



УДК / UDC 630
УДК / UDC 635.9
УДК / UDC 674

Online ISSN 1857-9507
www.sf.ukim.edu.mk/sumarski_pregled.htm

ШУМАРСКИ ПРЕГЛЕД FOREST REVIEW

МЕЃУНАРОДНО НАУЧНО СПИСАНИЕ
INTERNATIONAL SCIENTIFIC JOURNAL

“International Scientific Conference
Sustainable Forestry: Fact or Fiction?”
70 years

Faculty of Forestry - Skopje
“Ss. Cyril and Methodius” University

Шум. преглед (Šum. pregled)
For. review

Год. 48
Vol. 48

Бр. 2
No. 2

Стр. 1-20
Pag. 1-20

Скопје, 2017
Skopje, 2017





УНИВЕРЗИТЕТ „Св. КИРИЛ И МЕТОДИЈ“ ВО СКОПЈЕ

Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE

ШУМАРСКИ ФАКУЛТЕТ ВО СКОПЈЕ

FACULTY OF FORESTRY IN SKOPJE



Online ISSN 1857-9507

www.sf.ukim.edu.mk/sumarski_pregled.htm

УДК / UDC 630

УДК / UDC 635.9

УДК / UDC 674

ШУМАРСКИ ПРЕГЛЕД FOREST REVIEW

МЕЃУНАРОДНО НАУЧНО СПИСАНИЕ
INTERNATIONAL SCIENTIFIC JOURNAL



Шум. преглед (Šum. pregled)

For. review

Год. 48

Vol. 48

Бр. 2

No. 2

Стр. 1-20

Pag. 1-20

Скопје, 2017

Skopje, 2017

ШУМАРСКИ ПРЕГЛЕД
Меѓународно научно списание
Год. 48, бр. 2 / Стр. 1-20
Скопје, 2017

Online ISSN 1857-9507
УДК 630
УДК 635.9
УДК 674

Издавач
Универзитет „Св. Кирил и Методиј“ во Скопје
Шумарски факултет во Скопје
Декан
Д-р Кирил Сотировски

Главен и одговорен уредник
Д-р Бојан Симовски

Уредувачки одбор

Д-р Јулија Несторовски (Скопје, Македонија)
Д-р Марилена Идојтиќ (Загреб, Хрватска)
Д-р Милосав Анделиќ (Подгорица, Црна Гора)
Д-р Милорад Даниловиќ (Белград, Србија)
Д-р Ирина Папазова-Анакиева (Скопје, Македонија)
Д-р Роберт Брус (Љубљана, Словенија)
Д-р Чипријан Палагијану (Сучава, Романија)
Д-р Влатко Андоновски (Скопје, Македонија)
Д-р Саша Орловиќ (Нови Сад, Србија)
Д-р Маргарита Георгиева (Софija, Бугарија)
Д-р Зоран Говедар (Бања Лука, Р. Српска, БИХ)
Д-р Јасминка Ризовска Атанасовска (Скопје, Македонија)
Д-р Маријус Димитров (Софija, Бугарија)
Д-р Јурген Бласер (Берн, Швајцарија)
М-р Дејан Манџуковски (Скопје, Македонија)

Технички уредник
М-р Дејан Манџуковски

Корица и насловна фотографија
Д-р Бојан Симовски, *Daphne blagayana*

Излегува два пати годишно

Интернет-страница
www.sf.ukim.edu.mk/sumarski_pregled.htm

Адреса на издавачот
УКИМ-Шумарски факултет во Скопје
Редакција на Шумарски преглед
Ул. „16 Македонска brigada“ бр. 1
(П. фах 235)
1 000 Скопје
Република Македонија
Е-пошта: sumpregled@sf.ukim.edu.mk
www.sf.ukim.edu.mk

FOREST REVIEW
International Scientific Journal
Vol. 48, No. 2 / Pag. 1-20
Skopje, 2017

Online ISSN 1857-9507
UDC 630
UDC 635.9
UDC 674

Publisher
Ss. Cyril and Methodius University in Skopje
Faculty of Forestry in Skopje
Dean
Kiril Sotirovski PhD

Editor-in-chief
Bojan Simovski PhD

Editorial board
Ljupčo Nestorovski PhD (Skopje, Macedonia)
Marilena Idžoitić PhD (Zagreb, Croatia)
Milosav Andelić PhD (Podgorica, Montenegro)
Milorad Danilović PhD (Belgrade, Serbia)
Irena Papazova-Anakieva PhD (Skopje, Macedonia)
Robert Brus PhD (Ljubljana, Slovenia)
Ciprian Palaghianu PhD (Suceava, Romania)
Vlatko Andonovski PhD (Skopje, Macedonia)
Saša Orlović (Novi Sad, Serbia)
Margarita Georgieva PhD (Sofia, Bulgaria)
Zoran Govedar PhD (Banja Luka, R. Srpska, BIH)
Jasminka Rizovska Atanasovska PhD (Skopje, Macedonia)
Marius Dimitrov PhD (Sofia, Bulgaria)
Jürgen Blaser PhD (Bern, Switzerland)
Dejan Mandžukovski MSc (Skopje, Macedonia)

Technical editor
Dejan Mandžukovski MSc

Cover page and photography
Bojan Simovski PhD, *Daphne blagayana*

Published twice a year

Web page (on-line)
www.sf.ukim.edu.mk/sumarski_pregled.htm

Publisher's address
UKIM Faculty of Forestry in Skopje
Editorial Board of the Forest Review
Ul. 16 Makedonska brigada br. 1
(P.O. box 235)
MK-1000 Skopje
Republic of Macedonia
E-mail: sumpregled@sf.ukim.edu.mk
www.sf.ukim.edu.mk

ШУМАРСКИ ПРЕГЛЕД

Меѓународно научно списание

Год. 48, бр. 2 / Стр. 1-20

Скопје, 2017

Online ISSN 1857-9507

УДК 630

УДК 635.9

УДК 674

FOREST REVIEW

International Scientific Journal

Vol. 48, No. 2 / Pag. 1-20

Skopje, 2017

Online ISSN 1857-9507

UDC 630

UDC 635.9

UDC 674

Научен и ревизентски одбор

Д-р Санја Периќ (Загреб, Хрватска)

Д-р Милун Крстиќ (Белград, Србија)

Д-р Димитар Димитров (Софija, Бугарија)

Д-р Николчо Велковски (Скопје, Македонија)

Д-р Марјан Никетиќ (Белград, Србија)

Д-р Андреј Пилиповиќ (Нови Сад, Србија)

Д-р Даниел Прухниевич (Вроцлав, Полска)

Scientific and reviewers board

Sanja Perić PhD (Zagreb, Croatia)

Milun Krstić PhD (Belgrade, Serbia)

Dimitar Dimitrov PhD (Sofia, Bulgaria)

Nikolcho Velkovski PhD (Skopje, Macedonia)

Marjan Niketić PhD (Belgrade, Serbia)

Andrej Pilipović PhD (Novi Sad, Serbia)

Daniel Pruchniewicz (Wroclaw, Poland)

Интернет-страницаwww.sf.ukim.edu.mk/sumarski_pregled.htm**Адреса на издавачот**

УКИМ-Шумарски факултет во Скопје

Редакција на Шумарски преглед

Ул. „16 Македонска brigada“ бр. 1

(П. фах 235)

1 000 Скопје

Република Македонија

Е-пошта: sumpregled@sf.ukim.edu.mkwww.sf.ukim.edu.mk**Web page (on-line)**www.sf.ukim.edu.mk/sumarski_pregled.htm**Publisher's address**

UKIM Faculty of Forestry in Skopje

Editorial Board of the Forest Review

Ul. 16 Makedonska brigada br. 1

(P.O. box 235)

MK-1000 Skopje

Republic of Macedonia

E-mail: sumpregled@sf.ukim.edu.mkwww.sf.ukim.edu.mk

CONTENTS

Preface

Original Scientific Articles:

Gegoski M., Velkovski N., Andonovski V., Vasilevski K., Rizovska-Atanasovska J., Najdovski B. CHARACTERISTICS OF NATURAL REGENERATION OF BEECH AND FIR IN OFFSPRING AND YOUNG FOREST DEVELOPMENT STAGES ON KORAB MOUNTAIN	1
Najdovski B., Vasilevski K., Velkovski N., Andonovski V. ECOLOGICAL CONDITIONS AND SUCCESSIONAL PROCESSES OF THE ABANDONED MOUNTAIN PASTURES IN THE REGION OF MALESH	9
Nikolov Z. SCABIOSA LUCIDA VILL. (DIPSACACEAE), A NEW SPECIES IN THE FLORA OF THE REPUBLIC OF MACEDONIA	14
Trifković V., Govedar Z. ANALYSIS OF THE CONNECTION BETWEEN SPATIAL FACTORS WITH TWO TYPES OF FORESTS IN THE CEMERNICA FOREST MANAGEMENT UNIT, BOSNIA AND HERZEGOVINA	18

Instructions to Authors

**SCABIOSA LUCIDA VILL. (DIPSACACEAE),
A NEW SPECIES IN THE FLORA OF THE REPUBLIC OF MACEDONIA**

NIKOLOV Z.

Macedonian Museum of Natural History, Skopje, Republic of Macedonia

Corresponding author e-mail address: z.nikolov@musmacscinat.mk

ABSTRACT: *Scabiosa lucida* is recorded for the first time for the flora of the Republic of Macedonia. Newly discovered population is located on Osogovo Mts, in north-eastern part of the Republic of Macedonia, nearby the border with Bulgaria. This finding confirms also the previous record for the Bulgarian side of the mountain. The species was recently recoded for another border mountain (ridge Kobilica on Šar Planina Mts), also at the other side of the border, this time in Kosovo. *S. lucida* is a mountainous element, distributed in central and southern Europe. The species belongs to the very complex group of *Scabiosa columbaria*. Certain features, like the hairiness of the leaves and the shape of the calyx-setae, in the fruit stage, make clear distinction between this and the other closely related species of the same group.

Keywords: *Scabiosa lucida*, Osogovo Mts., Republic of Macedonia.

1 INTRODUCTION

The research of the genus *Scabiosa*, in the flora of the Republic of Macedonia, is not finished yet. The approximate number of the species, according to the available literature data (Griesbach, 1843; Wettstein, 1892; Degen & Dörfler, 1897; Beck von Managetta, 1904; Adamović, 1905; Dimitrov, 1908; Košanin, 1909; Vandas, 1909; Velenovsky, 1922; Jurišić, 1923; Urumov, 1923; Bormüller, 1925/26/28, 1927, 1937; Csiki, Javorka & Kümmerle, 1926; Stojanov, 1928; Soška, 1938, 1938/39b, 1939, 1941, 1953; Rechinger, 1939; Petrović, 1941; Černjavski, 1943; Rudski, 1943; Weber, 1951; Micevski, 1952, 1978, 1994; Todorovski, 1954, 1963, 1970; Cirimotić (=Matvejeva), 1958, 1965; Grupčić, 1958; Em, 1962; Šmarda, 1968; Drenkovski, 1968; Matevski, 1995; Teofilovski, 2011; Nikolov, 2017), following the system of Jasiewicz (1976), is 18. Beside the already alleged *Scabiosa rhodopensis* Stoj. & Stef., as a Balkan endemic species, with very restricted distribution on the territory of the Republic of Macedonia (Nikolov, 2017), there is another one, from this genus, that also attracts attention. It is *Scabiosa lucida* Vill. which, according to the available literature data, appeared to be new for the flora of the Republic of Macedonia. It is a mountainous element distributed in central and southern Europe (Jasiewicz, 1976; Domina, 2017). On the Balkan Peninsula this species has not yet been recorded in Bosnia and Herzegovina and Greece. *S. lucida* grows on forest clearings, mountain meadows, pastures and rocky places, from montane to alpine zone, at the altitude of (1200) 1500–2700 m.a.s.l. (Grossman, 1975).

2 MATERIALS AND METHODS

Plant material, collected during the field surveys on Osogovo Mts (2002, 2012, 2013 and 2018), is stored in the herbarium of the Macedonian Museum of Natural History (HMMNH). Different literature sources were used for the identification of the material (Prodan, 1961; Diklić, 1973; Grossman, 1975; Jasiewicz, 1976; Petrova, 2012). Photos from the habitat, plant and its different parts were also made. Distribution map is presented, as well (Fig. 2).



Figure 1: *Scabiosa lucida* Vill. - a) species habitat b) flowering plant



Figure 3: Distribution of *Scabiosa lucida* Vill. in the Republic of Macedonia

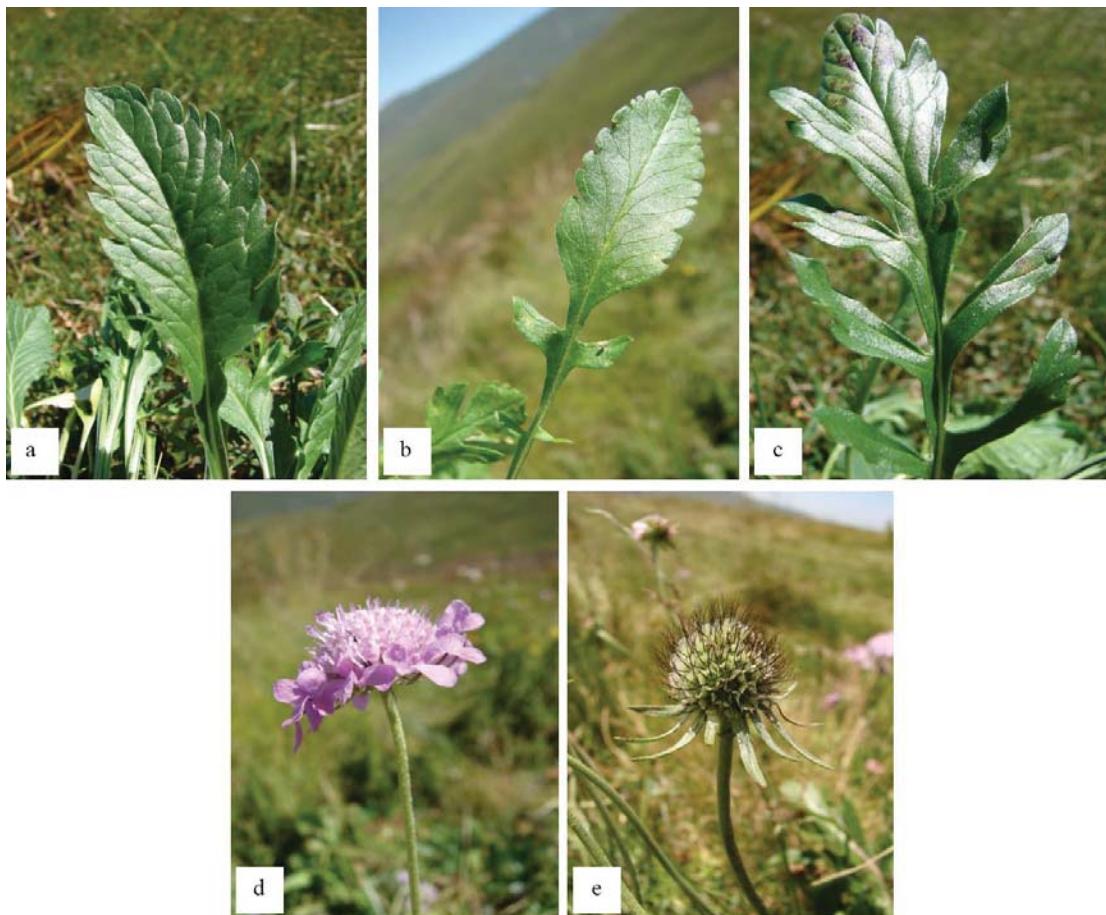


Figure 3: *Scabiosa lucida* Vill. – a,b,c) - basal leaves d) flower e) fruit stage

3 RESULTS AND DISCUSSION

Mk.: Osogovo Mts (Kriva Palanka): mountain pastures above the mine “Toranica”, 1600-2200 m.a.s.l., 18.07.2013 (Leg./Det.: Z. Nikолов).

Very abundant population of this species was observed on the mountain pastures on Osogovo Mts, from above the mine “Toranica” to the very peak of Ruen, near the border with Bulgaria. So far, *S. lucida* is not recorded on the territory of the Republic of Macedonia. However, data about the presence of this species on Osogovo Mts, in general, already existed, for the Bulgarian side of this border mountain (Velenovsky, 1891). So, our new finding is, beyond the importance as a new species for the flora of the Republic of Macedonia, contribution to the distribution area of this species on the Osogovo Mts as well as on the Balkan Peninsula, in general. There is one more recently published record that also deserves attention. In the paper of Duraki, Stanojević & Stojanović (2017), the presence of *S. lucida*, for the Kosovo-side of the ridge Kobilica (Šar Planina Mts) was alleged. However, during our field surveys (2007, 2018) the presence of this species was not confirmed on the Macedonian side of the ridge Kobilica.

Scabiosa lucida belongs to the group of *S. columbaria* (Jasiewicz, 1976) that, contrary to *S. ochroleuca* group with yellow or whitish corolla,

includes taxa with purple or reddish corolla (Fig. 2, d). Within the group of *S. columbaria*, *S. lucida* has stable taxonomic rank through certain characteristics that make clear distinction from the other closely related taxa. For example, from the closest *S. columbaria* L., *S. lucida* differs in the hairiness of the leaves and the shape of the calyx-setae (Grossman, 1975; Jasiewicz, 1976). Namely, the leaves of the *S. lucida* are glabrous or subglabrous and the calyx-setae are distinctly widened at base, in the fruit stage, while the leaves of the *S. columbaria* are usually hispid and the calyx-setae are not widened at base, in the fruit stage.

The plants from the Osogovo Mts match the description given by Diklić (1973), Grossman (1975), Jasiewicz (1976), Petrova (2012). Leaves are more or less glabrous with rare hairs on the margins, on the midrib of the both surfaces of the leaves as well as on some veins on the lower surface (Fig. 4, a-f).

The calyx-setae, contrary to *S. columbaria* (Fig. 5, a), are widened at the base (Fig. 5, b).

4 ACKNOWLEDGEMENT

I am grateful to Marjan Niketić and Dimitar Dimitrov for the valuable suggestions and comments to the earlier version of the manuscript.

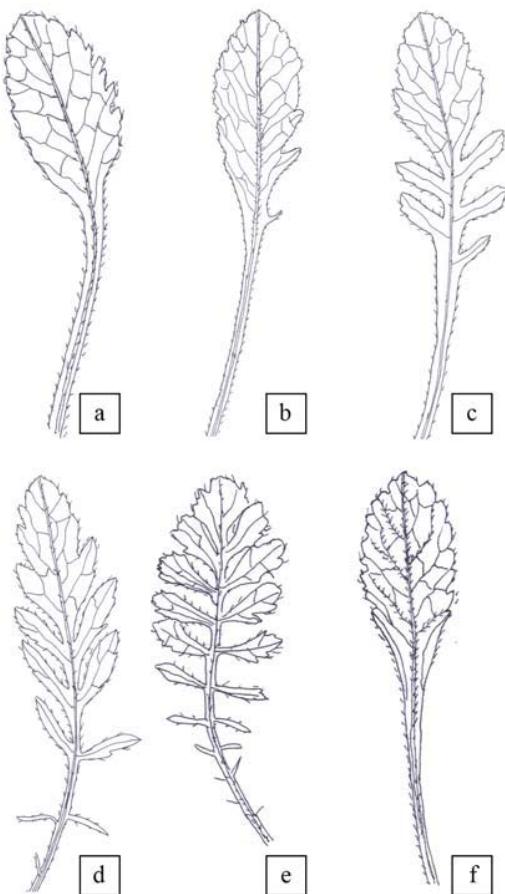


Figure 4: *Scabiosa lucida* Vill. – different forms of basal leaves
 a-e) upper surface f) lower surface

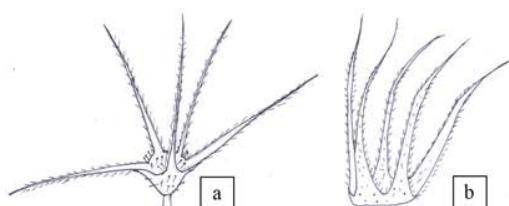


Figure 5: Calyx-setae – a) *Scabiosa columbaria* L. b) *Scabiosa lucida* Vill.

5 REFERENCES

- [1] Adamović, L., 1905: Neue Bürger der altserbischen und macedonischen Flora. ABZ, Jahrgang 11:1-3.
- [2] Beck von Managetta, G.R., 1904: Beitrag zur Flora des östlichen Albanien. Annalen des k.k. naturhistorischen Hofmuseums, 19(1):70-78.
- [3] Bornmüller, J., 1925: Beiträge zur Flora Mazedoniens. Engl. Bot. Jahr., 1 (59): 286-504. Leipzig.
- [4] Bornmüller, J., 1926: Beiträge zur Flora Mazedoniens. Engl. Bot. Jahr., 2 (60): 51-125. Leipzig.
- [5] Bornmüller, J., 1928: Beiträge zur Flora Mazedoniens. Engl. Bot. Jahr., 3 (61): 1-136. Leipzig.
- [6] Bornmüller, J., 1927: Bearbeitung der von H. Burgeff und Th. Herzog in den Kriegsjahren 1916/18 in Mazedonien gesammelten Pflanzen, II. Allgemeine Botanische Zeitschrift, 2 (23): 25-38.
- [7] Bornmüller, J., 1937: Zur Flora Mazedoniens. Fedde Rep., 42:126-142.
- [8] Cirimotić, J. (=Matvejeva, J.), 1958: Contribution to the knowledge of the flora of Mts Dub nearby Dojran Lake. God. Šum. Inst., 3:175-210. Skopje.
- [9] Csiki, E., Javorka, S. & Kümmerle, J., 1926: Adatok Albania Florajahoz (Additamenta ad Floram Albaniæ), 197-348. The Hungarian Academy of Science. Budapest.
- [10] Degen, A. & Dörfler, I., 1897: Beitrag zur Flora Albaniens und Mazedoniens. DAWW, 64:701-748.
- [11] Čeranjavski, P., 1943: Beitrag zur Kenntnis der Flora der Umgebung des Ochridsees. Acta Achridensia. Monografiarum, vol. 136. Sectio Scientiarum Naturalium et Mathematicarum, vol. 35 (2):11-88. Regia Academica Serbica. Belgrad.
- [12] Diklić, N., 1973. *Dipsacaceae*. - In Josifović, M. (Eds.). Flora of Serbia, V. Serbian Academy of Sciences and Arts. Belgrade.
- [13] Dimitrov, A., 1908: Floristic materials of Bitola surrounding. Periodičesko spisanie na Bugarskoto kniževno društvo, 69(1-2): 693-748. Sofija.
- [14] Domina, G. (2017): *Dipsacaceae*. - In: Euro+Med Plantbase - the information resource for Euro-Mediterranean plant diversity.
- [15] Degen, A. & Dörfler, I., 1897: Beitrag zur Flora Albaniens und Mazedoniens. DAWW, 64:701-748.
- [16] Drenkovski, R., 1969: Ein überblick über die Flora des Vodnogorje. GzPMF, 21:163-184. Skopje.
- [17] Duraki, Š., Stanojević, M. & Stojanović, V., 2017: Floristic characteristics of the ridge Kobilica (Šar Planina Mts). Nature Conservation, 67, 1-2:5-23. Belgrade.
- [18] Em, H., 1962: Pflanzengesellschaften der Nadelwälder in der VR Mazedonien. Biološki glasnik, 15:1-38. Zagreb.
- [19] Grisebach, A., 1843: Spicilegium Flora Rumelicae et Bithynicae. Synopsin plantarum, 1:1-407. F. Wieweg, Brunsvigae.
- [20] Grossmann, F., 1975. Morphologisch-ökologisch Untersuchungen an *Scabiosa columbaria* L. s.l. im mittleren und westlichen Alpengebiet. Veröffentlichungen des Geobotanischen Institutes der Erdg. Tech. Hochschule, Stiftung Rübel, in Zürich, Band 52:1-125.
- [21] Grupčić, Lj., 1958: Über das Pflanzenvorkommen in der Skopska Crna Gora. Faculte de Philosophie de L'universite de Skopje. Section des sciences naturelles. Editions speciales, Livre 9:1-80.
- [22] Jasiewicz, A., 1976. *Scabiosa*. - In Tutin, T.G. & al. (eds.). Flora Europaea, 4. Cambridge University Press. London.
- [23] Jurišić, Ž., 1923: Contribution to the Flora of South Serbia. Spom. SKA, 60:1-45.
- [24] Košanin, N., 1909: Contribution to the Flora of mountains Korab and Bistra. Izd. Muz. Srp. Zemlje, 7:1-14.

- [25] Matevski, V., 1995: The Flora of Dobra Voda Mountain, 1-46. PMF, Skopje.
- [26] Matvejeva, J., 1965: Contribution to the knowledge of the Flora of mountain Žeden. ACTA Musei Macedonici Scientiarum Naturalium, 10(2):27-65. Skopje.
- [27] Micev (=Micevski), K., 1952: La Flore du defile de Taor. Annaire de la faculte de Philosophie de L'universite de Skopje. Section des sciences des naturelles, 5:1-54.
- [28] Micevski, K., 1978: Seltene und unbekannte Arten in der Flora Mazedoniens. God. Zbor., Biol., 31:159. Skopje.
- [29] Micevski, K., 1994: Vegetation of Mts. Bistra. III (Eds.). Macedonian Academy of Sciences and Arts. Skopje.
- [30] Nikolov, Z., 2017: *Geranium phaeum* L. (Geraniaceae) and *Scabiosa rhodopensis* Stoj. & Stef. (Dipsacaceae) in the flora of the Republic of Macedonia. ACTA Muzei Macedonici Scientiarum Naturalium, 20(1):25-29. Skopje.
- [31] Petrova, A., 2012. *Dipsacaceae*. - In Kožuharov, S.I. & Ančev, M.E. (Eds.). Flora of the Republic of Bulgaria, XI. Bulgarian Academy of Sciences. Sofija.
- [32] Petrović, J., 1941: Contribution to the Flora of Skopje Valley. Glasnik SND, 22(8):79-89. Skopje.
- [33] Prodan, I., 1961. *Dipsacaceae*. - In Savulescu, T. & al. (Eds.). Flora Reipublicae Popularis Romanicae, VIII. Academiae Reipublicae Popularis Romanicae. Bucharest.
- [34] Rechinger, K.H. (fil.), 1939: Zur Flora von Albanien und Mazedonien. Feddes Rep., Naturhistorischen Hofmuseums, 47:165-179.
- [35] Rudski, I., 1943: Beitrag zur Kenntnis der Flora der Umgebung von Strumica. Acta Achridensia. Monografiarum, vol. 136. Sectio Scientiarum Naturalium et Mathematicarum, vol. 35 (2):205-238. Regia Academica Serbica. Belgrad.
- [36] Soška, Th., 1938: Beitrag zur Kenntnis der Schluchtenfloren von Südserbien, I Teil. BSS Sk., 18(6):223-238.
- [37] Soška, Th., 1938-1939b: Beitrag zur Kenntnis der Schluchten-floren von Südserbien, III Teil. BSS Sk., 20(7):167-191.
- [38] Soška, Th., 1939: Zur Flora des Berges Bukovik bei Gostivar in Südserbien. Annales Musei Serbiae Meridionalis, 1(6):55-59. Skopje.
- [39] Soška, Th., 1941: Beitrag zur Kenntnis der Schluchtenflora von Südserbien, IV Teil. BSS Sk., 22(8):169-181.
- [40] Soška, Th., 1953: Beitrag zur Kenntnis der Schluchtenfloren von Mazedonien. ACTA Musei Macedonici Scientiarum Naturalium, 1(3):61-77. Skopje.
- [41] Stojanoff, N., 1928: Thracische und mazedonische Herbarmaterialien des Verstorbenen Prof. Dr. Theodor Nikoloff. BAN, 37(18):49-209. Sofija.
- [42] Šmaranda, J. & al., 1968: Vysledky biogeografickych cest do Jugoslavie v letech 1964-1967; II. Vysledky botanickych cest do Jugoslavie v letech 1964-1967, 1-127 pp. Československa akademie ved Geograficky ustav v Brne. Nakladem Geografickeho ustavu ČSAV v Brne.
- [43] Teofilovski, A. 2011. Contributions to the flora of the Republic of Macedonia. Private edition, p. 1-142. Skopje.
- [44] Todorovski, A., 1954: Beitrag zur Kenntnis der Flora Westmazedoniens I. Die Flora von Smolevo bei Bitola (Monastir). ACTA Musei Macedonici Scientiarum Naturalium, 2(2):33-53. Skopje.
- [45] Tododrovski, A., 1963: A contribution for knowledge of the fodder flora in the district of Bitola. Prilozi, 3:55-74. Bitola.
- [46] Todorovski, A., 1970: The decorative flora of the area of the district of Bitola, Prilep, Kruševo and Demir Hisar. Prilozi, 14:3-36. Bitola.
- [47] Urumov, Iv. K., 1923: Contribution to the flora of Belomorska Trakija. BAN, 28(13):1-107. Sofija.
- [48] Vandas, C., 1909: Reliquiae Formanekianae. Enumeratio critica plantarum vascularium iquas itineribus in Haemo peninsula et Asia Minore (Bithynia) factis collegit Dr. E. Formanek, Professor gymnasii Brunensis Bohemici Brunae.
- [49] Velenovsky, J., 1891: Flora Bulgarica. Descriptio et enumeratio systematica plantarum vascularium in principatu Bulgariae sponte nascentium. Pragae.
- [50] Velenovsky, J., 1922: Relique Mrkvičkanae. In Commissione Bibliopole Fr. Rivnač, 1-32. Praga.
- [51] Weber, F., 1951: Botanička vychazka do pohori Galičica. Sborn. Klub. Prirodov. Brne, 29:168-178. Nakladem Klubu prirodovedec koh v Brno.
- [52] Wettstein, R., 1892: Beitrag zur Flora Albaniens. (Bearbeitung der von J. Dörfler im Jahre 1890 im gebiete des Sar-Dagh gesammelten Pflanzen). Biblioth. Botanica, Cassel.



ШУМАРСКИ ПРЕГЛЕД

Меѓународно научно списание

Год. 48, бр. 2 / Стр. 1-20

Скопје, 2017

Online ISSN 1857-9507

УДК 630

УДК 635.9

УДК 674

FOREST REVIEW

International Scientific Journal

Vol. 48, No. 2 / Pag. 1-20

Skopje, 2017

Online ISSN 1857-9507

UDC 630

UDC 635.9

UDC 674

Издавач

Универзитет „Св. Кирил и Методиј“ во Скопје
Шумарски факултет во Скопје

Декан

Д-р Кирил Сотировски

Publisher

Ss. Cyril and Methodius University in Skopje
Faculty of Forestry in Skopje

Dean

Kiril Sotirovski PhD

Главен и одговорен уредник

Д-р Бојан Симовски

Editor-in-chief

Bojan Simovski PhD

Уредувачки одбор

Д-р Љупчо Несторовски (Скопје, Македонија)
Д-р Маријена Идојтиќ (Загреб, Хрватска)
Д-р Милосав Анђелиќ (Подгорица, Црна Гора)
Д-р Милорад Даниловиќ (Белград, Србија)
Д-р Ирина Папазова-Анакијева (Скопје, Македонија)
Д-р Роберт Брус (Љубљана, Словенија)
Д-р Чипријан Палагијану (Сучава, Романија)
Д-р Влатко Андоновски (Скопје, Македонија)
Д-р Саша Орловиќ (Нови Сад, Србија)
Д-р Маргарита Георгијева (Софija, Бугарија)
Д-р Зоран Говедар (Бања Лука, Р. Српска, БИХ)
Д-р Јасминка Ризовска Атанасовска (Скопје, Македонија)
Д-р Маријус Димитров (Софija, Бугарија)
Д-р Јурген Бласер (Берн, Швајцарија)
М-р Дејан Манџуковски (Скопје, Македонија)

Editorial board

Ljupčo Nestorovski PhD (Skopje, Macedonia)
Marilena Idžoitić PhD (Zagreb, Croatia)
Milosav Andelić PhD (Podgorica, Montenegro)
Milorad Danilović PhD (Belgrade, Serbia)
Irena Papazova-Anakieva PhD (Skopje, Macedonia)
Robert Brus PhD (Ljubljana, Slovenia)
Ciprian Palaghianu PhD (Suceava, Romania)
Vlatko Andonovski PhD (Skopje, Macedonia)
Saša Orlović (Novi Sad, Serbia)
Margarita Georgieva PhD (Sofia, Bulgaria)
Zoran Govedar PhD (Banja Luka, R. Srpska, BIH)
Jasminka Rizovska Atanasovska PhD (Skopje, Macedonia)
Marius Dimitrov PhD (Sofia, Bulgaria)
Jürgen Blaser PhD (Bern, Switzerland)
Dejan Mandžukovski MSc (Skopje, Macedonia)

Технички уредник

М-р Дејан Манџуковски

Technical editor

Dejan Mandžukovski MSc

Корица и насловна фотографија

Д-р Бојан Симовски, *Daphne blagayana*

Cover page and photography

Bojan Simovski PhD, *Daphne blagayana*

Излегува два пати годишно

Published twice a year

Интернет-страница

www.sf.ukim.edu.mk/sumarski_pregled.htm

Web page (on-line)

www.sf.ukim.edu.mk/sumarski_pregled.htm

Адреса на издавачот

УКИМ-Шумарски факултет во Скопје

Редакција на Шумарски преглед

Ул. „16 Македонска бригада“ бр. 1

(П. фах 235)

1 000 Скопје

Република Македонија

E-пошта: sumpregled@sf.ukim.edu.mk

www.sf.ukim.edu.mk

Publisher's address

UKIM Faculty of Forestry in Skopje

Editorial Board of the Forest Review

Ul. 16 Makedonska brigada br. 1

(P.O. box 235)

MK-1000 Skopje

Republic of Macedonia

E-mail: sumpregled@sf.ukim.edu.mk

www.sf.ukim.edu.mk

Шум. преглед (Šum. pregled)
For. review

Год. 48
Vol. 48

Бр. 2
No. 2

Стр. 1-20
Pag. 1-20

Скопје, 2017
Skopje, 2017

