DISTRIBUTION OF *FESTUCA AMETHYSTINA* L. SUBSP. *RITSCHLII* (HACKEL) LEMKE EX MARKGR.-DANNENB. IN POLAND

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ABSTRACT

The distribution of *Festuca amethystina* subsp. *ritschlii* in Poland has been prepared on the basis of data from literature, herbaria and the author's field investigations. The paper presents the general distribution of this taxon in Europe and gives its ecological, phytocoenological and taxonomical description.

KEY WORDS: *Festuca amethystina* subsp. *ritschlii* (Hackel) Lemke ex Markgr.-Dannenb., distribution maps, habitat, phytocoenoses, *Potentillo albae-Quercetum*, taxonomical features, extravaginal shoots, vascular strands, unawned glumes, vallecule.

INTRODUCTION

Festuca amethystina L. is considered a rare and threatened species in the Polish vascular flora (Jasiewicz 1981; Zarzycki 1986; Zarzycki, Szelać 1992; Zarzycki, Kaźmierczakowa 1993).

F. amethystina var. *Ritschlii* was first recorded by Ritschl (1850) on Dziewiczka Góra near Poznań and named by him as *F. duriuscula* var. *nemoralis* (Ascherson, Graebner 1902-1904). On the basis of materials' revision, the taxon was suitably named *Festuca amethystina* var. *Ritschlii* by Hackel (1882) (Wojterscy 1953). According to Markgraf-Dannenberg (1980) this taxon is now considered as subsp. *ritschlii*.

The occurrence of *F. amethystina* var. *Ritschlii* in the vicinities of the towns of Bydgoszcz, Szubin, Międzyrzecz, Poznań and Gniezno was determined by German researchers as early as the end of the 19th century and beginning of the 20th century (Bock 1895, 1897a,b, 1908; Pfuhl 1896, 1897; Spribille 1895, 1900; Ascherson, Graebner 1898-99). Few localities, also in the Wielkopolska Region, were in later years discovered by Polish botanists (Kulesza 1920; Wodziczko, Krawiec, Urbański 1938; Szulczewski 1951).

On the basis of the above mentioned studies, in the Polish literature, both from the inter-World-Wars period and after World War II, this taxon was cited only in the Wielkopolska Region and the vicinities of Bydgoszcz (Szafer 1919, 1930; Czubiński 1950; Szulczewski 1951; Szafer, Kulczyński, Pawłowski 1986). Since that time there was no new information on the distribution of *F. amethystina* in Poland, whereas the existing data were very scanty (Zarzycki 1984). Only 12 years ago it was recorded in the Chęciny Region by Bróz (1981).

The records of new, rather numerous localities, became a stimulus for undertaking the present study.

MATERIAL AND METHODS

The distribution of *Festuca amethystina* subsp. *ritschlii* was elaborated on the basis of data from literature, herbaria and results of own research.

Data on published localities were collected from studies by: Bock (1895, 1897a,b, 1908); Pfuhl (1896, 1897); Spribille (1895, 1900); Ascherson, Graebner (1898-99); Kulesza (1920); Wodziczko, Krawiec and Urbański (1938); Szulczewski (1951); Bróz (1981); Pawlus (1993).

Another source of data were collections from the herbaria of:

- Department of Plant Taxonomy, Faculty of Biology, A. Mickiewicz University, Poznań (POZ);
- Institute of Botany, Polish Academy of Sciences, Kraków (KRAM);
- Institute of Botany, Jagiellonian University (KRA);
- Department of Botany, Institute of Ecology and Conservation, Łódź University (LOD).

Note that older collections from the area of Poland preserved in some herbaria, designated in the past as the taxon *F. amethystina* var. *tatrae*, represent in fact a separate species *Festuca tatrae*, which was proved on the basis of cariologic investigation (Pogan 1977). The present state of knowledge indicates that *F. amethystina* subsp. *ritschlii* is the only taxon representing this species in Poland (Szafer, Kulczyński, Pawłowski 1986).

DISTRIBUTION

The distribution of *Festuca amethystina* L. covers mostly the mountain areas of middle and southern Europe (Meusel,

Fig.1. Distribution of *Festuca amethystina* L. (after Meusel, Jäger, Weinert 1965)

Jäger, Weinert 1965). The occurrence is of a dispersed nature, and its main centres are in the Balkan Peninsula, the Alps and Eastern Carpathians (Fig. 1). In all its area, *F. amethystina* belongs to rare species. It was recorded in various types of phytocoenoses, for example in xerothermic pine and pine-beech forests in Austria, in flatlands (500-800 m. a.s.l.) on a dolomite substrate (Wittman, Strobl 1984), in mountain areas in the phytocoenoses of the *Erico-Pinion* alliance (Strobl 1989) and also in grass communities (e.g., Horvat, Glavač, Ellenberg 1974).

The species comprises four subspecies, occupies different parts of the species' occurrence range (Markgraf-Dannenberg 1980). *F. amethystina* subsp. *ritschlii* occurs in the Middle-European Lowland, representing the species in its most northern localities. In Poland its occurrence is limited to the western regions of the country (Zarzycki 1984). This interes-

ting element of the Polish flora has been included in the oldest group of mountain species occurring in the lowland (Szafer 1930, Czubiński 1950), and also to glacial relicts, which have remained in the lowland as survivors of mixed tundra. According to Szafer (1930), over a long time it has formed an endemic, lowland taxon *F. amethystina* var. *Ritschlii*. According to a narrower definition, this taxon has even been considered a Poznań endemite (neoendemite) (Krawiec 1936).

Beyond Poland, *F. amethystina* subsp. *ritschlii* occurs in northern Bavaria (Rothmaler 1982) and also in Moravia, which is indicated by its herbarium specimens collected in 1973 by Dvořák and Vicherěk, identified by M. Pawlus, and deposited in the Herbarium of Plant Taxonomy of the University of Poznań.

HABITAT AND PHYTOCOENOSES

The data from literature (e.g., Kulesza 1920, Bróz 1981; Rothmaler 1982), information included in herbaria collections and own observations indicate that *Festuca amethystina* subsp. *ritschlii* is a heliophyte occurring in fully insolated or only partially shaded places. It grows on midfertile, permeable soils. Zarzycki (1984) includes it among species growing under moderately warm climatic conditions, on sandy substrate.

This taxon characterises a narrow phytocoenotic range (Tab. 1), while its presence is mostly determined by the light

factor. It most frequently occurs in the phytocoenoses of heliophilous oak forests (Bróz 1981, Jakubowska-Gabara 1993), both under oak and pine-oak tree stands; more rarely in mixed forests, which are usually substitute communities on places of heliophilous oak forests. *F. amethystina* subsp. *ritschlii* occurs always in well insolated, warm and dry places. Because its optimal condition exist in the phytocoenoses of *Potentillo albae-Quercetum* it was considered a distinguishing taxon of this association (Jakubowska-Gabara 1993).

TABLE 1. *Potentillo albae-Quercetum* with *Festuca amethystina* subsp. *ritschlii*

Successive number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
No of record	1697	1717	1537	1240	1774	1142	1180	1119	1769	1030	1069	960	1768	1223	1629	1450	1579	1193	1465	956	1145	1471	1622	1632	1178	
No of locality on the map- Fig. 3	18	17	28	27	30	31	34	32	41	42	33	40	38	37	39	35	36	50	47	44	49	45	60	52	46	
Date (Year)	1990	1990	1989	1988	1991	1987	1987	1987	1991	1985	1985	1984	1991	1988	1991	1989	1990	1987	1989	1986	1987	1989	1991	1991	1987	
Localities (forest range)	DG	ZI	TL	Db	Pd	Gs	Br	Np	BI	Rd	RD	RL	Pp	Sz	GI	Lu	LL	Jd	JK	SB	Pk	Zg	Ch	Kr	ZG	
No of forest division	93	27	177	441	99	56	118	134	23	93	166	147	170	77	198	85	26	115	157	304	43	44	26	190	262	
Density of tree layer in % a ₁	d	a	a	c	b	a	c	j	g	a	c	g	a	c	n	c	a	g	f	a	a	h	c	b	c	
a ₂	70	60	50	60	70	50	60	70	60	65	70	70	70	60	60	70	70	60	70	75	60	70	40	60	40	
Density of shrub layer b	—	—	—	20	—	—	—	—	—	—	—	20	—	—	—	—	20	—	—	—	—	—	—	—	—	
Density of herb layer c	sl	15	10	10	5	2	5	25	5	15	20	20	40	25	20	30	10	10	20	30	15	20	sl	30	10	
Cover of mosses d	70	90	100	95	80	95	100	90	90	85	90	90	80	70	80	90	90	100	100	85	100	90	100	90	80	
Area of record in m ²	5	5	5	—	—	5	sl	5	5	10	—	sl	sl	10	sl	sl	—	—	10	5	—	5	sl	5	30	
Number species in record	250	200	400	400	250	300	250	400	400	400	400	400	250	300	300	200	200	400	250	400	400	300	250	300	400	
	48	55	50	50	53	47	49	47	67	54	58	63	59	65	62	65	49	48	55	63	49	52	66	67	41	
<i>Quercus petraea</i> a ₁	4	3	.	.	3	3	3	1	1	4	2	4	4	3	4	.	4	4	4	1	2	.	1	3	3	V
a ₂	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	2	.	.	.	.	.	.	.	.	
b	.	2	.	.	+	.	.	.	+	1	.	2	+	1	1	.	+	.	.	.	.	.	.	1	+	IV
c	+	+	.	.	+	1	1	.	+	2	.	1	1	1	1	.	1	1	.	+	+	.	+	+	+	
<i>Quercus robur</i> a ₁	.	.	3	.	1	1	4	4	1	4	.	1	.	.	.	4	.	.	.	4	3	4	3	.	1	IV
a ₂	.	.	.	2	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	
b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	1	1	1	.	1	.	III
c	.	.	1	+	+	.	1	1	+	1	.	.	.	.	.	1	.	.	.	+	+	1	+	.	1	
<i>Pinus sylvestris</i> a ₁	.	2	1	2	1	.	1	.	1	2	1	1	.	2	1	.	.	+	.	1	2	1	.	2	2	II
b	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	
<i>Betula pendula</i> a ₁	.	1	1	.	1	1	.	.	+	.	.	.	.	.	.	.	2	2	.	2	.	.	.	.	2	
b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	
c	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	+	.	.	+	.	.	.	+	IV
<i>Juniperus communis</i> b	.	.	1	+	+	.	3	+	.	1	1	.	1	.	1	.	.	.	+	+	.	+	.	+	+	
c	.	.	1	+	+	+	1	+	+	+	1	+	+	1	+	.	.	+	+	+	+	.	+	+	+	IV
<i>Frangula alnus</i> b	+	+	+	.	+	+	.	.	1	2	.	+	.	+	.	+	2	.	.	+	+	1	1	.	1	+
c	.	+	+	.	.	.	.	.	+	+	+	+	+	.	+	+	2	.	.	+	+	.	.	.	+	III
<i>Sorbus acuparia</i> b	.	+	1	+	.	.	+	.	.	.	.	.	+	1	.	.	+	.	.	.	.	.	.	.	.	+
c	+	+	+	+	+	+	.	.	+	.	.	.	.	+	.	+	1	+	.	.	.	.	.	.	.	
<i>Carpinus betulus</i> b	.	.	1	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	+	1	.	2	.	.	.	II
c	.	.	+	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	+	+	+	+	.	.	.	
<i>Corylus avellana</i> b	.	.	.	.	.	.	.	.	.	.	.	.	2	1	1	.	.	1	2	2	2	.	.	.	.	I
c	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+	.	.	+	1	+	+	.	.	.	.	I
<i>Euonymus verrucosus</i> b	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	+	.	.	.	+	I
<i>Rosa canina</i> c	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Populus tremula</i> b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	I
c	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	
<i>Tilia cordata</i> b	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	+	.	.	.	.	.	.	.	.	.
c	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Moreover in records: 1 – *Rosa* sp. +(c); 23 – *Prunus serotina* +(b, c); 7 – *Malus sylvestris* +(c); 10 – *Viburnum opulus* +(c); 13 – *Lonicera xylosteum* 1 (b), +(c); 16 – *Malus sylvestris* +(c); 17 – *Picea abies* +(b, c); 19 – *Lonicera xylosteum* +(c); 23 – *Rosa gallica* +(c); 24 – *Cornus sanguinea* 1(b), +(c), *Rhamnus catharticus* +(c); 25 – *Picea abies* +(c).

Ch. D* *Potentillo albae-Quercetum*

*Festuca amethystina subsp. ritschlii	+	1	+	1	+	+	+	1	1	+	+	+	+	+	+	+	+	+	+	+	+	+	2	+	V	
Ranunculus polyanthemus	+	+	+	+	+	.	.	+	+	.	+	1	.	.	+	.	+	.	.	+	+	.	+	+	III	
Potentilla alba	+	1	.	.	+	.	.	+	+	1	.	+	.	+	+	1	.	+	.	+	.	.	2	2	III	
*Vicia cassubica	1	.	.	+	.	.	1	1	.	.	+	.	.	.	.	.	+	.	.	.	+	.	.	.	II	
Pulmonaria angustifolia	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	+	+	.	+	I	
Quercetalia pubescentis																										
Campanula persicifolia	+	+	+	1	+	+	+	.	+	1	1	.	+	+	+	+	+	+	1	+	+	.	+	.	IV	
Melittis melissophyllum	.	.	.	.	.	.	.	.	.	+	.	.	.	+	.	1	1	+	+	1	2	+	.	1	1	III
Hypericum montanum	.	+	.	.	+	.	.	.	+	.	.	+	.	+	.	+	+	+	.	+	.	.	.	.	II	
Primula veris	.	.	.	+	+	.	.	.	.	.	.	1	.	.	+	.	.	.	.	+	.	.	+	+	II	
Digitalis grandiflora	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	+	.	.	+	1	.	.	.	.	I	

Moreover in records: 23 – *Chrysanthemum corymbosum* +; 24 – *Viola hirta* +.

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Moreover in record: 8 - *Dianthus deltoides* +, *Poa compressa* +.

Fig. 2. *Festuca amethystina* subsp. *ritschlii*.

Explanations: a – cross-section of leaf, b – palea, c – lemma,

d – glumes (on the base of specimen from Rawski Las locality, coll. J. Jakubowska-Gabara 1989, LOD).

Fig. 3. Localities of *Festuca amethystina* subsp. *ritschlii* (Hackel) Lemke ex Markgr.-Dannenb. in Poland.

Explanations: a – published till 1951, b – published or confirmed after 1951, c – unpublished, discovered in 1900-1956, d – unpublished, discovered or confirmed in 1970-1993.

The basic features of this taxon visible in its cross-section are seven vascular-strands, dispersed strands of sclerenchyma, separated from the vascular ones with parenchyma (Fig. 2). The important and easily perceptible features of this species are unawned lanceolate glumes (Fig. 2), sheaths of upper leaves of non-flowering shoots closed with a membrane up their middle part and possessing a vallecule (Hackel 1882, Hegi 1906, Rothmaler 1982).

The general physiognomy of *F. amethystina* subsp. *ritschlii* is well described by Kulesza (1920), „... which occurs in dense, grey-green caespitoses with very long leaves and lofty stems ended with a greeny, slightly pendent panicle ended with numerous unawned spikelets...”

RESULTS AND CONCLUSIONS

At present in Poland there are sixty localities of *Festuca amethystina* subsp. *ritschlii* (Fig. 3), including twenty seven already published.

Only one of the ten localities discovered in the late 19th century (Dziewicza Góra) was confirmed in later research (Kulesza 1920, Jakubowska-Gabara 1990 unpubl.). Recent investigations also do not confirm eight localities published between World Wars I and II and just after World War II (Kulesza 1920; Wodziczko, Krawiec and Urbański 1938; Szulczewski 1951).

From among the thirty three so far non-published localities, twenty eight were discovered or confirmed in the last decades, while five are presented on the basis of historical herbarium data.

Taking into account the latest data, published and unpublished, from the recent twenty five years enables the author considering only thirty eight localities as existing ones (Fig. 3).

The distribution of *F. amethystina* subsp. *ritschlii* is limited to western and central Poland. It occurs on lowlands and uplands to the west of the Vistula River. The discovery of new localities in recent years confirms the suggestion of Szafer (1919) on the possibility of discovering it in other lowland areas in Poland outside the Region of Wielkopolska.

The localities confirmed by the present author are represented by small populations, single caespitoses (in localities No.: 31, 33, 37, 38, 43, 46) and from several to a dozen or so in another. In the last decades fast advancing changes in some types of heliophilous oak and oak-pine forests, where there are the best habitat conditions for this species, are observed. These changes consist mainly in the expansion of *Carpinus* and *Corylus*, whose consequence is the shading of forest bottom and then elimination of heliophilic plants (Jakubowska-Gabara 1993 and cited literature).

In result of the progressing changes, the living conditions of heliophilic *F. amethystina* subsp. *ritschlii* become more and more difficult, the existence of at least several localities seems to be endangered. The recession of the species is evidenced by a comparison with a locality on Dziewicza Góra given by Kulesza (1920) („... it abundantly overgrows well sunlit places and afforested mount slopes”) with its present state. In 1990 only two caespitoses, of low vitality, including one with only non-flowering shoots, could be recorded. Thus, despite the appearance on the map of new localities of *F. amethystina* subsp. *ritschlii*, this taxon should be considered as threatened.

LIST OF LOCALITIES

- Szczecin voivodeship (= vd): 1 – **Bielinek** on Odra, coll. T. Kowal 1956 unpubl., KRAM;
Gorzów Wielkopolski vd: 2 – **Międzyrzecz**, Ascherson, Graebner 1898-99;
Piła vd: 3 – **Wyżysk**, Bock 1908;
Bydgoszcz vd: 4 – **Oplawiec (Oplawiec)**, Bock 1897; 5 – **Tryszczyn** Bock 1908; 6 – **Szubin**, Ascherson, Graebner 1898-99; 7 – **Dziki Ostrów** near Brzoza, coll. F. Krawiec 1939 unpubl., det. M. Pawlus 1984, POZ, coll. J. Jakubowska-Gabara 1989, LOD;
Poznań vd: 8 – **Miączynek (Mionczynek)**, Bock 1908; 9 – **Biedrusko**, coll. F. Pfuhl 1907, POZ, Szulczewski 1951; 10 – **Jeziory**, Szulczewski 1951; 11 – **Rosnówko**, Wodziczko, Krawiec, Urbański 1938; 12 – **Porażyn**, coll. F. Krawiec 1934 unpubl., det. M. Pawlus 1984, POZ, Pawlus 1993; 13 – **Puszczykowo**, Kulesza 1920; 14 – **Ludwikowo** near Poznań, Wodziczko, Krawiec, Urbański 1938, coll. F. Krawiec 1939, POZ; 15 – **Łączny Młyn**, coll. F. Pfuhl 1900 unpubl., POZ; 16 – **Owińsk**, coll. W. Sławiński 1926 unpubl., POZ; 17 – **Zielonka Forest Range** sect.: 26, 114, 121, 202, coll. J. Jakubowska-Gabara 1990 unpubl., LOD; 18 – **Dziewicza Góra**, Ritschl 1850 (as *F. duriuscula* var. *nemorialis*), det. Hackel 1882, coll. F. Pfuhl 1895, POZ, Spribille 1895, Kulesza 1920, coll. J. Jakubowska-Gabara 1990, LOD; 19 – **Wierzenica**, Spribille 1895, coll. F. Pfuhl 1896, POZ; 20 – **Brodowo**, coll. Freystedt 1906, POZ, Szulczewski 1951; 21 – **Murzynówko**, coll. Freystedt 1906 unpubl., POZ; 22 – **Jezerce** near **Wierzyce** (Wierzyce), coll. F. Pfuhl 1895, POZ, Pfuhl 1899, Wodziczko, Krawiec, Urbański 1938; 23 – **Gniezno**, Town Forest, Bock 1895, coll. F. Pfuhl 1895, det. E. Hackel, POZ;
Leszno vd: 24 – **Wyspa Konwaliowa**, coll. J. Paczoski 1932 unpubl., det. M. Pawlus 1984, POZ;
Kalisz vd: 25 – **Bažantarnia** near Gorzyce (**Odolanów**), Spribille 1900; 26 – **Łysy Młyn**, Szulczewski 1951;
Konin vd: 27 – **Dąbrowice**, Koło district, sect.: 433, 434, coll. J. Jakubowska-Gabara 1988 unpubl., LOD; 28 – **Tokary-Licheń**, Konin district, sect. 170, coll. J. Jakubowska-Gabara 1988 unpubl., LOD; 29 – **Lipie Góry**, coll. R. Olaczek 1990 unpubl., LOD;
Płock vd: 30 – **Podgórze**, Łąck district, sect. 99, coll. J. Jakubowska-Gabara 1991 unpubl., LOD;
Sieradz vd: 31 – **Gostków**, Poddębice district, sect. 56, coll. J. Jakubowska-Gabara 1987 unpubl., LOD; 32 – **Napoleonów**, Poddębice district, sect.: 126, 127, 134, 135, coll. J. Jakubowska-Gabara 1987 unpubl., LOD; 33 – **Ruda-Dunaj**, Sieradz district, sect. 166, coll. J. Jakubowska-Gabara 1986 unpubl., LOD; 34 – **Borszewice**, Kolumna district, sect. 117, coll. J. Jakubowska-Gabara 1987 unpubl., LOD;
Łódź vd: 35 – **Lućmierz**, Grotniki district, sect.: 83, 84, coll. J. Jakubowska-Gabara 1991 unpubl., LOD; 36 – **Łagiewniki Forest** near Łódź, Grotniki district, sect. 26, coll. J. Jakubowska-Gabara 1991 unpubl., LOD;
Skierniewice vd: 37 – **Szymaniszki**, Brzeziny district, sect. 77, coll. J. Jakubowska-Gabara 1991 unpubl., LOD; 38 – **Popień**, Rogów district, sect. 170, coll. J. Jakubowska-Gabara 1991 unpubl., LOD; 39 – **Głuchów**, Rogów district, sect.: 190, 191, 198, 199, coll. J. Jakubowska-Gabara 1991 unpubl., LOD; 40 – **Rawski Las**, Spała district, sect.: 147, 142, coll. J. Jakubowska-Gabara 1989 unpubl., LOD; 41 – **Bolimów**, Skierniewice district, sect. 23, coll. J. Jakubowska-Gabara 1983 unpubl., LOD; 42 – **Radziejowice**, Grójec district, sect.: 110, 111, 93, 99, coll. J. Jakubowska-Gabara 1985 unpubl., LOD; 43 – **Trębaczew**, Spała district, sect. 94, coll. J. Jakubowska-Gabara 1970 unpubl., LOD;
Radom vd: 44 – **Stryków-Brzostowiec**, Grójec district, sect. 93, coll. J. Jakubowska-Gabara 1984 unpubl., LOD; 45 – **Kozienice Forest**, Kozienice district, sect. 43, 44, coll. J. Jakubowska-Gabara 1989 unpubl., LOD;
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ROZMIESZCZENIE *FESTUCA AMETHYSTINA* L. SUBSP. *RITSCHLII*
(HACKEL) LEMKE EX MARKGR.-DANNENBERG W POLSCE

STRESZCZENIE

Głównym obszarem występowania *Festuca amethystina* L. są tereny górskie Europy Środkowej i Południowej. *F. amethystina* subsp. *ritschlii* jest jednym spośród czterech podgatunków wyróżnionych w obrębie gatunku. Występuje na niżu środkowoeuropejskim, reprezentuje gatunek na najbardziej na północ wysuniętych stanowiskach. We florze krajowej *F. amethystina* należy do rzadko występujących i zagrożonych taksonów. Ten interesujący element polskiej flory zaliczono do najstarszej grupy roślin górskich występujących na niżu, a także do reliktyw glacialnych. Według Szafera (1930) *F. amethystina* var. *ritschlii* to forma endemiczna, jaka wytworzyła się na niżu w ciągu długiego czasu.

Odkrycie w ostatnich latach nowych stanowisk taksonu stało się impulsem do podjęcia opracowania jego rozmieszczenia. Jako pewnie istniejące można traktować trzydzieści osiem stanowisk. Pozostałe, zwłaszcza podane w końcu XIX i na początku XX wieku, nie potwierdzone w okresie późniejszym, mają charakter historyczny. Rozmieszczenie stanowisk wskazuje, że *F. amethystina* subsp. *ritschlii* występuje w Polsce Zachodniej i Środkowej, w pasie nizin i wyżyn, na zachód od Wisły.

Na podstawie zbadanego materiału zielnikowego przedstawiono najważniejsze cechy taksonomiczne. Praca zawiera również ogólną charakterystykę warunków siedliskowych oraz dokumentację fitocenotyczną taksonu.

SŁOWA KLUCZOWE: *Festuca amethystina* subsp. *ritschlii* (Hackel) Lemke ex Markgr.-Dannenb., rozmieszczenie, siedlisko, fitocenozy, cechy taksonomiczne.