

Notes on *Viola* in the new Flora of the Czech Lands

Poznámky ke zpracování rodu *Viola* v nové Květeně ČSR

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Taxonomic and nomenclatural notes are given on the *Viola* taxa whose treatment in the Flora of the ČSR requires more detailed explanatory comments. The lectotype is chosen for *V. rupestris* F. W. SCHMIDT. A group of *V. saxatilis* is annotated (two new combinations are made). Notes on *V. montana*, *V. elatior* and *V. ruppii* are presented. *V. elatior* is shown to be legitimate. *V. porphyrea* UEBSTR. is typified and interpreted as *V. collina* × *V. odorata*.

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As a result of studies in *Viola* for the new Flora of the Czech Socialist Republic, Vol. 2 (KIRSCHNER et SKALICKÝ 1990), some new facts have come to light that require more detailed comments. These notes concern mainly nomenclatural aspects because the format accepted in the Flora allows neither extensive explanatory notes, nor new nomenclatural combinations.

1. TYPIFICATION OF *VIOLA RUPESTRIS* F. W. SCHMIDT

Recently, the original material of *Viola rupestris* F. W. SCHMIDT has been traced at the Budapest Museum (KIRSCHNER 1988). The plant (Fig. 1) corresponds taxonomically to that depicted in the original work (SCHMIDT 1791). However, in contrary to the protologue, it is not glabrous. We suppose that Schmidt overlooked the short hairiness which cannot be observed easily without lens, and that there are not serious reasons not to select the Budapest plant as the lectotype.

It should be noted that both morphotypes, the glabrous one and the pubescent one, occur together in mixed populations in central Europe, the hairiness being the only character exhibiting a more conspicuous variability. The subspecific treatment of these two types is considered as questionable.

Viola rupestris F. W. SCHMIDT, Neue Abh. Böhm. Königl. Ges. Wiss., ser. 2, 1 : 60, 1791. — LT: BP, herb. Kitaibel, no. IX/196! (Fig. 1)

= *Viola arenaria* DC. in LAM. et DC., Fl. Franç., ed. 3, 4: 806, 1805. — T: G-DC!

= *Viola rupestris* subsp. *arenaria* (DC.) ROTHM. Feddes Repert. 67 : 7, 1963; [TZVEL. in Arkt. Fl. SSSR 8: 33, 1980 (isonymum)].

2. VARIABILITY OF *VIOLA SAXATILIS* F. W. SCHMIDT

In the Flora, a concept of *Viola tricolor* agg. is adopted to cover the $2n=26$ pansies of central Europe. This group consists of two species in Czechoslovakia. *Viola tricolor* L. is an annual with mainly synanthropic distribution in Bohemia, while *V. saxatilis* F. W. SCHMIDT comprises perennial populations of (more or less) natural habitats. The latter species shows a complex varia-

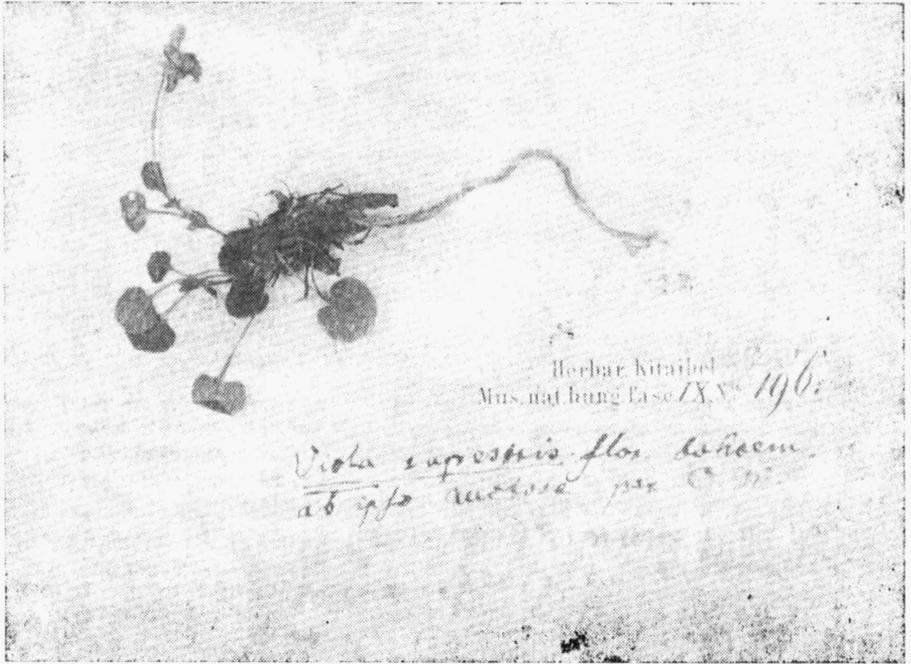


Fig. 1. — *Viola rupestris* F. W. SCHMIDT. The lectotype (BP).

bility, partly of the geographical (island) nature, partly in connection with the habitat factors. Generally speaking, central Europe is a region of climax forest vegetation; *Viola saxatilis*, however, is found on three types of non-forest relic habitats: sand dunes, rocky slopes and canyons, and mountain meadows. In each of these habitat types, a series of isolated local populations can be found, the populations within the series differing in many quantitative features. Thus, in the Czech Lands, three subspecies of *Viola saxatilis* are recognised. On the other hand, as a result of anthropogenic changes in the vegetation, originally isolated populations came to a secondary contact with each other or with other related pansies, which locally leads to blurred boundaries between the taxa.

Viola saxatilis F. W. SCHMIDT Fl. BOEM. Inch. 3 : 60, 1794 subsp. *saxatilis*

The typical population (sampled by F. W. Schmidt) occurs in C. Bohemia on rocks north of Prague. The plants have large yellow flowers and tufted type of growth. The type has not been traced up to now.

Viola saxatilis subsp. **curtisii** (E. FOSTER) KIRSCHNER et SKALICKÝ, comb. n.

Bas.: *Viola curtisii* E. FORSTER in SM. Engl. Bot., suppl. 2, tab. 2693, 1831—1835. — Syn.: *Viola tricolor* L. subsp. *curtisii* (E. FOSTER) SYME in SM. Engl. Bot., ed. 3, 2 : 26, 1864.

This subspecies includes dune populations, both coastal and inland ones, of perennial pansies with narrow leaves and stipules, and typical growth adapted to the substrate.

Viola saxatilis subsp. **polychroma** (A. KERNER) KIRSCHNER et SKALICKÝ, comb. n.

Bas.: *Viola polychroma* A. KERNER Sched. Fl. Exs. Austro-Hung. 2 : 89, 1882. — Syn.: *Viola alpestris* (DC.) JORDAN subsp. *polychroma* (A. KERNER) HAYEK Fl. Steierm. 1 : 595, 1909.

The typical morphotype grows in subalpine meadows in the Alps. The Czech populations are close to this form. They have long, \pm creeping and ascending shoots (with short branches), perennial growth and most often blue-violet flowers. They are found in montane to subalpine meadows.

We do not give any detailed taxonomic account of this group in C. Europe. For special information see PETTET (1964—1965). It should be added that this group is complicated taxonomically in the W. Alps and S. Europe. The W. Alpine populations described by WITROCK (1897) are taxonomically different from subsp. *polychroma*. The epithet “*subalpina*” that may refer to this taxon was not published at the rank of subspecies by GAUDIN, 1828. It was transferred to this rank only later (very likely in 1948). The oldest epithet for the mountain populations at the subspecific level is that of “*polychroma*” (1909).

3. TAXONOMY AND NOMENCLATURE OF THE *VIOLA CANINA* AGG.

The group of *V. canina* was studied in a wider scope than that required for the Flora. Relatively distinct morphotypes (having $2n=40$) included in this group form often fertile hybrids in the contact zones between their geographical or ecological ranges. These morphotypes are given subspecific or specific (or varietal) status and the following names are most often used for them: *V. canina* L. emend. REICHENB., *V. ruppii* ALL., *V. schultzei* BILLOT, *V. septentrionis* LINDB. fil., nom. inval., and *V. montana* auct.

Viola ruppii and allied forms

Viola ruppii ALL. is characterized by erect stems, long stipules in the upper half of stem, and larger pale blue flowers. While in the W. Alps and in the region adjacent to the N. Alps, these plants have long spurs with upward pointing tips, and \pm narrow petals (= *V. ruppii* s. str., *V. schultzei* BILLOT), in northern and northeastern Europe they have shorter spurs, smaller flowers, and petals wider and rounded at the apex. The northeastern morphotypes usually have deeper blue petals (*V. montana* auct. fl. ross., cf. KUPFFER 1904 : 170, *V. septentrionis* LINDB. fil. 1958 p.p.). As a detailed study of the overall variability of this narrower group is needed within the European range, we refrain from any definite taxonomic account of it. The Czech plants of this group mostly correspond to the Alpine ones.

Viola ruppii ALL. was published in 1773 through a reference to HALLER, 1768. Up to now, we have not selected any lectotype from among the Haller

plants (herb. P), we have only gathered evidence in favour of our interpretation of this name. HALLER (1768) did not base his violet on his earlier work (Fl. Jenensis, p. 289, 1745). He used a completely new phrase name, wrote a detailed description and gave a number of localities, mainly from Schwaben, Baden and Württemberg. This is a region where (in our conception) *V. ruppii* is very common and the other similar species are rare or absent. We suppose that there will be a possibility to select the lectotype in this sense from the Haller material.

Nomenclature of *Viola montana*

The name *Viola montana* L. or *V. canina* subsp. *montana* (L.) HARTM. has been widely used for the taxon named *V. ruppii* now. The original Linnean conception of this name, however, covered another taxon (or taxa), judging from the herbarium material and references. This point is not very important as the correct interpretation of *V. montana* is determined by the lectotype (see below). Many authors (e.g., BORBÁS 1892, FRIES 1828, WILMOTT 1916, LINDBERG 1958, HYLANDER 1945) arrived at the conclusion that originally the name *V. montana* L. referred chiefly to what is called *V. elatior* FR. This opinion has been summarized by NIKITIN (1988) recently. Nikitin selected the lectotype in the original sense (i.e. in the sense of *V. elatior* FR., contrary to the recommendation of HYLANDER, 1945), and believes that the name *V. montana* should be used instead of *V. elatior*. However, since the 1820's, this name has been only very rarely and exceptionally used for *V. elatior*. In all the major Floras and many special or monographic studies, the name *V. montana* has represented *V. ruppii*. In our opinion, this fact qualifies the name *V. montana* L. to be listed among the nomina specifica rejicienda. An official proposal to reject *V. montana* L. on the basis of the Art. 69.1 will be submitted to the relevant nomenclatural committee.

A note on *Viola elatior*

NIKITIN (1988) suggests the name *V. elatior* FR. to be illegitimate (nomenclaturally superfluous) under Art. 63. However, it is not difficult to show that his opinion is erroneous. FRIES (1828 : 277) included the name *V. montana* in the synonymy of his *V. elatior* but *V. montana* is also given as a synonym by FRIES at another place in the same work (p. 273). (Nomenclaturally, it is not important that Fries quotes *V. montana* from different Linnean works because all the quoted works refer to the same type.) This means that Fries excluded the type of *V. montana* from the synonymy of *V. elatior* by implication (Art. 63.2); a later lectotypification is not retroactive. The name *Viola elatior* FR. therefore represents a legitimate name.

For the sake of completeness, we refer to RAUSCHERT (1973) for explanation concerning the usage of the name *Viola persicifolia* SCHREBER.

4. WHAT IS *VIOLA PORPHYREA* UECHTR.?

Among the taxa regarded as endemics of Poland, *Viola collina* subsp. *porphyrea* (UECHTR.) W. BECKER is also listed in the newer works (e.g. SZAFER et ZARZYCKI 1977). This taxon was described as a separate taxon by Uechtritz from S. Silesia, not far from the Czech border. Recently, we have studied the type of *V. porphyrea* (WRSL). Both labels attached to the sheet were written by UECHTRITZ: „*Viola sciaphila* KOCH. Entdeckt für Schlesien

auf den Rabenfelsen b. Liebau (=Lubawka). 1859.4“ and „Species propria tam a *V. sciaphila* tam a *V. collina* BESSER bene distincta. *V. porphyrea* UECHTRITZ“. An analysis of the morphology of the type leaves no doubt that it represents a nothomorph of a hybrid between *V. collina* BESSER and *V. odorata* L. (the plant has intermediate stipules and hairiness of petioles, stolons are very short, thin). *Viola* × *porphyrea* is a correct name for this hybrid.

Viola × *porphyrea* UECHTR. in ENGLER J.-Ber. Schles. Ges. Vaterl. Cultur 1870: 139, 1871, pro sp. — HT: WRSL!
= *V. collina* subsp. *porphyrea* (UECHTR.) W. BECKER, Beih. Bot. Cbl., sect. 2, 26: 30, 1909.
= *V. × merkensteinensis* WIGSBAUR in HALÁCSY et H. BRAUN Nachtr. Fl. Nieder-Oesterr. 166, 1882.

REFERENCES

- BORBÁS V. (1892): X. Ordnung. Violarieen. — In: HALLIER E. et WOHLFARTH R., W. D. J. Koch's Synopsis der Deutschen und Schweizer Flora 1: 161—226. Leipzig.
- FRIES E. M. (1828): Novitiae florae suecicae, Ed. 2. — Lund.
- HALLER A. (1768): Historia stirpium Helvetiae ... — Bernae.
- HYLANDER N. (1945): Nomenklatorische und systematische Studien über nordische Gefäßpflanzen. — Uppsala Univ. Årsskr. 1945/7: 1—337.
- KIRSCHNER J. (1988): A preliminary report on the plants collected by F. W. Schmidt. — Preslia, Praha, 60: 85—88.
- KIRSCHNER J. et SKALICKÝ V. (1990): Violaceae. — In: HEJNÝ S., SLAVÍK B. et al., Květena ČSR 2 [sub prelo].
- KUPFFER K. R. (1904): Tentamen systematis Violarum florae Rossicae. — Tr. Bot. Sada Imp. Jur'evsk. Univ. 4: 158—193.
- LINDBERG H. (1958): Växter kände från Norden i Linnés Herbarium. — Acta Bot. Fenn., Helsinki, 60: 1—133.
- NIKITIN V. V. (1988): O tipifikacii *Viola montana* L. (Violaceae). — Bot. Ž., Leningrad, 73: 1536—1542.
- PETTET A. (1964—1965): Studies on British pansies I—III. — Watsonia, London, 6: 39—69, 1964 et 141—160, 1965.
- RAUSCHERT S. (1973): Zur Nomenklatur der Farn- und Blütenpflanzen Deutschlands. III. — Feddes Repert., Berlin, 83: 645—662.
- SCHMIDT F. W. (1791): Verzeichniss der um Wosečan ... wildwachsenden Pflanzen. — Abh. Königl. Böhm. Ges. Wiss., Prag, ser. 2, 2: 1—74.
- SZAFER W. et ZARZYCKI K. (1977): Szata roślinna Polski. — Warszawa.
- WITTRICK V. B. (1897): *Viola* studier. I. — Acta Horti Berg., Stockholm, 2/1: 1—142.
- WILMOTT A. J. (1916): What is *Viola montana* L.? — J. Bot., London, 54: 257—262.

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