



SCIENTIFIC SIGNIFICANCE OF THE BOTANICAL DATA COLLECTED BY JÓSEF JUNDZIŁŁ DURING EXPEDITION FOR PLANT, ANIMAL AND MINERAL STUDY THROUGH LITHUANIA IN 1821

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Abstract. Referring to the published and unpublished historical sources, the significance of botanical data collected by Józef Jundziłł during the expedition in Lithuania in 1821 to the development of plant distribution studies in Lithuania is analysed. Attention is given to the distribution of plant species collected by J. Jundziłł on the present territory of Lithuania, currently rare plants and J. Jundziłł's notes on their distribution. Botanical data are treated as one of the first evidences for the formation of plant distribution studies in Lithuania.

Keywords: 19th century, J. Jundziłł, botany, expedition, plant collection, rare plants.

Introduction

J. Jundziłł was a Professor of Natural Sciences of Vilnius University. His life and scientific activities: studies of natural sciences at the Imperial University of Vilnius in 1812–1815 and abroad: in Halle, Göttingen, Paris, Freiberg and London in 1817–1820; research work at the Imperial University of Vilnius in 1823–1832 and Botanical Garden in 1825–1829 were analyzed by several authors (Bielinski 1903: 168–170; Mowszowicz 1987: 239), and most comprehensively by P. Köhler (2004: 83–117). For the development of botany science in Lithuania is very important an expedition performed by J. Jundziłł in 1821.

In May–September, 1821, J. Jundziłł with assistant J. Krinicki (later professor of mineralogy and zoology at Kharkiv University) went on a scientific trip through the central, western and northern parts of the present day Lithuanian territory, collecting plants, fungi, animals and minerals. The expedition started in Vilnius. Its route passed alongside the biggest rivers of Lithuania, i.e. Neris, Nemunas, Dubysa, Nevėžis, Šventoji, and Venta towards the Baltic Sea, and included Vilnius, Kernavė, Jonava, Ukmergė, Kaunas, Kėdainiai, Vilkija, Ariogala, Raseiniai, Jurbarkas, Tauragė, Švėkšna, Rietavas, Plungė, Kretinga, Palanga, Pape Lake, Kalvarija, Vieksniai, and Žagarė environs. During the expedition, J. Jundziłł wrote a diary. Wherein he described the route of the trip and the plants, insects and soils discovered.

This diary he sent to the Council of the University of Vilnius and to the Ministry of Education of Russian Imperium, to which Vilnius University belonged at that time. The manuscript of this diary has survived and a copy is preserved at the Lithuanian State History Archive. In the following year, 1822, J. Jundził published the diary version in the journal “Pamiętnik Farmaceutyczny Wileński” (1822a: 438–446; 1822b: 574–587).

Authors of many fundamental books about Lithuanian flora have used the materials of J. Jundził's expedition published in the journal “Pamiętnik Farmaceutyczny Wileński”. The expedition itself, time of travel, route, and visited localities are discussed by Hrynewecki (1933: 108–111), Merkys (1960: 54), Galinis (1971: 13), and Köhler (2004: 83–117). Some parts of the diary were also published in the book about Vilnius and Kremenets schools of botany by Grębecka (1998: 141–143).

However, up to now there has been no special work revealing the scientific significance of the botanical data collected by J. Jundził during this expedition for flora distribution studies in Lithuania. Therefore, this paper aims to fill this gap.

My goal was to analyze the present distribution of the plants registered by J. Jundził, and, thereby, to observe the temporal changes in the plant species distribution. Thus to present the significance of botanical data collected during the expedition for the formation of plant distribution studies in Lithuania.

Materials and methods

Materials entitled “O wojażach Magistra Jundziła w przedmiocie botaniki za granica i w kraju” (About the journeys of Master Jundził on the subject of botany abroad and in the native land) (Fig. 1) are preserved at the Lithuanian State History Archive in fund 721, inventory 1, file 101.

These materials include J. Jundził's letters to Professor S. Jundził during his journey for natural history studies in Europe, S. Jundził's application to the Senate of the Imperial University of Vilnius and Ministry of Education to organize a scientific journey in Vilnius province, the agreement of the Ministry of Education to organize such expedition, and the diary which J. Jundził wrote during the journey for collecting natural history objects in Vilnius Governorate (most of the territory of Lithuania belonged to the Russian Imperia in 1795–1915 and was generally called Vilna Governorate).

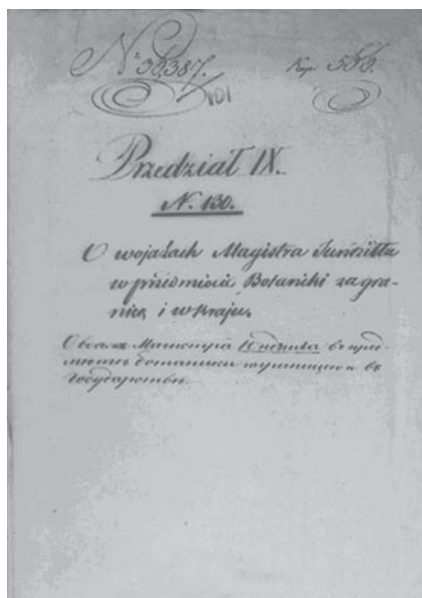


Fig. 1. The title page of J. Jundził's manuscript about the journeys of Master Jundził on the subject of botany abroad and in the native land. LSHA, fund 721, inventory 1, file 101

The last part of the above-mentioned manuscript includes the materials of J. Jundziłł's expedition. The journey materials are composed of 4 reports. They include information about the route, investigated localities, precise data of arrival to the chosen localities and departure, as well as names of the recorded plants, fungi, insects and soils. Information about plants occupies the largest part of registered objects.

Each report was written from different place of Lithuania and at different time. In the end of each report the lists of collected plants are given. The diary is comprised of very concrete facts and enables us to evaluate the scientific significance of the data.

The methods of investigation are descriptive and analytical.

The currently used names of the plants from J. Jundziłł's journey were determined using P. Köhler book "Zielnik Józefa Jundziłła" (1995). This book describes the historical herbarium of J. Jundziłł with plant names after their revision to the present day nomenclature.

Present distribution of J. Jundziłł's collected plants was determined using data of fundamental works about Lithuanian flora (Snarskis 1950; Minkevičius *et al.* 1959–1980; Balevičius *et al.* 1992; Naujalis *et al.* 1995; Laasimer *et al.* 1993; Kuusk *et al.* 1996, 2003; Jukonienė 2003; Rašomavičius *et al.* 2007). Three criteria: frequent, infrequent (meaning a plant is infrequent but distributed throughout the whole territory) and rare were used for determining a plant's frequency.

Natural objects registered by J. Jundziłł during the expedition

As mentioned above, the diary is composed of 4 reports. All of them had supplemental lists of the collected objects (Fig. 2). The first report was written in Kaunas on June 21st. In the supplement, 239 names of plants, 10 of lichens, 8 of fungi, 1 of algae and 64 of insects collected on the way from Vilnius to Kaunas; visiting Ukmergė and Jonava is mentioned. The second report was written in Raseiniai on July 14th. It contains 116 names of plants, 11 of lichens, 2 of algae and 23 of fungi collected on the way from Kaunas to Raseiniai visiting Kėdainiai, Vilkija, and Ariogala. The third report was written in Palanga on August 14. In this supplement J. Jundziłł mentioned 88 plants, 15 of lichens, 3 of algae, 11 of fungi and 44 of insects collected on the way from Raseiniai to Palanga through Jurbarkas, Tauragė, Švėkšna, Plungė, and Kretinga. He wrote the last report in Vilnius on the 5th of September and indicated 48 names of plants, 3 of lichens, 2 of algae, 1 of fungus and 12 of insects collected on the way from Palanga to Riga through Salantai, Kalvarija, Papilė, Žagarė and Jelgava in its supplement. Just a few species of fishes (*Esox belone* and *Squalus pristis*) and common birds called ducks are registered in the third report. Likewise, description of the soils is also poor.

Revision of plant species by J. Jundziłł's expedition and their present distribution in Lithuania

All in all, 585 names of plants are recorded in 4 reports. While comparing the material of J. Jundziłł's herbarium and the names of plants from his manuscript, the names of

plants, which corresponding to the contemporary nomenclature of botany, were ascertained. Among all revised plants in the herbarium 1854 specimens, 231 belong to those collected during the expedition. These 231 specimens are registered in all reports. Most of them (152) are registered in the first report that includes plants collected by J. Jundziŭ on the way from Vilnius to Kaunas. Among them there are 120 specimens of flowering plants (*Magnoliophyta*), 30 specimens of bryophytes (*Bryophyta*), 1 horsetail (*Equisetophyta*) and 1 fern (*Polypodiophyta*). 37 specimens are from the second report, including plants collected on the road from Kaunas to Raseiniai. Among them there are 14 specimens of flowering plants (*Magnoliophyta*), 19 of bryophytes (*Bryophyta*) and 4 of ferns (*Polypodiophyta*). 23 specimens were collected during the third journey on the road Raseiniai–Palanga, including 17 flowering plants (*Magnoliophyta*), 2 ferns (*Polypodiophyta*), 1 clubmoss (*Lycopodiophyta*) and 3 bryophytes (*Bryophyta*). 19 specimens are mentioned in the 4th report, including material collected on the road Palanga–Riga. Among them there are 18 flowering plants (*Magnoliophyta*) and 1 bryophyte (*Bryophyta*).

The largest amount of plants specimens was collected by J. Jundziŭ in the surroundings of Vilnius, Kaunas, Jonava and Palanga.

Then, a comparison of all reviewed plants with the present data of their distribution was performed. After the revision it was determined that 90 % of them are frequent or infrequent and distributed throughout the whole territory of Lithuania.

Rare or presently endangered plant species found by J. Jundziŭ during the expedition and their present distribution in Lithuania

Records of the rare plants found by J. Jundziŭ during the expedition constitute the most interesting part of the information. In the end of the 4th report, which was written in Vilnius on 5 September, J. Jundziŭ indicated: "We found very rare species and species which have never been found before, such as *Callitriche intermedia*, *Circaea alpina*, *Circaea intermedia*, *Calamagrostis schleicheri*, *Koeleria cristata*, *Sesleria caerulea*, *Scirpus caricinus*, *Primula farinosa*, *Salsola kali*, *Chenopodium villosum*, *Ribes alpinum*, *Swertia perennis*, *Lunaria rediviva*, *Alyssum montanum*, *Cakile maritima*, *Dentaria bulbifera*, *Taxus baccata*, *Betula nana*, *Myrica* and many other cryptogams".

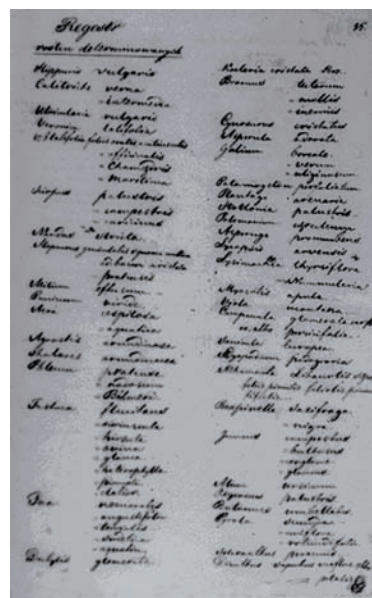


Fig. 2. The supplemental list of the diary with plant registers (LSHA, fund 721, inventory 1, file 101)

Only 8 specimens from this list (*Callitriche intermedia*, *Circaea alpina*, *Salsola kali*, *Swertia perennis*, *Lunaria rediviva*, *Cakile maritima*, *Dentaria bulbifera*, *Betula nana*) have survived in the herbarium. Species *Salsola kali*, *Swertia perennis*, *Lunaria rediviva*, *Dentaria bulbifera* and *Betula nana* are rare and 4 of them (*Swertia perennis*, *Lunaria rediviva*, *Dentaria bulbifera*, and *Betula nana*) are included into the Red Data Book of Lithuania. Yet, the species mentioned by J. Jundziłł as rare: *Callitriche intermedia*, *Circaea alpina*, and *Cakile maritima* are frequent in Lithuanian flora. Among the 231 specimens in the revised herbarium data, presently 27 plant species are rare or endangered (Fig. 3). 14 of them are included into the list of protected species of Lithuania and into the Red Data Book of Lithuania. Some species (*Taxus baccata*, *Carex stenophylla*, *Bry-*

Plant name by J. Jundziłł and locality (1821) – Plant name after revision to the present day nomenclature (Köhler, 1995) – included into the Red Data Book of Lithuania (RDBL) or rare
<i>Scirpus campestris</i> (Kernavė) – <i>Eleocharis quinqueflora</i> (F. X. Hartmann) O. Schwarz – rare <i>Aira aquatica</i> (Jonava) – <i>Catabrosa aquatica</i> (L.) P. Beauv. – rare <i>Juncus bulbosus</i> (Palanga) – <i>Juncus bulbosus</i> L. – rare <i>Allium ursinum</i> (Vepriai) – <i>Allium ursinum</i> L. – included in the RDBL <i>Dianthus superbus</i> var. <i>flore albo</i> (Kaunas) – <i>Dianthus superbus</i> L. – included in the RDBL <i>Geum urbanum</i> (urbanum β <i>intermedium</i> Ehrhart – <i>herbare</i>) (near Jonava) – <i>Geum aleppicum</i> Jacq. – rare <i>Lunaria rediviva</i> (near Jonava) – <i>Lunaria rediviva</i> L. – included in the RDBL <i>Dentaria bulbifera</i> (Karmėlava) – <i>Dentaria bulbifera</i> (L.) Crantz – included in the RDBL <i>Astragalus onobrychis</i> (near Jonava Upinkai) – <i>Onobrychis arenaria</i> (Kit.) DC. – rare <i>Hieracium dubium</i> (near the Jonava Lokio stream) – <i>Hieracium</i> $\times$ <i>schultesii</i> F. W. Schultz – rare <i>Orchis morio</i> (Rastinėnai near Vilnius) – <i>Orchis morio</i> L. – included in the RDBL <i>Orchis maculata</i> (banks of the Šventoji river) – <i>Dactylorhiza maculata</i> (L.) Soó – included in the RDBL <i>Carex stenophylla</i> (Kaunas) – <i>Carex stenophylla</i> Wahlenb – rare <i>Carex divulsa</i> (Mazūriškės near Vilnius) – <i>Carex divulsa</i> Stokes – rare <i>Carex muricata</i> (Kaunas) – <i>Carex muricata</i> L. – included in the RDBL <i>Carex retroflexa</i> (Kernavė) – <i>Carex loliacea</i> L. – rare <i>Hypnum recognitum</i> (Mazūriškės near Maišiagala) – <i>Thuidium recognitum</i> (Hedw.) Lindb. – rare <i>Mnium crudum</i> (Jonava) – <i>Pohlia cruda</i> (Hedw.) Lindb. – included in the RDBL <i>Gymnostomum microstomum</i> (near Kaunas) – <i>Hymenostomum microstomum</i> (Hedw.) R. Brown – rare <i>Jungermannia laevigata</i> (Jonava) – <i>Porella platyphylla</i> (L.) Pfeiff. – included in the RDBL <i>Jungermannia serpyllifolia</i> (Būda near Kėdainiai) – <i>Lejeunea cavifolia</i> (Ehrh.) Lindb. – included in the RDBL <i>Jungermannia incisa</i> (Būda near Kėdainiai) – <i>Lophozia incisa</i> (Schrad.) Dum. – rare <i>Iris sibirica</i> (Raseiniai) – <i>Iris sibirica</i> L. – included in the RDBL <i>Salsola kali</i> (Palanga) – <i>Salsola kali</i> L. – rare <i>Betula nana</i> (near Jurbarkas) – <i>Betula nana</i> L. – included in the RDBL <i>Splachnum ampullaceum</i> (Rietavas) – <i>Splachnum ampullaceum</i> Hedw. – rare <i>Saxifraga hirculus</i> (Palanga) – <i>Saxifraga hirculus</i> L. – included in the RDBL <i>Swertia perennis</i> (near Palanga) – <i>Swertia perennis</i> L. – included in the RDBL

Fig. 3. List of rare or presently endangered plants found by J. Jundziłł during the journey

um knowltonii, *Dicranum congestum*, *Fontinalis squamosa*, *Hygrohypnum molle*, *Meesia longiseta*, and *Neckera crispa*) are included in the lists of Lithuanian flora only referring to J. Jundził's materials, and have never been confirmed with herbarium specimens or as growing in the wild.

List of plant species from the expedition in the book “Opisanie roślin w Litwie, na Wołyniu, Podolu i Ukrainie dziko rosnących, iako i oswojonych. Podług wydania szesnastego układu roślin Linneusza” (1830)

This J. Jundził's book is generally considered as the first modern flora compendium of Lithuania (Köhler 2004: 117; Grębecka 1998). The opinion that the plants collected during the expedition provided a basis for J. Jundził's herbarium and the book also exists (Köhler 2004: 117; Grębecka 1998: 143).

After comparing botanical data of the expedition with the material of the book (Jundził 1830) it was observed that the exact localities are indicated only for a small part of plants in the book, and that the definitions of the localities are unclear. For example, common Lithuanian plant *Festuca hirsuta* is only indicated as growing in Volhynia, *Bromus inermis* – only in Kaunas surroundings, Volhynia and Podolia, *Atriplex patula* – in Palanga. Clearer indications are given for some rare plants, for example, *Betula nana* grows near Jurbarkas. In the diary, J. Jundził mentioned the places where rare species *Swertia perennis*, *Dentaria bulbifera*, and *Dianthus superbus* had been found, but these places are not indicated in the book. Moreover, J. Jundził did not include some species from the expedition into the book. The reasons for this are unclear. From the revised list of collected plants, 18% of plants are not included, mostly the sedges or grasses from the genera *Agrostis*, *Phleum*, *Festuca*, *Poa*, *Carex* as well as – bryophytes, ferns and clubmosses. Probably he was not sure about the correct identification of these tricky species.

Conclusions

Summarizing the above-presented materials, some concluding remarks could be made.

J. Jundził's journey and collected materials have had several meanings for botany development in Lithuania: as a historical event – the expedition which explored plants in a rather large territory of Lithuania in the 19th century, materials supplied in the reports are historical sources for investigations into the history of botany, and collected plant registers are valuable floristic information for present – day botanists. All fundamental work regarding Lithuanian flora is included in J. Jundził's expedition data.

231 specimens of plants from the expedition remain in J. Jundziłł's herbarium and confirm that these species really grew in Lithuania 200 years ago. In comparison with the current data, 90% of the plant species collected by J. Jundziłł are frequent or infrequent and distributed throughout the entire territory of Lithuania. 10% are rare, and 14 species are included in the Red Data Book of Lithuania.

J. Jundziłł's observations about the rare plants are among the first information about these endangered plants in Lithuania. More than 10 plant species have been included in the lists of Lithuanian plant species only following J. Jundziłł's expedition data.

The book "Opisanie roślin w Litwie, na Wołyniu, Podolu i Ukrainie dziko rosnących, iako i oswojonych. Podług wydania szesnastego układu roślin Linneusza" (Jundziłł 1830) does not provide as much value for the flora distribution studies in Lithuania as the materials of the expedition.

Botanical data of the expedition can be treated as one of the first evidences for the formation of plant distribution studies in Lithuania.

References

- Balevičius, K.; Lapelė, M.; Paltanavičius, S. (red.). 1992. *Lietuvos raudonoji knyga*. Vilnius: Lietuvos Respublikos aplinkos apsaugos departamentas.
- Bielinski, J. 1903. Jundziłł Józef, in Mahrburg, A.; Straszewski, M. (Eds.). *Wielka Encyklopedia Powszechna Ilustrowana, volume 33*. Warszawa: Drukarnia Aleksandra Tadeusza Jezierskiego, 168–170.
- Galinis, V. 1971. Pirmoji floristinė ekspedicija, *Mūsų gamta* 8: 13.
- Grębecka, W. 1998. *Wilno – Krzemieniec botaniczna szkoła naukowa (1791–1841)*. Warszawa: Retro-Art.
- Hryniewiecki, B. 1933. *Tentamen florae Lithuaniae*. Warszawa: Towarzystwo Naukowe Warszawskie.
- Jukonienė, I. 2003. *Lietuvos kiminai ir žaliosios samanos*. Vilnius: Botanikos instituto leidykla.
- Jundziłł, J. 1822a. Raport Pana Józefa Jundziłła do fakultetu fizyczno-matematycznego w Uniwersytecie Imperatorskim wileńskim przysłane z podróży botanicznej po gubernii Wileńskiej, *Pamiętnik Farmaceutyczny Wileński* 2(3): 438–446.
- Jundziłł, J. 1822b. Trzy późniejsze raporta Pana Józefa Jundziłła do fakultetu fizyczno-matematycznego w Uniwersytecie Imperatorskim wileńskim przysłane z podróży botanicznej po gubernii Wileńskiej, *Pamiętnik Farmaceutyczny Wileński* 2(3): 574–587.
- Jundziłł, J. 1830. *Opisanie roślin w Litwie, na Wołyniu, Podolu i Ukrainie dziko rosnących, iako i oswojonych. Podług wydania szesnastego układu roślin Linneusza*. Wilno: Drukarnia Józefa Zawadzkiego Typografa Akademickiego.
- Köhler, P. 1995. *Zielnik Józefa Jundziłła (Herbarium of Józef Jundziłł)*. Kraków: W. Szafer Institute of Botany, Polish Academy of Sciences.
- Köhler, P. 2004. Józef Jundziłł (1794–1877). Materiały do biografii [Józef Jundziłł (1794–1877). Materials for his biography], *Kwartalnik Historii Nauki i Techniki* 49(1): 83–117.
- Kuusk, V.; Tabaka, L.; Jankevičienė, R. (Eds.). 1996. *Flora of the Baltic countries: compendium of vascular plants*, vol. 2. Tartu: Estonian Agricultural University.

- Kuusk, V.; Tabaka, L.; Jankevičienė, R. (Eds.). 2003. *Flora of the Baltic countries: compendium of vascular plant*, vol. 3. Tartu: Estonian Agricultural University.
- Laasimer, L.; Kuusk, V.; Tabaka, L.; Lekavičius, A. (Eds.). 1993. *Flora of the Baltic countries: compendium of vascular plants*, vol. 1. Tartu: Estonian Agricultural University.
- Merkys, A. 1960. Botanikos ir žemės ūkio mokslų raida Vilniaus universitete XVIII–XIX a., iš Biziulevičius, S.; Dagys, J.; Petrauskas, V.; Slavėnas, P.; Vileišis, A. (red.). *Iš mokslų istorijos Lietuvoje*, 1 tomas. Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla, 54.
- Minkevičius, A.; Jankevičius, K.; Brundza, K.; Dagys, J.; Lekavičius, A.; Natkevičaitė-Ivanauskienė, M.; Pipinys, J. (red.). 1959–1980. *Lietuvos TSR flora*, 1–5 tomas. Vilnius: Mokslas.
- Mowszowicz, J. 1987. Jundził Józef, in Feliksiak, S. (Ed.). *Słownik Biologów polskich*. Warszawa: PWN, 239.
- Naujalis, J.; Kalinauskaitė, N.; Grinevičienė, M. 1995. *Vadovas Lietuvos kerpsamanėms pažinti*. Vilnius: Žodynas.
- Rašomavičius, V.; Augustauskas, J.; Ivinskis, P.; Motiejūnaitė, J.; Paltanavičius, S.; Raudonikis, L. (red.). 2007. *Lietuvos raudonoji knyga*. Vilnius: Lututė.
- Snarskis, P. 1954. *Vadovas Lietuvos TSR augalams pažinti*. Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

JUZEFO JUNDZILO (JÓSEF JUNDZIŁŁ) EKSPEDICIJOJE LIETUVOS AUGALAMS, GYVŪNAMS IR MINERALAMS TIRTI 1821 METAIS SUKAUPTŲ BOTANIKOS DUOMENŲ MOKSLINĖ REIKŠMĖ

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Santrauka. 1821 m. Vilniaus universiteto gamtininkas Juzefas Jundzilas (Józef Jundziłł) dalyvavo ekspedicijoje, kurioje tyrinėjo augalus, gyvūnus ir dirvožemį vidurio, vakarų ir šiaurės Lietuvoje. Ekspedicijos metu jis rašė dienoraštį, kurio rankraščio kopija yra saugoma Lietuvos valstybės istorijos archyve (f. 721, ap. 1, b. 101). Šiame dienoraštyje yra minima apie 600 augalų pavadinimų. Remiantis dabartiniais leidiniais apie Lietuvos florą, straipsnyje nagrinėjama, kaip J. Jundzilo ekspedicijos dienoraštyje paminėtos augalų rūšys paplitę dabartinėje Lietuvos teritorijoje. Nustatyta, kad 90 % J. Jundzilo rastų augalų rūšių yra dažnos, 10 % – retos, 14 rūšių įrašyta į Lietuvos raudonąją knygą. Keletą J. Jundzilo rastų ir aprašytų augalų rūšių dabartiniai botanikai įrašo į Lietuvoje augančių augalų sąrašus remdamiesi tik J. Jundzilo ekspedicijos dienoraščiu.

J. Jundzilo ekspedicijoje surinkti botanikos duomenys gali būti vertinami kaip vieni pirmųjų šaltinių augalų paplitimui Lietuvoje tirti.

Reikšminiai žodžiai: XIX amžius, botanika, ekspedicija, augalų kolekcijos, reti augalai.

Aurika Ričkienė yra Botanikos instituto Augalų fiziologijos laboratorijos mokslo darbuotoja. 2003 m. ji apgynė daktaro disertaciją „Botanikos mokslas Lietuvoje 1944–1965 m.“ Šiuo metu tyrinėja botanikos mokslo istoriją ir jo raidą Lietuvoje XIX–XX a.

A. Ričkienė viena ir su bendraautoriais paskelbė 7 straipsnius recenzuojamuose mokslo žurnaluose Lietuvoje ir užsienyje, išspausdino straipsnių apie Lietuvos botanikus jiems skirtuose leidiniuose, kartu su bendraautore sudarė knygą, kurioje publikavo augalų fiziologo LMA akademiko A. Merkio bibliografiją. Ji yra dalyvavusi tarptautinėse mokslo istorikų konferencijose Lietuvoje, Latvijoje, Estijoje, Lenkijoje, JAV.

A. Ričkienė yra Lietuvos augalų fiziologų draugijos sekretorė ir Lietuvos mokslo istorikų draugijos narė.

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She is the secretary of the Lithuanian Association of Plant Physiologists and a member of the Lithuanian Association of Historians of Science.