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A survey of the genus *Festuca* L. (Poaceae) in Italy. III. Nomenclatural notes on some *Festuca* belonging to *Festuca violacea*-group

MARIA ADELE SIGNORINI

&

BRUNO FOGGI

ABSTRACT

SIGNORINI, M. A. & B. FOGGI (1997). A survey of the genus *Festuca* L. (Poaceae) in Italy. III. Nomenclatural notes on some fescues belonging to the *Festuca violacea*-group. *Candollea* 52: 409-427. In English, English and French abstracts.

Nomenclatural aspects of some taxa belonging to the *F. violacea* group (*F. violacea* and related infraspecific taxa, *F. pallida*, *F. puccinellii*, *F. rubra* var. *nigricans* and related taxa) are discussed. Lectotypes of many of these names are also designated.

RÉSUMÉ

SIGNORINI, M. A. & B. FOGGI (1997). Recherches sur le genre *Festuca* L. (Poaceae) en Italie. III. Notes sur la nomenclature de quelques fêtuques du groupe de *Festuca violacea*. *Candollea* 52: 409-427. En anglais, résumés anglais et français.

Les aspects de la nomenclature de quelques taxa du groupe de *Festuca violacea* (*F. violacea* et taxa infraspécifiques corrélés, *F. pallida*, *F. puccinellii*, *F. rubra* var. *nigricans* et taxa corrélés) sont discutés. Les lectotypes de plusieurs noms sont aussi désignés.

KEY-WORDS: *Festuca* – Typification – Nomenclature – Italy.

Introduction

During the course of a taxonomic study on some taxa belonging to the *Festuca violacea*-group (*sensu* PILS, 1980), we primarily had to face some interesting problems of nomenclature. This paper reports the results of our studies on this subject.

Materials and methods

We personally searched the Herbaria FI, G, LAU, P and W for specimens and asked many other herbaria for information and loans. B, BRNM, BP, G, GJO, K, LIV, LY, M, NA, NCY, OXF, PAL, PAV, PRC, W, Z, ZA answered and/or sent specimens.

As far as possible, the labels of the lectotypes have been transcribed to comply with the original writing. If more than one label was attached on the same sheet, each is preceded by a capital letter and a bracket: A), B), C), ...).

The following abbreviations and symbols have been used (cfr. DE LA FUENTE GARCIA & SANCHEZ-MATA, 1986):

- [] our own observations;
- / new line;
- // new line after a large gap (lines much spaced);
- pr. printed;
- m. handwriting by ...;
- m. i. *manu ignota* (unknown handwriting);
- o. s. printed or written directly on the sheet;
- s. coll. *sine collectore* (without collector's name);
- s. d. *sine data* (with no date);
- s. loc. *sine loco* (with no locality indication);
- ? not clearly legible;
- ... text not transcribed as unessential or illegible.

Abbreviations of authors' names are according to BRUMMITT & POWELL (1992).

Festuca violacea

The name *Festuca violacea* was legitimately published for the first time by Gaudin in 1808. In a little known paper published in the journal *Alpina* (GAUDIN, 1808), Gaudin reports "F. violacea N.". The name is accompanied by a description, which ends with the letters "D. v." (= *descripsi vivum*) and the indication "Sie kommt ziemlich häufig... [= it appears quite frequently on Boreal Alps]". The name "*Festuca violacea* Seringe gram. exs." is also reported as a synonym. A few years later, in *Agrostologia Helvetica* (GAUDIN, 1811), Gaudin gives two other synonyms for this species: "*Festuca violacea* Schleich. l. c. p. 13. Thom. l. c. p. 13". The three authors mentioned by Gaudin – Seringe, Schleicher, Emmanuel Thomas – were Swiss plant collectors who used to sell and exchange exsiccata and seeds and also published some plant catalogues (see BRIQUET, 1940; BURDET & GREUTER, 1982; BURDET, 1979). None of them validly published the name *Festuca violacea* before 1808. In the year 1807, Seringe published a catalogue of plants (SERINGE, 1807), where the name "*Festuca violacea* Gaud." is reported. Schleicher followed suit in the 2nd edition of his *Catalogus plantarum* (SCHLEICHER, 1807), published the same year. Yet, the two names:

F. violacea Gaudin ex Schleich., Cat. Pl. Helvetia ed. 2: 13 (1807),

F. violacea Gaudin ex Ser., Cat. (1807),

were not accompanied by a description or diagnosis (or any references to previous descriptions), so they were effectively, but not validly, published (*nomina nuda*).

It is to be noted that *F. violacea* is not mentioned in the first edition of Schleicher's Catalogue (SCHLEICHER, 1800), where references to the descriptions given by HALLER (1768) are reported and could validate some Schleicher's names (BURDET & GREUTER, 1982). Neither did we find any printed labels referring to Haller on Schleicher's exsiccata of this species (LAU!)

As for Thomas, his first printed paper (THOMAS, 1818) only appeared in 1818 (BURDET, 1979; BRIQUET, 1940): the paper cited by Gaudin in *Agrostologia Helvetica* sub “Cat. Pl. helv. exs.” was probably a handwritten catalogue.

Therefore, the correct reference for the name of this species is:

Festuca violacea Gaudin in *Alpina* 3: 57 (1808).

Examined type material. – s. loc., s. d., s. coll., LAU Herb. Schleicher!; s. loc. (“commune sur les hautes Alpes”), s. d., s. coll., LAU Herb. Gaudin!; Lautaret, s. d., leg. Mutel, LAU Herb. Gaudin!

The last two specimens are attached to the same sheet, with labels in Gaudin’s own hand. Other specimens, not annotated by Gaudin, are also present on this same sheet. We also had the opportunity of studying many specimens from Seringe’s herbarium (LY!); out of these, only one bears a label with annotations in Gaudin’s own hand: “Grande [?] var. / du violacea. / la [?] nigr. a 2 sortes / de [?] feuilles sur / les tiges plus... [?] [m. Gaudin] / M.Gaudin [m. i.]”. As noted on the label, the specimen does not fit the original description of *F. violacea* and cannot be chosen for lectotypification.

Lectotype here designated. – “Herb. Ch. Schleicher / MUSEE de BOTANIQUE / LAUSANNE (SUISSE) [o. s., pr.]; A “festuca violacea Gaud.” [m. Schleicher]; B “Festuca violacea Gaud. / Diese Art hat Herr v. Haller / lange im Garten gehabt. Sie / ist darinnen unverändert ge- / blieben. [m. Gaudin] [= Mr. von Haller has been holding this species for a long time in his garden. There it remained unchanged *] / Écriture de Gaudin [m. i.]”, Herb. Schleicher, LAU!

This sentence (*) is almost the same as that reported in the protologue (GAUDIN, 1808): “Der gelehrte herr Staatsrath von Haller ...” (= “The much learned State Councilor Mr. von Haller, to whom I communicated the existence of this plant, regards it as a true species; according to his own experience, its characteristic features remain unchanged under cultivation”). Among the numerous specimens attached to the sheet, all fitting the original description, we chose the specimen on the bottom left of the sheet as lectotype, as it is the most complete. The sheet is held in a folder of Schleicher’s herbarium, together with three further sheets without a label. (Fig. 1).

In 1881, HACKEL published a synopsis of the genus *Festuca* for Europe. This paper includes the validation of several names a few months before the publication of his monograph (HACKEL, 1882). So doing he was the first to validly publish a *status novus* for *F. violacea* Gaudin both at the subspecific and varietal ranks with the reference to “F. viol. Schleich. ap. Gaud.”:

Festuca rubra subsp. ***violacea*** (Gaudin) Hack. in *Bot. Centralbl.* 8: 406 (1881),

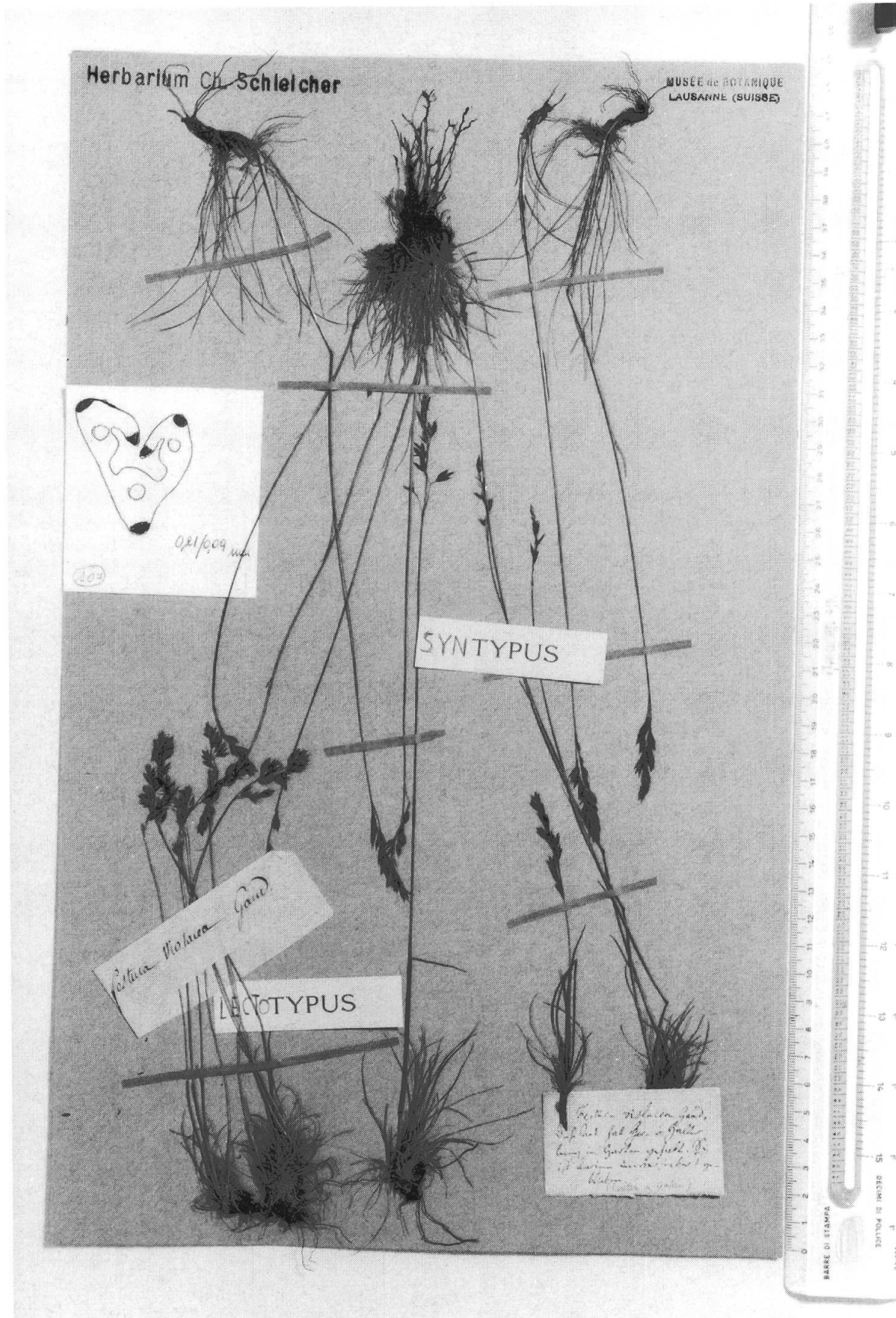
Festuca rubra var. ***violacea*** (Gaudin) Hack. in *Bot. Centralbl.* 8: 406 (1881).

In 1882, Hackel published his monograph on the genus *Festuca* (HACKEL, 1882), where he reports *F. rubra* subsp. *violacea*. Within the subspecies, he describes a “var. 1 *genuina*”, which includes a «subvar. a *typica*». At the end of the description of the latter, he reports the synonym “F. violacea Schleich.! ap. Gaud.!”.

With regard to the var. *genuina* and the subvar. *typica*, according to the provisions of the I.C.B.N. (GREUTER & al., 1994), neither name is validly published (art. 24.3):

F. rubra subsp. ***violacea*** (Gaudin) Hack. var. ***genuina*** Hack., *Monogr. Festuc. Eur.*: 132 (1882), *nomen invalidum*.

F. rubra L. subsp. ***violacea*** (Gaudin) Hack. subvar. ***typica*** Hack., *Monogr. Festuc. Eur.*: 133 (1882), *nomen invalidum*.



1a

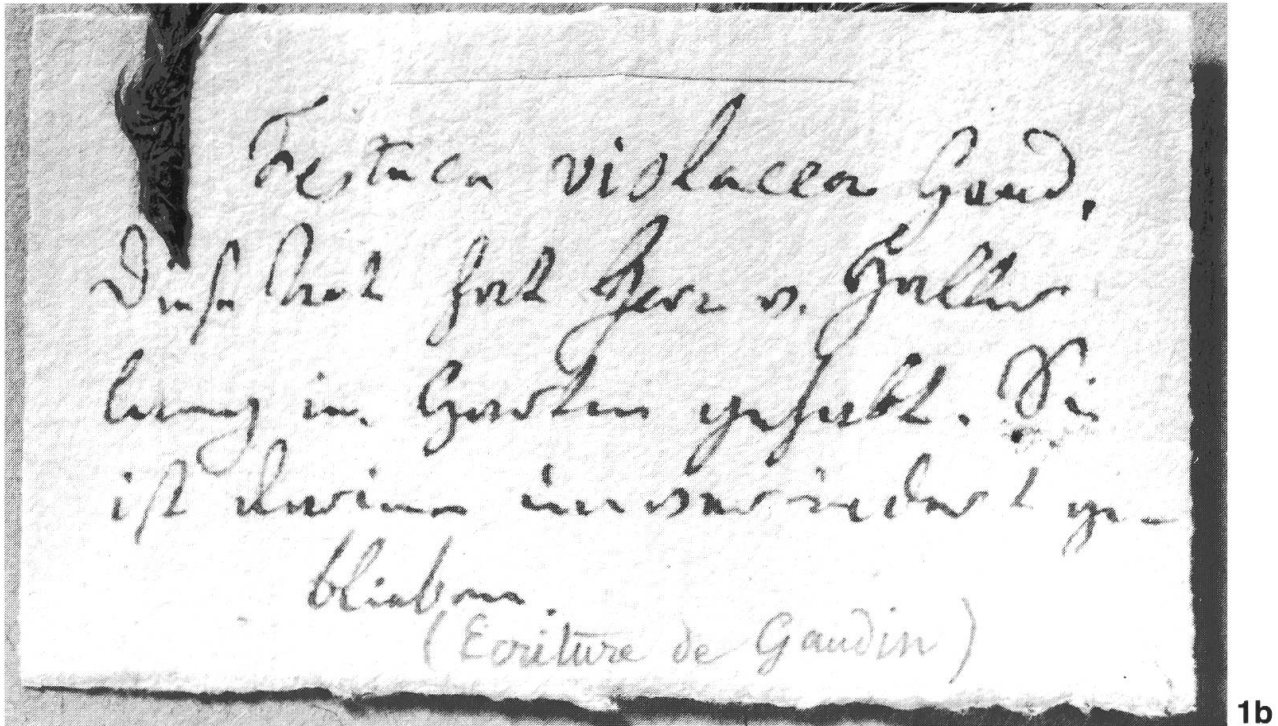


Fig. 1. – *Festuca violacea* Gaudin, LAU, Herb. Schleicher: **1a**) type material; **1b**) label handwritten by Gaudin.

For *F. rubra* subsp. *violacea* var. *genuina* Hack., Saint-Yves proposes the new name *F. rubra* subsp. *violacea* var. *eu-violacea* (SAINT-YVES, 1913); for *F. rubra* subsp. *violacea* subvar. *typica* Hack., the same author proposes the name *F. rubra* subsp. *violacea* subvar. *schleicheri* (SAINT-YVES, 1924). Yet, according to Art. 26.2 of the Code, neither name is validly published.

F. rubra subsp. *violacea* var. *eu-violacea* St.-Yves in *Annuaire Conserv. Jard. Bot. Genève* 17: 111 (1913), *nomen invalidum*.

F. rubra L. subsp. *violacea* subvar. *schleicheri* St.-Yves in *Bull. Soc. Bot. France* 71: 121 (1924), *nomen invalidum*.

Within *F. rubra* subsp. *violacea* (Gaudin) Hack., a subvar. *carnica* Hack. is also legitimately described in the Monograph:

Festuca rubra subvar. *carnica* Hack., *Monogr. Festuc. Eur.*: 133 (1882).

Examined type material. – Alpe Begunsica (Carniola), 27 jul 1875, leg. Hackel, *W* 5223 Herb. Hackel!

Lectotype here designated. – A) “*Festuca violacea* subv. *carnica* / Hack. [m. Hackel] / [?] in Alpe / Begunsica in ... [?] 1400 m / 1875 26 7 [m. i.] leg. E. Hackel [pr.]”; B) “*Festuca* [pr.] *nitida* Kit. ex Schult. / subsp. *nitida* // XI 88 [m. Markgraf-Dannenberg] det. I. Markgraf-Dannenberg [pr.]”, *W* 5223 Herb. Hackel, W!, specimen on the left.

This specimen has been chosen as it is the more complete of the two on the same sheet, both collected in a locality mentioned in the protologue. It perfectly fits the original description.

Festuca violacea var. *macrathera*

This taxon was originally described at an infraspecific level in Beck's "*Flora von Südbosnien...*" (BECK, 1887), where a "*Festuca violacea* Schleich. ap. Gaudin [...] var. *macrathera* Hack. in litt." is reported. Beck correctly attributes the name to Eduard Hackel, who probably sent him both the name and the diagnosis of the new taxon by letter. In Beck's Flora, the name is actually followed by a description which ends with the words "(Hackel, mssc.)". This clearly indicates that the description which validates the publication is entirely to be attributed to Hackel.

Consequently, the correct name for the taxon is:

Festuca violacea var. *macrathera* Hack. in Beck in Ann. K.K. Naturhist. Hofmus 2: 45 (1887).

Examined type material. – We personally searched W (Hackel's herbarium) and asked for specimens determined and/or annotated by Hackel in many other herbaria where plants collected or studied by Hackel and by Beck are kept, but no specimen was found. The specimens most probably were sent on loan to I. Markgraf-Dannenberg and are now in Z in her personal herbarium (pers. comm. of the Curator of W). If all the original material were definitely lost, a neotype should be made, collected from the *locus classicus* ("Auf steinigigen Stellen [= In stony places] der Tisovicaalpe in der Prenj Planina ca. 1600 M.").

The following names have been based upon this basionym:

F. violacea subsp. *macrathera* (Hack.) Markgr.-Dannenb. in Bot. J. Linn. Soc. 76: 326 (1978);

F. violacea f. *macrathera* (Hack.) Hayek in Repert. Spec. Nov. Regni Veg. Beih. (Prodr. Fl. Penins. Balcan.) 30(3): 283 (1933).

F. macrathera (Hack.) Markgr.-Dannenb. ex Pignatti & Markgr.-Dannenb. in Pignatti, Fl. Ital. 3: 493 (1982), effectively but not validly published as a full and direct reference to the author and the place of valid publication of the basionym is not given.

Festuca pallida / *Festuca aurata*

The name *F. pallida* was legitimately published by Gaudin in *Agrostographia alpina* (GAUDIN, 1808); it was followed by a description which ends with the letters "D. s." (= *descripti siccum*). No synonym is reported by Gaudin for this species. Consequently, the correct reference for this species is:

Festuca pallida Gaudin in Alpina 3: 56 (1808).

Examined type material. – s. loc., s. d., s. coll., LAU Herb Gaudin!

Lectotype here designated. – "Festuca flavescens [struck out]? Bell. [m. i.] [o. s.]; A) Festuca / pallida / Hall 1439 [m. Thomas ?], s. d., s. coll."; B) "Festuca [pr.] violacea Schleicher ex Gaud. / sbvar. aurata (Gaud.) Hack. / XI. 72 [m. Markgraf-Dannenberg] det. I. Markgraf-Dannenberg [pr.]", Herb. Gaudin, LAU!, specimen on the left.

The sheet is the only one held in a folder with the name "Festuca aurata N [m. Gaudin] Fl. helv. 1 p 280 [m. Gaudin, but added later] / Festuca pallida, Vill [m. Gaudin]" (Fig. 2).

The name "*Festuca pallida* Gaud." is also reported by Murith in a catalogue of plants growing in the Valais (MURITH, 1810). This catalogue also gives "*Festuca aurata* Gaud." as a different species. This appears to be the first effective publication of this last binomial, but as it lacks any description and diagnosis (also in a reference to Haller preceding other names reported in the same catalogue by Murith), it has not been validly published.

F. aurata Gaudin ex Murith, Guide Bot. Valais: 68 (1810), *nomen invalidum* (*nomen nudum*).

The following year, Gaudin published the name “*Festuca aurata*” in *Agrostologia helvetica* (GAUDIN, 1811), where the binomial is followed by a full description. Gaudin gives the names “*Festuca pallida Alpina* 3. p. 56.” and “*Festuca aurata* Thom. l. c. p. 13.” as synonyms for the species. Of these two names, *F. aurata* Thomas had definitely not been validly published, as we had already noticed that this author had not published a printed paper before 1808. The name *F. pallida* had been legitimately published by Gaudin in 1808. Consequently, the name *F. aurata* Gaudin was validly published but it is illegitimate as a *nomen superfluum* for *F. pallida* Gaudin. Thus its type is the same as for *F. pallida*.

F. aurata Gaudin, Agrost. Helv. 1: 234 (1811), *nomen illegitimum* (*nomen superfluum*).

In his monograph on the genus *Festuca*, HACKEL (1882) reports a “*F. rubra* subvar. *aurata*” among the taxa included within *F. rubra* L., with the synonym “*F. aurata* Gaud! Agrost. helv. I. 234 (1811)”. The name is not followed by a description or diagnosis, but the full reference to Gaudin’s Flora makes it validly published.

Festuca rubra subvar. *aurata* Hack., Monogr. Festuc. Eur.: 133 (1882).

The type of this name is the same specimen selected as lectotype for *F. pallida* Gaudin. This specimen does not carry any annotation by Hackel. In the introduction to his monograph, he writes that he had seen Gaudin’s herbarium in Lausanne (HACKEL, 1882: VIII) and in the protologue of the subvar., he marks the name of Gaudin’s taxon with a “!”.

In his *Plantae Europae*, RICHTER (1890) reports *F. violacea* Gaudin “(c) *aurata* (Gaud.) agr. helv. I. p. 234 (1811)”. According to GREUTER (1968), this taxon should be regarded as a subspecies and the full reference to Gaudin’s description makes the name validly published:

Festuca violacea subsp. *aurata* K. Richt., Pl. Eur. 1: 98 (1890).

The type of this name is the same specimen designated for *F. pallida* Gaudin.

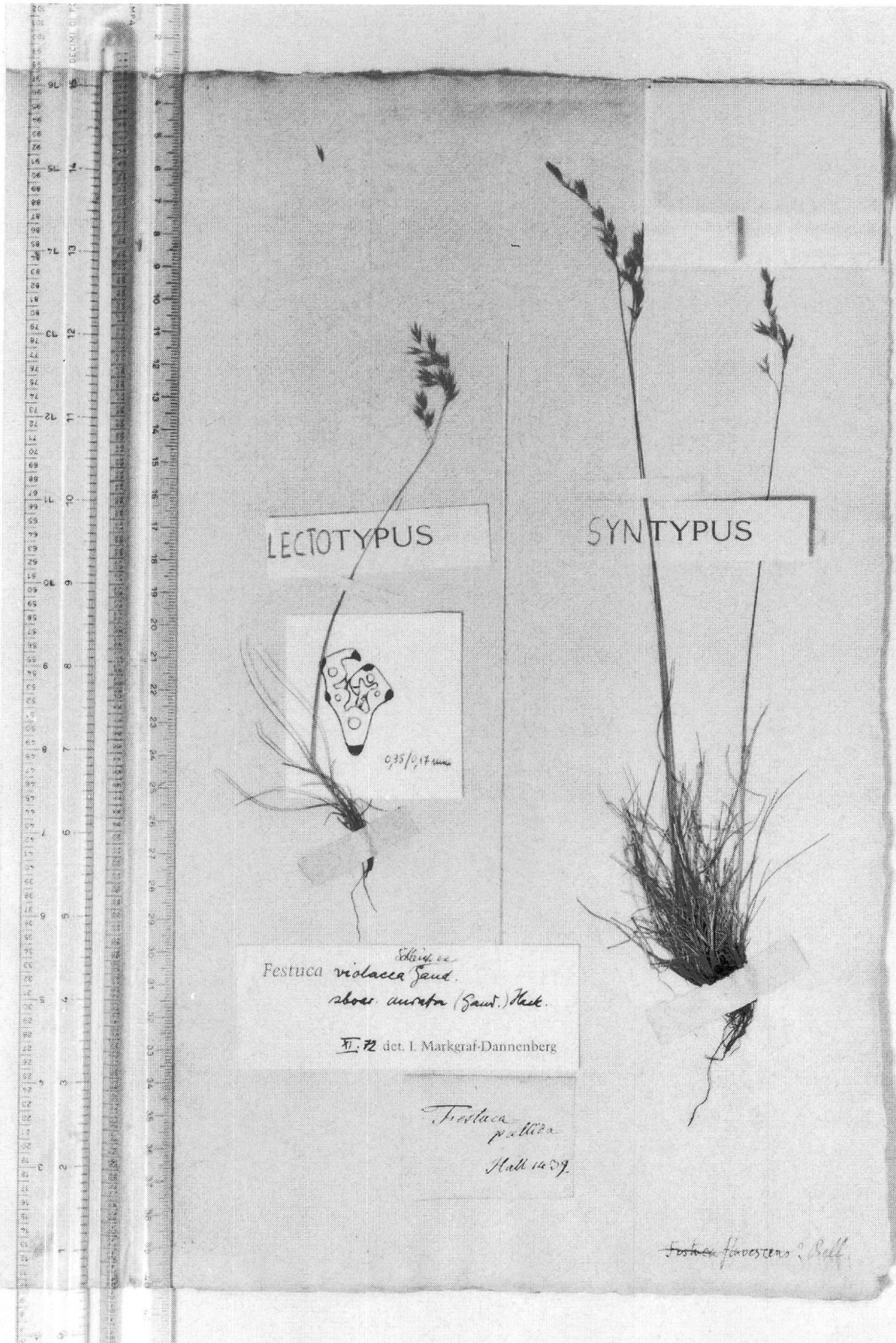
Festuca puccinellii

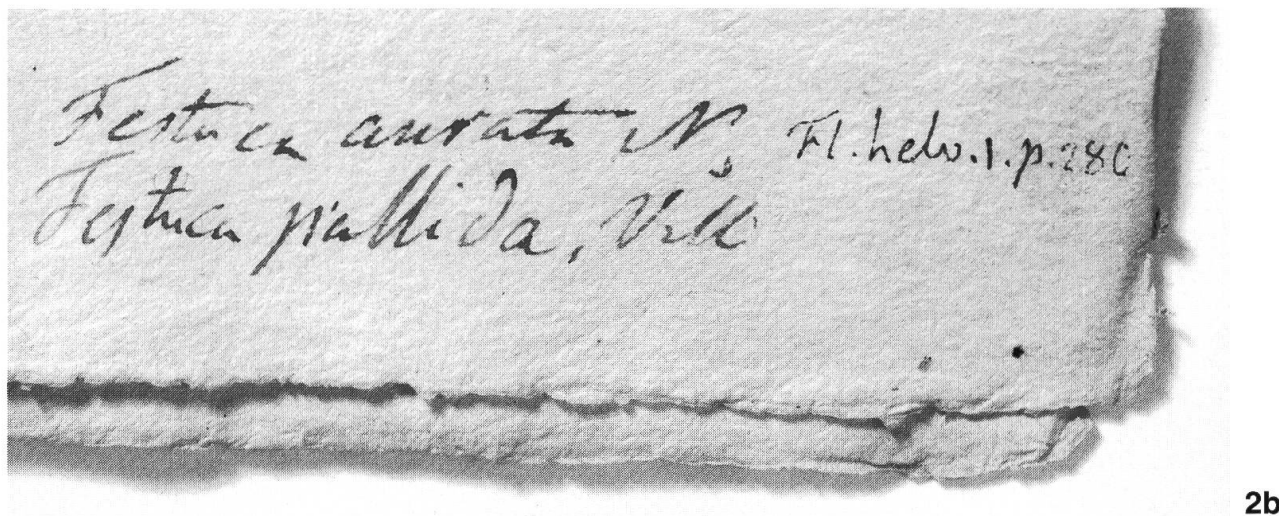
The species was legitimately published in *Flora Italiana* by PARLATORE (1850), who dedicated it to Benedetto Luigi Puccinelli (1808-1850), a botanist from Lucca (Tuscany). He first collected the species on Mount Pisanino (Alpi Apuane, Northern Apennines) and identified it as “*F. halleri* Roem et Schult.” (PUCCINELLI, 1844). In the protologue, Parlatores refers to the specimens collected by Puccinelli on Mount Pisanino and by himself on Mount Alpe delle Tre Potenze (Northern Apennines, near Lucca).

Festuca puccinellii Parl., Fl. Ital. 1: 440 (1850).

Examined type material. – Tre Potenze (Northern apennines), aug 1847, leg. Parlatores, FI!; Pisanino (Alpi Apuane), s. d., leg. Puccinelli, FI! This specimen is pinned to a sheet together with another one, collected later by Ad. Targioni Tozzetti.

Lectotype here designated. – “*Festuca puccinellii* [this name substitutes the two deleted names “*puccinellii* [?]” and “*nigrescens*”] Parl. fl. ital. / In Apennino lucensi alle Tre Potenze / legi Augusto 1847” [m. Parlatores] / “Da Parlatores Tre Potenze / in Agosto 1847 [m. i.]”, FI! This specimen was chosen as lectotype as it is the more complete (Fig. 3).





2b

Fig. 2. – *Festuca pallida* Gaudin, LAU, Herb. Gaudin: 2a) type material; 2b) Gaudin's handwriting on the folder.

Festuca nigricans

The name *Festuca nigricans* appears for the first time in two printed papers in the year 1807.

In the 2nd edition of Schleicher's catalogue (SCHLEICHER, 1807), the name "*Festuca nigricans* Lam." is reported, without any description or reference to previous descriptions.

Yet, the fescue described and legitimately published by Lamarck is:

Festuca nigrescens Lam., Encycl. 2: 460 (1788).

Examined type material. – Mont d'Or (France), s. d., leg. Lamarck (?), P Herb. Lamarck!

Lectotype here designated. – A) "festuca nigrescens. lam. dic. / du mont d'or. [m. Lamarck]"; B) "Herb. Mus. Paris. // Herbarium de Lamarck, / Acquis en Novembre 1886. [pr.]", Herb. Lamarck, P!, specimen on the right, which is the more complete.

The change in the specific epithet (from *nigrescens* to *nigricans*) was possibly due to the fact that the word "nigricans" (= blackish) is the exact latin translation of the common name "fêtuque noirâtre" (= blackish fescue) attributed by Lamarck himself to *F. nigrescens*, while "nigrescens" on the other hand means "becoming black". We must point out, however, that there has long been much nomenclatural confusion between these two terms ever since, both in papers and on the labels of herbarium specimens.

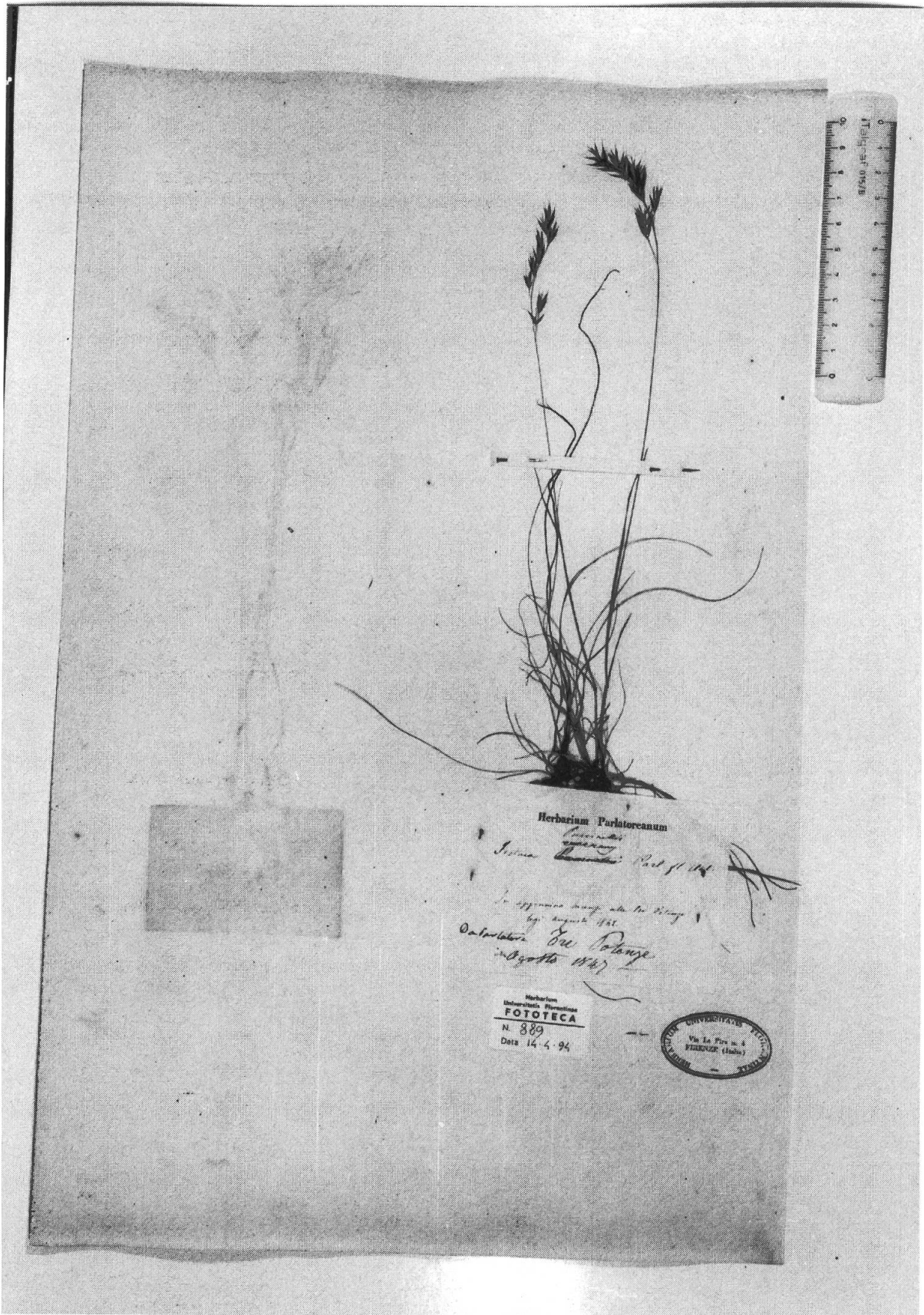
In any case, Schleicher effectively published a new name; but as it is not accompanied by a description, the name is not validly published (*nomen nudum*).

F. nigricans Lam. ex Schleich., Cat. Pl. Helvetia ed. 2: 13 (1807), *nomen invalidum* (*nomen nudum*).

In the same year, SERINGE (1807) published a "*Festuca nigricans* Gaud" in his above mentioned 1^{er} Catalogue... The reference to Gaudin is perhaps to some handwritten lists of plants or to exsiccata.

Seringe's name is not accompanied either by a diagnosis and is not validly published.

F. nigricans Gaudin ex Ser., Cat. (1807), *nomen invalidum* (*nomen nudum*).



Herbarium Parlatoceanum
Juliana ...
In ...
August 1981
Parlatore ...
1887

Herbarium
Universitatis Turinensis
FOTOTECA
N. 889
Data 14-4-94



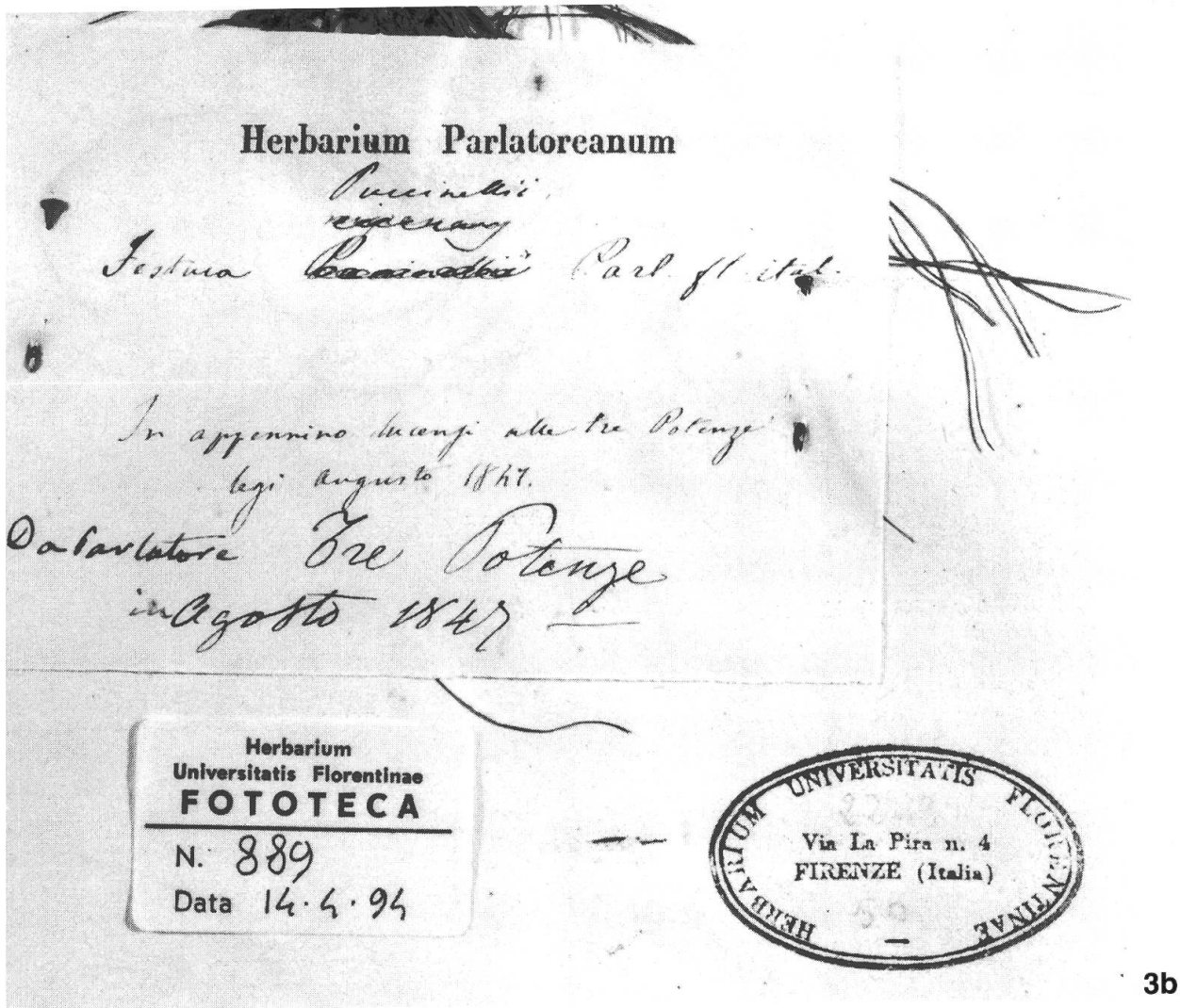


Fig. 3. – *Festuca puccinellii* Parl., FI: 3a) type material; 3b) label with Parlatores's handwriting.

In his Flora of Transylvania, SCHUR (1866) published the name "*F. nigricans* Lam." For the first time, the binomial is followed by a diagnosis making it validly published. Schur also reports the names of many authors who mentioned the species in their works: actually, all of them correctly reported *F. nigrescens* Lam. (and not *F. nigricans*). He also adds several synonyms for the species, among which "*F. rubra* Gaud. agrost.". The reference to Gaudin's work is not complete; in many other passages of the *Enumeratio*, however, Schur is more precise and the reference is evidently to *Agrostologia helvetica* (GAUDIN, 1811). In this paper, Gaudin reports a *F. rubra* L., without excluding in any way the type of Linnaeus' species, validly published in the *Species Plantarum* and typified by JARVIS & al. (1987). Consequently, no "*F. rubra* Gaudin (non L.)" has been published and the synonym reported by Schur makes his own species a *nomen superfluum* for *F. rubra* L., with which it shares the same type.

F. nigricans Schur, Enum. Pl. Transsilv.: 792 (1866), *nomen illegitimum* (*nomen superfluum*).

The name is later drawn on by Hackel in a short paper (HACKEL, 1881) published when his monograph on the genus *Festuca* was in press. In this paper, he reports the name "*Festuca rubra* L. var. *nigricans*", without any description or diagnosis, but the synonymy "*F. nigricans* Schleich.; *F. nigrescens* Gaud. non Lam.". In the monograph (HACKEL, 1882), the reference to Gaudin is more precise: "*F. nigrescens* Gaud. Agrost. helv. I. 254 (1811)". According to P. Perret (GE, *in litt.* 22.8.97), we can assume that Hackel had in mind the same paper by Gaudin while he was writing both contributions, so the reference to Gaudin in HACKEL (1881) can be considered clear enough to validate the name *F. rubra* var. *nigricans* through the description reported in GAUDIN (1811) (Art. 32.5 I.C.B.N.).

Festuca rubra var. *nigricans* Hack. in Bot. Centralbl. 8: 406 (1881).

Examined type material. – s. loc. ("Sur les Alpes et sur le Jura"), s. d., s. coll., LAU Herb. Gaudin!

According to Art. 7.7 of the Code, we searched for the lectotype in LAU among the specimens identified by Gaudin as "*Festuca nigrescens*". In LAU Herb. Schleicher we found a specimen with the label "*Festuca nigrescens* Lam./ Hall.: n: 1440/ Gaud.", but as the whole label appears to be handwritten by Schleicher and there is no evidence that it had been seen by Gaudin, we preferred not to choose this specimen as a lectotype.

Lectotype here designated. – A) "*F.* 1440. / *F. nigricans*. Lam. / encycl. méth. / Sur les Alpes et sur le Jura. [m. Gaudin]"; B) "*Festuca* [pr.] *puccinellii* Parl. / (= *F. violacea* Gaud. subsp. *nigricans* (Hack.) Hegi / (non *F. nigricans* Lam. ex Schur) [m. Markgraf-Dannenberg] / det. I. Markgraf-Dannenberg [pr.]", Herb. Gaudin, LAU!, specimen on the left (Fig. 4).

This specimen, together with another one, is attached to a folder that brings the label C) "*Fl.* Helv. 1. p. 290/ *Festuca nigrescens* Lam./ 88. *Festuca rubra* Hall. helv. 1440 [m. Gaudin]" (that is, it is attached to the folder itself, so that we may attribute to the specimen too the label attached to the folder). The specimen, that agrees rather well with the description of *F. nigrescens* in GAUDIN (1811), has been chosen as it is the more complete one.

In HACKEL (1882), the following synonyms too are reported for this taxon:

F. heterophylla b *alpina* Gr. et Godr.! Fl. Fr. III 575 ex p. (quoad pl. alpin.) (1855)

F. rubra v. *nigrescens* Mut. Fl. Fr. IV 102 (1838)".

He adds: "Variat sec. cll. Gaud. (Agrost. helv.) et Parl. (fl. it.) ll. c. spiculis affatim pubescentibus (*nigrescens* b. *pubescens* Parl.)."

We discuss in detail in Appendix 1 the typification of these names.

The following names have been based upon this basionym:

F. nigricans (Hack.) K. Richt., Pl. Eur. 1: 99 (1890), *nomen illegitimum*.

Actually, Richter reports a “*F. nigricans* Schl. ap. Hack. mon. p. 135 (1882)”. The name is not legitimate, as it is a later homonym of *F. nigricans* Schur, validly, even if not legitimately, published before.

Festuca violacea subsp. *nigricans* (Hack.) Hegi, Ill. Fl. Mitteleur. 1: 342 (1908).

Even if Hegi reported it in the incorrect form “*F. violacea* subsp. *nigricans* (Schleich.) Hack.”, the new combination is legitimate.

In his check-list of the Gramineae of France, KERGUÉLEN (1975) publishes *F. violacea* subsp. *atrata*, a new name for *F. rubra* var. *nigricans* Hack. Among the synonyms he reports “*F. violacea* subsp. *nigricans* (Schleicher ex Hackel) Hegi”. As this name was already legitimately published, the name proposed by Kerguélen is illegitimate.

F. violacea subsp. *atrata* Kerguélen in Lejeunia ser. 2, 75: 180 (1975), *nomen illegitimum* (*nomen superfluum*).

At the specific rank, this taxon lacks any legitimate name. On the taxonomic and other related aspects of this taxon, a study is currently under way by the authors of this paper together with G. Rossi (Pavia).

Appendix 1: Discussion on the synonyms reported by HACKEL (1882)
for *F. rubra* var. *nigricans*.

1) *Festuca heterophylla* var. *alpina* Godr. in Gren. & Godr., Fl. France 3: 575 (1856).

The name is followed by a short description and is legitimately published.

Examined type material. – A) “Vallée du Lauzannier (B. alpes) / 19 aout 1853 [m. Godron]”; B) “*Festuca heterophylla* / Lam. / b alpina / (Fldefr. 3, p. 575) [m. Grenier]”, NCY (photocopy!).

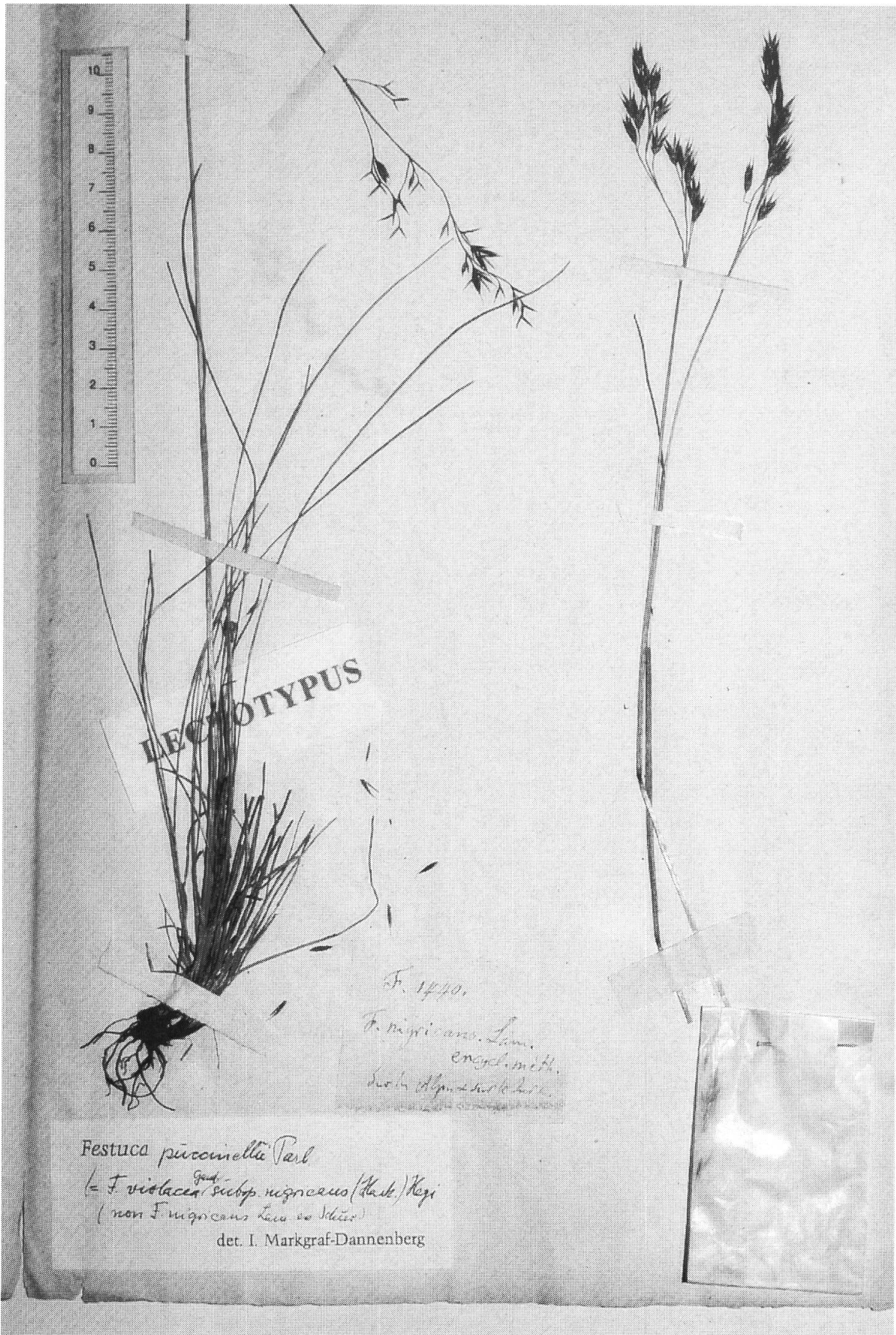
Lectotype. – We could not lectotypify this taxon, as we could only obtain a photocopy of the above mentioned specimen from the NCY herbarium. We have been told (pers. comm. of the Curator) that this is the only specimen of this taxon kept in Godron’s herbarium, therefore it is likely to be a holotype. However, it was not possible to verify the diagnostic characters of the specimen reported in the protologue from the copy (“Panicule panachée de violet et de jaune; feuilles plus fermes”).

2) *Festuca rubra* var. *nigrescens* (Lam.) Lam., Tabl. Encycl.: 188 (1791).

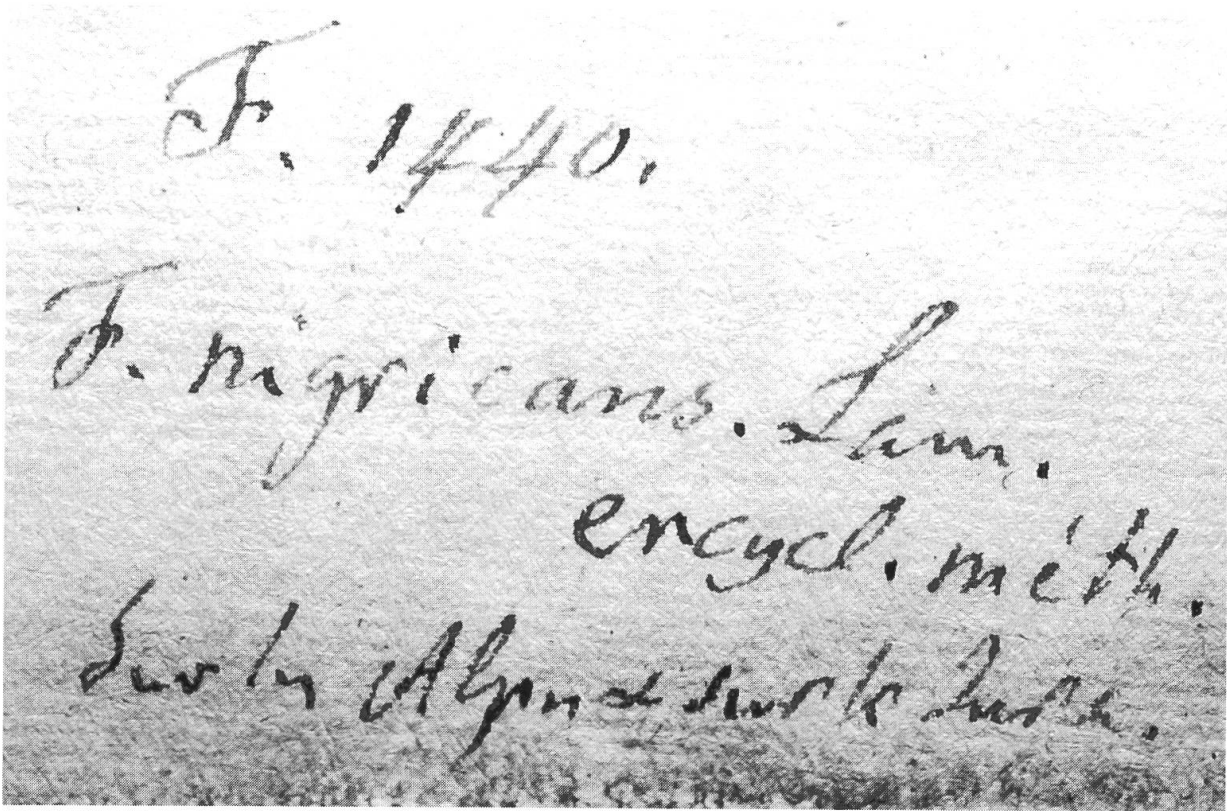
In the Tableau Encyclopédique et Méthodique, LAMARCK (1791) also reports, under the specific name *F. rubra* L. the taxon “β *Festuca nigrescens* Dict.”, clearly referring to *F. nigrescens* Lam. The rank of this infraspecific taxon is not specified but, according to the I.C.B.N. (GREUTER & al., 1994), it must be regarded as a variety and is legitimately published.

This taxon is reported by MUTEL (1837) in his Flore of France as “*F. rubra* L. i *nigrescens* Lam. ill.”. In an observation (pag. 104), Mutel notes that Lamarck himself, in the Tableau Encyclopédique treats *F. nigrescens* as an infraspecific taxon of *F. rubra*.

Publishing *F. rubra* var. *nigricans*, Hackel explicitly excludes the type *F. nigrescens* Lam. from the synonyms (“*F. nigrescens* Gaud. non Lam.”). Consequently, the citation of “*F. rubra* var. *nigrescens* Mutel” among the synonyms must be intended as “*sensu* Mutel, non Lam.” Thus the variety described by Hackel may not be considered a *nomen superfluum* for *F. rubra* var. *nigrescens* (Lam.) Lam.

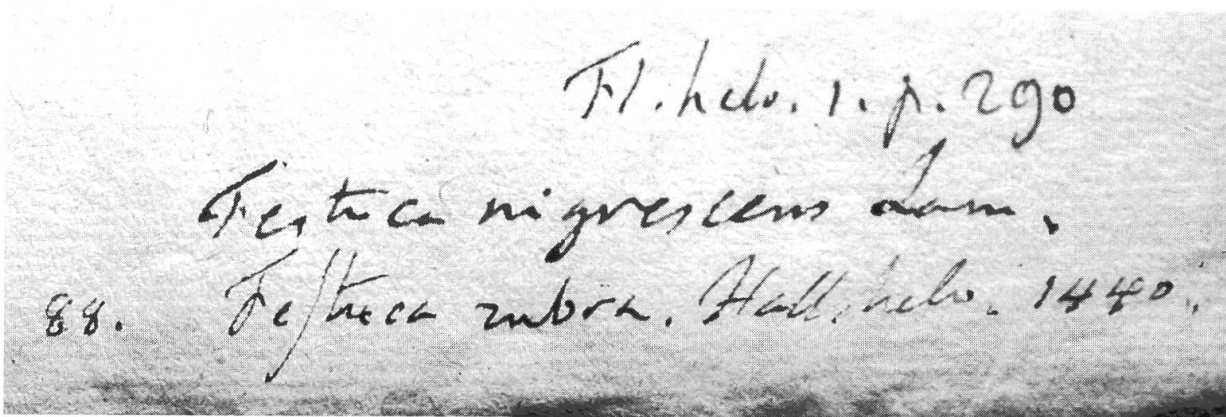


4a



F. 1440.
F. nigricans. Lam.
encycl. méth.
Savoy Alpes de Savoie Suisse.

4b



Fl. helv. 1. p. 290
Festuca nigrescens Lam.
88. *Festuca rubra*. Hall. helv. 1440.

4c

Fig. 4. – *Festuca rubra* var. *nigricans* Hack., LAU, Herb. Gaudin: 4a) type material; 4b) label with Gaudin's handwriting; 4c) Gaudin's handwriting on the folder.

3) *F. nigrescens* var. *pubescens* Parl., Fl. Ital. 1: 440 (1850), *nomen illegitimum*.

PARLATORE (1850) published *F. nigrescens* var. *pubescens* Parl. in the first volume of his *Flora italiana*. The name is followed by a description and is validly published.

Examined type material. – We could not find any specimen of this taxon collected in the *locus classicus* in FI (“Ho la varietà b. della Valtellina”, that is “I have got the variety b. from Valtellina”) before 1850 and annotated by Parlatore, not even under every synonym possible. As Parlatore made his first trip to Valtellina in 1861 (PARLATORE, 1992), the specimen must have been collected by somebody else. After examining the Catalogue of botanical collections of the Florentine Museum of Natural History (PARLATORE, 1874) and the register of entries of the Herbarium Centrale Italicum up to 1850 (PARLATORE, ined.), we deduced that the plant was probably sent to Parlatore by Giuseppe Comolli. Maybe it was later lost or is now hidden somewhere in FI under a different name. In a Catalogue of Comolli’s herbarium in PAV, written by O. Penzig, both *Festuca violacea* (“n° 188”) and *Festuca nigrescens* (“n° 193”) are reported; but the folders of the two species are now missing from Comolli’s herbarium (Graziano Rossi, pers. comm.). Consequently the choice of a neotype is necessary: the following specimen is in accordance with the description given by Parlatore:

Neotype. – “HERBARIUM UNIVERSITATIS TICINENSIS [pr.] / *Festuca nigrescens* Lam. / var. *pubescens* Parl. [m. B. Foggi] / loc. [pr.] Val Viola – Bormina (SO). 17.7.1995 / RIL 2 [m. G. Rossi] / [...] / crittogrammeto [m. G. Rossi] / legit [pr.] G. Rossi [m. G. Rossi]”, PAV!

Yet, in *Synopsis Florae helveticae* edited by Monnard after Gaudin’s death (GAUDIN, 1836), Gaudin had already validly published a *F. nigrescens* b *pubescens*, with the diagnosis “*spiculis affatim pubescentibus*”. The rank of the infraspecific taxon is not specified; but in other passages of the same work, infraspecific taxa marked with a letter of the greek alphabet are clearly referred to as varieties (see for example on page 7 a sentence in the paragraph on *Veronica dentata* Schrad., referring to *V. teucrium* b *angustifolia*: “Priori ac praecipue [...] **varietati** b nimis affinis”). On this subject, see also GREUTER (1968).

In GAUDIN (1811), a *F. nigrescens* b *spiculis affatim pubescentibus* had been reported by Gaudin, but this infraspecific taxon bears no name as its epithet is polynomial. In that paper, Gaudin refers that *F. nigrescens* b *spiculis affatim pubescentibus* had been communicated to him by Haller.

Festuca nigrescens var. *pubescens* Gaudin in Monnard, Syn. Fl. Helv.: 70 (1836).

Examined type material. – No specimen with this name has been found either in Gaudin’s herbarium (LAU!), or in G, where plants collected by Haller filius are kept (pers. comm. of the Curator); thus we designate the following neotype:

Neotype. – A) “Ex herbario L. Favrat [pr.] / *F. violacea* Schleich. ap. [?] Gaud. [m. Hackel] / teste Hackel [m.i.] / *Festuca nigrescens* Lam. ? / Glacier des Martinets / Vaud, / Suisse. / 28-7 69. / Favrat [m. Favrat] / Botanisches Museum des eidg. Polytechnikums. / ZÜRICH [pr.]”; B) “*Festuca* [pr.] *violacea* Gaud. / var. *nigricans* Schleich. / III 68 [m. Markgraf-Dannenberg] det. I. Markgraf-Dannenberg [pr.]”, Z!, specimen on the left.

We chose this specimen as a neotype as its characteristics are in accordance with the original diagnosis («*spiculis affatim pubescentibus*») and it was collected in Switzerland in the *locus classicus* («In pascuis alpinis montanisque», as *F. nigrescens*).

As Gaudin’s name has priority, *F. nigrescens* var. *pubescens* Parl. is an illegitimate later homonym.

Appendix 2: List of the names discussed in this paper

The names that have been legitimately published are underlined. A letter T! marks the names that have been typified in this paper.

- F. aurata*** Gaudin ex Murith, Guide Bot. Valais: 68 (1810), *nomen invalidum (nomen nudum)*.
- F. aurata*** Gaudin, Agrost. Helv. 1: 234 (1811), *nomen illegitimum (nomen superfluum for *F. pallida* Gaudin)*.
- F. halleri*** Roem. & Schult. *sensu* Puccin. in Giorn. Bot. Ital. 1(1): 121 (1844) non *F. halleri* All., Fl. Pedemont. 2: 235 (1785), *nomen male appositum*.
- F. heterophylla*** var. ***alpina*** Godr. in Gren. & Godr., Fl. France 3: 575 (1856).
- F. macrathera*** (Hack.) Markgr.-Dannenb. ex Pignatti & Markgr.-Dannenb. in Pignatti, Fl. Ital. 3: 493 (1982), *nomen invalidum (nomen nudum)*.
- F. nigrescens*** Lam., Encycl. 2: 460 (1788) T!
- F. nigrescens*** var. ***pubescens*** Gaudin in Monnard, Syn. Fl. Helv.: 70 (1836) T!
- F. nigrescens*** var. ***pubescens*** Parl., Fl. Ital. 1: 440 (1850), *nomen illegitimum (later homonym)* T!
- F. nigricans*** Gaudin ex Ser., Cat. (1807), *nomen invalidum (nomen nudum)*.
- F. nigricans*** Lam. ex Schleich., Cat. Pl. Helvetia ed. 2: 13 (1807), *nomen invalidum (nomen nudum)*.
- F. nigricans*** Schur, Enum. Pl. Transsilv.: 792 (1866), *nomen illegitimum (nomen superfluum for *F. rubra* L., Sp. Pl.: 74 (1753))*.
- F. nigricans*** (Hack.) K. Richt., Pl. Eur. 1: 99 (1890), *nomen illegitimum (later homonym)*.
- F. pallida*** Gaudin in Alpina 3: 56 (1808) T!
- F. puccinellii*** Parl., Fl. Ital. 1: 440 (1850) T!
- F. rubra*** subsp. ***violacea*** (Gaudin) Hack. in Bot. Centralbl. 8: 406 (1881).
- F. rubra*** subsp. ***violacea*** (Gaudin) Hack. var. ***eu-violacea*** St.-Yves in Annuaire Conserv. Jard. Bot. Genève 17: 111 (1913), *nomen invalidum*.
- F. rubra*** subsp. ***violacea*** (Gaudin) Hack. var. ***genuina*** Hack., Monogr. Festuc. Eur.: 132 (1882), *nomen invalidum*.
- F. rubra*** subsp. ***violacea*** (Gaudin) Hack. subvar. ***schleicheri*** St.-Yves in Bull. Soc. Bot. France 71: 121 (1924), *nomen invalidum*.
- F. rubra*** subsp. ***violacea*** (Gaudin) Hack. subvar. ***typica*** Hack., Monogr. Festuc. Eur.: 133 (1882), *nomen invalidum*.
- F. rubra*** var. ***nigrescens*** (Lam.) Lam., Tabl. Encycl.: 188 (1791).
- F. rubra*** var. ***nigricans*** Hack. in Bot. Centralbl. 8: 406 (1881) T!
- F. rubra*** var. ***violacea*** (Gaudin) Hack. in Bot. Centralbl. 8: 406 (1881).
- F. rubra*** subvar. ***aurata*** Hack., Monogr. Festuc. Eur.: 133 (1882) T!
- F. rubra*** subvar. ***carnica*** Hack., Monogr. Festuc. Eur.: 133 (1882) T!
- F. violacea*** Gaudin ex Schleich., Cat. Pl. Helvetia ed. 2: 13 (1807), *nomen invalidum (nomen nudum)*.
- F. violacea*** Gaudin ex Ser., Cat. (1807), *nomen invalidum (nomen nudum)*.
- F. violacea*** Gaudin in Alpina 3: 57 (1808) T!

- F. violacea* subsp. *atrata* Kerguélen in *Lejeunia* ser. 2, 75: 180 (1975), *nomen illegitimum* (*nomen superfluum* for *F. violacea* subsp. *nigricans* (Hack.) Hegi).
- F. violacea* subsp. *aurata* K. Richt., *Pl. Eur.* 1: 98 (1890) T!
- F. violacea* subsp. *macrathera* (Hack.) Markgr.-Dannenb. in *Bot. J. Linn. Soc.* 76: 326 (1978).
- F. violacea* subsp. *nigricans* (Hack.) Hegi, *Ill. Fl. Mitteleur.* 1: 342 (1908).
- F. violacea* var. *macrathera* Hack. in Beck, *Ann. K.K. Naturhist. Hofmus.* 2: 45 (1887).
- F. violacea* f. *macrathera* (Hack.) Hayek in *Repert. Spec. Nov. Regni Veg. Beih.* 30(3): 283 (1933).

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