

Nomenclatural notes on *Juncus supinus* var. *nigritellus* — a new synonym of *Juncus bulbosus* subsp. *kochii* (*Juncaceae*)

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The nomenclatural issues concerning *Juncus supinus* Moench var. *nigritellus* W.D.J. Koch *nom. illeg.* (*non* (D. Don) F.W. Schultz) are treated. The name is reduced to a synonym of *J. bulbosus* L. subsp. *kochii* (F.W. Schultz) Reichg.

Key words: *Juncaceae*, *Juncus*, nomenclature, original material, typification

Introduction

The ‘*Juncus bulbosus* Synonyms Typification Project’ arose during studies on taxonomic variation of the bulbous rush *J. bulbosus* L. (e.g. Proćków 2002, 2006a, 2006b, 2006c). *Juncus kochii* F.W. Schultz and *J. supinus* Moench var. *nigritellus* W.D.J. Koch (both at present best recognized as *J. bulbosus* subsp. *kochii* (F.W. Schultz) Reichg.) were recently lectotypified (Proćków 2006a). During my study on the nomenclature and variability of this rush I realized that Koch (1844) published new synonym of it, *J. supinus* var. *nigritellus*. However, the name is illegitimate (and thus cannot be used), and was not mentioned in the *Juncaceae* study by Kirschner (2002).

Koch (1837) initially erroneously identified *J. kochii* as *J. nigritellus* D. Don (synonym of *Juncus articulatus* L. subsp. *articulatus*); he clearly cited Don without the intention of publishing a new name (*see* also Kirschner 2002).

In this situation there was no evidence for the existence of the name *J. nigritellus* W.D.J. Koch (1837) *non* D. Don. Further evidence that it was not a later homonym, *J. nigritellus* W.D.J. Koch *non* D. Don (but just a misidentification *J. nigritellus sensu* W.D.J. Koch *non* D. Don) was that the varietal name is *J. supinus* var. *nigritellus* (D. Don) F.W. Schultz 1840, i.e. a new combination based on D. Don’s name though applied to Koch’s taxon (cf. Greuter *et al.* 2000: art. 7.4, Proćków 2006a).

However, in the second edition of *Synopsis* Koch (1844) published an auto-correction for *J. supinus* var. (“ δ ”) *nigritellus*: ‘*J. nigritellus* Koch syn. ed. 1., St. h. 78, *non* Engl. bot. [i.e. *not* D. Don in J. E. Smith, Engl. Bot. Suppl. 1, tab. 2643 (1831)]’. In doing so, Koch in fact excluded D. Don’s type, hence the illegitimate junior homonym of *J. supinus* var. *nigritellus* (D. Don) F.W. Schultz arose, cited as *J. supinus* var. *nigritellus* W.D.J. Koch *nom. illeg., non* (D. Don) F.W. Schultz (*see* also Proćków 2006a).

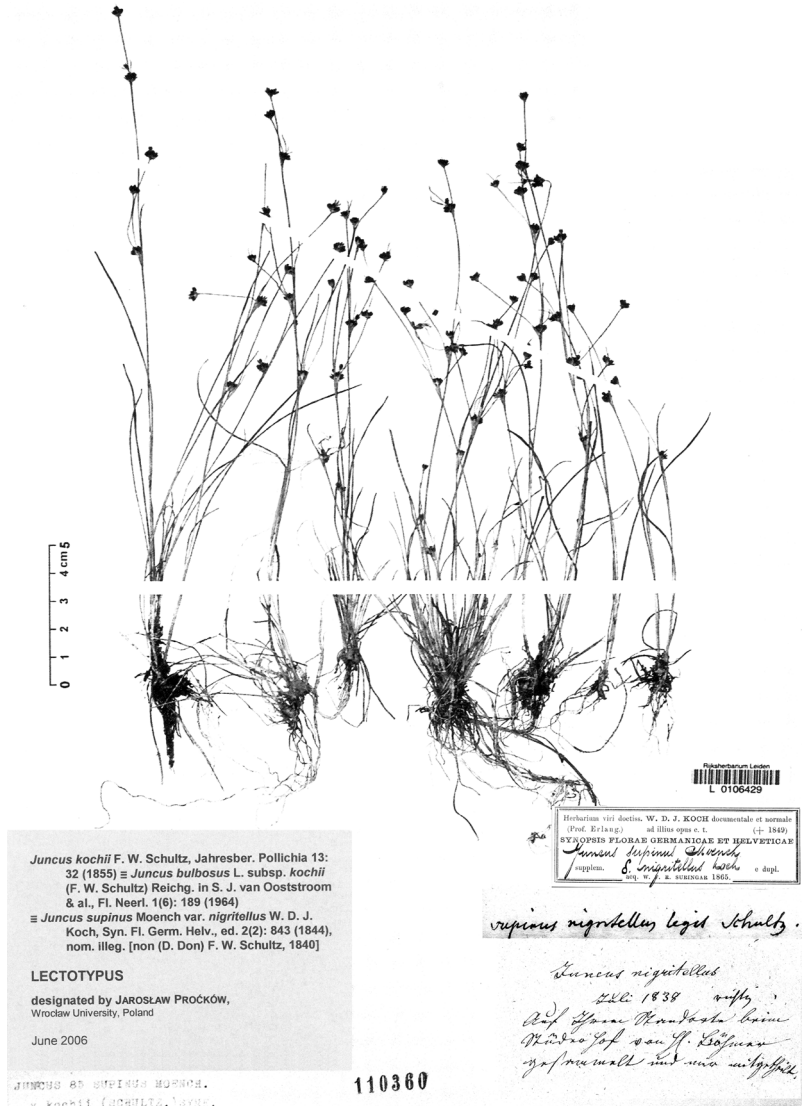


Fig. 1. Lectotype of *Juncus kochii* and *J. supinus* var. *nigritellus* with Schultz's handwritten notes. Herbarium sheet L 106429 (photo by the author).

So this paper re-examines the nomenclatural elements in the protologue of *J. supinus* Moench var. *nigritellus* W.D.J. Koch, based on characteristics mentioned in the protologue and authenticity of the material proven by the authors' handwritten notes. Most of the features of the taxon (and its type locality as well) are included in Koch (1837), as in the protologue (1844) he cites his earlier publication.

Original material examined

[Abbreviation: HK — "Herbarium viri doctiss. W. D. J. Koch [Prof. Erlang., †1849] documenta et normale ad illius opus

c. t. Synopsis Florae Germanicae et Helveticae. acq. W. F. R. Suringar 1865.“]

A: Auf Ihrem Standorte beim Stüderhof von H.[ern] Böhmer gesammelt und mir mitgetheilt [Schultz's handwriting]. Jul 1838, HK, *Böhmer/Schultz*? [see comments below] (L 106429 ex Herb. W. D. J. Koch!) — *Juncus nigritellus* [7 plants];

B: Sumpfige Waldwiese und Rand der Gräben und des kleinen Waldbächleins an der sogenannten Mooswiese bei Mölschbach. 5 Sep 1843, HK, *F. Schultz* (L 106430 ex Herb. W. D. J. Koch!) — *Juncus supinus* δ . *nigritellus* mihi [2 plants];

C: An einem morartigen Waldabhänge am Stüderhof bei Kaiserslautern. s. d., *Communicavit Koch, 1840*, Herb. Zuccarinii No. 751 (M 10265!) — *Juncus nigritellus* Don [5 plants];

D: An einem morartigen Waldabhänge am Stüderhof bei

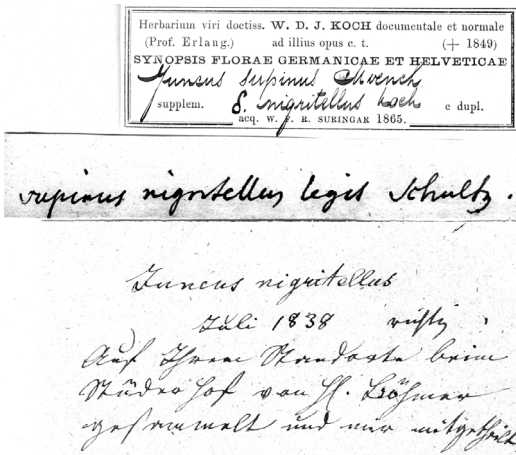


Fig. 2. Herbarium label of the sheet L 106429 with Schultz's handwritten notes (photo by the author).

Kaiserslautern. s.d., Koch (L 106423!) — *Juncus nigritellus* Don [2 plants];

E: Abhang unter den Stüderhof nach Möls[ch]bach zu 2 Stunden vor Kaiserslautern. s. d., HK, Koch [selbst gesammelt] (L 106432!) — *Juncus nigritellus* Engl. bot. Suppl. [4 plants];

F: E terra limosa sylvatica prope Stüderhof, non longe a Kaiserslautern in Palatinatu rhenano (Depart. du Monttonere) a me lectus. s.d., Koch misit Aug. 1840, Herb. J. Gay (K!) — top left part of the sheet). — A simillimo *Juncus supinus* satis differt capsulis brevioribus apii impressis. Capsulae, ut earum figura bene [observia] vert. [potet], par aliquas horas aquae in mittendae sunt. — *Juncus nigritellus* Don, Hook. Engl. Bot. Suppl. tab. 2643 [3 plants];

G: E locis paludosis prope Studerhof. s. d., dedit Celeb. Koch, Comm. Clason (S!) — *Juncus nigritellus* Don [1 plant];

Some sheets bear no collection date (e.g. L 106423, L 106432 & Comm. Clason at S), but due to the determination *J. nigritellus* 'Don' or 'Engl. bot. Suppl.' it is almost certain that the material was collected prior to 1844! (see above: Koch's auto-correction).

Juncus bulbosus L. subsp. *kochii* (F.W. Schultz) Reichg.

in S.J. van Ooststroom *et al.*, Fl. Neerl. 1(6): 189. 1964. — *Juncus supinus* Moench var. *nigritellus* W.D.J. Koch, Syn. Fl. Germ. Helv., ed. 2(2): 843. 1844 *nom. illeg., non* (D. Don) F.W. Schultz, 1840. [excl. syn. *Juncus polycephalus* D. Don *ex Hook.*, Fl. Scot. 109. 1821, *nom. illeg., non* Michx. 1803] — LECTOTYPE (designated by Pročków 2006a: 790): [Rhineland-Palatinate, SW Germany] "Auf Ihrem Standorte beim Stüderhof von H.[errn] Böhmer gesammelt und mir mitgetheilt" [Schultz's handwriting]. Jul 1838, "*Juncus nigritellus*", Böhmer/Schultz? (Herb. W.D.J. Koch, L 106429!;

Fig. 1 and 2). — Residual original material of *J. supinus* var. *nigritellus*: L 106430!; M 10265!; L 106423!; L 106432!; K *ex Herb. J. Gay!*, top left part of the sheet; S, *Comm. Clason!* [i.e. specimens listed as B–G, above].

It is important (but was not stated in Pročków 2006a) that '*Juncus polycephalus* Hook. scot. 109' [i.e., *J. polycephalus* D. Don *ex Hook.*, Fl. Scot. 109. 1821] was mentioned as a synonym of *J. supinus* var. *nigritellus* W.D.J. Koch in the indirect reference by Koch (1837) to one of the elements of a new taxon. However, *J. polycephalus* is now recognized as a synonym of *J. articulatus* L. subsp. *articulatus* (Kirschner 2002) and thus should be excluded from the synonymy of *J. supinus* var. *nigritellus*.

In the material of Koch (seven sheets = six specimens and one duplicate, listed as A–G) there occur, clearly identifiably, the features of the diagnosis of *J. supinus* var. *nigritellus*. Even the fruits of L 106432 are immature, as stated in the protologue: 'v. mir selbst, aber mit unreifen Kapseln, gefunden'. Thus all the examined specimens were good putative choices as lectotypes of *J. supinus* var. *nigritellus*, but I proposed to designate one of these specimens (L 106429!; Figs. 1 and 2) as the lectotype of both names (*J. supinus* var. *nigritellus* W.D.J. Koch and *J. kochii* F.W. Schultz). In this way I made the names homotypic (before lectotypification both names were not necessarily homotypic; see Pročków 2006a for more details). Schultz obtained the plants on sheet L 106429 from Böhmer (he did not collect them himself), but an additional, narrow, probably later added label bears the information '*supinus nigritellus* Schultz legit'. Obviously the specimen was also studied by Koch (Fig. 2).

The herbarium specimens of residual original material of *J. supinus* var. *nigritellus* are not syntypes, because in fact no specimens are cited in the protologue, only locality data, i.e., "*In sylvarum mont[u]osarum locis uliginosis*, (an einem sumpfigen Waldabhange zwischen d. Stüderhofe u. d. Dorfe Mölschbach 2 Stunden v. Kaiserslautern)" (cf. Greuter *et al.* 2000: art. 9.4).

Comparative characters, based on the protologue of *J. kochii*, between *J. bulbosus* subsp. *kochii* and subsp. *bulbosus* in the flowers and fruits were shown in Pročków (2006a: table 1).

Bibliographic corrections

1. The combination '*Juncus supinus* var. *kochii* (F.W. Schultz) Syme', cited e.g. by Buchenau (1890) and Kirschner (2002), requires a bibliographic correction, as observed by Hård av Segerstad (1923), since 'The Journal of Botany 9 [not 11!]: 271 (1871)', contains only a short note by J.F. Duthie (not Syme!), who in turn cited '*Juncus supinus* var. *kochii* Syme, E. B.' [i.e., English Botany, ed. 3B(10): 33 (1870)!].
2. The correct date of publication for 'J.E. Smith, Engl. Bot. Suppl. 1' is '1831' (not '1830'); also compare Kirschner (2002) with Buchenau (1890).

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