

TWO NEW SEMPERVIVA FROM MACEDONIA

by

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(Dublin, 20. II. 1930)

With 3 figures in the text

Among other interesting plants seen at the Botanic Garden at Beograd when I visited it in 1926 were two *Semperviva* collected in Macedonia by Prof. Košanin, of which, with others, he kindly gave me living specimens for purposes of study. These both flowered well in 1929, and they prove to be undescribed. Although this group is difficult, and much confusion exists in regard to it, I make this assertion with some confidence, as I have in cultivation all the European plants which may be regarded as good species (except only *S. caucasicum* Ruprecht), and as I have had good opportunities for studying the Balkan *Sempervivum-flora* during a visit to Bulgaria in 1926. Both plants belong to the red-flowered section of the genus. The majority of the Balkan species are yellow-flowered, the only red-flowered plants being *S. tectorum* (not native in the Balkans), its ally *S. glaucum* = *acuminatum* (widespread as far south as Serbia), *S. Schlehani* = *blandum* = *rubicundum* (widespread, and occurring in Macedonia), and the Bulgarian *S. erythraeum*: neither of Prof. Košanin's plants can be placed under any of these. The lamentable story of speciesmongering among the *Semperviva* of the Alps, where during the latter half of last century some fifty „species“ were made out of the multitudinous hybrid offspring of four or five species, led to the question of hybridity being carefully considered; but this was definitely rejected, even without a study of the accompanying flora on the ground, which in the case of possible hybrids is highly desirable. The characters of neither plant are intermediate between those of any two of the Balkan red-flowered species, nor is the suggestion of a cross between one of these and one of the yellow-flowered species admissible, when one compares the full red-purple of the flowers with the pale inter-

mediate tints of the known red \times yellow crosses. Both species were labelled in the Beograd Garden *S. montanum*, but they cannot be referred to any of the forms of that variable species. The „*S. montanum*“ of Balkan floras is a composite group, including *S. erythraeum*, *S. leucanthum* and other plants, all quite independent of *S. montanum* L. of the Alps, Carpathians and Pyrenees; the last does not extend further south-east than Austria. One of the species described below, *S. macedonicum*, is not at all unlike *S. montanum* in its vegetative parts (rosettes and offsets), but its inflorescence is much denser, petals much shorter and proportionally broader, and red-purple (not blue-purple) in colour, ovaries shorter in proportion to the styles, and scales different.

***Sempervivum Košaninii* Praeger sp. nov.**

(Fig. 1—2)

Rosulae magnae, apertae, subplanae, densae 6—8 cm. diametro. Rami propaginiferi robusti, ad 12 cm. longi, foliis lanceolatis glanduloso-pubescentibus 1 cm. longis vestiti. Folia rosularia oblanceolata, breve acuminata, utrinque glanduloso-pubescentia, carnosissima, atro-viridia, margine ciliis glandulosis quam pubescentia intermixta duplo longioribus obsita, apice atro-purpurea, basi albescentia. Ramus floriferus robustus, 15—20 cm. altus dense glanduloso-hirsutus, foliis confertis sublinearibus acuminatis carnosissimis glanduloso-pubescentibus, circa 3 cm. longis, 8 mm. latis, prope apicem rubescentibus, vestitus. Inflorescentia densa, glanduloso-pubescentis, subplana, 7—10 cm. diametro. Flores subsessiles, 13—14-meri, 2—3 cm. diametro, sordide rubropurpurei. Calyx glanduloso-pubescentis, 7—9 mm. longus, segmentis linearilanceolatis, subacutis, 4—5 mm. longis. Petala linearia, acuminata, 10—12 mm. longa, supra rubropurpurea margine albescente, subtus viridescentia margine albescente, dorso et margine glanduloso-pubescentia. Stamina 6—7 mm. longa, filamentis purpureis, ad basem expansis, leviter hirsutis, antheris pallide rubris. Squamae nectariferae contiguae, virides, rotundatae, 3 mm. longae 1 mm. latae. Carpella 6—7 mm. longa, ovarii gracilibus, 3—3,5 mm. longis, viridibus, utrinque pubescentibus, stylis subulatis, purpurascensibus, 3—3,5 mm. longis. Fl. Julio.

Inter Sempervivos foliis glanduloso-pubescentibus, *S. Košaninii* proxime *S. leucantho* accedit, sed floribus rubropurpureis nec flavis distinctissimum. Inter Sempervivos Balcanicos rubro-

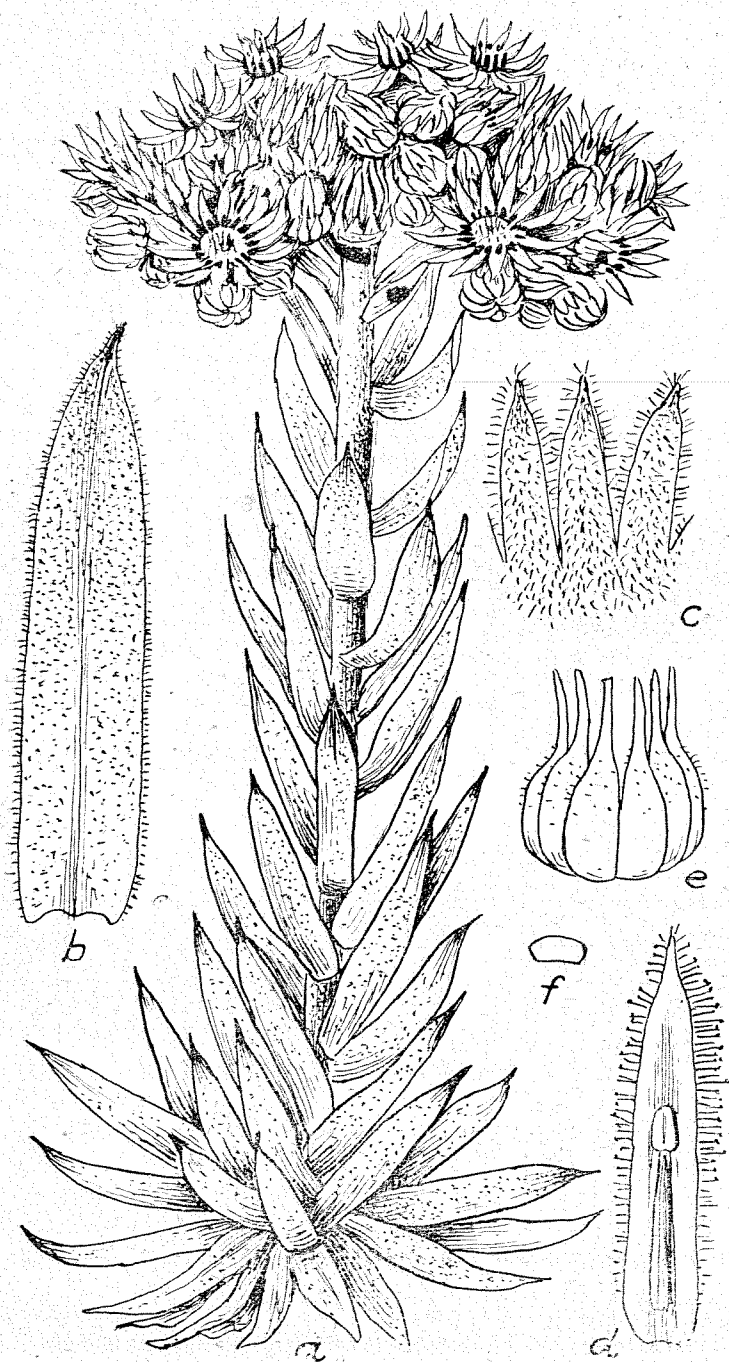


Figure 1. *Sempervivum Košaninii*. a, flowering branch, Orig. size. b, Stem-leaf, 2 \times . c, calyx, 6 \times . d, petal, 6 \times . e, carpels, 6 \times . f, scale, 12 \times .

florentes, *S. Košaninii* propaginibus robustis longicaulibus, foliis dense glanduloso-pubescentibus apice atropurpureis facile distinguendum.

Habitat. — Macedonia: m. Ošljak (Scardus) above Prizren, 1800—2000 metres, on Triassic limestone; coll. Prof. N. Košanin, 1925.

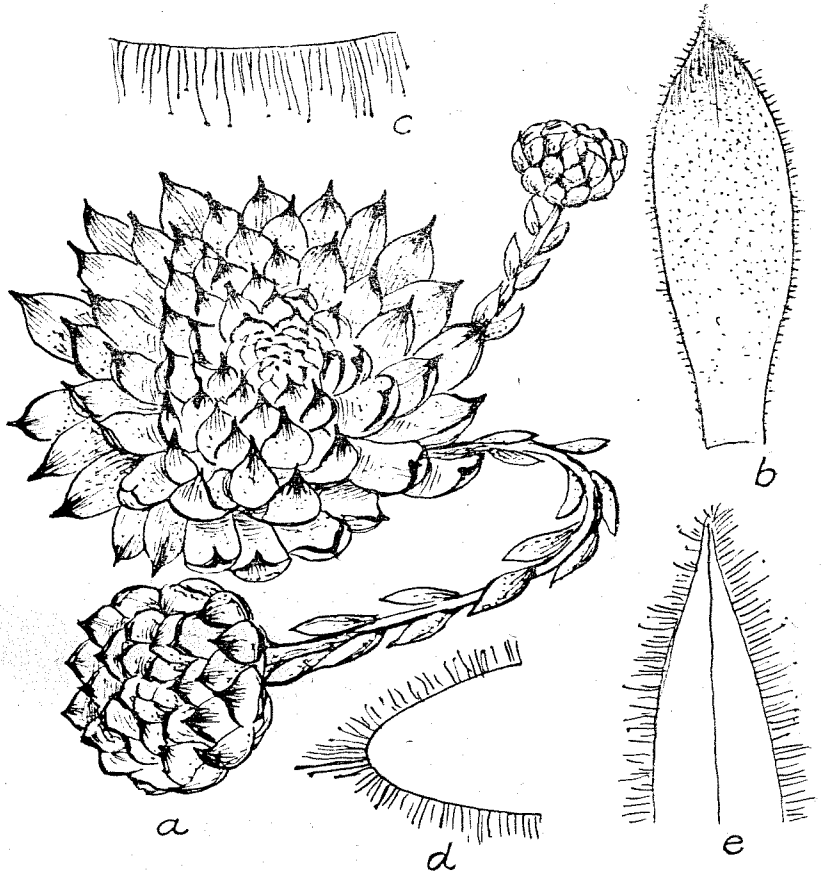


Figure 2. *Sempervivum Košaninii*. a, barren plant, Orig. size. b, leaf, 2 \times . c, edge of same, much enlarged. d, transverse section at edge of leaf. e, longitudinal section at tip of leaf.

***Sempervivum macedonicum* Praeger sp. nov.**

(Fig. 3)

Rosulae 2—5 cm. diametro, densae, subplanae. Rami propaginiferi graciles, foliosi, 4—7 cm. longi. Folia rosularia late oblanceolata, utrinque dense minute glanduloso-pubescentia, apice

breve acuminata, basi breve linearia, 1,5 — 2 cm. longa, 6 — 7 cm. lata, carnosissima, sordide viridia, prope apicem saepissime rubro-tincta (nec purpurea), basi albescentia, margine ciliis glandulis 25 mm. longis (pubescentia duplo longioribus) obsita. Ramus floriferus 7—10 cm. longus, glanduloso-pubescentis, foliis imbricatis, oblongis vel lanceolatis, acutis glanduloso-pubescentibus,

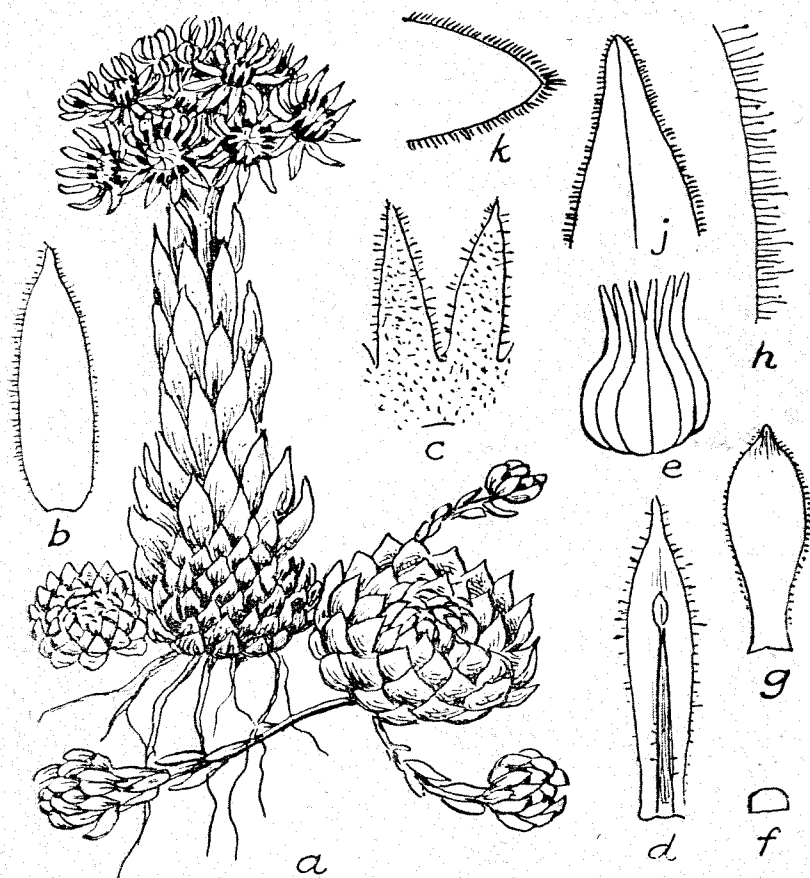


Figure 3. *Sempervivum macedonicum*. a, plant, Orig. size. b, stem-leaf, 2 \times . c, calyx, 6 \times . d, petal, 6 \times . e, carpels, 6 \times . f, scale, 12 \times . g, leaf, 2 \times . h, edge of same, much enlarged. j, longitudinal section at tip of leaf. k, transverse section at edge of leaf.

ciliatis, 1,5 — 2,5 cm. longis dense obsitis. Inflorescentia compacta, subplana, glanduloso-pubescentis, 3—5 cm. diametro. Flores 11—12-meri, 1,5—2 cm. diametro, sordide rubropurpurei. Calyx 6 mm. longus, glanduloso-pubescentis, segmentis lanceolatis, acu-

minatis, 4 mm. longis. Petala 7—8 mm. longa, lineari-lanceolata vel oblongo-lanceolata, acuminata, subpallide roseopurpurea, dorso margineque glanduloso-hirsuta. Stamina 5—6 mm. longa, roseopurpurea, filamentis sublatis prope basem hirtulis. Squamae nectariferae rotundato-quadratae, viridescentes, patentes, 3—4 mm. longae, 4 mm. latae. Carpella 4—5 mm. longa, ovariis gracilibus, viridibus, 3 mm. longis, antice pubescentibus dorso glabris, stylis subulatis, purpureis, 2 mm. longis. Fl. Junio-Julio.

Rosulis parvis minute glanduloso-pubescentibus, foliis parte superiore rubrotinctis (nec apice atropurpureis), propaginibus longis, floribus roseopurpureis, *S. macedonicum* inter species Balcanicas distinguendum.

Habitat. — Macedonia: m. Pepeljak, Salakovo Planina; coll. Prof. N. Košanin. Also m. Krčin, north of Debar, on the Serbian-Albanian frontier, 2285 metres; coll. Garden-Inspector Soška, 1925.

The plant from the latter station is the more vigorous form, with larger rosettes and longer-stemmed offsets, and its leaves have less of the rosy flush in their upper part; but otherwise the two are identical.

It is with much pleasure that I dedicate the more striking of the two new species to Prof. Košanin, who has done so much to elucidate the flora of Macedonia; and I name the other after the scene of his labours.
