

The botanical legacy of Mihael Dimonie (1870–1935), an almost forgotten plant collector in the southern Balkan Peninsula before the First World War

Authors: Pachschwöll, Clemens, Reich, Dieter, and Tan, Kit

Source: Willdenowia, 49(2) : 257-279

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: <https://doi.org/10.3372/wi.49.49213>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

CLEMENS PACHSCHWÖLL^{1*}, DIETER REICH¹ & KIT TAN²

The botanical legacy of Mihael Dimonie (1870–1935), an almost forgotten plant collector in the southern Balkan Peninsula before the First World War

Version of record first published online on 29 August 2019 ahead of inclusion in August 2019 issue.

Abstract: An up-to-date biography of Mihael Dimonie (1870–1935), an important Aromanian plant collector in the southern Balkan Peninsula, is presented. So far, he has been better known to linguists than to botanists on account of the *Codex Dimonie* and his contributions to Aromanian cultural heritage. His private herbarium collections were destroyed in two separate fires in 1917 and 1944, and only the numerous vouchers belonging to the *Plantae Macedonicae* series that had been commercially distributed remain. These specimens are available in several European and American herbaria and are a lasting testament to Dimonie's extensive collecting activities in what are today Albania, Bulgaria, Greece and North Macedonia. His collecting localities in the southern Balkans are indicated in a map. Seven names based on material collected by Dimonie and one based on material collected by Ignaz Dörfler are lectotypified and nomenclatural notes for six other taxa are presented. A preliminary list of taxa described (or partly described) from Dimonie's material includes at least 29 names.

Key words: Albania, Aromanian language, Balkan Peninsula, biography, Bulgaria, flora, Greece, herbarium, lectotypification, Mihael Dimonie, North Macedonia, Romania

Article history: Received 10 April 2019; peer-review completed 17 May 2019; received in revised form 11 June 2019; accepted for publication 12 June 2019.

Citation: Pachschwöll C., Reich D. & Tan K. 2019: The botanical legacy of Mihael Dimonie (1870–1935), an almost forgotten plant collector in the southern Balkan Peninsula before the First World War. – Willdenowia 49: 257–279. doi: <https://doi.org/10.3372/wi.49.49213>

Introduction

Mihael Dimonie collected in the European part of the Ottoman Empire and distributed plant material to several important European herbaria as a series of exsiccata bearing the label “Dimonie, Plantae Macedonicae” (Greuter 1975; Karagiannakidou & Raus 1996). Standard biographical sources such as *Taxonomic literature II* (TL-2) (<http://www.sil.si.edu/digitalcollections/tl-2/index.cfm>), *Index of botanists* (http://kiki.huh.harvard.edu/databases/botanist_index.html) or *Index collectorum* (<https://www.uni-goettingen.de/en/index-collectorum/186907.html>) lack information on him. However, some biographical

details have been published in rarely accessed books and journals, which are solely in the Romanian language (Longinescu 1935; Ștefureac 1984, 1986). We therefore decided to present here the first biography of Dimonie in English together with recent information concerning his plant material in European herbaria, as well as lectotypifications and nomenclatural notes for some taxa based on his collections.

Matevski (2009) provided a brief account, referring to “M. M. Dimonie”; Rechinger (1944) and Karagiannakidou & Raus (1996) to “H. M. Dimonie”, but all three sources lack biographical data. Hertel & Schreiber (1988: 300) listed him as “Dimonie, Mihael”, a professor

1 Department of Botany and Biodiversity Research, University of Vienna, Rennweg 14, 1030 Vienna, Austria; *e-mail: clemens.pachschwoell@univie.ac.at (author for correspondence); dieter.reich@univie.ac.at

2 Institute of Biology, University of Copenhagen, Universitetsparken 15, 2100 Copenhagen Ø, Denmark; e-mail: kitt@bio.ku.dk

of the Romanian commercial school from Thessaloniki and probably a commercial plant trader. According to Greuter (1975), Dimonie, together with Lujo Adamović, Ignaz Dörfler and Christos Leonis, represents a category of professional plant collector in the Balkan Peninsula, a profession that for economic and political reasons ceased to exist after World War I. For Adamović and Dörfler, comprehensive biographies are available (for Adamović: Jasprica & Kovačić 2001; for Dörfler: Vogt & al. 2018), but not for Dimonie or Leonis.

Biography

Mihael Dimonie came from a well-to-do Aromanian family. He was born in 1870 in the family house in Ohrid (North Macedonia), at that time part of the Vilayet of Monastir in the Ottoman Empire (Longinescu 1935; řefureac 1984). After completing primary school in Monastir (present-day Bitola), he obtained a scholarship to attend the prestigious Šcoala Normală Superioară high school in Bucharest (Romania). He enrolled at the Faculty of Sciences, University of Bucharest and graduated in 1894 with a teaching diploma (řefureac 1984). Studying in Romania was a common practice for future Aromanian teachers in the second half of the 19th century (Motta 2011). In Bucharest, Dimonie was one of the last students of Dimitrie (Demetrius) Brândză (1846–1895), a leading botanist and founder of the University Botanical Garden. In 1894, Dimonie returned to what is now North Macedonia and for three years taught natural sciences in a Romanian high school in Bitola (řefureac 1984).

In 1889, the German linguist Gustav Weigand, with the help of the two Dimonie brothers Iancu and Mihael, discovered the *Codex Dimonie* in the Dimonie home in Ohrid (Kahl & Prifti 2016). This collection of 127 sheets of mostly religious texts in early Aromanian language and in Cyrillic script was written by a grand-uncle of the Dimonie brothers at the beginning of the 19th century (Kahl & Prifti 2016). Due to this important document, the name Dimonie is better known to linguists and historians studying Aromanian heritage than to botanists (Nevaci 2013; Kahl & Prifti 2016).

Dimonie's later interest in medicinal plants may have been influenced by his collaboration with Dimitrie Grecescu (1841–1910), who was a professor of medical botany in Bucharest, and also a physician and phytogeographer (Văduva-Poenaru 2000). Dimonie's herbarium vouchers collected between 1895 and 1896 were documented by Grecescu (1899) in a paper written in French entitled *Plantes de la Macédonie appartenant au Vilayet de Monastir, recueillies par Michel Dimonié*. Most of the records originated from the surroundings of Ohrid and Bitola, some from Mt Pelister (= Peristeri) in the Baba Mts (Grecescu 1899). Based on Dimonie's knowledge of the Aromanian language Grecescu (1899) even included several vernacular plant names in the introduction to his

work, and Panțu (1906) added several names provided by Mihael and his brother Iancu in his book on Romanian vernacular plant names. In a later publication written in Romanian, Grecescu (1907) listed approximately 900 taxa. Apart from duplicating records from Grecescu (1899), this work included plants from Thessaloniki and material collected by three students of pharmacy, viz. E. Constantinescu, S. řunda and N. Petrescu.

Throughout his life, Dimonie was torn between a school career, establishing a successful business and collecting plants, the last of these being his real passion (Longinescu 1935). In 1898, Dimonie was a high school teacher in Caracal (Romania), and then taught in a forestry college in Brănești (present-day Colegiul Silvic Branesti "Th. Pietraru") near Bucharest. In 1899, he was appointed professor and principal of the Thessaloniki Commercial High School (Šcoala Comercială din Salonic, École commerciale romaine Salonique), where he stayed until 1912 (see Fig. 1 & 2, depicting his professional visiting card and his handwriting at that time). He started to be a professional plant trader distributing his material as sets of *Plantae Macedonicae* to important herbaria in Europe such as Vienna, Geneva, Budapest and London (řefureac 1986). When the First Balkan War broke out in 1912, he returned to Caracal as professor and, for a time, principal of the Ioniță Asan high school (present-day Colegiul Național "Ioniță Asan"). For unknown reasons, his private herbarium had remained in Thessaloniki and was stored in a chapel from the beginning of the Balkan wars. This entire collection burnt down during the Great Fire of Thessaloniki in 1917 (Longinescu 1935; řefureac 1984). Thus his scientific data compiled during 18 years of study on the Balkan flora was regrettably lost.

Dimonie never went back to North Macedonia or Greece but stayed in Romania until his death (řefureac 1984). The portrait (Fig. 3) shows Dimonie during the interwar period in Romania, when his botanical interest shifted from the Balkans to the flora of Oltenia in SW Romania, and to medicinal and economic plants (řefureac 1984). On the first topic, he only published minor articles such as the flora of Valea Batovei near Batovo (Dimonie 1934). On the second topic, he wrote a book on medicinal plants (Dimonie 1926), a paper on economic plants of Oltenia (Dimonie 1925a), and numerous articles in newspapers and in the popular science journal *Natura*, e.g. on medicinal plants such as *Viola odorata* L. (Dimonie 1919) and "hervea româneascor" (a herbal anti-rheumatic drug) (Dimonie 1934). He also published on insect communication (Dimonie 1925b) and even the production of ice cream (Dimonie 1933). In 1931, he wrote a manuscript entitled *Synopsis plantarum Scholae Polytechnicae* (Dimonie 1931), a compilation of the herbarium contents in the former botanical laboratory of the Polytechnic School in Bucharest (present-day Politehnica University of Bucharest), where his friend and mentor Nicolae Iacobescu (1863–1931) worked. At least

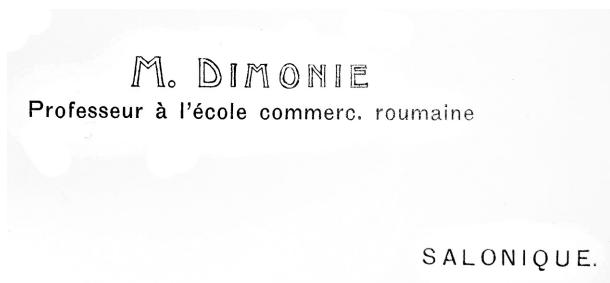


Fig. 1. Mihael Dimonie's visiting card from Dörfler's collection of letters from botanists kept in the University Library Uppsala, see Lack & Sydow (1984). – Reproduced by kind permission, © University Library Uppsala.

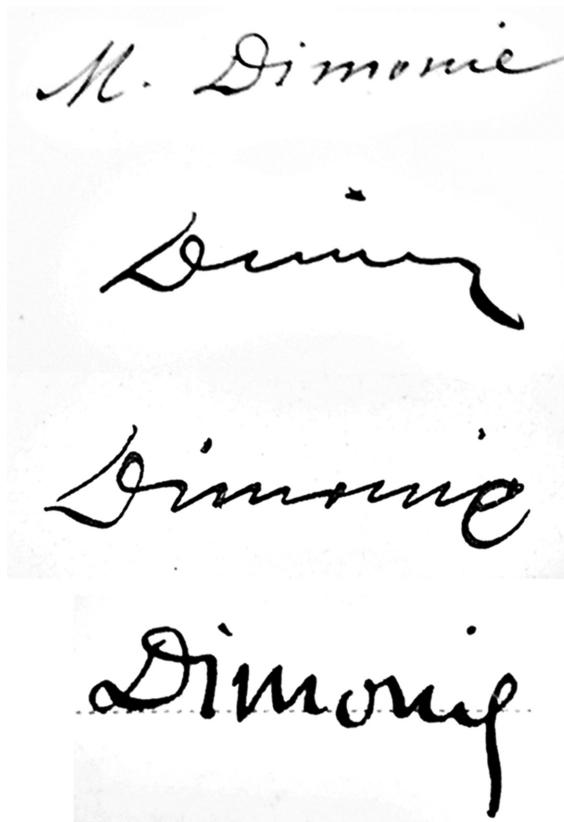


Fig. 2. Samples of Mihael Dimonie's handwriting. – Top: from a letter to Halász kept in the Dörfler collection in Uppsala, see Lack & Sydow (1984). Reproduced by kind permission, © University Library Uppsala. – Top middle: from a herbarium label of *Centaura* sp. (WU-Halász-Europaeum 0102561). – Bottom middle: from a herbarium label of *Dryopteris pallida* (Bory) Maire & Petitm. (WU-Halász-Europaeum 0103738). – Bottom: from a herbarium label of *Ranunculus* sp. (BUCF 33205).

two lithographic copies exist in Bucharest libraries. For this manuscript, he contributed with his own vouchers to “fasc. 1 – *Ranunculaceae*” (Ştefureac 1984). Only a few vouchers of *Ranunculaceae* collected after the First Balkan War (1912–1913) have survived in the former Polytechnic School herbarium (Herbarul Şcoalei Politehnicei Bucureşti / Laboratorul botanic). These are now stored in BUCF (Fig. 4), i.e. the Alexandru Beldie herbarium, which is owned by the Marin Drăcea National Institute



Fig. 3. Portrait of Mihael Dimonie (from Longinescu 1935). – Biblioteca Centrală Universitară “Lucian Blaga” Cluj-Napoca.

for Research and Development in Forestry (I.N.C.D.S) and situated in Voluntari near Bucharest (Vasile & al. 2016; Lucian Dinca, pers. comm. 2019). Dimonie had originally planned to prepare his doctorate under Nicolae Iacobescu based on the Balkan plant collections of his youth when he retired. However Iacobescu died in 1931, so this idea could not be further pursued (Longinescu 1935). In 1933, Dimonie retired from teaching but kept up his publication activity for the journal *Natura* (Longinescu 1935). In his last years, Dimonie, together with an English entrepreneur, established a large-scale business cultivating the fibre plant “ghiara pisicei”, i.e. *Abutilon theophrasti* Medik. (Longinescu 1935; Drăgulescu 2018). They developed 200 hectares of farmland in Brăila county (SE Romania) for this purpose. Dimonie died unexpectedly in Bucharest on 8th December 1935 at the age of 65 (Longinescu 1935). During his lifetime, he wrote approximately 30 popular science articles, most of them outside the field of botany and none about the Balkan flora (Ştefureac 1984). A list of his articles for the journal *Natura* can be found in Longinescu (1936: 10).

Although he was a contributor to the *Flora România Exsiccata* (Cent. VII–XI) in the 1920s and 1930s (Borza 1935), his pre-war Balkan gatherings are more relevant for botanical science. His Balkan material kept in the herbarium of Grecescu was destroyed on 4th April 1944 when the Bucharest herbarium (now BUC) burned down after an Allied air raid (Ştefureac 1986; Văduva-Poenaru 2000).



Fig. 4. One of the few extant vouchers of Mihael Dimonie from after the First Balkan War: *Ranunculus constantinopolitanus* (DC.) d'Urv. (\equiv *R. villosum* subsp. *constantinopolitanus* (DC.) Elenevsky) collected at Pădurea Reșca near Caracal, Romania (BU CF 33172).

Dimonie's plant collections

The herbarium vouchers of Dimonie's *Plantae Macedonicae* series, collected in present-day Albania, Bulgaria, Greece and North Macedonia, can be found in the following herbaria [important collections partly kept separate are in parentheses, herbarium codes are according to Thiers (2019+): B (herb. Bornmüller), BEO, BEOU, BM (herb. Lacaita), BP (herb. Degen), BR, BRNM, BRNU, BUCF (post-war material), C, CHER, CL (post-war material), DR, E, FI, FR, G (herb. Delessert), GAT, GB (herb. Hayek), H, JE (herb. Haussknecht, incl. herb. Sagorski), K, L, LD, LY, M, MA, P (herb. Giraudias), PR, PRC (herb. Velenovský), S, SARA, STR, TIR, US, VT, W (herb. Sabransky), WU (herb. Halácsy) and Z. According to unpublished letters addressed to Eugen von Halácsy (1842–1913) written in French and deposited in Uppsala (Lack & Sydow 1984), Dimonie was in close contact with Halácsy, Arpád von Degen (1866–1934) and Josef Velenovský (1858–1949). Therefore, the collections in BP, PR, PRC, W and WU are particularly rich in Dimonie's gatherings. There even exists in WU a *Taraxacum* voucher of plants grown from seeds taken from Dimonie's voucher (WU 0104555) and collected by Heinrich von Handel-Mazzetti (1882–1940) (Zeisek & al. 2016: WU 0104556). In 1909, Dimonie offered the centuria 1–6 of his *Plantae regionis Salonicae et montis Athos* for 36 Goldmark each in a German magazine (Weigel 1909: 59). His widespread exsiccata series *Plantae Macedonicae* was traded by Weigel in Germany at least until 1918 (Hertel & Schreiber 1988: 300).

Nevertheless, in the *Index herbariorum* (Thiers 2019+), he is only mentioned for WU and his name is also ignored in the account of Balkan collectors by Křivka & Holubec (2010). Because none of the listed herbaria has its holdings fully catalogued in a database, we cannot know for certain how many specimens Dimonie ever collected and distributed. According to the records at W and WU documenting acquisitions, herbarium WU bought two tranches: 750 vouchers of "plants from Albania" for 225 Austro-Hungarian kronen in February 1909, and 700 vouchers of "plants from Macedonia" for 267.40 Austro-Hungarian kronen in February 1910, a total of 1450 herbarium vouchers. Herbarium W acquired 555 vouchers of *Plantae Macedonicae* in 1909 (Steindachner 1910: 30), and 641 vouchers from "Pflanzen aus Mazedonien" in 1910 (Steindachner 1911: 29), in total 1196 vouchers. Unfortunately, the number of Dimonie vouchers in WU-Hal-Europaeum has not been documented. Because the original price for one voucher around 1910 was approximately 3 kronen, this would now be 15 € at purchasing-power parity.

Apart from his commercial sets of *Plantae Macedonicae*, issued often with conspicuous pre-printed labels of blue indelible ink (Fig. 5, 8B, 10), Dimonie also sold specimens provided only with handwritten labels, especially those considered rare or more interesting than the

bulk of plants he distributed (Fig. 6, 8A, 11, 12). It should also be noted that Dimonie often distributed herbarium specimens without any identification (Fig. 5, 8A, 10).

Dimonie collected much material in North Macedonia, especially in the surroundings of Ohrid and Bitola, also in Struga, Sv. Naum, Resen, Debar and in the Baba, Galičica, Jablanica and Korab Mts. In Greece, he collected near Thessaloniki, Mt Athos, Mt Vermio, near Edessa, at the border region with North Macedonia (Voras Mts/ Nidže Mt, Mt Tzena/Kožuf, near Gevgelija), and on the N Aegean islands of Limnos and Thasos. Approximately 320 taxa have been registered for the *Flora Hellenica Database* (Kit Tan, unpublished; Strid & Tan 2017). A list of localities based on verified extant material is provided in Table 1. A map of Dimonie's collecting localities based on specimens as well as publications (Grecescu 1899, 1907) can be found in Fig. 7. According to the *Flora Hellenica Database*, some of his collections are new for Greece, e.g. *Primula elatior* (L.) L. collected in April 1909 in a forest near the Prodromos monastery on Mt Athos (WU 0104412), and at Mt Doxa/Mt Vermio (WU 0104413). This information had already been published by Fritsch (1916: 295–296), but was overlooked for a long time (Eleftheriadou & Raus 1996).

Dimonie collected in the European part of the late Ottoman Empire, but not within the Kingdom of Greece. His collections are therefore not mentioned in Halácsy's *Conspectus florae graecae* (1901–1912), although Dimonie was in good contact with the Austro-Hungarian botanist and had visited him in Vienna in 1909 [unpublished letters kept in Uppsala; see Lack & Sydow (1984)]. Halácsy's Herbarium Europaeum (WU-Halácsy-Europaeum) contains a large number of plants collected by Dimonie.

In 1909, Dimonie was collecting in the Pirin Mts ("Perin Dagh") and the SW Rila Mts near Blagoevgrad in Bulgaria, at that time part of the Ottoman Empire. The Pirin Mts were, according to Velenovský (1911), a mountain range "almost unknown to botanists at that time". The SW Rila Mts formed the border to the newly independent Bulgaria, and Dimonie therefore repeatedly wrote "ad extremum finis Turco-Bulgariae" on his vouchers.

Even though Dimonie obviously was aware of country borders in his time, it often remains impossible to clarify if the specimens were gathered in present-day Albania, Bulgaria, Greece or North Macedonia. However, in Floras, monographic revisions or herbarium databases the assignment to one of these modern countries is often made in an arbitrary and uncritical manner. Dimonie often used Ottoman toponyms difficult to locate nowadays, e.g. Cara-tach, Gül-tepe, Keci-kaja, Kerici-köj, Nisi-dagi. The fact that he distributed his vouchers in a series named *Plantae Macedonicae* (referring to historical Macedonia) increased the confusion in later literature and in herbarium databases. Handel-Mazzetti (1923: 259) and Rohlena (1940), for example, mentioned vouchers of *Taraxacum bithynicum* DC. and *Aster alpinus* var. *cylleneus* Boiss.

Table 1. Dimonie's collecting localities in the southern Balkan Peninsula based on herbarium specimens verified to be extant. Current toponyms, if available, are in parentheses. – Country codes: AL = Albania; BG = Bulgaria; GR = Greece; MK = North Macedonia.

Date	Country	Localities
1907	MK	Baba Mts: Pelister (Peristeri), label without month of collecting.
May 1907	GR	Nomos Thessalonikis: Thessaloniki, Denibaylar/Deni Boglar/Ienibaglar/Kara tepé (Yenibaglar).
Jul 1907	GR	Nomos Thessalonikis: Thessaloniki, Denibaylar/Deni Boglar, Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis).
Sep 1907	MK	Galičica Mts: foothills near Ohrid (“In pascuis reg. inf. mtis. Galicitza op. Ohrida”).
Apr 1908	GR	Nomos Thessalonikis: Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis) and several unspecified localities near Thessaloniki, e.g. “in collinis prope Thessalonicam”.
May 1908	GR	Nomos Chalkidikis: Mt Athos. – Nomos Thessalonikis: several unspecified localities near Thessaloniki, e.g. “in paludosis ad mare Thessalonica”, “in collibus ad Thessalonica”.
Jun 1908	GR	Nomos Chalkidikis: Mt Athos, Ag. Anna (3 km SW of summit), Daphni (Dafni). – Nomos Thessalonikis: Capudčilar (Pylea).
Jul 1908	GR	Nomos Chalkidikis: Mt Athos, Ag. Anna (3 km SW of summit).
Jul 1908	MK/AL	Korab Mts: up to 2000–2100 m a.s.l. – Jablanica Mts: summit region (“in reg. superior”).
Jul 1908	MK	Dibra (Debar), “in mtilens Dibra”. – Korab Mts: up to 2100 m a.s.l. – Jablanica Mts: in forests along Belica river (“in silvis Jablonitza ad rivulos prope Belitzia”). – Galičica Mts: foothills (“ad radices mt. Galicitza prope Ohrida”, “in reg. infer m. Galicitza”); near Ohrid, e.g. “in incultis prope Ohrida”, “in faucetis prope Ohrida”; near Struga (“ad ripas fluminis Drina prope Strauga”).
Mar 1909	GR	Nomos Thessalonikis: Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis).
Apr 1909	GR	Nomos Chalkidikis: Ag. Oros (Mt Athos), Prodromus monastery, Ag. Anna, Mt Vigla. – Nomos Imathias: Fetitza (Fitia) near Njausta (Naoussa), Mt Doxa (Mt Vermio). – Nomos Kavalas: N Aegean island of Thasos. – Nomos Lesvou: N Aegean island of Limnos. – Nomos Pellis: near Vodena (Edessa), Cara-tach/Karatač (Karataş) pag. Gramaticova (Ano Grammatiko) prope Vodena (Edessa). – Nomos Thessalonikis: Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis) and several unspecified localities near Thessaloniki, e.g. “in arenosis maritimis op. Thessalonica”, “in collibus siccis [prope] Thessalonicam”, “in herbidis reg. infer. et montanae op. Thessalonica”.
Apr 1909	GR/MK	Mt Porta pag. Huma op. Ghevgheli (Porta-Huma near Gevgelija), Mt Keci-kaja (Tzena/Kožuf) pag. Huma.
May 1909	GR	Nomos Chalkidikis: Ag. Oros (Mt Athos), Prodromus monastery. – Nomos Kavalas: N Aegean island of Thasos. – Nomos Thessalonikis: Caputzilar/Kapugjilar (Pylea), Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis) and several unspecified localities near Thessaloniki, e.g. “in dumosis reg. inferioris collidae Thessalonicam”, “in campis inter segetes Thessalonicam”, “in siccis graminosis ad Thessalonicam”.
May 1909	GR/MK	Mt Suarpa/Suharupa (Suva Rupa), Mt Porta pag. Huma op. Ghevgheli (Porta-Huma near Gevgelija), Mt Keci-kaja (Tzena/Kožuf) pag. Huma.
Jun 1909	GR	Nomos Chalkidikis: Ag. Oros (Mt Athos), Prodromus monastery. – Nomos Kavalas: N Aegean island of Thasos. – Nomos Pellis: near Vodena (Edessa), pag. Luguntza (Lagkadia) op. Ghevgheli (Gevgelija). – Nomos Thessalonikis: Capudčilar (Pylea), Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis).
Jun 1909	GR/MK	Mt Kajmakcalan (Voras/Nidže), Mt Suarpa/Suharupa (Suva Rupa), Mt Porta pag. Huma op. Ghevgheli (Porta-Huma near Gevgelija), Ghevgheli (Gevgelija), Mt Keci-kaja (Tzena/Kožuf) pag. Huma.
Jun 1909	BG	Blagoevgrad oblast: Jel-Tepe (Mt Vihren) in Pirin Mts. – Parangalitsa (nature reserve) near [Gorno/Upper] Osenovo, Smigelitsa/Smigelica (in SW Rila Mts, “ad extremum finis Turco-Bulgariae”).
Jul 1909	GR	Nomos Imathias: Fetitza (Fitia) near Njausta (Naoussa), Njausta (Naoussa), Mt Doxa (Mt Vermio). – Nomos Pellis: Ostrovo (Vegoritis), near Vodena (Edessa), Cara-tach (Karataş) pag. Gramaticova (Ano Grammatiko) prope Vodena (Edessa); Batecina/Patecina (Panagitsa) Nisi-dagi (mountain near village of Nision/Nisi, which is SE of Panagitsa). – Nomos Chalkidikis: Ag. Oros (Mt Athos), Prodromus monastery. – Nomos Thessalonikis: Mt Gül-tepe (Mt Chortiatis) pag. Kerici-köj (Chortiatis) and several unspecified localities near Thessaloniki, e.g. “in vinetis op. Thessalonica”, “in collibus aridis op. Thessalonica”.
Jul 1909	GR/MK	Lower slopes of Mt Kajmakcalan (Voras/Nidže).
Jul 1909	BG	Blagoevgrad oblast: Jel-Tepe (Mt Vihren) in Pirin Mts.
Aug 1909	BG	Blagoevgrad oblast: Jel-Tepe (Mt Vihren) in Pirin Mts. – Parangalitsa (nature reserve) near [Gorno/Upper] Osenovo, Mt. Germanica (Germanitsa/Dzhermanitsa, mountain east of Parangalitsa reserve, above Dobarsko village) in SW foothills of Rila Mts. – In reg. mont. oppido Dzumaza [Dzumaya/Dzumaja] (Blagoevgrad), all “ad extremum finis Turco-Bulgariae”.
Jun 1910	GR	Nomos Pellis: “in rivularibus sylvaticis pag. Patecina [Batecina/Patecina (Panagitsa)] mt. Kaimakcelan [Mt Kajmakcalan (Voras)]”.



Fig. 5. Holotype of *Thymus pulvinatus* var. *perinicus* Velen. (PRC-Phanerogamae 452094), collected by Dimonie on Jel-tepe (Mt Vihren) in the Pirin Mts (Bulgaria) in August 1909. This Balkan endemic is now treated as *T. perinicus* (Velen.) Jalas (Euro+Med 2006+; Assyov & al. 2012; Genova 2015).

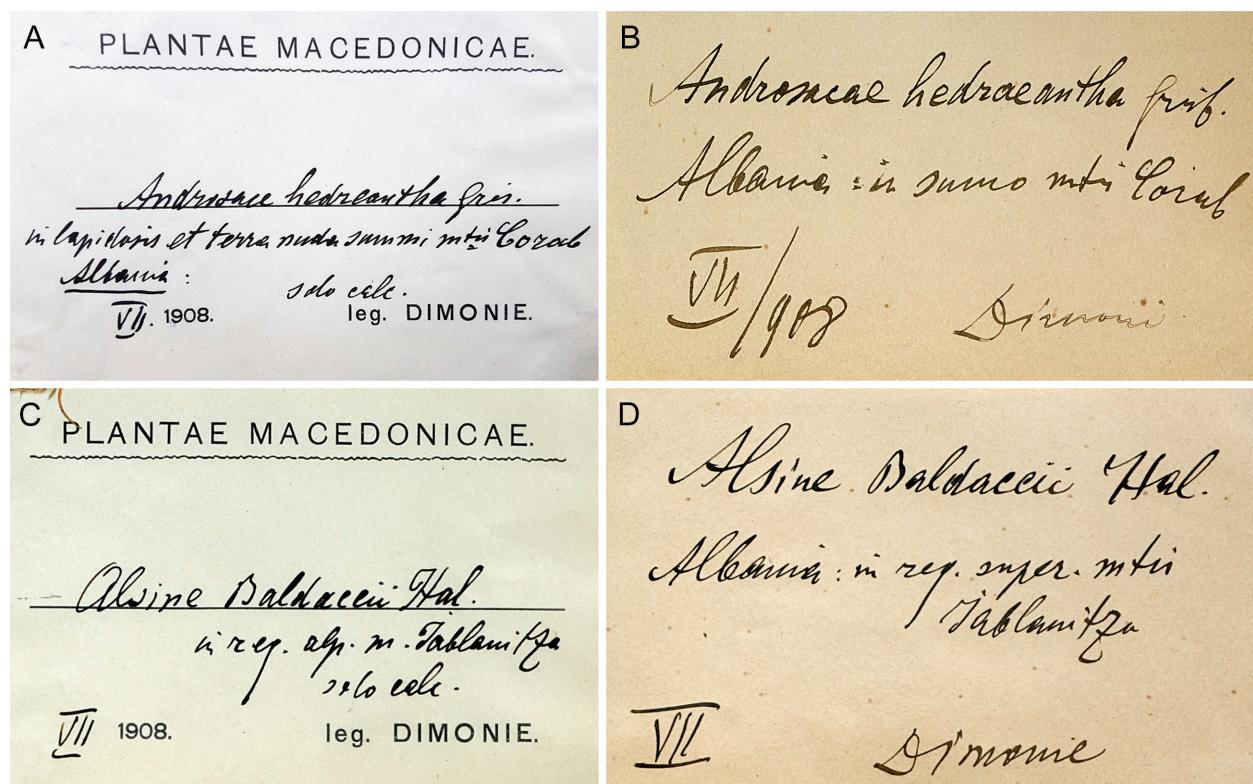


Fig. 6. Handwritten labels of Mihael Dimonie. – A and B: *Androsace hedraeantha* Griseb. from the alpine region of Mt Korab, collected in July 1908. According to Barina (2017) this species grows at 2000–2400 m above sea level. A: WU 0104753, see also Fritsch (1916: 305). B: WU-Halácsy-Europaeum 0103775. – C and D: *Minuartia baldaccii* (Halácsy) Mattf. (= *Alsine baldaccii* Halácsy) from higher altitudes in the Jablanica Mts, collected in July 1908. C: WU 0059967. D: WU-Halácsy-Europaeum 0059783. In Dimonie's commercial set of *Plantae Macedonicae* (Fig. 6C) there is no indication that the specimen was collected in "Albania" and on the label in WU-Halácsy-Europaeum (Fig. 6D), the collecting year is absent.

& Orph., respectively, from "Jel-tepe, Perin Dagh" for North Macedonia, although they were collected on Mt Vihren in Bulgaria, on a peak called until 1942 El tepe or Jel-tepe. Information on his labels is likewise often scant, e.g. only "in m. Corab", "in reg. alp. m. Jablanitza" or "collibus ad extremum finis Turco-Bulgariae. alt. 400 m", referring to whole mountain ranges or a border region. Usually the labels are without the exact date, giving the year, or sometimes the year and month (e.g. VII. 1908 for July 1908 or 06/09 for June 1909), see Fig. 5, 6, 8, 9, 10, 11.

Dimonie is usually not categorized as a plant collector for Albania (Barnes & Hoda 2001; Barina 2017), although he was mentioned by Baldacci (1925: 96, 98) and Markgraf (1932: 127). His "Albanian" vouchers are exclusively from the border ridges of the Jablanica Mts (Vierhapper 1909: 148, fig. 6C & D, 11, 12; Handel-Mazzetti 1910: 10; Murbeck 1933: 145; Wagenitz 1983: 153) and the Korab Mts (Wagenitz 1983: 153; Baltisberger 1994; Polatschek 2013: 179; Krendl 2014: 126, 129, 139, 143, 148, fig. 6A & B, 8A). According to Jenő Béla Kümmerle (1876–1931), based on information from Dimonie himself, the latter could botanize in the "unknown" terrain of the Korab Mts by disguising himself in traditional Albanian costume; however, he failed to reach the peak of Korab (Kümmerle 1926: 30). This corroborates data

from his Korab herbarium vouchers, which were collected at a maximum altitude of 2000–2100 m (see Engler & Irmscher 1916: 314; Erben 1985: 689). In several of his *Plantae Macedonicae* sets "Albania" is inscribed by hand (Fig. 6A, 8A), although Albania and North Macedonia were both still part of the Ottoman Empire. Dimonie followed ethnical aspects, traditions and wisely, his customers' preferences (Wettstein 1892: 1; Vierhapper 1914: 243; Hayek 1924–1933: *Praefatio* p. V). The herbarium vouchers collected at low to medium altitudes (e.g. as cited in Krendl 2014 for Albania) were most likely collected in the ethnically Albanian part of present-day North Macedonia (e.g. *Satureja subspicata* var. *macedonica* Velen., Fig. 8A). Only gatherings from the mountain ridges of the Jablanica Mts and, with some reservation, of the Korab Mts, may have been collected in Albania or at least close to its border (Fig. 6).

Ranunculus crenatus Waldst. & Kit. collected in the Vranica Planina (Bosnia and Herzegovina) in 1901 by I. Dimonie and published in Baltisberger (1994: 236) can be ascribed to his brother Iancu Dimonie.

During Dimonie's lifetime, Velenovský (1911), Fritsch (1916, 1918), Bornmüller (1932), Murbeck (1933) and, after his death, Rechinger (1944) published a remarkable number of plant records from the Balkan Peninsula based on Dimonie's collections or described taxa from his ma-



Fig. 7. Map of Dimonie's collecting localities in the southern Balkan Peninsula. – Red lines: historical borders of the Ottoman Empire in 1908 sensu Kunz & al. (2003), kindly provided by Bogdan G. Popescu (Popescu 2017); green dots: data from Grecescu (1899, 1907); red dots: data from extant herbarium vouchers including data from the *Flora Hellenica Database*; question marks: exact localities not traceable; Dimonie's places of residence are underlined; mountains are in italics.

terial. Velenovský (1911), in particular, described 12 taxa within a single paper. From these, only five taxa are accepted today: *Anthyllis vulneraria* subsp. *vitellina* (Velen.) Kuzmanov (Kuzmanov 1976; Anchev 2006; Nanev 2012), *Saxifraga discolor* Velen. (Tkach & al. 2015, 2019), *Thymus perinicus* (Velen.) Jalas (Euro+Med 2006+; Markova 2006; Assyov & al. 2012; Genova 2015), *Viola frondosa*

(Velen.) Velen. (Dimopoulos & al. 2013; Raab-Straube & Henning 2018) and *Verbascum dimonieei* Velen. (Marhold 2011f; Dimopoulos & al. 2013). In the case of *Saxifraga discolor* (Fig. 8B), Dimonie presumed it could be new to science and wrote on the label of the specimen he sold to Velenovský: “[...] Si elle est nouvelle pourquoi ne la nommez pas *Dimoniana*!” [authors' translation: “If it is new

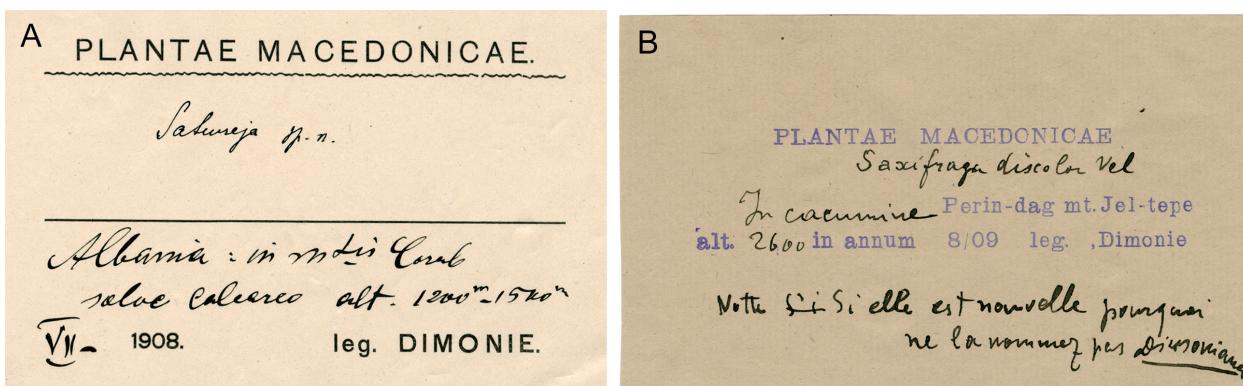


Fig. 8. A: Label of the holotype of *Satureja subspicata* var. *macedonica* Velen., collected in the Korab Mts in July 1908 (PRC-Phanerogamae 451330). “*Satureja* sp. n.” was written on the original label by J. Velenovský, who described the variety (Velenovský 1911). As often, Dimonie distributed the voucher without identification. Although he wrote “Albania”, the voucher more likely was collected in North Macedonia. – B: Label of the isolectotype of *Saxifraga discolor* Velen. (PRC-Phanerogamae 451704), see Appendix 1. Dimonie distributed it without identification, but with a request to have it named after him should it prove to be a novelty.



Fig. 9. Holotype of *Hesperis verroiana* F. Dvořák from the National Museum in Prague (PR 193244/11569), see Appendix 1. – Reproduced by kind permission, © National Museum Prague



Fig. 10. The holotype of *Verbascum dimonieei* Velen. is mounted on two sheets in PRC; this is one of them (PRC-Phanerogamae 451369). The type locality is Fetitza (Fitia) near Njausta (Naoussa) in the foothills of Mt Vermio in Greece.



Fig. 11. Lectotype of *Soldanella dimoniei* Vierh. (WU 0027910), see Appendix 1.

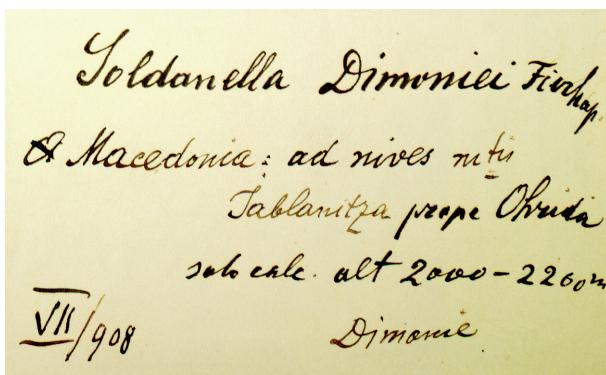


Fig. 12. Label of the isolectotype of *Soldanella dimoniei* Vierh. (WU-Halácsy-Europaeum 0040240), see Appendix 1. Dimonie probably wrote the label by hand during his visit to Vienna in February 1909, when he knew from Vierhapper (misspelt as “Fierhap.”) that his collection represented a new species to be published soon, in April 1909; see Vierhapper (1909).

why not name it *Dimoniania*!”]. Velenovský (1911), however, did not obey the request and named the species after its bicoloured, whitish-purple petals.

It is not known how many taxa botanists have described based on Dimonie specimens. Since type material was often part of his *Plantae Macedonicae* series, isotypes and syntypes are available in many herbaria. More than two dozen type specimens and other authentic material mostly from W, WU and PRC can currently be viewed via Virtual Herbaria JACQ (<https://herbarium.univie.ac.at/database/search.php>). Additional specimens of Dimonie are available online, e.g. via the Dutch botanical collections of Naturalis, i.e. L (<http://bioportal.naturalis.nl/>), Sweden’s Virtual Herbarium, i.e. GB, LD, S (<http://herbarium.emg.umu.se/>), the herbarium catalogue of the Royal Botanic Garden Edinburgh, i.e. E (<https://data.rbge.org.uk/search/herbarium/>) and the database of the Smithsonian National Museum of Natural History, i.e. US (<https://collections.nmnhs.si.edu/search/botany/>). In Appendix 1, we lectotypify seven names and present nomenclatural notes on six others that were described based on material collected by Dimonie, and lectotypify one name based on material collected by Ignaz Dörfler. In Appendix 2, we present a preliminary list of 29 names based on plant material collected by Dimonie.

According to Euro+Med (2006+), most of the taxa described based on Dimonie’s gatherings, especially those at infraspecific level by Velenovský (1911), are no longer accepted. This is also true for some described at a later stage, e.g. *Hesperis verroiana* F. Dvořák (Dvořák 1966; Appendix 1, Fig. 9), now included in *H. theophrasti* Borbás subsp. *theophrasti* by Tan & Suda (2002). Others are disputed, e.g. *Viola beckiana* subsp. *pascua* (W. Becker) Trinajstić, accepted in Euro+Med (2006+), but reduced to a synonym of *V. eximia* Formánek in Erben (1985: 459) and therefore not listed in Dimopoulos & al. (2013); see also Appendix 1.

To honour Dimonie, taxonomists of the early 20th century described several infraspecific entities of no cur-

rent taxonomic relevance, e.g. *Cerastium moesiacum* f. *dimoniei* Borza (Borza 1913: 57, as “*Dimonii*”), or as unpublished manuscript names, e.g. “*Potentilla dimoniei* Adam.” in sched. (Gandoger 1912; Urumov 1914), “*Potentilla subserica* var. *dimoniei* (Adam.) Bornm.” (Bornmüller 1928: 254) and “*Cerastium dimoniei*” (Soška 1939).

Of the four published species bearing his name (*Hieracium dimoniei* Zahn, *Hypericum dimoniei* Velen., *Soldanella dimoniei* Vierh., *Verbascum dimoniei* Velen.), only two are still accepted according to Euro+Med (2006+), viz. *Hieracium dimoniei* and *Verbascum dimoniei*.

Hieracium dimoniei was originally described based on material from the Korab Mts and is an intermediate species between *H. waldsteinii* Tausch and *H. pilosum* Froel. endemic to Albania, Greece, Kosovo and North Macedonia (Zahn 1910; Gottschlich & al. 2010; Szelag 2015; Gottschlich 2016). The lectotype from PRC is depicted in Szelag (2015: 46).

Hypericum dimoniei was described from Porta-Huma near Gevgelija (Kožuf/Tzena/Dzana Mts) at the borders of Greece and North Macedonia (Velenovský 1911) and is now synonymized with *Hypericum olympicum* L. (Marhold 2011c). Holotype: PRC-Phanerogamae 452062.

Soldanella dimoniei is a microspecies by Vierhapper (1909) described from the higher altitudes of the Jablanica Mts (North Macedonia); see Appendix 1 and Fig. 11, 12. Today it is accepted only by Barina (2017) and Barina & al. (2018). Markgraf (1931) considered it a variety of *Soldanella pindicola* Hausskn. and Meyer (1985) synonymized it with the latter, an opinion followed by Raus (1986), Micevski (1998), Zhang & Kadereit (2004), Marhold (2011d), Pils (2016) and Štubňová & al. (2017).

Verbascum dimoniei was described based on specimens from North Central Greece (Fetizza prope Njausta [Naoussa]) distributed by Dimonie as *Plantae Macedonicae* no. 327. It occurs in Greece and North Macedonia (Velenovský 1911) and is very similar to *V. graecum* Boiss., but was accepted in Marhold (2011f) and Dimopoulos & al. (2013). The holotype in PRC was mounted onto two sheets; the one with the original label is depicted in Fig. 10.

The identification of plant material from the Southern Balkans must have been daunting and challenging before the seminal works of Halácsy (1900–1912) and Hayek (1924–1933) appeared. Therefore, it is not surprising that Dimonie’s determinations were also criticized, e.g., by Handel-Mazzetti (1926) in a review of the first volume of Hayek’s *Prodromus florae balcanicae*: “Die leichtere Bereitsbarkeit der Balkanländer hat das Interesse dafür gesteigert und beträchtliches zum guten Teile falsch bestimmtes (Adamović, Dimonie) Material hat sich in den größeren Herbarien angesammelt, [...].” [authors’ translation: “Ease of travel in the Balkan lands has increased both the interest [in collecting in this area] as well as

the considerable and erroneously determined material (Adamović, Dimonie) that has gathered in large herbaria, ...]. An example of a Mediterranean species in *Apiaceae* difficult to determine is *Seseli arenarium* M. Bieb. (= *S. tortuosum* auct. fl. graec., non L.; Lyskov & al. 2018) originally named as *Hippomarathrum cristatum* (DC.) Boiss. (WU 0095813). Mattfeld & al. (1925) also wrote that Dimonie often confused localities in his exsiccata, a fact obviously known to his contemporaries.

As is often the case with large sets of material within series, his distributed exsiccata contain mixed gatherings. Persson (1999: 77) noted that in different herbaria sheets/vouchers of the presumably same *Colchicum* gathering collected in 1907 from the foothills of the Galičica Mts near Ohrid contained either *C. bivonae* Guss. or *C. haynaldii* Heuff. Villar & al. (2015) found *Tamarix parviflora* DC. and *T. hampeana* Boiss. & Heldr. on the same sheet in G, collected by Dimonie from coastal Thessaloniki. Polatschek (2013: 100, 104) indicated that a gathering of *Syrenia cana* (Piller & Mitterp.) Neirl., distributed as *Flora Romaniae Exsiccata* nr. 253b, comprised both *Erysimum canum* (Piller & Mitterp.) Polatschek and *E. quadrangulum* Desf. Franzén (1986) excluded Dimonie's gatherings of *Achillea setacea* Waldst. & Kit. from Mt Athos (erroneously labelled as *A. ageratifolia* (Sm.) Boiss. subsp. *ageratifolia*) from his distribution map.

Nevertheless, the thousands of vouchers collected by Dimonie in the southern Balkan Peninsula between 1894 and 1912 render him one of the most important plant collectors of his time, even though only the commercial specimens from 1907 to 1910 are preserved. His contributions to the flora of Greece and North Macedonia are comparatively well known to science (Greuter 1975; Strid 1978; Matevski 2009), but those for the floras of the Albanian border regions (Fig. 6, 8, 11, 12) and for the Pirin and SW Rila Mts in Bulgaria (Fig. 5, 8B) are almost forgotten (see, however, Baldacci 1925; Stefanoff 1930; Stojanoff & Achtaroff 1935). In comparison to the privileged situation that many professional taxonomists at universities or museums enjoyed, Dimonie's position as a plant trader and teacher did not permit him to publish his material himself. He was hindered by a lack of time, botanical literature and a large institutional herbarium where he could compare and identify his specimens. He was fully aware of these circumstances and, in a letter to Halácsy, regretted this as well as the high expenses incurred for his journeys and the low remuneration received for his specimens.

His private herbarium, probably one of the most comprehensive collections of the Balkan flora in his time, and his Balkan vouchers deposited in the herbarium Grecescu in BUC were destroyed in the two World Wars. What remains are his commercial vouchers from 1907 to 1910, which he had sold to herbaria all over Europe, and his contributions to Aromanian cultural heritage (*Codex Dimonie*, Aromanian plant names and ethnobotany). Despite all shortcomings, the scientific value of his *Plantae*

Macedonicae is obvious and his vouchers are still used by taxonomists. Košanin (1912: 208) already regretted that "Dimonie's vouchers [from the Korab Mts] are stored unpublished in various herbaria". Now we stand at the same position more than a hundred years later and only the complete digitization of major European herbaria including OCR-aided databasing of label information can help (Drinkwater & al. 2014; Soltis 2017; Besnard & al. 2018). This would contribute to a thorough knowledge of the extant gatherings of often forgotten historic collectors like Mihael Dimonie.

Acknowledgements

We thank Vlado Matevski (Skopje), Vladimir Stevanović and Marjan Niketić (Belgrade), Ana Petrova and Vladimir Vladimirov (Sofia) and Lulëzim Shuka (Tirana) for their kind help in connection with identifications of localities and specimens. Mihai Pușcaș (Cluj) is acknowledged for organizing rare Romanian literature, Kia Hedell (University Library Uppsala) for kindly providing digital images of the correspondence between Dimonie and Halácsy as kept in Dörfler's collection, Heimo Rainer (WU and W) for providing detailed information on herbarium acquisitions, Lucian Dincă (Brașov) for providing the digital image of the herbarium voucher from BUCF, Bogdan G. Popescu (Chicago) for providing shapefiles of historical borders, Margarita Lachmayer and Ruth Sander (Vienna) for commenting on an earlier version of the manuscript, and the reviewers Thomas Raus (Berlin) and Arne Strid (Ørbaek) for their helpful suggestions. Last but not least, we are grateful to the herbarium curators Bruno Wallnöfer and Christian Bräuchler (W), Walter Till (WU), Otakar Šída (PR) and Patrik Mráz (PRC) for their help.

References

- Anchev M. 2006: *Anthyllis vulneraria* subsp. *vitelina* (Velen.) Kuzmanov – Pp. 120–121 in: Petrova A. (ed.), *Atlas of Bulgarian endemic plants*. – Sofia: Gea-Libris.
- Assyov B., Petrova A., Dimitrov D. & Vassilev R. (ed.) 2012: *Conspectus of the Bulgarian vascular flora. Distribution maps and floristic elements*. Ed. 4. – Sofija: Bǎlgarska Fondatsija Biorasnoobrasie [Bulgarian Biodiversity Foundation].
- Baldacci A. 1925: Le fonti della flora albanese. – Mem. Reale Accad. Sci. Ist. Bologna, Cl. Sci. Fis., ser. 8, 2: 91–108.
- Ball P. W. 1968: *Vicia* L. – Pp. 129–136 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb. D. A. (ed.), *Flora europaea* 2. – Cambridge: Cambridge University Press.
- Baltisberger M. 1994: *Ranunculus cacuminis* and *R. crenatus*, representatives of the *R. alpestris*-group

- (*Ranunculaceae*) on the Balkan Peninsula. – Pl. Syst. Evol. **190**: 231–244.
- Barina Z. (ed.) 2017: Distribution atlas of vascular plants in Albania. – Budapest: Hungarian Natural History Museum.
- Barina Z., Somogyi G., Pifkó D. & Rakaj M. 2018: Checklist of vascular plants of Albania. – Phytotaxa **378**: 1–339.
- Barnes P. & Hoda P. 2001: Plant exploration in Albania. – Curtis's Bot. Mag. **18**: 170–179.
- Becker W. 1912: Anthyllisstudien. – Beih. Bot. Centralbl., Abt. 2, **29**: 16–40.
- Becker W. 1928: *Violae novae Balcanicae*. – Bull. Inst. Jard. Bot. Univ. Beograd **1**: 33–36.
- Besnard G., Gaudeul M., Lavergne S., Muller S., Rouhan G., Sukhorukov A. P., Vanderpoorten A. & Jabbour F. 2018: Herbarium-based science in the twenty-first century. – Bot. Lett. **165**: 323–327.
- Bornmüller J. 1928: Bearbeitung der von H. Burgeff und Th. Herzog in den Kriegsjahren 1916–1918 in Mazedonien gesammelten Pflanzen. Fortsetzung. – Allg. Bot. Z. Syst. **33**: 249–262.
- Bornmüller J. 1932: Bearbeitung der von H. Burgeff und Th. Herzog in den Kriegsjahren 1916–1918 in Mazedonien gesammelten Pflanzen. Fortsetzung. – Repert. Spec. Nov. Regni Veg. **30**: 337–362.
- Borza A. 1913: *Cerastium-tanulmányok*. – Bot. Közlem. **12**: 41–79.
- Borza A. 1935: Dare de seamă despre activitatea Muzeului Botanic și a Grădinii Botanice dela Universitatea din Cluj în anii 1927–1934. – Bul. Grăd. Bot. Univ. Cluj **15**, Appendix I: 1–48.
- Coulot P. & Rabaut P. 2016: Monographie des *Leguminosae* de France, tome **4**: Tribus des *Fabeae*, des *Cicerae* et des *Genisteae*. – Bull. Soc. Bot. Centre-Ouest, Num. Spéc. **46**.
- Davis P. H. & Plitmann U. 1970: *Vicia* L. – Pp. 274–323 in: Davis P. H. (ed.), Flora of Turkey and East Aegean Islands, **3**. – Edinburgh: Edinburgh University Press.
- Dimonie M. 1919: Din plantele medicinale. Toporaș. – Răsăritul (București) **2(3–4)**: 9–10.
- Dimonie M. 1925a: Plante folositoare din Oltenia. – Arhivele Olteniei **4**: 429–438.
- Dimonie M. 1925b: Cum și prin ce mijloace se înțeleg insectele între ele. – Natura (Bucharest) **14(8)**: 14–15.
- Dimonie M. 1926: Plante medicinale. – București: Editura Cartea Românească.
- Dimonie M. 1931: Synopsis plantarum Scholae Polytechnicae. Enumerația plantelor din herbariu Școlii Politehnice din București. – București: Universitatea Politehnica din București.
- Dimonie M. 1933: Industria înghețatei. – Natura (Bucharest) **22(7)**: 23–27.
- Dimonie M. 1934a: Valea Batovei. – Natura (Bucharest). **23(3)**: 29–32.
- Dimonie M. 1934b: Hervea Românească. – Natura (Bucharest) **23(9)**: 35–38.
- Dimopoulos P., Raus Th., Bergmeier E., Constantinidis Th., Iatrou G., Kokkini S., Strid A. & Tzanoudakis D. 2013: Vascular plants of Greece: an annotated checklist. – Berlin: Botanic Garden and Botanical Museum Berlin-Dahlem; Athens: Hellenic Botanical Society. [Englera **31**].
- Domin K. 1940 [“1939”]: Monografická studie o *Myosotis sylvatica* (Ehrb.) Hoffm. a některých příbuzných pomněnkách se zvláštním zřením k oblasti karpatské. – Carpatica, Ser. B, **1(2)**: 209–379.
- Drăgușescu C. 2018: Dicționar de fitonime românești. Ediția a 5-a completată. – Sibiu: Editura Universității “Lucian Blaga”.
- Drinkwater R. E., Cubey R. W. N. & Haston E. M. 2014: The use of Optical Character Recognition (OCR) in the digitisation of herbarium specimen labels. – PhytoKeys **38**: 15–30.
- Dvořák F. 1966: Ad *Hesperidis* L. generis species in Haemo crescentes adnotaciones aliquae. – Preslia **38**: 57–64.
- Engler A. & Irmscher E. 1916: *Saxifragaceae–Saxifraga I*. – Pp. 1–448 in: Engler A. (ed.), Das Pflanzenreich. Regni vegetabilis conspectus **IV. 117(Heft 67)**. – Leipzig: Wilhelm Engelmann.
- Erben M. 1985: Cytotaxonomische Untersuchungen an südosteuropäischen *Viola*-Arten der Sektion *Melanium*. – Mitt. Bot. Staatssamml. München **21**: 339–740.
- Erben M. 2000: *Viola serresiana*, eine neue Art von *Viola* sect. *Melanium* aus Nordost-Griechenland. – Bot. Chron. (Patras) **13**: 51–59.
- Euro+Med 2006+ [continuously updated]: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/> [accessed 14 Feb 2019].
- Franzén R. 1986: Taxonomy of the *Achillea clavennae* and the *A. ageratifolia* groups (Asteraceae, Anthemideae) on the Balkan Peninsula. – Willdenowia **16**: 13–33.
- Fritsch K. 1916: Neue Beiträge zur Flora der Balkanhalbinsel, insbesondere Serbiens, Bosniens und der Herzegowina. Sechster Teil. – Mitt. Naturwiss. Vereines Steiermark **52**: 293–332.
- Fritsch K. 1918: Neue Beiträge zur Flora der Balkanhalbinsel, insbesondere Serbiens, Bosniens und der Herzegowina. Achter Teil. – Mitt. Naturwiss. Vereines Steiermark **54**: 235–299.
- Gandoger M. M. 1912: Additamenta ad floram Europæ recentiora. – Bull. Soc. Bot. France **59**: 428–434.
- Gartner H. 1939: Zur systematischen Anordnung einiger Arten der Gattung *Cerastium* L. – Repert. Spec. Nov. Regni Veg. Beih. **113**: 1–96.
- Genova E. 2015: *Thymus perinicus* (Velen.) Jalas – In: Peev D., Vladimirov V., Petrova A. S., Anchev M., Temniskova D., Denchev C. M., Ganeva A. & Gussev C. (ed.), Red Data Book of the Republic of Bulgaria, digital edition 1 (plants and fungi). – Published at <http://e-ecodb.bas.bg/rdb/en/vol1/Thyperin.html> [accessed 14 Feb 2019].

- Gottschlich G. 2016: *Hieracium, Pilosella, Tolpis*. – Pp. 48–51 in: Pils G., Illustrated Flora of Albania. – St. Stefan: Eigenverlag G. Pils.
- Gottschlich G., Meierott L., Gregor T. & Krendl F. 2010: 45. *Hieracium dimoniei* Zahn. – P. 151 in: Vladimirov V., Dane F. & Tan K. (ed.), New floristic records in the Balkans: 13. – Phytol. Balcan. **16**: 143–165.
- Grau J. & Merxmüller H. 1972: *Myosotis* L. – Pp. 111–117 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora europaea **3**. – Cambridge: Cambridge University Press.
- Grecescu D. 1899: Plantes de la Macédoine appartenant au vilayet de Monastir recueillies par Michel Dimonié. – Bucarest: Imprimerie de l’Indépendance Roumaine.
- Grecescu D. 1907: Plante Macedonice din vilaieturile Monastir și Salonic. – Anal. Acad. Române, ser. 2, **29**: 27–136.
- Greuter W. 1975: Floristic studies in Greece. – Conf. Rep. Bot. Soc. Brit. Isles **15**: 18–37.
- Greuter W., Pirker B. & Oxelman B. 1997: *Silene* L. – Pp. 239–323 in: Strid A. & Tan K. (ed.), Flora hellenica **1**. – Königstein: Koeltz Scientific Books.
- Greuter W. & Raus Th. 1986: Med-Checklist Notulae, 12. – Willdenowia **15**: 413–432.
- Halácsy E. de 1900–1912: Conspectus florae graecae **1–3**, Supplementum [1]. – Leipzig: G. Engelmann; Supplementum **2**. – Magyar Bot. Lapok **11**: 114–202.
- Handel-Mazzetti H. 1910: Revision der balkanischen und vorderasiatischen *Onobrychis*-Arten aus der Sektion *Eubrychis*. (Fortsetzung). – Österr. Bot. Z. **60**: 5–12.
- Handel-Mazzetti H. 1923: Nachträge zur Monographie der Gattung *Taraxacum*. – Österr. Bot. Z. **72**: 254–275.
- Handel-Mazzetti H. 1926: Referate: Hayek, A., Prodromus florae peninsulae balcanicae. – Verh. Zool.-Bot. Ges. Wien. **74–75**: (81)–(83).
- Hartvig P. 2002: *Alyssum* L. – Pp. 199–224 in: Strid A. & Tan K. (ed.), Flora hellenica **2**. – Ruggell: A. R. G. Ganther.
- Hayek A. 1924: Plantae novae orientales. – Repert. Spec. Nov. Regni Veg **19**: 333–335.
- Hayek A. von 1924–1933: Prodromus florae peninsulae balcanicae **1–3**. – Repert. Spec. Nov. Regni Veg. Beih. **30(1)**: 1–1193; **30(2)**: 1–1152; **30(3)**: 1–472.
- Hayek A. von 1925: Prodromus florae peninsulae balcanicae **1**. – Repert. Spec. Nov. Regni Veg. Beih. **30(1)**: 353–512.
- Hayek A. von 1926: Prodromus florae peninsulae balcanicae **1**. – Repert. Spec. Nov. Regni Veg. Beih. **30(1)**: 673–960.
- Hertel H. & Schreiber A. 1988: Die Botanische Staats-sammlung München 1813–1988 (Eine Übersicht über die Sammlungsbestände). – Mitt. Bot. Staats-samml. München **26**: 81–512.
- Jasprica N. & Kovačić S. 2001: Botaničar Lujo Adamović (1864–1935). – Prirodoslovjje **1**: 45–62.
- Kahl T. & Prifti E. 2016: Geschichte der Kodifizierung des Aromunischen. – Pp. 33–64 in: Dahmen W., Holttus G., Kramer J., Metzeltin M., Schweickard W. & Winkelmann O. (ed.), Romanische Kleinsprachen heute. – Tübingen: Narr Francke Attempto. [Romanistisches Kolloquium **27**].
- Karagiannakidou V. & Raus Th. 1996: Vascular plants from Mount Chortiatis (Makedonia, Greece). – Willdenowia **25**: 487–559.
- Košanin N. 1912: Die Verbreitung der Waldkoniferen auf Šar-Planina und Korab. – Österr. Bot. Z. **62**: 208–216, 267–271.
- Krendl F. 2014: Die *Rubiaceae* in Albanien: Zytologie, Ökologie und Verbreitung der bisher nachgewiesenen Taxa. – Ann. Naturhist. Mus. Wien, B, **116**: 119–151.
- Křivka P. & Holubec V. 2010: The Balkan collections in the main Czech herbaria. – Phytol. Balcan. **16**: 215–220.
- Kümmerle J. B. 1926: Útvázlat – Reiseskizze. – Pp. 8–89 in: Csiki E., Jávorka S. & Kümmerle J. B. (ed.), Adatok Albánia flórájához. – Additamenta ad floram Albániae. – Budapest: A Magyar Tudományos Akadémia Kiadása. [Teleki P. & Csiki E. (ed.), Balkán-kutatásainak tudományos eredményei **3**].
- Kunz A., Johnen B., Röss W. & Moeschl J. R. 2003: Südosteuropa 1908. Karte / Map 235. – In: Kunz A. (ed.), IEG-MAPS · Server für digitale historische Karten / Server for digital historical maps. – Published at <https://doi.org/10.25359/ISSN.1614-6352.MAP235> [accessed 19 Feb 2019].
- Kuzmanov B. A. 1970: *Saxifragaceae* Juss. – Pp. 652–704 in: Jordanov D. (ed.), Flora Reipublicae popularis bulgaricae **4**. – Sofia: Aedibus Acad. Sci. Bulgaricae.
- Kuzmanov B. 1976: *Anthyllis* L. – Pp. 187–193 in: Jordanov D. (ed.), Flora Reipublicae popularis bulgaricae **6**. – Sofia: Aedibus Acad. Sci. Bulgaricae.
- Kuzmanov B. A. & Markova T. 1973: *Anthyllis vulneraria* L. ssp. *vitellina* (Vel.) Kuzmanov, stat. nov. – P. 288 in: Löve Á. (ed.), IOPB Chromosome number reports XL. – Taxon **22**: 285–291.
- Lack H. W. 1980: Das Herbar der zoologisch-botanischen Gesellschaft in Wien. – Willdenowia **10**: 67–81.
- Lack H. W. & Sydow C.-O. von 1984 (“1983”]: Dörfers Sammlung von Botanikerbriefen in der Universitätsbibliothek Uppsala I. Einführung. Verzeichnis der Briefschreiber A–F. – Willdenowia **13**: 397–428.
- Longinescu G. G. 1935: †Mihail Dimonie. – Natura (Bucharest). **24(10)**: 28–30.
- Longinescu G. G. 1936: Tabla de materie a celor 25 de volume apărute dela 1905 până la 1936. – Natura (Bucharest) **25(10)**: 1–53.
- Lyskov D., Güner E. D., Samigullin T., Duman H. & Pimenov M. 2018: Molecular data to elucidate the taxonomy of *Seseli* sect. *Seseli* (*Apiaceae*) in east Mediterranean and southern Europe. – Nordic J. Bot. **36**: e01857.
- Mattfeld J., Bornmüller J. & Handel-Mazzetti H. von 1925: Zur Kenntnis der Formenkreise der euro-

- päischen und kleinasiatischen Tannen. – Notizbl. Bot. Gart. Berlin-Dahlem **9**: 229–246.
- Marhold K. 2011a: *Brassicaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=14691&PTRefFk=7200000> [accessed 18 Feb 2019].
- Marhold K. 2011b: *Caryophyllaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=100811&PTRefFk=7200000> [accessed 18 Feb 2019].
- Marhold K. 2011c: *Clusiaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=25236&PTRefFk=7200000> [accessed 18 Feb 2019].
- Marhold K. 2011d: *Primulaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=29007&PTRefFk=7200000> [accessed 18 Feb 2019].
- Marhold K. 2011e: *Saxifragaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=31303&PTRefFk=7200000> [accessed 18 Feb 2019].
- Marhold K. 2011f: *Verbascum*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=32868&PTRefFk=7200000> [accessed 18 Feb 2019].
- Markgraf F. 1931: *Soldanella pindicola* Hausskn. – Notizbl. Bot. Gart. Berlin-Dahlem **11**: 219–223.
- Markgraf F. 1932: Pflanzengeographie von Albanien. Ihre Bedeutung für Vegetation und Flora der Mittelmeerländer. – Biblioth. Bot. **105**.
- Matevski V. 2009: Floristički i vegetacijski istraživanja na teritorijata na Makedonija (1839–1945) [Floristic and vegetational investigations on the territory of Macedonia (1839–1945)]. – Pp. 315–342 in: Grozdanov C., Tomovski K. & Topolinjska Z. (ed.), Otkrivanjeto i proučuvanjeto na Makedonija vo Evropskata nauka do formiranjeto na Makedonskite državni instituciji [Discovering and exploring Macedonia in European science until the establishment of Macedonian state institutions]. – Skopje: Makedonska Akademija na naukite i umetnostite [Macedonian Academy of Sciences and Arts].
- McNeill J. 2014: Holotype specimens and type citations: general issues. – Taxon **63**: 1112–1113.
- Meyer F. K. 1985: Beitrag zur Kenntnis ost- und südosteuropäischer *Soldanella*-Arten. – Haussknechtia **2**: 7–41.
- Micevski K. 1998 (ed.): Flora na Republika Makedonija **1(4)**. – Skopje: Makedonska Akademija na naukite i umetnostite.
- Motta G. 2011: The fight for Balkan latinity. The Aromanians until World War I. – Medit. J. Soc. Sci. **2**: 252–260.
- Murbeck S. 1933: Monographie der Gattung *Verbascum*. – Acta Univ. Lund ser. 2, **29(2)**: 1–630.
- Nanev K. 2012: *Anthyllis vulneraria* L. – In: Nanev K. (ed.), Bulgarskata Flora online/The Bulgarian Flora online. – Published at [http://www.bgflora.eu/Anthyllis%20vulneraria%20ssp.%20vitellina%20\(Vel.\)%20Kuzm.%20EN.html](http://www.bgflora.eu/Anthyllis%20vulneraria%20ssp.%20vitellina%20(Vel.)%20Kuzm.%20EN.html) [accessed 2 Mar 2019].
- Nevaci M. 2013: Recent research in Aromanian from the Republic of Macedonia. – Dialectol. Geolinguist. **21**: 21–35.
- Nyárády E. I. 1928: Studiu preliminar asupra unor specii de *Alyssum* din sectia *Odontarrhena*. (Vorstudium über einige Arten der Section *Odontarrhena* der Gattung *Alyssum*). (Fortsetzung). – Bul. Grăd. Bot. Univ. Cluj **7**: 65–160.
- Nyárády E. I. 1929: Studiu preliminar asupra unor specii de *Alyssum* din sectia *Odontarrhena*. (Vorstudium über einige Arten der Section *Odontarrhena* der Gattung *Alyssum*). (Fortsetzung). – Bul. Grăd. Bot. Univ. Cluj **9**: 1–63.
- Panțu Z. C. 1906: Plantele cunoscute de poporul român. Vocabular botanic cuprinzând numirile române, franceze, germane și științifice. – București: Institutul de Arte Grafice și Editură Minerva.
- Persson K. 1999: New and revised species of *Colchicum* (*Colchicaceae*) from the Balkan Peninsula. – Pl. Syst. Evol. **217**: 55–80.
- Pils G. 2016: Illustrated Flora of Albania. – St. Stefan: Eigenverlag G. Pils.
- Podlech D. 1987–2011: Thesaurus Astragalorum. Index of all taxa described within the genus *Astragalus* L. and other genera but belonging to the genus *Astragalus*. – München: Ludwig-Maximilians-Universität München. – Published at http://www.sysbot.biologie.uni-muenchen.de/de/personen/podlech/thesaurus_astragalus.pdf [accessed 6 Mar 2019].
- Podlech D. 2008: The genus *Astragalus* L. (*Fabaceae*) in Europe with exclusion of the former Soviet Union. – Feddes Report. **119**: 310–387.
- Podlech D. & Zarre S. 2013: A taxonomic revision of the genus *Astragalus* L. (*Leguminosae*) in the Old World. Vol. 1. – Wien: Naturhistorisches Museum.
- Polatschek A. 2013: Revision der Gattung *Erysimum* (*Cruciferae*): Teil 5. Nord-, West-, Zentraleuropa, Rumänien und westliche Balkan-Halbinsel bis Albanien. – Ann. Naturhist. Mus. Wien, B, **75**: 75–218.
- Popescu B. G. 2017: Historical atlas of central and eastern Europe. – Chicago: University of Chicago Map Collection. – Published at <https://bgpopescu.wordpress.com/data-historical-atlas/> [accessed 2 Mar 2019].
- Raab-Straube E. von & Henning T. 2018: *Violaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published

- at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=35443&PTRefFk=7500000> [accessed 18 Feb 2019].
- Raus Th. 1987: *Soldanella* (*Primulaceae*) in Griechenland. – *Willdenowia* **16**: 335–342.
- Rechinger K. H. 1939: Zur Flora von Albanien und Mazedonien. – *Repert. Spec. Nov. Regni Veg.* **47**: 165–179.
- Rechinger K. H. 1944 [“1943”]: Flora aegaea. Flora der Inseln und Halbinseln des ägäischen Meeres. – *Denkschr. Akad. Wiss. Wien, Math.-Naturwiss. Kl.* **105(1)**.
- Rohlena J. 1940: Zwölfter Beitrag zur Flora von Montenegro. – *Věstn. Král. České Společn. Nauk. Tř. Mat.-Přír.* **1939(1)**: 1–16.
- Roskov Y. R., Bisby F. A., Zarucchi J. L., Schrire B. D. & White R. J. 2005: ILDIS World Database of Legumes: draft checklist, version 10. – Published at <https://ildis.org/LegumeWeb10.01.shtml> [accessed 6 Mar 2019].
- Soltis P. S. 2017 Digitization of herbaria enables novel research. – *Amer. J. Bot.* **104**: 1281–1284.
- Soška T. 1939: Zur Flora des Berges Bukovik bei Gostivar in Südserbien. – *Ann. Mus. Serb. Merid.*, Skopje **1**: 55–59.
- Španiel S., Kempa M., Salmerón-Sánchez E., Fuertes-Aguilar J., Francisco Mota J., Al-Shehbaz I. A., German D. A., Olšavská K., Šingliarová B., Zozomová-Lihová J. & Marhold K. 2015: AlyBase – database of names, chromosome numbers, and ploidy levels of *Alysseae* (*Brassicaceae*), with a new generic concept of the tribe. – *Pl. Syst. Evol.* **301**: 2463–2491. – Database published at <http://www.alysseae.sav.sk/> [accessed 18 Feb 2019].
- Stefanoff B. 1930: Istoritscheski pregljada na issledwaniata warchu florata na Balgarija. Historische Übersicht der Untersuchungen über die Flora Bulgariens. – *Izv. Tsarsk. Prir. Inst. Sofiya* **3**: 61–112.
- Stefureac T. 1984: Botaniști români exploratori ai florei din Peninsula Balcanică. – Pp. 55–58 in: Muzeul de Istorie Naturală (ed.), Volum festiv “150 ani de la înființarea muzeului”. – Iași: Editura Universitatea A. I. Cuza.
- Stefureac T. 1986 [“1984”]: Academia Română și dezvoltarea cercetărilor botanice în sudul țării (1866–1920). – Mem. Secț. Științ. Acad. Română, Ser. IV, **7(1)**: 175–188.
- Steindachner F. 1910: Notizen – Jahresbericht für 1909. – Ann. K. K. Naturhist. Hofmus. **24**: 1–70.
- Steindachner F. 1911: Notizen – Jahresbericht für 1910. – Ann. K. K. Naturhist. Hofmus. **25**: 1–54.
- Stojanoff N. & Achтарoff B. 1935: Kritische Studien über die Nelken Bulgariens. – *Sborn. Bălg. Acad. Nauk. Klon Prir.-Mat.* **29**: 1–101.
- Strid A. 1978: Contribution to the flora of Mount Kajmakcalan (Voras Oros), northern Greece. – *Ann. Mus. Goulandris* **4**: 211–247.
- Strid A. 1986: *Astragalus* L. – Pp. 460–478 in: Strid A. (ed.), Mountain flora of Greece **1**. – Cambridge: Cambridge University Press.
- Strid A. 1991: *Myosotis* L. – Pp. 47–57 in: Strid A. & Tan K. (ed.), Mountain flora of Greece **2**. – Edinburgh: Edinburgh University Press.
- Strid A. & Tan K. 2017: Recent progress in plant taxonomy and floristic studies in Greece. – *Bot. Serbica* **41**: 123–152.
- Štubňová E., Hodálová I., Kučera J., Mártonfiová L., Svitok M. & Slovák M. 2017: Karyological patterns in the European endemic genus *Soldanella* L.: Absolute genome size variation uncorrelated with cytotype chromosome numbers. – *Amer. J. Bot.* **104**: 1241–1253.
- Szelag Z. 2015: *Hieracia balcanica* X. Typification of the *Hieracium* (*Asteraceae*) names described by K. H. Zahn from the Balkan Peninsula. – *Polish Bot. J.* **60**: 41–65.
- Tan K. & Suda J. 2002: *Hesperis* L. – Pp. 152–155 in: Strid A. & Tan K. (ed.), Flora hellenica **2**. – Ruggell: A. R. G. Gantner.
- Thiers B. 2019+ [continuously updated]: Index herbariorum: a global directory of public herbaria and associated staff. New York Botanical Garden’s virtual herbarium. – Published at <http://sweetgum.nybg.org/science/ih/> [accessed 15 Feb 2019].
- Tkach N., Röser M., Miehe G., Muellner-Riehl A. N., Ebersbach J., Favre A. & Hoffmann M. H. 2015: Molecular phylogenetics, morphology and a revised classification of the complex genus *Saxifraga* (*Saxifragaceae*). – *Taxon* **64**: 1159–1187.
- Tkach N., Röser M., Suchan T., Cieślak E., Schönswetter P. & Ronikier M. 2019: Contrasting evolutionary origins of two mountain endemics: *Saxifraga wahlenbergii* (Western Carpathians) and *S. styriaca* (Eastern Alps). – *B. M. C. Evol. Biol.* **19**: 18 [pp. 1–19].
- Trinajstić I. 1975: Taxa nova et combinationes novae in Flora Jugoslaviae III. – *Suppl. Fl. Anal. Jugosl.* **3**: 5–8.
- Turland N. J., Wiersema J. H., Barrie F. R., Greuter W., Hawksworth D. L., Herendeen P. S., Knapp S., Kusber W.-H., Li D.-Z., Marhold K., May T. W., McNeill J., Monro A. M., Prado J., Price M. J. & Smith G. F. (ed.) 2018: International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. – Glashütten: Koeltz Botanical Books [Regnum Veg. **159**].
- Urumov I. K. 1914: Po florata Čataldža i Bulair (Turska Trakija). – *Spis. Bălg. Akad. Nauk.* **9**: 1–133.
- Văduva-Poenaru I. 2000: Enciclopedia marilor personalități: din istoria, știința și cultura românească de-a lungul timpului **2**: G–O. – București: Editura Geneze.
- Valdés B. 2011: *Boraginaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at <http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=109417&PTRefFk=7100000> [accessed 2 Mar 2019].
- Vasile D., Dincă L., Indreica A. & Voiculescu I. 2016: Herbarul Alexandru Beldie – o colecție de plante și o

- importantă bază de date pentru specialiști. – Revista Silvic. Cineget. **39:** 114–119.
- Velenovský J. 1911 [“1910”]: Letzte Nachträge zur Flora der Balkanländer. – Sitzungsber. Königl. Böhm. Ges. Wiss., Math.-Naturwiss. Cl. **8:** 1–13.
- Velenovský J. 1922: Reliquiae mrkvíčkanae. – Pragae: Fr. Řivnáč.
- Vestergren T. 1939: Systematische Beobachtungen über *Myosotis silvatica* (Ehrh.) Hoffm. und verwandte Formen. – Ark. Bot. **29A(8):** 1–39.
- Vierhapper F. 1909: Eine neue *Soldanella* aus dem Balkan. – Österr. Bot. Z. **59:** 148–150, 202–205.
- Vierhapper F. 1914: Beiträge zur Kenntnis der Flora Griechenlands. Bearbeitung der anlässlich der zweiten Wiener Universitätsreise im April 1911 in Griechenland gesammelten Pflanzen. A. *Anthophyta* und *Pteridophyta*. I. – Verh. K. K. Zool.-Bot. Ges. Wien **64:** 239–270.
- Villar J. L., Turland N. J., Juan A., Gaskin J. F., Ángeles Alonso M. & Crespo M. B. 2015: *Tamarix minoa* (*Tamaricaceae*), a new species from the island of Crete (Greece) based on morphological and plastid molecular sequence data. – Willdenowia **45:** 161–172.
- Vogt R., Lack H. W. & Raus Th. 2018: The herbarium of Ignaz Dörfler in Berlin. – Willdenowia **48:** 57–92.
- Wagenitz G. 1983: Die Gattung *Adenostyles* Cass. (*Compositae–Senecioneae*). – Phyton (Horn) **23:** 141–159.
- Weigel T. O. 1909: Herbarium – Organ zur Förderung des Austausches wissenschaftlicher Exsiccatensammlungen **8:** – Leipzig: Hermann Schneider.
- Wettstein R. von 1892: Beitrag zur Flora Albaniens. – Biblioth. Bot. **26:**
- Wyse Jackson M. B. 1992: Taxonomic notes on *Cerastium fontanum* Baumg. emend. Jalas (*Caryophylaceae*) in Europe. – Bot. J. Linn. Soc. **109:** 325–328.
- Zahn K. H. 1910 [“1909”]: Beiträge zur Kenntnis der Hieracien Ungarns und der Balkanländer IV. – Magyar Bot. Lapok. **8:** 276–309.
- Zarre M. S. & Podlech D. 1997: Problems in the taxonomy of tragacanthic *Astragalus*. – Sendtnera **4:** 243–250.
- Zeisek V., Kirschner J., Štěpánek J. & Amini Rad M. 2015: Microsatellite variation, sexual reproduction and taxonomic revision of *Taraxacum* sect. *Dioszegia*: relationships at a large spatial scale. – Preslia **87:** 55–85.
- Zhang L.-B. & Kadereit J. 2004: Nomenclature of *Soldanella* L. (*Primulaceae*). – Taxon **53:** 741–752.

Appendix 1: Typifications of, and nomenclatural notes on, selected taxa described from plant material collected by Mihael Dimonie

In this Appendix, we lectotypify seven names of taxa described from herbarium material collected by Mihael Dimonie, plus one by Ignaz Dörfler, and present their current taxonomic treatments. Lectotypification is not necessary for the majority of names published by Velenovský (1911), who, according to his introduction, worked only with the vouchers in PRC and usually only one voucher is extant there, therefore qualifying as the holotype. For other names, the holotype was already indicated in the protologue, e.g. *Anthyllis alpestris* subsp. *vitellina* W. Becker (Becker 1912), *Hesperis verroiana* Dvořák (Dvořák 1966) and *Viola pascua* W. Becker (Becker 1928). Others have been lectotypified already, e.g. *Alyssum obtusifolium* subsp. *helioscopioides* Nyár. (Hartvig 2002: 222), or the lectotype was chosen from a syntype not collected by Dimonie, e.g. *Astragalus monachorum* Širj. (Strid 1986: 467). For *Cerastium fontanum* subsp. *balcanum* Gartner, we designate a voucher collected by Dörfler as the lectotype, because this is the best preserved and most representative among a number of available syntypes. Because several lectotypifications were previously done only in schedis, it should be mentioned that typifications are achieved only by effective publication (Turland & al. 2018: Art. 7.10). Apart from the lectotypifications, we present nomenclatural notes for six other taxa.

Alyssum obtusifolium* var. *helioscopioides Nyár. in Bul. Grăd. Bot. Univ. Cluj 9: 18–20. 1929. – Lectotype (designated by Hartvig in Strid & Tan, Fl. Hellen. 2: 222. 2002): [Greece, Nomos Kavalas], in saxosis aridis calcaris insula Thasos, Apr 1909, M. Dimonie (WU 0033164).

In the protologue, Nyárády (1929) did not indicate a type, but rather a single gathering by Dimonie in the herbaria Degen (today BP) and WU that he had consulted. Deposited in WU are two vouchers most likely originating from the same gathering and both annotated by Nyárády in 1926. Hartvig (2002) performed a (probably unintentional) lectotypification by indicating one of the two vouchers in WU as the type by its slightly different label text (cf. WU 0033165); see Turland & al. (2018: Art. 9.22). Additional isolectotypes can be found in the herbaria E (E00438386) and W (W 1910-0005921).

Current names: *Odontarrhena obtusifolia* (Steven ex DC.) C. A. Mey. (Marhold 2011a; Španiel & al. 2015) or *Alyssum sibiricum* Willd. [= *Odontarrhena sibirica* (Willd.) Španiel & al.] (Dimopoulos & al. 2013).

Alyssum punctatum Nyár. in Bul. Grăd. Bot. Univ. Cluj 7: 72–73. 1928. – **Lectotype (designated here):** [Greece, Nomos Thessalonikis], in collinis prope Thessalicum, Apr 1908, M. Dimonie (WU 0076276).

In the protologue, Nyárády (1928) cited several syntypes in the herbaria Formánek (today BRNM), Degen (today BP), Halászy (today WU-Halászy-Europaeum and -Graecum) and WU. All corresponding vouchers in

WU (including Halácsy-Europaeum and -Graecum) were annotated by Nyárády in 1926 (syntypes: WU 0090266, WU-Halácsy-Europaeum 0090425, WU-Halácsy-Graecum 0076178); the isolectotypes in W (W 1909-0006939, W 1909-0007222) lack these annotations.

Current names: *Odontarrhena chalcidica* (Janka) Španiel & al. (Marhold 2011a; Španiel & al. 2015) or *Alyssum chalcidicum* Janka (Dimopoulos & al. 2013).

Anthyllis alpestris subsp. *vitellina* W. Becker in Beih. Bot. Centralbl., Abt. 2, 29: 26. 1912 ≡ *Anthyllis vulneraria* var. *vitellina* (W. Becker) Hayek in Repert. Spec. Nov. Regni Veg. Beih. 30: 890. 1926. – Holotype: [Bulgaria, Blagoevgrad oblast], in saxosis alpinis Perin-dag mt. Jel-tepe, Aug 1909, *M. Dimonie* (WU 0104512).

In the protologue, Becker (1912) mentions Velenovský's variety ("A. vulneraria var. *vitellina* Vel. ?"). However, the question mark renders subsp. *vitellina* the validly published name of a new taxon, not a new combination. Becker cited the same gathering by Dimonie, like Velenovský (1911), but indicated the herbarium WU as the main source for his studies; therefore, the single voucher in this herbarium can be considered as the holotype and the duplicate vouchers in PRC and W as isolectotypes (see under *A. vulneraria* var. *vitellina* below).

Current name: *Anthyllis vulneraria* subsp. *vitellina* (Velen.) Kuzmanov (Kuzmanov 1976; Anchev 2006; Nanev 2012).

Anthyllis vulneraria var. *vitellina* Velen. in Sitzungsber. Königl. Böh. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 4. 1911 ≡ *Anthyllis vulneraria* subsp. *vitellina* (Velen.) Kuzmanov in Taxon 22: 288. 1973. – **Lectotype (designated here):** [Bulgaria, Blagoevgrad oblast], in saxosis Perin-dag mt. Jel-tepe, Aug 1909, *M. Dimonie* 356 (PRC-Phanerogamae 451440).

In the protologue, Velenovský (1911) cited a single gathering by Dimonie. However, a set of at least two duplicates can be found in PRC: the lectotype designated here (PRC-Phanerogamae 451440) and an isolectotype (PRC-Phanerogamae 451439); two further isolectotypes are deposited in W (W 1910-0005668) and WU (WU 0104512).

Current name: *Anthyllis vulneraria* subsp. *vitellina* (Velen.) Kuzmanov (Kuzmanov 1976; Anchev 2006; Nanev 2012).

Astragalus monachorum Širj. in Repert. Spec. Nov. Regni Veg. 47: 242–243. 1939 ≡ *Astragalus thracicus* subsp. *monachorum* (Širj.) Strid, Mount. Fl. Greece 1: 467. 1986 ≡ *Astracantha thracica* subsp. *monachorum* (Širj.) Greuter in Willdenowia 15: 426. 1986. – Lectotype (designated by Strid, Mount. Fl. Greece 1: 467. 1986): [Greece, Nomos Chalkidikis], zwischen Steine und felsige Orte am Monte Athos, Aug 1873, T. Pichler 156 (G-Boiss!).

In the protologue, Širjaev (1939) cited syntypes collected by Friedrichsthal, Dimonie, Brener, Pichler, Janka, Sintenis and Bornmüller, all originating from the upper

regions of Mt Athos. Strid (1986) designated as the lectotype a voucher by Pichler in G-Boiss; however, it remains doubtful if the voucher in WU indicated as an isolectotype by Zarre in scheda in 1996 really belongs to the same gathering, because the given locality is slightly different and the voucher lacks a collecting number by Pichler (WU 0068226). The same holds true for the duplicates in E (E00021216) and PRC (PRC-Phanerogamae 452029) indicated as "isotype". Syntypes can be found in the herbaria B (B 100279205, B 100279206), LD (1793342), W (W 0026158, W 0026159) and WU (WU-Halácsy-Europaeum 0068224, WU 0068225, WU 0068227).

Current names: *Astragalus thracicus* subsp. *monachorum* (Širj.) Strid (Podlech 1987–2011, 2008; Dimopoulos & al. 2013) or *Astracantha thracica* subsp. *monachorum* (Širj.) Greuter (Roskov & al. 2006). *Astracantha* Podlech is polyphyletic and therefore taxonomically obsolete (Zarre & Podlech 1997); hence it is treated as a mere synonym of *Astragalus* L. (Podlech & Zarre 2013: 4).

Cerastium fontanum subsp. *balcanum* Gartner in Repert. Spec. Nov. Regni Veg. Beih. 113: 76. 1939. – **Lectotype (designated here):** [Albania, Shkodér], auf steinigem Boden auf dem Maranaj, nördl. von Skutari [Shkodra], 16 Jun [1916], I. Dörfler 49 (WU 0066100).

In the protologue, Gartner (1939) cited material by several collectors in the herbaria WU (including WU-Hal) and W, but none of the vouchers was annotated by him. Michael B. Wyse Jackson (TCD) annotated a specimen collected by Dörfler as the lectotype; however, this typification was never published, neither by him (see, e.g., Wyse Jackson 1992) nor by Vogt & al. (2018). We therefore publish here Wyse Jackson's in scheda choice of the lectotype. Syntypes can be found in the herbaria GZU, W and WU (GZU 000291987, WU 0066103), including some collected by Dimonie (W 1909-0007341, WU 0066100, WU 0066101, WU 0066102, WU-Halácsy-Europaeum 0104561), but in a worse state of preservation than the lectotype designated here.

Current names: *Cerastium fontanum* subsp. *vulgare* (Hartm.) Greuter & Burdet (Marhold 2011b) or *C. holosteoides* Fr. (Dimopoulos & al. 2013).

Hesperis verroiana Dvořák in Preslia 38: 59. 1966. – Holotype: [Greece, Nomos Imathias], in rupestribus declivum mt. Doxa pag. Doleni prope Caraferia, Apr 1909, *M. Dimonie* (PR 193244/11569 [Fig. 9]).

In the protologue, Dvořák (1966) indicated the holotype in PR, which was depicted in a low-quality black and white image in tab. IV(1) of that publication. The original, unmounted herbarium label of the holotype was later lost and an almost identical label from the isotype in PRC copied and mounted instead on the voucher in PR (Fig. 9). Isotypes can be found in the herbaria LD (LD 1002566), PRC (PRC-Phanerogamae 455747), W (W 1910-0005752) and WU (WU 0028099, WU 0028100).

Current name: *Hesperis theophrasti* Borbás subsp. *theophrasti* (Tan & Suda 2002; Dimopoulos & al. 2013).

Myosotis villicaulis Domin in Carpatica, Ser. B, 1(2): 296. 1940 [“1939”]. – **Lectotype (designated here):** [Greece or North Macedonia], in pascius alpinis mt. Kajmakcalan, Jul 1909, M. Dimonie 53 (PRC-Phanerogamae 454076).

For his revision, Domin (1940) consulted the herbaria of the Charles University (PRC) and the National Museum (PR) in Prague as well as the herbarium of the Masaryk University (BRNU) in Brno. In the protologue, Domin (1940) cited several gatherings by Dimonie. None of the syntypes could be found in the herbaria W and WU. Obviously, Domin (1940) was not aware of Vestergren’s work on *Myosotis sylvatica* (Vestergren 1939), published a year earlier, and neither did Vestergren (1939) know the material Domin used for his description of *M. villicaulis*. Because the specimen designated here as the lectotype exhibits acute nutlets, we consider it to be a hairy form of *M. sylvatica* subsp. *cyanea* (Hayek) Vestergr., according to Grau & Merxmüller (1972) and Strid (1991). A close relationship to *M. cyanea* (Hayek) Domin (≡ *M. sylvatica* subsp. *cyanea*) was already anticipated by Domin (1940).

Current name: *Myosotis sylvatica* subsp. *cyanea* (Hayek) Vestergr. (Valdés 2011; Dimopoulos & al. 2013).

Saxifraga discolor Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 7. 1911 ≡ *Saxifraga adscendens* subsp. *discolor* (Velen.) Kuzmanov in Jordanov, Fl. Reipubl. Popularis Bulg. 4: 663. 1970. – **Lectotype (designated here):** [Bulgaria, Blagoevgrad oblast], in saxosis Perin-dag mt. Jel-tepe, Aug 1909, M. Dimonie 376 (PRC-Phanerogamae 451703).

In the protologue, Velenovský (1911) cited a single gathering by Dimonie. However, a set of at least two duplicates can be found in PRC: the lectotype designated here (PRC-Phanerogamae 451703) and an isolectotype (PRC-Phanerogamae 451704). The latter includes an interesting, handwritten remark of Dimonie, which is depicted in Fig. 8B. Additional isolectotypes are deposited in W (W 1910-0005689) and WU (WU 0104414).

Current names: *Saxifraga adscendens* subsp. *discolor* (Velen.) Kuzmanov (Marhold 2011e; Dimopoulos & al. 2013) or *S. discolor* Velen. (Tkach & al. 2015, 2019).

Silene perinica Hayek in Repert. Spec. Nov. Regni Veg. 19: 334. 1924. – **Lectotype (designated here):** [Bulgaria, Blagoevgrad oblast], in summo mtis Jel-tepe Perin dag, Jun 1909, M. Dimonie (W 1910-0005830).

When describing *Silene perinica* in his *Plantae novae orientales*, Hayek (1924) mentioned neither a type nor a herbarium, but only that his new species was collected in “Macedonia” on “Jel-Tepe Perindaghr” and distributed as *S. graminea* by “J. Dimonie”. Greuter & al. (1997) supposed the type specimens to be in WU or GB. In the treatment of *Euphorbia imperfoliata* Vis., another

species mentioned in the same paper, Hayek (1924: 334) stressed that he worked in the Natural History Museum, Vienna (W) for his account. Rechinger (1939: 167) stated that he had seen “Hayeks Original” and “Typus” in W. The lectotype chosen here even contains a handwritten annotation by Hayek: “*S. perinica* m. n. sp.”, whereas the type material in WU lacks annotations or revisions by Hayek (isolectotypes: WU 0104796, WU 0104798; syntypes: WU 0104797, WU 0104799).

Current name: *Silene ciliata* subsp. *graefferi* (Guss.) Nyman (Greuter & al. 1997; Dimopoulos & al. 2013).

Soldanella dimoniei Vierh. in Österr. Bot. Z. 59: 148. 1909 ≡ *Soldanella pindicola* var. *dimoniei* (Vierh.) Markgraf in Notizbl. Königl. Bot. Gart. Berlin 11: 221, 223. 1931. – **Lectotype (designated here):** [Albania or North Macedonia], ad nives liquescentes mt. Jablanitza, Jul 1908, M. Dimonie (WU 0027910 [Fig. 11]).

Although working in WU, Vierhapper (1909) did not indicate the type or a herbarium in his description of *S. dimoniei*. Therefore, the “holotype” mentioned by Zhang & Kadereit (2004: 743) has to be designated as the lectotype. The mere handwritten designation on the voucher as “Originalexemplare” and, by a later hand, “i.e. HOLO-TYPUS” (Fig. 11) does not achieve designation of a lectotype according to Turland & al. (2018: Art. 7.10); see also McNeill (2014). The “isotype” in WU mentioned by Zhang & Kadereit (2004: 743) is from the Halácsy herbarium, a private collection most likely not available to Vierhapper, because it was only later incorporated into WU (Lack 1980). “Macedonia” is indicated only on the label of the isolectotype in Halácsy’s herbarium (WU-Halácsy-Europaeum-0040240 [Fig. 12]), neither on the lectotype from the exsiccata series *Planta Makedonicae* (Fig. 11) nor on the isolectotype in W (W 1909-0007371), nor in Vierhapper (1909), where the species is stated to have been collected “im zentralen Albanien” (in central Albania) (cf. Vierhapper 1914: 243).

Current name: *Soldanella pindicola* Hausskn. (Meyer 1985; Raus 1987; Micevski 1998; Zhang & Kadereit 2004; Marhold 2011d; Dimopoulos & al. 2013).

Vicia lutea var. *bicolor* Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 5. 1911. – **Lectotype (designated here):** [Greece, Nomos Chalkidikis], in pratis St. Nil Hagion Oros prope coenobium Prodrom, Apr 1909, M. Dimonie 180 (PRC-Phanerogamae 451160).

In the protologue, Velenovský (1911) cited a single gathering (in PRC) collected by Dimonie near the Prodrom monastery at Mt Athos, Greece. However, a set of at least two duplicates with almost identical labels can be found in PRC (PRC-Phanerogamae 451159, PRC-Phanerogamae 451160). An additional specimen from Mt Athos, but from the Ag. Anna monastery, is deposited in W (W 1910-0005481). Because one of the vouchers in PRC (PRC-Phanerogamae 451159) also shows a label

with a handwritten correction of the printed “Aja-Anna” to “Prodromo”, we assume that the Vienna voucher also belongs to the type gathering. All the above cited type material morphologically corresponds to *Vicia laeta* Ces. (= *V. barbazitae* Ten. & Guss.) in inflorescence structure and size, glabrescent calyx, equal length of calyx lobes, ratio of calyx tube to calyx lobes, and the yellow corolla with blue wings (Ball 1968; Davis & Plitmann 1970; Coulot & Rabaute 2016), and not to *V. lutea* L. nor to *V. grandiflora* Scop.

Current name: *Vicia laeta* Ces. (Dimopoulos & al. 2013).

Viola pascua W. Becker in Bull. Inst. Jard. Bot. Univ. Belgrade 1: 34. 1928 ≡ *Viola beckiana* subsp. *pascua* (W. Becker) Trinajstić in Suppl. Fl. Anal. Jugosl. 3: 7. 1975. – Holotype: [Greece or North Macedonia], in pascuis alpinis mt. Porta pag. Huma op. Ghevgheli, Jun 1909, M. Dimonie 74 (PRC-Phanerogamae 454679).

Becker (1928) clearly indicated that the type was deposited in the Herbarium Velenovský (today in PRC) and annotated the second, similar gathering (same locality and date but no. 71) as *Viola orphanidis* Boiss., the latter specimen being the type of *V. zoysii* var. *frondosa* Velen. (see below). Erben, in 1983, annotated the first voucher as *V. eximia* Formánek and cited it as the holotype of *V. pascua* (Erben 1985). An isotype in WU (WU 0103968), lacking a number but with an identical locality, was annotated by Erben in 1984 and cited by him (Erben 1985), although he noted that two out of the three specimens are *V. eximia* and one is *V. eximia* × *V. frondosa* (Velen.) Velen. Additionally, a paratype in WU (WU 0103967) was determined by Erben in 1984 as *V. eximia* s.l. and cited by him (Erben 1985). In the herbarium W, another isotype and a specimen most likely belonging to the same paratype gathering cited above (but with the label information on altitude not in agreement with the protologue) are mounted on the same sheet (W 1910-0006006). All above-cited specimens, except the type of *V. zoysii* var. *frondosa* and the hybrid, morphologically fit the description and figures of *V. eximia* given by Erben (1985), who considered *V. pascua* to be a synonym of that species.

Current names: *Viola beckiana* subsp. *pascua* (W. Becker) Trinajstić (Raab-Straube & Henning 2018) or *Viola eximia* Formánek (Dimopoulos & al. 2013).

Viola zoysii var. *frondosa* Velen. in Sitzungsber. Königl. Böh. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 3. 1911 ≡ *Viola frondosa* (Velen.) Velen., Reliq. Mrkvič.: 6. 1922. – Holotype: [Greece or North Macedonia], in pascuis alpinis mt. Porta pag Huma op Ghevgheli, Jun 1909, M. Dimonie 73 (PRC-Phanerogamae 455754).

In the protologue, Velenovský (1911) cited a single gathering by Dimonie deposited in PRC without giving a number. However, a set of at least three vouchers with almost identical labels (same locality and date but differing in the numbers 71, 73 and 74) can be found

in PRC. The voucher labelled no. 71 bears specimens of *Viola orphanidis* (PRC-Phanerogamae 452060). The one labelled no. 74 is the holotype of *V. pascua* (see above). The third voucher bears two labels, one with a determination as “*Viola zoysii* Wulf. var. *latisepala* Vel.”, handwritten by Dimonie and lacking a number, and one with a determination as “*Viola zoysii* Wulf. var. *frondosa* Vel.” (corrected from “var. *latisepala* Vel.”), handwritten by Velenovský and labelled with no. 73; they also slightly differ in the handwritten habitat description (“in graminosis alpinis” vs. “in pascuis alpinis”). But, because the material was kept together in one cover in PRC and was all seen by Velenovský, we can assume that it originated from the same gathering. Also, the specimens clearly fit the description and figures of *V. frondosa* given in Erben (1985). The voucher therefore qualifies as the holotype of *V. zoysii* var. *frondosa*. An additional isotype, again fitting the morphology, is deposited in WU (WU 0103969).

Current name: *Viola frondosa* (Velen.) Velen. (Dimopoulos & al. 2013). In Raab-Straube & Henning (2018) this taxon is cited as *V. frondosa* (Velen.) Hayek in Repert. Spec. Nov. Regni Veg. Beih. 30(1): 511. 1925, apparently neglecting the earlier combination of Velenovský (1922).

Appendix 2: Preliminary list of taxon names described (or partly described) from plant material collected by Mihail Dimonie

Alyssum obtusifolium var. *helioscopioides* Nyár. in Bul. Grăd. Bot. Univ. Cluj 9: 18–20. 1929.

Alyssum punctatum Nyár. in Bul. Grăd. Bot. Univ. Cluj 7: 72–73. 1928.

Anthyllis alpestris subsp. *vitellina* W. Becker in Beih. Bot. Centralbl., Abt. 2, 29: 26. 1912 ≡ *Anthyllis vulneraria* var. *vitellina* (W. Becker) Hayek in Repert. Spec. Nov. Regni Veg. Beih. 30: 890. 1926.

Anthyllis vulneraria var. *vitellina* Velen. in Sitzungsber. Königl. Böh. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 4. 1911 ≡ *Anthyllis vulneraria* subsp. *vitellina* (Velen.) Kuzmanov in Taxon 22: 288. 1973.

Arabis mrkvickana Velen., Reliq. Mrkvič.: 4. 1922.

Astragalus monachorum Širj. in Repert. Spec. Nov. Regni Veg. 47: 242–243. 1939 ≡ *Astragalus thracicus* subsp. *monachorum* (Širj.) Strid, Mount. Fl. Greece 1: 467. 1986 ≡ *Astracantha thracica* subsp. *monachorum* (Širj.) Greuter in Willdenowia 15: 426. 1986.

Campanula pusilla var. *perinica* Velen. in Sitzungsber. Königl. Böh. Ges. Wiss. Prag, Math.-Naturwiss. Cl. 1910(8): 9. 1911.

Cerastium fontanum subsp. *balcanum* Gartner in Repert. Spec. Nov. Regni Veg. Beih. 113: 76. 1939.

Cerastium moesiacum f. *dimoniei* Borza in Bot. Közlem. 12: 57. 1913, ‘*Dimonii*’.

Hesperis verroiana F. Dvořák in Preslia 38: 59. 1966.

Hieracium dimoniei Zahn in Magyar Bot. Lapok 8: 299. 1909.

- Hieracium mrkvickanum*** Velen., Reliq. Mrkvič.: 17. 1922.
- Hypericum dimoniei*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 3. 1911.
- Leontopodium alpinum*** var. ***perinicum*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 8. 1911.
- Myosotis villicaulis*** Domin in Carpatica, Ser. B, 1(2): 296. 1940 [“1939”].
- Salvia officinalis*** var. ***thasia*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 10. 1911.
- Satureja subspicata*** var. ***macedonica*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 11. 1911.
- Saxifraga discolor*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 7. 1911 ≡ *Saxifraga adscendens* subsp. *discolor* (Velen.) Kuzmanov in Jordanov, Fl. Reipubl. Popularis Bulg. 4: 663. 1970.
- Silaum tenellum*** Velen., Reliq. Mrkvič.: 14. 1922 ≡ *Silaum tenellum* (Velen.) M. Hiroe, Umbelliferae World: 773. 1979.
- Silene perinica*** Hayek in Repert. Spec. Nov. Regni Veg. 19: 334. 1924.
- Soldanella dimoniei*** Vierh. in Österr. Bot. Z. 59: 148. 1909 ≡ *Soldanella pindicola* var. *dimoniei* (Vierh.) Markgraf in Notizbl. Königl. Bot. Gart. Berlin 11: 221, 223. 1931.
- Thymus balcanus*** var. ***albiflorus*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 11. 1911.
- Thymus pulvinatus*** var. ***perinicus*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 11. 1911 ≡ *Thymus perinicus* (Velen.) Jalas in Ann. Bot. Fenn. 11: 262. 1974.
- Trichera hybrida*** var. ***pinnatifida*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 9. 1911.
- Verbascum dimoniei*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 10. 1911.
- Vicia lutea*** var. ***bicolor*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 5. 1911.
- Viola pascua*** W. Becker in Bull. Inst. Jard. Bot. Univ. Belgrade 1: 34. 1928 ≡ *Viola beckiana* subsp. *pascua* (W. Becker) Trinajstić in Suppl. Fl. Anal. Jugosl. 3: 7. 1975.
- Viola serresiana*** Erben in Bot. Chron. (Patras) 13: 51. 2000.
- Viola zoysii*** var. ***frondosa*** Velen. in Sitzungsber. Königl. Böhm. Ges. Wiss. Prag., Math.-Naturwiss. Cl. 1910(8): 3. 1911 ≡ *Viola frondosa* (Velen.) Velen., Reliq. Mrkvič.: 6. 1922.

Willdenowia

Open-access online edition bioone.org/journals/willdenowia

Online ISSN 1868-6397 · Print ISSN 0511-9618 · Impact factor 1.156

Published by the Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin

© 2019 The Authors · This open-access article is distributed under the CC BY 4.0 licence

