

Preslia: hundred years of exploring central-European flora and vegetation

Petr Pyšek^{1,2}, Zdeněk Kaplan¹, Milan Chytrý³ & Lubomír Hrouda^{4,5}

¹*Institute of Botany, Academy of Sciences of the Czech Republic, CZ-252 43 Průhonice, Czech Republic, email: pysek@ibot.cas.cz, kaplan@ibot.cas.cz;* ²*Department of Ecology, Faculty of Science, Charles University in Prague, Viničná 7, CZ-128 44 Prague 2, Czech Republic;* ³*Department of Botany and Zoology, Masaryk University, Kotlářská 2, CZ-611 37 Brno, Czech Republic, e-mail: chytry@sci.muni.cz;* ⁴*Czech Botanical Society, Benátská 2, CZ-128 01 Prague 2, Czech Republic, e-mail: hrouda@natur.cuni.cz;* ⁵*Department of Biology and Environmental Studies, Faculty of Education, Charles University in Prague, Magdaleny Rettigové 4, CZ-116 39 Prague 1, Czech Republic*

Introduction

One hundred years ago, in 1914, the first issue of *Preslia* (Fig. 1) was published as a bulletin of the Czech Botanical Society, which was founded two years earlier (Novák 1962, Holub 1982, Hrouda 2012). The issue of 48 pages, alongside reports and news from the botanical community, contained four papers: two focused on mycology (Šimek 1914, Velenovský 1914), one on phytogeography (Kavina 1914) and one on the symbiosis of bacteria with plant leaves (Ambrož 1914). With World War I looming and the political changes to follow, volume 2 only appeared eight years later in 1922 and, like its predecessor, it consisted of a single issue. Between 1922 and 1951, 22 volumes were published but *Preslia* was appearing irregularly, and volumes usually had a single issue. Some issues contained several papers, while others were monothematic with only one study. Volume 7 (1928) was remarkable in including three thorough vegetation studies published under the title “Publié a l’honneur de Cinquième excursion phytogéographique internationale” on the occasion of the 5th International Phytogeographical Excursion (Domin 1928, Podpěra 1928, Zlatník 1928). During this period, *Preslia* also published an extensive bibliography series, *Bibliographia botanica Českoslovaca I–VIII*, which started to appear since volume 3 (1925). The publishing of *Preslia* was effectively discontinued between 1942 and 1952, when only one double issue, representing volumes 22–23, appeared in 1948; it did not, however, contain any scientific papers but instead listed the botanical workplaces in the post-war Czechoslovakia, and the last part of the *Bibliographia botanica Českoslovaca IX*).

The period up to the early 1940s saw the publication of some works in *Preslia* of eminent importance not only for the Czechoslovak botany, such as the complete checklist of the national flora (Domin 1935) or key ecological studies at that time (e.g. Novák 1928, Zlatník 1928), but also for other regions of Europe, the latter referring namely to a five-hundred-pages *Conspectus* of the flora of Montenegro, published during the World War II (Rohlena 1942). Since 1952, *Preslia* has been published quarterly, with assigned journal editors. Up to now, there were four Editors-in-Chief: Bohuslav Fott (1952–1962), Zdeněk Černohorský (1963–1989), Josef Holub (1990–1999), and Petr Pyšek (since 1999).

On the occasion of centenary of *Preslia*, we review in this essay its current state with an emphasis on the last decade, publication focus and core topics, and outline its editorial rationale. For a wider context of the history of national botanical research see Krahulec (2012).

Recent status of *Preslia*

Until 1991, *Preslia* was published by Academia, the publishing house of the Czechoslovak Academy of Sciences and served as a platform for publications of the members of the Czechoslovak Botanical Society. With the opening of the research environment in the country that followed the political change at the end of 1980s, it became open to all authors regardless of the Society membership. In 1992 the publisher was the Czechoslovak Botanical Society and since 1993 when Czechoslovakia split, the journal has been published by the Czech Botanical Society. *Preslia* was traditionally a multilingual journal with papers published in Czech, Slovak, German, English and French, but the 1990s saw a gradual change in its language profile, with English papers acquiring increasingly more space.

A major change in the journal's profile and international status came in 2003 when *Preslia* was accepted by Thomson-Reuters ISI for listing on the Web of Science, and with the first impact factor of 1.545 received for 2005. The impact factor gradually increased and since 2009 it keeps over 2.5. The most recent 2012 figure of 2.833 ranked *Preslia* as 37th among 197 journals in the Plant Sciences category. This places *Preslia* among leading European journals focused on field botany.

The listing on WoS was associated with other changes in the journal's profile. *Preslia* continues to publish original research papers on plant systematics, phytogeography, ecology and vegetation science of vascular and non-vascular plants, but since 2004 its geographical profile has been delimited to papers dealing with a wider area of central Europe (with the exception of special issues that are composed for a specific topic). The geographical scope roughly corresponds to that of *The World Factbook* (2009), *Encyclopaedia Britannica* and *Brockhaus Enzyklopädie* (see http://en.wikipedia.org/wiki/Central_Europe), including the Czech Republic, Austria, Germany, Hungary, Liechtenstein, Poland, Slovakia, Slovenia and Switzerland, and occasionally also neighbouring countries or their parts, such as non-Mediterranean Croatia, Romanian Transylvania, Serbia and the Carpathian part of Ukraine. Pan-European studies and papers of global importance are also published.

In 2008, papers started to be published exclusively in English, and since 2010 (volume 82), authors are offered an opportunity to have their papers released on the journal's web page (www.preslia.cz) as open access. Free pdfs of papers published in 2003–2009 (volumes 75–81) are available for download.

Datasets of national significance: mapping the state of flora and vegetation of the Czech Republic

One role the journal has always played in the past (e.g. Domin 1935, Holub et al. 1979, Moravec et al. 1983, Váňa 1993, 1995) but that became more pronounced in the 2000s, is the focus on nationally important datasets. These have traditionally included Red Lists of vascular plants (Holub 2000, Holub & Procházka 2000, Grulich 2012), bryophytes

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Fig. 1. – Cover of the first issue of Preslia, published in 1914 as a bulletin of the Czech Botanical Society.

(Kučera & Váňa 2003, Kučera et al. 2012), and lichens (Liška et al. 2008), but major achievements have been made recently by publishing the complete checklist of vascular plant species of the Czech Republic (Danihelka et al. 2012), catalogues of alien plants not only for the Czech Republic (Pyšek et al. 2002, 2012b), but also for Slovakia (Medvecká et al. 2012), comprehensive accounts on the flora and phytogeography of the Czech Republic (Kaplan 2012), and its vegetation (Chytrý 2012), habitat species pools (Sádlo et al. 2007) and clonal growth diversity (Klimešová & Klimeš 2008).

Core topics in current research

In the last decade, *Preslia* continued publishing a wide range of topics from various disciplines of the field of botany but several lines of research that have been profiled as core topics need to be highlighted, because these brought the journal international recognition.

Vegetation science

Vegetation studies have traditionally found *Preslia* to be a suitable publication venue since the 1920s (e.g. Domin 1928, Zlatník 1928). Over the last two decades, the mainstream of vegetation survey research shifted from descriptive studies based on local datasets to systematic analyses of large databases of vegetation plots (Chytrý & Rafajová 2003, Schaminée et al. 2009) and exploration of large-scale vegetation patterns, both at the national scale of the Czech Republic (e.g. Kočí 2001, Knollová & Chytrý 2004, Kropáč 2006, Douda 2008) or other countries (Roleček 2005, Šilc & Čarni 2007, Illyés et al. 2009) and across broader geographical ranges including several countries (e.g. Botta-Dukát et al. 2005, Dúbravková et al. 2010, Rozbrojová et al. 2010, Purger et al. 2014). Some of the recent vegetation studies also used or discussed novel methodological approaches (e.g. Chytrý 2000, Lososová 2004, Botta-Dukát et al. 2005, Roleček 2007).

Invasion ecology

Research in plant invasions has had a strong tradition in the Czech botany for a long time due to the interest in plants of human-made habitats (see Pyšek & Prach 2003, Pyšek et al. 2002 for overviews). In the last decades, *Preslia* became an important vehicle for pursuing this kind of research. Besides publishing reports on individual alien species new for the country (e.g. Kaplan & Řehořek 1998, Dančák 2002) or the whole of Europe (e.g. Řepka et al. 1997, Petřík 2003), the systematic research yielded publication of the first complete catalogue of alien species in the Czech Republic (Pyšek et al. 2002), which was recently updated (Pyšek et al. 2012b) using the standard classification criteria of alien plants (Blackburn et al. 2011) and followed by a comprehensive assessment of the state of the art of plant invasions in the country (Pyšek et al. 2012a). Emphasis on occurrence of alien species in habitats yielded a detailed knowledge of the level of invasion of Czech habitats (Chytrý et al. 2005) and the national map of plant invasion risk (Chytrý et al. 2009). Concerning wider geographic regions, *Preslia* published a checklist of alien plants in Slovakia (Medvecká et al. 2012) and an account of alien flora of Europe (Lambdon et al. 2008).

Other topics of plant invasions recently addressed in *Preslia* include the role of species traits in invasiveness (e.g. Kubešová et al. 2010, Moravcová et al. 2010, Gioria et al. 2012),

habitat invasibility (Kowarik et al. 2013), testing of invasion theories (Palmer et al. 2006, Stohlgren et al. 2006), case studies of major European invasive species (e.g. Perglová et al. 2006) and their invasion dynamics (Follak et al. 2013). A specific line of plant invasion research represents the exploration of the role of native central-European species as aliens in other parts of the world (Phillips et al. 2010).

Plant ecology

Besides numerous studies on various aspects of the ecology of individual species and on traditional topics of plant community ecology such as competition (Janeček et al. 2007, Koutecká & Lepš 2011), *Preslia* provides space for publishing papers on general ecological issues. These are represented by studies on diversity maintenance, functional aspects of diversity and mechanisms of community assembly (e.g. Rejmánek et al. 2004, Lepš et al. 2006, Ricotta & Burrascano 2008, Schamp et al. 2011, Klaus et al. 2013), including papers focusing on determinants of plant diversity of habitats important from both ecological and nature conservation point of view (Hájková et al. 2011, Merunková et al. 2012). Studies on changes in plant species diversity over time (e.g. Erschbamer et al. 2011) and vegetation succession and community dynamics (e.g. Prach & Řehouňková 2006, Török et al. 2008, Konvalinková & Prach 2010, Trnková et al. 2010) represent another systematically explored area of plant ecology in *Preslia*.

Taxonomy and phytogeography

Over the last decades *Preslia* became a major publication venue for modern taxonomic research on apomictic plants such as *Pilosella* (e.g. Krahulec et al. 2004, 2008, 2011, Šingliarová & Mráz 2009, Křišťálová et al. 2010), *Rubus* (e.g. Trávníček & Zázvorka 2005, Lepší & Lepší 2009, Trávníček & Žíla 2011, Király et al. 2013), *Sorbus* (Lepší et al. 2009, 2013a, b, Velebil 2012, Vít et al. 2012) and *Taraxacum* (e.g. Trávníček et al. 2008, Kirschner & Štěpánek 2011, Štěpánek et al. 2011). These studies usually represent modern taxonomic revisions and often yield descriptions of new species, some of them endemic to the Czech Republic and neighbouring areas, with implications for their ecology (Lepší & Lepší 2009). They often address, by using molecular and cytogenetic methods (Krahulcová & Rotreklová 2010), hybridization mechanisms, reproduction modes and their evolutionary implications (e.g. Krahulec et al. 2011).

Application of modern approaches such as molecular analyses, flow cytometry or geometric morphometrics helped to refine taxonomy also in sexually reproducing plants. These are particularly important in biosystematic studies of critical and taxonomically difficult groups (e.g. Ekrt et al. 2009, Kaplan & Fehrer 2009, Kaplan 2010, Olšavská et al. 2011, Dančák et al. 2012, Koutecký et al. 2012), including rare, often endemic, species of concern for nature conservation (e.g. Krahulec 2006, Štěpánková 2008, Hoták et al. 2013). Some of these studies shed light on traditional myths of central-European botany (Rooks et al. 2011, Letz et al. 2012, Kučera et al. 2013, Lepší et al. 2013b).

Karyology is another topic for which *Preslia* has become long recognized. Traditionally represented are studies providing overviews of chromosome numbers (e.g. Krahulcová 2003, Rotreklová et al. 2011, Krahulcová et al. 2013), in some cases used for taxonomic and evolutionary implications (Kaplan et al. 2013). This field became recently accompanied by modern karyological research using flow cytometry (Suda et al. 2010) that

allowed to address general questions on the role of genome size not only in vascular plants (Šmarda & Bureš 2010) but also in other groups such as bryophytes (Temsch et al. 2010).

Other fields

Finally, research in some other fields traditionally makes important contribution to the *Preslia*'s profile. This concerns namely algology (e.g. Neustupa & Šťastný 2006, Pouličková 2008, Hašler et al. 2011, Kováčik et al. 2011) and palaeobotany (e.g. Pokorný 2005, Jankovská & Pokorný 2008, Kuneš et al. 2009), where natural-history insights are often being combined with application of modern methods.

Special issues

Since 2000, eight special issues appeared in *Preslia*; until mid-2000s these were assembled papers dedicated to the memory of distinguished personalities of Czech botany, Josef Holub (Pyšek et al. 2000), Slavomil Hejný (Pyšek & Kaplan 2002), Emil Hadač (Pyšek & Kaplan 2004) and Leoš Klimeš (Klimešová & Pyšek 2011). More recently, special issues addressed specific topics, such as plant invasions (Pyšek et al. 2006), the use of flow cytometry in botanical research (Suda et al. 2010), clonal plants (Klimešová & Pyšek 2011), and history, ecology and restoration of oligotrophic wetlands (Hájek & Pyšek 2013). In 2012, there was a special issue published on the occasion of the centenary of the Czech Botanical Society, which summarized the state of the art of botanical research in the Czech Republic (Chytrý et al. 2012). A specific feature of the special issues, waiving the geographical restriction to central Europe, allows for comprehensive exploration of the specific topics and achieving a higher level of generalization (e.g. Palmer 2006, Richardson 2006, de Bello et al. 2011, Jónsdóttir 2011).

Editorial outlook

While *Preslia* continues to publish any important contribution on plant systematics, phytogeography, ecology and vegetation science from central Europe, the topics highlighted above have been raising systematic attention of botanists working in this region and became a kind of the journal's flagship. In terms of editorial policy, *Preslia* will continue to put emphasis on insightful elaboration of the topics addressed, such as thorough taxonomic and phytogeographic treatments, supported by the knowledge of mechanisms generating variation patterns and their evolutionary implications, or, in ecology and vegetation science, robust analyses of solid data sets allowing for generalizations over time and space.

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References

- Ambrož A. (1914): Symbiosa bakterií s listy zelených rostlin [Symbiosis of bacteria with leaves of green plants]. – Preslia 1: 31–40.
- Blackburn T. M., Pyšek P., Bacher S., Carlton J. T., Duncan R. P., Jarošík V., Wilson J. R. U. & Richardson D. M. (2011): A proposed unified framework for biological invasions. – Trends Ecol. Evol. 26: 333–339.
- Botta-Dukát Z., Chytrý M., Hájková P. & Havlová M. (2005): Vegetation of lowland wet meadows along a climatic continentality gradient in Central Europe. – Preslia 77: 89–111.
- Chytrý M. (2000): Formalizované přístupy k fytoocenologické klasifikaci vegetace [Formalized approaches to phytosociological vegetation classification]. – Preslia 72: 1–29.
- Chytrý M. (2012): Vegetation of the Czech Republic: diversity, ecology, history and dynamics. – Preslia 84: 427–504.
- Chytrý M., Pyšek P., Kaplan Z. & Danihelka J. (2012): Flora and vegetation of the Czech Republic: introduction to special issue dedicated to the centenary of the Czech Botanical Society. – Preslia 84: 393–396.
- Chytrý M., Pyšek P., Tichý L., Knollová I. & Danihelka J. (2005): Invasions by alien plants in the Czech Republic: a quantitative assessment across habitats. – Preslia 77: 339–354.
- Chytrý M. & Rafajová M. (2003): Czech National Phytosociological Database: basic statistics of the available vegetation-plot data. – Preslia 75: 1–15.
- Chytrý M., Wild J., Pyšek P., Tichý L., Danihelka J. & Knollová I. (2009): Maps of the level of invasion of the Czech Republic by alien plants. – Preslia 81: 187–207.
- Dančák M. (2002): *Glyceria striata*: a new alien grass species in the flora of the Czech Republic. – Preslia 74: 281–289.
- Dančák M., Duchoslav M. & Trávníček B. (2012): Taxonomy and cytogeography of the *Molinia caerulea* complex in central Europe. – Preslia 84: 351–374.
- Danihelka J., Chrtek J. Jr. & Kaplan Z. (2012): Checklist of vascular plants of the Czech Republic. – Preslia 84: 647–811.
- de Bello F., Doležal J., Ricotta C. & Klimešová J. (2011): Plant clonal traits, coexistence and turnover in East Ladakh, Trans-Himalaya. – Preslia 83: 315–327.
- Domin K. (1928): The plant associations of the valley of Radotín. – Preslia 7: 3–68.
- Domin K. (1935): Plantarum Čechoslovakiae enumeratio. – Preslia 13–15: 1–305.
- Douda J. (2008): Formalized classification of the vegetation of alder carr and floodplain forests in the Czech Republic. – Preslia 80: 199–224.
- Dúbravková D., Chytrý M., Willner W., Illyés E., Janišová M. & Kállayné Szerényi J. (2010): Dry grasslands in the Western Carpathians and the northern Pannonian Basin: a numerical classification. – Preslia 82: 165–221.
- Ekrt L., Trávníček P., Jarolímová V., Vít P. & Urfus T. (2009): Genome size and morphology of the *Dryopteris affinis* group in Central Europe. – Preslia 81: 261–280.
- Erschbamer B., Unterluggauer P., Winkler E. & Mallaun M. (2011): Changes in plant species diversity revealed by long-term monitoring on mountain summits in the Dolomites (northern Italy). – Preslia 83: 387–401.
- Follak S., Dullinger S., Kleinbauer I., Moser D. & Essl F. (2013): Invasion dynamics of three allergenic invasive *Asteraceae* (*Ambrosia trifida*, *Artemisia annua*, *Iva xanthiifolia*) in central and eastern Europe. – Preslia 85: 41–61.
- Gioria M., Pyšek P. & Moravcová L. (2012): Soil seed banks in plant invasions: promoting species invasiveness and long-term impact on plant community dynamics. – Preslia 84: 327–350.
- Grulich V. (2012): Red List of vascular plants of the Czech Republic: 3rd edition. – Preslia 84: 631–645.
- Hájek M. & Pyšek P. (2013): History, recent variability and restoration of oligotrophic wetlands: editorial. – Preslia 85: 209–214.
- Hájková P., Roleček J., Hájek M., Horsák M., Fajmon K., Polák M. & Jamrichová E. (2011): Prehistoric origin of the extremely species-rich semi-dry grasslands in the Bílé Karpaty Mts (Czech Republic and Slovakia). – Preslia 83: 185–204.
- Hašler P., Dvořák P., Ondřej V., Kítner M., Hloušková P. & Pouličková A. (2011): The importance of the polyphasic approach in a comparative study of *Nodularia* (*Nostocales*, *Cyanobacteria*). – Preslia 83: 167–182.
- Holub J. (ed.) (1982): 70 let Československé botanické společnosti [Seventy years of the Czechoslovak Botanical Society]. – Zpr. Čs. Bot. Společ., suppl., p. 1–146.
- Holub J. (2000): Černá listina vymizelých taxonů květeny České republiky a Slovenské republiky [The black list of taxa disappeared from the floras of the Czech and Slovak Republics]. – Preslia 72: 167–186.
- Holub J. & Procházka F. (2000): Red list of vascular plants of the Czech Republic–2000. – Preslia 72: 187–230.

- Holub J., Procházka F. & Čeřovský J. (1979): Seznam vyhynulých, endemických a ohrožených taxonů vyšších rostlin květeny ČSR (1. verze) [List of extinct, endemic and threatened taxa of vascular plants of the flora of the Czech Republic (1st version)]. – *Preslia* 51: 213–237.
- Hoták Z., Štěpánek J., Plačková I. & Jarolímová V. (2013): *Poa riphaea*, an endangered stenoendemic species in the Hrubý Jeseník Mts (Eastern Sudetes). – *Preslia* 85: 81–96.
- Hrouda L. (2012): 100 let České botanické společnosti [Hundred years of the Czech Botanical Society]. – *Živa* 60: 150–154.
- Illyés E., Bauer N. & Botta-Dukát Z. (2009): Classification of semi-dry grassland vegetation in Hungary. – *Preslia* 81: 239–260.
- Janeček Š., Janečková P. & Lepš J. (2007): Effect of competition and soil quality on root topology of the perennial grass *Molinia caerulea*. – *Preslia* 79: 23–32.
- Jankovská V. & Pokorný P. (2008): Forest vegetation of the last full-glacial period in the Western Carpathians (Slovakia and Czech Republic). – *Preslia* 80: 307–324.
- Jónsdóttir I. S. (2011): Diversity of plant life histories in the Arctic. – *Preslia* 83: 281–300.
- Kaplan Z. (2010): Hybridization of *Potamogeton* species in the Czech Republic: diversity, distribution, temporal trends and habitat preferences. – *Preslia* 82: 261–287.
- Kaplan Z. (2012): Flora and phytogeography of the Czech Republic. – *Preslia* 84: 505–573.
- Kaplan Z. & Fehrer J. (2009): An orphaned clone of *Potamogeton xschreberi* in the Czech Republic. – *Preslia* 81: 387–397.
- Kaplan Z., Jarolímová V. & Fehrer J. (2013): Revision of chromosome numbers of *Potamogetonaceae*: a new basis for taxonomic and evolutionary implications. – *Preslia* 85: 421–482.
- Kaplan Z. & Řehořek V. (1998): *Galium parisiense*: a new alien species for the Czech Republic. – *Preslia* 70: 51–56.
- Kavina K. (1914): Fytogeografický nástin Krkonoš [Phytogeographical outline of the Krkonoše Mts]. – *Preslia* 1: 12–31.
- Király G., Trávníček B. & Žíla V. (2013): Revision of *Rubus* ser. *Micantes* occurring in Hungary and re-evaluation of the neglected *Rubus balatonicus*. – *Preslia* 85: 505–526.
- Kirschner J. & Štěpánek J. (2011): Dandelions in Central Asia: a revision of *Taraxacum* section *Stenoloba*. – *Preslia* 83: 491–512.
- Klaus V. H., Hölzel N., Boch S., Müller J., Socher S. A., Prati D., Fischer M. & Kleinebecker T. (2013): Direct and indirect associations between plant species richness and productivity in grasslands: regional differences preclude simple generalization of productivity-biodiversity relationships. – *Preslia* 85: 97–112.
- Klimešová J. & Klimeš L. (2008): Clonal growth diversity and bud banks of plants in the Czech flora: an evaluation using the CLO-PLA3 database. – *Preslia* 80: 255–275.
- Klimešová J. & Pyšek P. (2011): Current topics in clonal plants research: editorial. – *Preslia* 83: 275–279.
- Knollová I. & Chytrý M. (2004): Oak-hornbeam forests of the Czech Republic: geographical and ecological approaches to vegetation classification. – *Preslia* 76: 291–311.
- Kočí M. (2001): Subalpine tall-forb vegetation (*Mulgedio-Aconitetea*) in the Czech Republic: syntaxonomical revision. – *Preslia* 73: 289–331.
- Konvalinková P. & Prach K. (2010): Spontaneous succession of vegetation in mined peatlands: a multi-site study. – *Preslia* 82: 423–435.
- Koutecká E. & Lepš J. (2011): Performance of three closely related *Myosotis* species in an experiment in which substrate quality and competition were manipulated. – *Preslia* 83: 403–420.
- Koutecký P., Tuleu G., Baďurová T., Košnar J., Štech M. & Těšitel J. (2012): Distribution of cytotypes and seasonal variation in the *Odontites vernus* group in central Europe. – *Preslia* 84: 887–904.
- Kováčik L., Jezberová J., Komárková J., Kopecký J. & Komárek J. (2011): Ecological characteristics and polyphasic taxonomic classification of stable pigment-types of the genus *Chroococcus* (*Cyanobacteria*). – *Preslia* 83: 145–166.
- Kowarik I., von der Lippe M. & Cierjacks A. (2013): Prevalence of alien versus native species of woody plants in Berlin differs between habitats and at different scales. – *Preslia* 85: 113–132.
- Krahulcová A. (2003): Chromosome numbers in selected monocotyledons (Czech Republic, Hungary, and Slovakia). – *Preslia* 75: 97–113.
- Krahulcová A. & Rotreková O. (2010): Use of flow cytometry in research on apomictic plants. – *Preslia* 82: 23–39.
- Krahulcová A., Trávníček B. & Šarhanová P. (2013): Karyological variation in the genus *Rubus*, subgenus *Rubus*: new data from the Czech Republic and synthesis of the current knowledge of European species. – *Preslia* 85: 19–39.

- Krahulec F. (2006): Species of vascular plants endemic to the Krkonoše Mts (Western Sudetes). – *Preslia* 78: 503–516.
- Krahulec F. (2012): History of the studies on the flora and vegetation in the Czech Republic. – *Preslia* 84: 397–426.
- Krahulec F., Krahulcová A., Fehrer J., Bräutigam S., Plačková I. & Chrtek J. jun. (2004): The Sudetic group of *Hieracium* subgen. *Pilosella* from the Krkonoše Mts: a synthetic view. – *Preslia* 76: 223–243.
- Krahulec F., Krahulcová A., Fehrer J., Bräutigam S. & Schuhwerk F. (2008): The structure of the agamic complex of *Hieracium* subgen. *Pilosella* in the Šumava Mts and its comparison with other regions in Central Europe. – *Preslia* 80: 1–26.
- Krahulec F., Krahulcová A., Rosenbaumová R. & Plačková I. (2011): Production of polyhaploids by facultatively apomictic *Pilosella* can result in formation of new genotypes via genome doubling. – *Preslia* 83: 471–490.
- Křišťálová V., Chrtek J., Krahulcová A., Bräutigam S. & Krahulec F. (2010): Populations of species of *Pilosella* in ruderal habitats in the city of Prague: frequency, chromosome numbers and mode of reproduction. – *Preslia* 82: 437–464.
- Kropáč Z. (2006): Segetal vegetation in the Czech Republic: synthesis and syntaxonomical revision. – *Preslia* 78: 123–209.
- Kubešová M., Moravcová L., Suda J., Jarošík V. & Pyšek P. (2010): Naturalized plants have smaller genomes than their non-invading relatives: a flow cytometric analysis of the Czech alien flora. – *Preslia* 82: 81–96.
- Kučera J., Turis P., Zozomová-Lihová J. & Slovák M. (2013): *Cyclamen fatrense*, myth or true Western Carpathian endemic? Genetic and morphological evidence. – *Preslia* 85: 133–158.
- Kučera J. & Váňa J. (2003): Check and Red List of bryophytes of the Czech Republic. – *Preslia* 75: 193–222.
- Kučera J., Váňa J. & Hradílek Z. (2012): Bryophyte flora of the Czech Republic: updated checklist and Red List and a brief analysis. – *Preslia* 84: 813–850.
- Kuneš P., Abraham V., Kovářik O., Kopecký M. & PALYCYZ contributors (2009): Czech Quaternary Palynological Database – PALYCYZ: review and basic statistics of the data. – *Preslia* 81: 209–238.
- Lambdon P. W., Pyšek P., Basnou C., Hejda M., Arianoutsou M., Essl F., Jarošík V., Pergl J., Winter M., Anastasiu P., Andriopoulos P., Bazos I., Brundu G., Celesti-Grappo L., Chassot P., Delipetrou P., Josefsson M., Kark S., Klotz S., Kokkoris Y., Kühn I., Marchante H., Perglová I., Pino J., Vilà M., Zikos A., Roy D. & Hulme P. E. (2008): Alien flora of Europe: species diversity, temporal trends, geographical patterns and research needs. – *Preslia* 80: 101–149.
- Lepš J., de Bello F., Lavorel S. & Berman S. (2006): Quantifying and interpreting functional diversity of natural communities: practical considerations matter. – *Preslia* 78: 481–501.
- Lepší M. & Lepší P. (2009): *Rubus silvae-norticae*, a new species from Bohemia, Austria and Bavaria and the significance of brambles for regional migrations. – *Preslia* 81: 43–62.
- Lepší M., Lepší P., Sádlo J., Kouřecký P., Vít P. & Petřík P. (2013a): *Sorbus pauca* species nova, the first endemic species of the *Sorbus hybrida* group for the Czech Republic. – *Preslia* 85: 63–80.
- Lepší M., Lepší P. & Vít P. (2013b): *Sorbus querneae*: taxonomic confusion caused by the naturalization of an alien species, *Sorbus mougeotii*. – *Preslia* 85: 159–178.
- Lepší M., Vít P., Lepší P., Boublík K. & Kolář F. (2009): *Sorbus portae-bohemicae* and *Sorbus albensis*, two new endemic apomictic species recognized based on a revision of *Sorbus bohemica*. – *Preslia* 81: 63–89.
- Letz D. R., Dančák M., Danihelka J. & Šarhanová P. (2012): Taxonomy and distribution of *Cerastium pumilum* and *C. glutinosum* in Central Europe. – *Preslia* 84: 33–69.
- Liška J., Palice Z. & Slavíková Š. (2008): Checklist and Red List of lichens of the Czech Republic. – *Preslia* 80: 151–182.
- Lososová Z. (2004): Weed vegetation in southern Moravia (Czech Republic): a formalized phytosociological classification. – *Preslia* 76: 65–85.
- Medvecká J., Kliment J., Májejková J., Halada L., Zaliberová M., Gojdičová E., Feráková V. & Jarolímek I. (2012): Inventory of the alien flora of Slovakia. – *Preslia* 84: 257–309.
- Merunková K., Preislerová Z. & Chytrý M. (2012): White Carpathian grasslands: can local ecological factors explain their extraordinary species richness? – *Preslia* 84: 311–325.
- Moravcová L., Pyšek P., Jarošík V., Havlíčková V. & Zákravský P. (2010): Reproductive characteristics of neophytes in the Czech Republic: traits of invasive and non-invasive species. – *Preslia* 82: 365–390.
- Moravec J., Balátová-Tuláčková E., Hadač E., Hejny S., Jeník J., Kolbek J., Kopecký K., Neuhäusl R., Rybníček K. & Vicherek J. (1983): Přehled vyšších vegetačních jednotek České socialistické republiky [Overview of higher vegetation units of the Czech Socialist Republic]. – *Preslia* 55: 97–122.
- Neustupa J. & Šťastný J. (2006): The geometric morphometric study of Central European species of the genus *Micrasterias* (*Zygnematophyceae*, *Viridiplantae*). – *Preslia* 78: 253–263.

- Novák F. A. (1928): Quelques remarques relatives au probleme de la vegetation sur les terrains serpentiniques. – Preslia 7: 42–71.
- Novák F. A. (1962): Padesát let Československé botanické společnosti [Fifty years of the Czechoslovak Botanical Society]. – Preslia 34: 1–30.
- Olšavská K., Perný M., Kučera J. & Hodálová I. (2011): Biosystematic study of the *Cyanus triumfetti* group in Central Europe. – Preslia 83: 59–98.
- Palmer M. W. (2006): Scale dependence of native and alien species richness in North American floras. – Preslia 78: 427–436.
- Perglová I., Pergl J. & Pyšek P. (2006): Flowering phenology and reproductive effort of the invasive alien plant *Heracleum mantegazzianum*. – Preslia 78: 265–285.
- Petřík P. (2003): *Cyperus eragrostis*: a new alien species for the Czech flora and the history of its invasion of Europe. – Preslia 75: 17–28.
- Phillips M. L., Murray B. R., Pyšek P., Pergl J., Jarošík V., Chytrý M. & Kühn I. (2010): Plants species of the Central European flora as aliens in Australia. – Preslia 82: 465–482.
- Podpěra J. (1928): Steppe und Waldsteppe des Hutberges oberhalb Pouzdřany. – Preslia 7: 153–167.
- Pokorný P. (2005): Role of man in the development of Holocene vegetation in Central Bohemia. – Preslia 77: 113–128.
- Pouličková A. (2008): Morphology, cytology and sexual reproduction in the aerophytic cave diatom *Luticola dismutica* (Bacillariophyceae). – Preslia 80: 87–99.
- Prach K. & Řehouňková K. (2006): Vegetation succession over broad geographical scales: which factors determine the patterns? – Preslia 78: 469–480
- Purger D., Lengyel A., Kevey B., Lendvai G., Horváth A., Tomić Z. & Csiky J. (2014): Numerical classification of oak forests on loess in Hungary, Croatia and Serbia. – Preslia 86: 47–66.
- Pyšek P., Chytrý M., Pergl J., Sádlo J. & Wild J. (2012a): Plant invasions in the Czech Republic: current state, introduction dynamics, invasive species and invaded habitats. – Preslia 84: 576–630.
- Pyšek P., Danihelka J., Sádlo J., Chrtek J. Jr., Chytrý M., Jarošík V., Kaplan Z., Krahulec F., Moravcová L., Pergl J., Štajerová K. & Tichý L. (2012b): Catalogue of alien plants of the Czech Republic (2nd edition): checklist update, taxonomic diversity and invasion patterns. – Preslia 84: 155–255.
- Pyšek P. & Kaplan Z. (eds) (2002): Botanické studie věnované památce Slavomila Hejného [Botanical studies dedicated to the memory of Slavomil Hejný]. – Preslia 74: 297–434.
- Pyšek P. & Kaplan Z. (eds) (2004): Botanické studie věnované památce Emila Hadače [Botanical studies dedicated to the memory of Emil Hadač]. – Preslia 76: 193–290.
- Pyšek P., Kaplan Z. & Mandák B. (eds) (2000): Botanické studie věnované památce Josefa Holuba [Botanical studies dedicated to the memory of Josef Holub]. – Preslia 72: 97–528.
- Pyšek P., Kaplan Z. & Richardson D. M. (eds) (2006): Ecological studies dedicated to Marcel Rejmánek. – Preslia 78: 361–516.
- Pyšek P. & Prach K. (2003): Research into plant invasions in a cross-roads region: history and focus. – Biol. Inv. 5: 337–348.
- Pyšek P., Sádlo J. & Mandák B. (2002): Catalogue of alien plants of the Czech Republic. – Preslia 74: 97–186.
- Rejmánek M., Rejmánková E. & Holzner W. (2004): Species diversity of plant communities on calcareous screes: the role of intermediate disturbance. – Preslia 76: 207–222.
- Řepka R., Lustyk P. & Trávníček B. (1997): *Carex scoparia*: a new alien sedge in Europe. – Preslia 69: 161–168.
- Richardson D. M. (2006): *Pinus*: a model group for unlocking the secrets of alien plant invasions? – Preslia 78: 375–388.
- Ricotta C. & Burrascano S. (2008): Beta diversity for functional ecology. – Preslia 80: 61–71.
- Rohlena J. (1942): Conspectus florae Montenegrinae. – Preslia 20–21: 1–506.
- Roleček J. (2005): Vegetation types of dry-mesic oak forests in Slovakia. – Preslia 77: 241–261.
- Roleček J. (2007): Formalized classification of thermophilous oak forests in the Czech Republic: what brings the Cocktail method? – Preslia 79: 1–21.
- Rooks F., Jarolímová V., Závěská Drábková L. & Kirschnner J. (2011): The elusive *Juncus minutulus*: a failure to separate tetra- and hexaploid individuals of the *Juncus bufonius* complex in a morphometric comparison of cytometrically defined groups. – Preslia 83: 565–589.
- Rotreklová O., Bureš P., Řepka R., Grulich V., Šmarda P., Hralová I., Zedek F. & Koutecký T. (2011): Chromosome numbers of *Carex*. – Preslia 83: 25–58.
- Rozbrojová Z., Hájek M. & Hájek O. (2010): Vegetation diversity of mesic meadows and pastures in the West Carpathians. – Preslia 82: 307–332.

- Sádló J., Chytrý M. & Pyšek P. (2007): Regional species pools of vascular plants in habitats of the Czech Republic. – *Preslia* 79: 303–321.
- Schaminée J. H. J., Hennekens S. M., Chytrý M. & Rodwell J. S. (2009): Vegetation-plot data and databases in Europe: an overview. – *Preslia* 81: 173–185.
- Schamp B., Hettenbergerová E. & Hájek M. (2011): Testing community assembly predictions for nominal and continuous plant traits in species-rich grasslands. – *Preslia* 83: 329–346.
- Šilc U. & Čarni A. (2007): Formalized classification of the weed vegetation of arable land in Slovenia. – *Preslia* 79: 283–302.
- Šimek A. (1914): K morfologii a biologii chorošů [On the morphology and biology of polyporous fungi]. – *Preslia* 1: 40–46.
- Šingliarová B. & Mráz P. (2009): A taxonomic revision of the *Pilosella alpicola* group in the Carpathians. – *Preslia* 81: 23–41.
- Šmarda P. & Bureš P. (2010): Understanding intraspecific variation in genome size in plants. – *Preslia* 82: 41–61.
- Štěpánek J., Kirschner J., Jarolímová V. & Kirschnerová L. (2011): *Taraxacum nigricans*, *T. alpestre* and their allies in the *Taraxacum* sect. *Alpestris*: taxonomy, geography and conservation status. – *Preslia* 83: 537–564.
- Štěpánková J. (2008): *Carex derelicta*, a new species from the Krkonoše Mountains (Czech Republic). – *Preslia* 80: 389–397.
- Stohlgren T., Jarnevich C., Chong G. W. & Evangelista P. H. (2006): Scale and plant invasions: a theory of biotic acceptance. – *Preslia* 78: 405–426.
- Suda J., Pyšek P. & Kaplan Z. (eds) (2010): Flow cytometry in botanical research. – *Preslia* 82: 1–164.
- The World Factbook (2009): Field listing: location. – Central Intelligence Agency, Washington, DC.
- Temsch E. M., Greilhuber J. & Krisai R. (2010): Genome size in liverworts. – *Preslia* 82: 63–80.
- Török P., Matus G., Papp M. & Tóthmérész B. (2008): Secondary succession in overgrazed Pannonian sandy grasslands. – *Preslia* 80: 73–85.
- Trávníček B., Kirschner J. & Štěpánek J. (2008): Five new species of *Taraxacum* sect. *Ruderalia* from Central Europe and Denmark. – *Preslia* 80: 27–59.
- Trávníček B. & Zázvorka J. (2005): Taxonomy of *Rubus* ser. *Discolores* in the Czech Republic and adjacent regions. – *Preslia* 77: 1–88.
- Trávníček B. & Žila V. (2011): *Rubus silvae-bohemicae*: a new species of bramble from Bohemia and Bavaria. – *Preslia* 83: 99–110.
- Trnková R., Řehounková K. & Prach K. (2010): Spontaneous succession of vegetation on acidic bedrock in quarries in the Czech Republic. – *Preslia* 82: 333–343.
- Váňa J. (1993): Předběžný seznam ohrožených mechorostů České republiky. I. Játrovky (*Hepatophyta*) a hlevíky (*Anthocerophyta*) [Preliminary list of threatened bryophytes in the Czech Republic. 1. Liverworts (*Hepaticophyta*) and hornworts (*Anthocerotophyta*)]. – *Preslia* 65: 193–199.
- Váňa J. (1995): Předběžný seznam ohrožených mechorostů České republiky. II. Mechy (*Bryophyta*) [Preliminary list of threatened bryophytes in the Czech Republic. 2. Mosses (*Bryophyta*)]. – *Preslia* 67: 173–180.
- Velebil J. (2012): *Sorbus omissa*, a new endemic hybridogenous species from the lower Vltava river valley. – *Preslia* 84: 375–390.
- Velenovský J. (1914): Vůně hub [The scent of fungi]. – *Preslia* 1: 10–11.
- Vít P., Lepší M. & Lepší P. (2012): There is no diploid apomict among Czech *Sorbus* species: a biosystematic revision of *S. eximia* and discovery of *S. barrandienica*. – *Preslia* 84: 71–96.
- Zlatník A. (1928): Aperçu de la végétation des Krkonoše (Riesengebirge). – *Preslia* 7: 94–152.