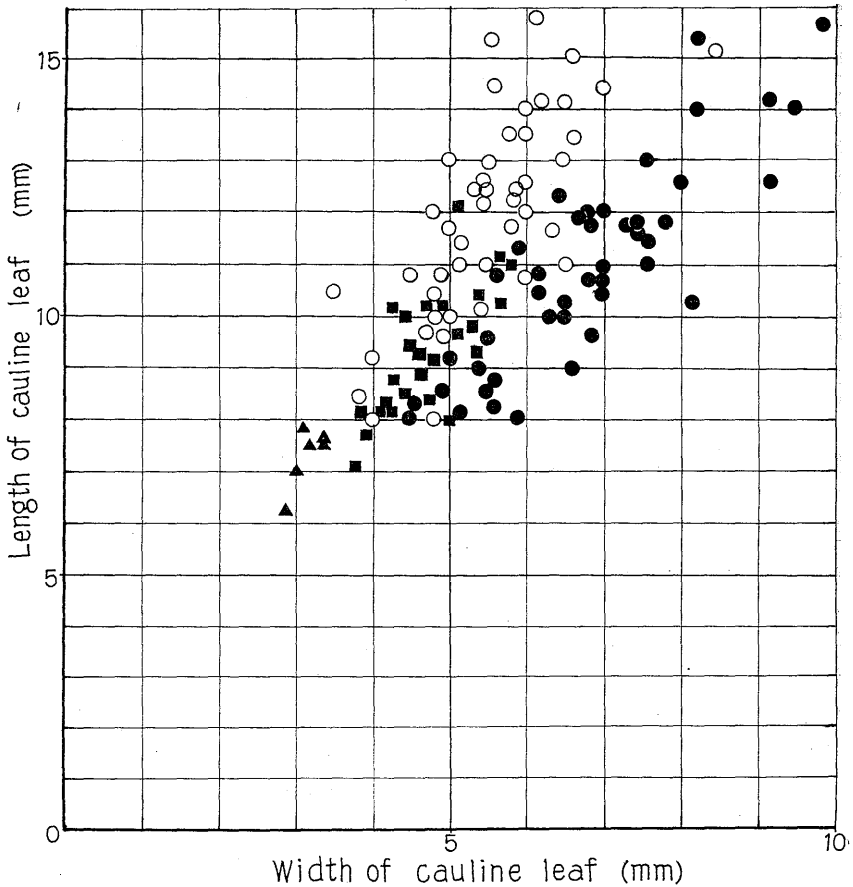


Fig. 3. Correlation between the length and the width of cauline leaf in *Sedum pluricaule*.
 (●): subsp. *pluricaule* var. *pluricaule*, (○): subsp. *pluricaule* var. *yezoense*, (■):
 subsp. *ezawae*, (▲): subsp. *hidakanum*.

examined all the specimens of *S. pluricaule* and *S. yezoense* including the holotypes conserved in the herbarium, Faculty of Agriculture, Hokkaidô University (SAPT). Figure 3 shows the ratio between the length and the width of cauline leaves in *S. pluricaule* var. *pluricaule* (solid circles) and in var. *yezoense* (open circles). According to the graph, there are two leaf types, the *pluricaule*-type and the *yezoense*-type, though they are occasionally overlapped.

On the other hand, Kawano (1957)⁸⁾ published *S. hidakanum* Tatewaki basing it on Tatewaki's manuscript of the *Sedum* specimens collected by N. Nishimura along the upper Saruru, Prov. Hidaka on July 10, 1951 and July 11, 1952. The holotype consists of a few individuals of which only one specimen has flowers. The present plant also comes very near to *S. pluricaule*, but is distinguished from the latter, especially var. *yezoense*, in having the dwarf habit, the colour and size of petals, and the length of stamens. The epipetalous stamens are slightly shorter than petals as compared with those of *S. pluricaule* var. *pluricaule* and var. *yezoense* which are much shorter than petals. By the characters explained above, it seems to be natural to regard the so-called *S. hidakanum* as a subspecies of *S. pluricaule* for the time being. The problems are to be discussed after more specimens will have been obtained.

In the light of the above findings, the *Sedum pluricaule*-complex is separated into the following subspecies and varieties.

Sedum pluricaule Kudo

subsp. *pluricaule*

var. *pluricaule*

var. *yezoense* (Miyabe et Tatewaki) Tatewaki et Kawano

subsp. *ezawae* Nosaka, subsp. nov.

subsp. *hidakanum* (Tatewaki) Nosaka, stat. et comb. nov.

The above mentioned characteristics by which *S. pluricaule* is divided into three subspecies well correspond to those of the *Sedum telephium*-complex pointed out by Hylander (1945)⁹⁾, Jalas (1954)¹⁰⁾, and others. In the latter case, there are four subspecies at present recognized in Europe, i. e., *telephium*, *fabaria*, *maximum* and *ruprechtii* (Tutin et al. 1964)¹¹⁾.

The writer wishes to express his cordial thanks to Professor Munenao Kurogi for his kind direction during the course of the present investiga-

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- 8) Kawano, S.: Notationes de plantis Japoniae borealis fragmentales 1. in Acta Phytotax. Geobot. 17(1): 1-4. 1957.
 - 9) Hylander, N.: Nomenklatorische und systematische Studien über nordische Gefässpflanzen. Uppsala Univ. Årsskr. 1945(7).
 - 10) Jalas, J.: Populationsstudien an *Sedum telephium* L. in Finnland. Ann. Bot. Soc. 'Vanamo' 26(3). 1954.
 - 11) Tutin, T. G., Heywood, V. H., Burges, N. A., Valentine, D. H., Walters, S. M. and Webb, D. A. (ed.): Flora Europaea 1: 358. 1964.

tion, to Dr. Kôji Itô for his kind permission to use the herbarium, Faculty of Agriculture, Hokkaidô University (SAPT) and to Dr. Hideo Toyokuni for his kind aid in literature. His hearty thanks are also extended to Dr. Masami Mizushima for his kind criticisms.

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1970年8月9日北海道石狩国夕張岳のローソク岩から江沢弘志氏によって採集された *Sedum* 属の植物につき検討した結果、工藤祐舜博士により北樺太から記載された *Sedum pluricaule* Kudo の亜種であると考定し、subsp. *ezawae* Nosaka (ユウバリミセバヤ。新称) として発表する。本亜種は、高さ 2~4 cm の小型のもので、種々の点で、*S. pluricaule* と *S. hidakanum* との中間的性質を示す。前者の基準型とは、茎の密簇が少なく、葉は小型、花序は少数花、花弁先端はそれ程鋭尖頭でなく、雄蕊が短い等の点で区別され、後者とは、茎の密簇が少なく、茎葉の幅が少々広く、花弁は紅紫色(白色でない)、その先端は多少鋭尖頭、雄蕊は明らかに花弁より短い等により区別される。

本植物は、*S. takasui* 及び *S. cyaneum* とも近縁であるが、前者とは、茎葉の形状、花弁及び雄蕊の長さにおいて異なり、後者とは、花弁及び萼片の長さ、子房下鱗片の形状並びに大きさにおいて異なる。*S. cauticola* は、茎が密簇し、茎葉は、円形に近く、縁辺に鋸齒があり、有柄である点で本植物と異なる。北海道大学農学部標本室に蔵される *S. pluricaule* の標本の再検討により、既知の北海道産の *S. pluricaule* は、館脇・河野両氏(1958年)の見解の如く、*S. pluricaule* の狭葉な変種であると考えられ、また、標本の個体数が僅少のため、今後の観察と検討を要する所ではあるが、*S. hidakanum* は、さしあたり、*S. pluricaule* の亜種として取り扱うのが適当と考える。従って、*S. pluricaule* は、次の様に区分されることになる。

Sedum pluricaule Kudo

subsp. *pluricaule* var. *pluricaule* (カラフトミセバヤ)

var. *yezoense* (Miyabe et Tatewaki) Tatewaki et Kawano (エゾミセバヤ、ゴケンミセバヤ)

subsp. *ezawae* Nosaka (ユウバリミセバヤ)

subsp. *hidakanum* (Tatewaki) Nosaka (ヒメミセバヤ)

このような区分は、ヨーロッパにおいて、*S. telephium-complex* が4亜種に区分されることと対応するものと思われる。

本報を発表するについて、御指導頂いた黒木宗尚教授に感謝申し上げると共に、標本室の使用を許可された伊藤浩司先生、文献を使用させて頂いた豊国秀夫先生、御批判と御助言を頂いた水島正美先生に御礼申し上げます。