

Juozas Labokas

CONTACT INFORMATION

Address Žaliųjų Ežerų Str. 47, LT-12200 Vilnius, Lithuania
Tel. no.: +370 5 272 99 30
E-mail: juozas.labokas@gamtc.lt
<https://orcid.org/0000-0002-1957-6689>
<https://www.researchgate.net/profile/Juozas-Labokas>

EDUCATION AND ACADEMIC DEGREE

1984–1990 Doctor's degree in the field of Botany (04 B), Biomedical Sciences (Institute of Botany, 1990), certified in 1993.
Dissertation: "Biological characteristics of lingonberries (*Vaccinium vitis-idaea* L.) introduced into cultivation in Lithuania", supervisor Dr V. Butkus.
Field of research: cultivation of wild plants, intraspecific diversity of forest berry plants, their cultivation technologies.

1977–1982 Faculty of Forestry of the Lithuanian Academy of Agriculture.
Diploma thesis: "Assessment of accuracy of lingonberry-fields stocktaking carried out by forest management in Valkininkai Forestry district".
The work was carried out in the Non-Timber Forest Resources Sector of the Lithuanian Forestry Research Institute.
Field of research: forest berry resources.

INTERNSHIPS AND COURSES

GIS course at UAB „HNIT-BALTIC“, Vilnius, 2007.
Nordic-Baltic courses "Management of databases of genetic resources on intranet and Internet", Nordic Gene Bank, Alnarp, Sweden, February 10–21, 1997.
Internship at the Department of Horticulture, University of Wisconsin, Madison, USA, January–April 1992.

PROFESSIONAL EXPERIENCE

Nature Research Centre:
June 2013 – currently Senior researcher, head of the Laboratory of Economic Botany

March 2012 – May 2013 Head of the Institute of Botany (0.75 full-time), senior researcher (0.25 full-time), performing the functions of the head of the Laboratory of Economic Botany

2010–2012 Senior researcher performing the functions of the head of the Laboratory of Economic Botany

Institute of Botany:
1999–2010 Senior researcher, head of the Laboratory of Economic Botany
1992–1999 Senior researcher at the Laboratory of Economic Botany

RESEARCH INTERESTS

Field of research: planning of *in situ* conservation of plant genetic resources, developing maintenance methodologies and conservation strategies; floristic inventory and prioritization of crop wild relatives (CWR) and wild food plants (WFP) for conservation based on international recommendations; analysis of accumulation of biologically active substances (e.g., essential oils

and their components) in plants; evaluation of the suitability of medicinal plant populations for long-term conservation and improvement of criteria for such evaluation.

PUBLICATIONS

Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science“ database (with citation index):

- Labokas, J., Karpavičienė, B. 2021. Development of a methodology for maintenance of medicinal plant genetic reserve sites: a case study for Lithuania. *Plants*, 10, 658. <https://doi.org/10.3390/plants10040658>. JCR: Q1 (Plant Sciences). IF 3.935 (2020).
- Česonienė, L., Labokas, J., Jasutienė, I., Šarkinas, A., Kaškonienė, V., Kaškonas, P., Kazernavičiūtė, R., Pažereckaitė, A., Daubaras, R. 2021. Bioactive compounds, antioxidant, and antibacterial properties of *Lonicera caerulea* berries: Evaluation of 11 cultivars. *Plants-Basel*, 10 (4): art. no. 624. <https://doi.org/10.3390/plants10040624>. Q1 IF 3.935 (2020).
- Kamaitytė-Bukelskienė, L., Ložienė K., Labokas J. 2021. Dynamics of Isomeric and Enantiomeric Fractions of Pinene in Essential Oil of *Picea abies* Annual Needles during Growing Season. *Molecules* 26 (8): 2138. <https://doi.org/10.3390/molecules26082138>. Q2 IF4.411 (2020).
- Ložienė, K., Labokas, J., Vaičiulytė, V., Švedienė, J., Raudonienė, V., Paškevičius, A., Šveistytė, L., Apšegaitė, V. 2020. Chemical composition and antimicrobial activity of fruit essential oils of *Myrica gale*, a neglected non-wood forest product. *Baltic Forestry*, 26 (1): art. no. 423. JCR/2019 IF 0.772 / Q4 FORESTRY. <https://doi.org/10.46490/BF423>.
- Labokas, J., Maxted, N., Kell, S., Magos Brehm, J., Iriondo, J. M. 2018. Development of national crop wild relative conservation strategies in European countries. *Genetic Resources and Crop Evolution*. 65(5): 1385–1403. <https://doi.org/10.1007/s10722-018-0621-x>.
- Labokas, J., Ložienė, K., Jurevičiūtė, R. 2017. Preconditions for industrial use of foliage as felling by-product of Scots pine for essential oil production. *Industrial Crops and Products*, 109, 542–547. <https://doi.org/10.1016/j.indcrop.2017.09.011>

Other reviewed scientific publications (books, books' chapters, collections of articles, articles, textbooks and etc.):

- Abraham, E. M., Chatzopoulou, P., Geirdal, A., Kyriazopoulos, A. P., Labokas, J., Magnúsdóttir, L., Marčeta, M., Keča, L., Radušienė, J., Stoyanova, M., Stoyanov, N., Vasile, D. 2020. NWFP from understory plants in Europe. In: Vacik, H., Hale, M., Spiecker, H., Pettenella, D., Tomé, M. (Eds) 2020: *Non-Wood Forest Products in Europe. Ecology and management of mushrooms, tree products, understory plants and animal products. Outcomes of the COST Action FP1203 on European NWFPs*, pp. 305–338. BoD, Norderstedt, 416 p. ISBN: 978-3-7494-7546-9.
- Labokas, J., Karpavičienė, B., Rašomavičius, V., Gelvonauskis, B. 2016. Developing national crop wild relative in situ conservation strategy for Lithuania: creation of national CWR inventory and its prioritization. In: Maxted, N., Dulloo, M. E., Ford-Lloyd, B. V. (Eds.) *Enhancing Crop Genepool Use: Capturing Wild Relative and Landrace Diversity for Crop Improvement*. P. 217–230. CAB International. ISBN 1780646135, 9781780646138.

Reviewed scientific articles, published in Lithuania:

- Labokas J., Karpavičienė B. 2019. Guidelines for evaluation of seed (genetic) sites of medicinal and aromatic plants in Lithuania. *Botanica*. 25(1): 54–64. <https://doi.org/10.2478/botlit-2019-0006>
- Labokas J., Karpavičienė B. 2018. Creation of a network of seed sites for in-situ conservation of medicinal and aromatic plant genetic resources in Lithuania. *Botanica*, 24(1): 87–97. <https://doi.org/10.2478/botlit-2018-0008>
- Ložienė K., Labokas J., Paškevičius A., Levinskaitė L., Venskutonis P. R., Švedienė J., Abrutienė G. 2016. Variation in the content of total phenolics, anthocyanins and antimicrobial effects in two fractions of blueberries different cultivars. – *Botanica Lithuanica*, 22(1): 78–86.

PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS

- 2019–2021 Coordinator of the ECPGR (European Cooperative Programme for Plant Genetic Resources) project "Identification, preparation of applications and approval of sites to join the European in situ PGRFA conservation network".
<https://www.ecpgr.cgiar.org/working-groups/wild-species-conservation/inclusion-of-cwr-sites-in-european-in-situ-network>
- 2015–2017 Coordinator of the ECPGR project "Crop wild relative conservation strategies".
<http://www.ecpgr.cgiar.org/working-groups/wild-species-conservation/cwr-conservation-strategies/>
- 2016–2018 Partner of the project „MIŠKOEKOKAITA – Response and plasticity of different tree species and establishing forest communities under the impact of climate change and other stress factors“, Contract No. SIT-4/2015, under the National Research Programme „Sustainability of Agro-, Forest and Water Ecosystems“.
- 2011–2014 Head of the project „Change of bioactive compounds in underutilised berry species depending on genotype and environment“, Contract No. SVE-04/2011, under the National Research Programme „Healthy and Safe Food“.
- 2012–2014 Partner of the project „Inventory of natural habitats of EC importance in the whole country“ (Contracting authority Ministry of Environment, Head of the Project Dr V. Rašomavičius).

PARTICIPATION IN SCIENTIFIC CONFERENCES

International scientific conferences:

1. June 24, 2020. EU Horizon 2020 project Farmer's Pride webinar "Crop wild relative conservation — adding value to Europe's natural sites" hosted by Eurosite. 90 participants. Duration 1:42:27, starts at min. 4:00: https://www.youtube.com/watch?v=jz_eb9IIoFU
2. October 8–10, 2019. Joint workshop of two projects "Identification, preparation of applications and approval of sites to join the European in situ PGRFA conservation network" and "Farmer's Pride" Santorini, Greece (chairing to one of the workgroups). Total 58 participants from 26 countries, including representatives from European Commission, FAO, Bioversity International and other international organizations.
<http://www.ecpgr.cgiar.org/working-groups/wild-species-conservation/inclusion-of-cwr-sites-in-european-in-situ-network>.
3. Labokas, J. CWR in situ Conservation In-country Report Lithuania. Oral presentation in the Nordic/ECPGR Joint Workshop "Plant genetic resources for food security and ecosystem services / Planning and implementing national and regional conservation strategies. CWR CONSERVATION STRATEGIES", 19–22 September 2016, Vilnius, Lithuania.
4. Labokas, J., Gelvonauskis, B., Karpavičienė, B., Kemešytė, V. 2014. Development of the national crop wild relative in situ conservation strategy for Lithuania. Oral presentation in the International Conference on ENHANCED GENEPOOL UTILIZATION – Capturing wild relative and landrace diversity for crop improvement, Cambridge, United Kingdom, 16–20 June 2014. Book of Abstracts. Bioversity International, Rome, Italy. P. 39. ISBN: 978929043995-0.
http://www.pgrsecure.bham.ac.uk/sites/default/files/documents/public/PGR_Secure_conference_abstracts.pdf

National scientific conferences:

1. Labokas, J., Karpavičienė, B. Vaistiniai augalai Lietuvos gamtinėse ekosistemose: įvairovė ir išteklių išsaugojimas. Lietuvos mokslų akademija, 2019 m. rugsėjo 19 d., Vilnius. [Medicinal plants in natural ecosystems of Lithuania: Diversity and conservation of resources. Lithuanian Academy of Sciences, 2019 September 19, Vilnius.]
2. Labokas, J., Karpavičienė, B. Sėklinių sklypų tinklo sukūrimas Lietuvos vaistinių ir aromatinių augalų genetinių išteklių išsaugojimui in-situ. – Seminaras „Pomologijos mokslas Lietuvoje: tikslai, darbai ir pasiekimai“, Kaunas, 2018.09.05. Apie 30 dalyvių. <http://botanikos-sodai.lt/pomologijos-mokslo-sviesuliai-rinkosi-vdu-botanikos-sode> [Creation of a network of seed sites for in-situ conservation of the genetic resources of Lithuanian medicinal and aromatic plants. – Seminar "Science of pomology in Lithuania: goals, works and achievements", Kaunas, 05.09.2018. About 30 participants.]
3. Labokas, J. Kultūrinių augalų laukiniai gėtiniai – unikalus genetinių išteklių šaltinis: išsaugojimo strategijos ir iššūkiai. – Tęstinė mokslinė konferencija ŠIUOLAIKINIAI BIOLOGIJOS TYRIMAI LIETUVOJE 2016 m., skirta šiuolaikinei botanikai. Lietuvos mokslų akademija, 2016 m. lapkričio 11 d., Vilnius. [Crop wild relatives – a unique source of genetic resources: Conservation strategies and challenges. – Continuous scientific conference CONTEMPORARY BIOLOGY RESEARCH IN LITHUANIA 2016, dedicated to modern botany. Lithuanian Academy of Sciences, 2016 November 11, Vilnius.]

PARTICIPATION IN THE STUDY PROCESS

Supervision of PhD students:

Biomedical Sciences, Botany (04 B)

<u>Sigitas</u> Kavaliauskas	Dissertation: Blackberry (<i>Rubus plicatus</i> , <i>R. nessensis</i> and <i>R. caesius</i>) cenopopulation structure, species polymorphism and distribution in Lithuania (Botany 04 B). Institute of Botany, Vilnius University. Defended on 11.09.2001.	1997–2001
Giedrė Abrutienė	Dissertation: Evaluation of the development, adaptability and genetic change of the acclimatized garden bilberry (<i>Vaccinium ×covilleianum</i> Butkus et Pliszka) in Lithuania.	2008–2012

Scientific consultant:

Biomedical Sciences, Pharmacy (09 B)

Valdas Jakštas	Lietuvoje augančių gudobelės (<i>Crataegus</i> L.) genties augalų fitocheminės sudėties įvertinimas. / Evaluation of phytochemical composition of hawthorn (<i>Crataegus</i> L.) species growing in Lithuania	2001–2005
Deividas Burdulis	Šilauogės (<i>Vaccinium</i> L.) genties augalų vaisių antocianinų sudėties ir biologinio poveikio tyrimas / Study of anthocyanin composition of the fruits of blueberries (<i>Vaccinium</i> L.) and its biological effects.	2005–2009

ARTICLES IN NEWSLETTERS, MAGAZINES, INTERVIEWS

1. Labokas, J., Karpavičienė, B. (2020) National network of genetic reserve sites for medicinal, aromatic plants and CWR conservation in Lithuania. Crop wild relative, 12: 17–22. ISSN 1742-3694 (Online). <https://more.bham.ac.uk/farmerspride/key-documents/newsletters/>
2. Pliūra A., Suchockas V., Lygis V., Labokas J. 2019. Miško ekosistemų atkūrimo, būklės stabilizavimo ir atsparumo didinimo, siekiant užtikrinti jų tvarumą kintančio klimato ir susijusių stresorių poveikio sąlygomis, rekomendacijų paketas. Mūsų girios. 4: 12-13. [A

package of recommendations for the restoration, stabilization and resilience of forest ecosystems to ensure their sustainability under the effects of a changing climate and related stressors.]

3. Labokas, J. 2017.08.17 dalyvauta rengiant TV reportažą „Augalų genetiniai ištekliai saugomi: ir gamtinėse buveinėse, ir šaldytuvuose“. <http://gamta.lrytas.lt/eko/2017/08/17/news/augalu-genetiniai-istekliai-saugomi-ir-gamtinese-buveinese-ir-saldytuvuose-2246400/>. [Participated in the preparation of the TV report "Plant genetic resources are preserved: both in natural habitats and in refrigerators"]

SOCIAL AND OTHER PROFESSIONAL ACTIVITIES

Member of the Standing Committee on Plant National Genetic Resources under the Ministry of Environment.

Member of the ECPGR Crop Wild Relatives Working Group

<https://www.ecpgr.cgiar.org/contacts-in-ecpgr/ecpgr-contacts/crop-wild-relatives/>.

Member of the ECPGR Medicinal and Aromatic Plant Working Group

<http://www.ecpgr.cgiar.org/contacts-in-ecpgr/ecpgr-contacts/medicinal-and-aromatic-plants/>.

Guest Editor at the journal *Plants* (IF 3.935), MDPI, Basel, Switzerland:

1) Special Issue "Natural Resources of Berry and Medicinal Plants" (1 April 2020 – 31 March 2021). https://www.mdpi.com/journal/plants/special_issues/Natural_Resources_of_Berry;

2) Special Issue "Natural Resources of Berry and Medicinal Plants Volume II" (15/02/2022–20/02/2023).

https://www.mdpi.com/journal/plants/special_issues/Natural_Resources_Plants_Volume_II

Member of the Reviewers Board of the journal *Diversity* (IF 2,465), MDPI, Basel, Switzerland.

https://www.mdpi.com/journal/diversity/submission_reviewers

Chairman of the doctoral defence committees: 2 events (in 2014 and 2021);

Member of the doctoral defence committees: 15 events (in 2007 through 2022);

Opponent at the doctoral defence committees: 5 events (in 2011 through 2015).

Chairman of the defence committees for bachelor's and/or master's theses in forestry (2012, 2013) and applied ecology (2014 through 2022) at the Faculty of Forestry and Ecology of the Academy of Agriculture of VMU.

Expert of the Latvian Science Council (2012, 2013).

Expert of the Lithuanian Academy of Sciences (2012, 2017).

Member of the working group for the preparation and amendment of the Law on Plant National Genetic Resources of the Republic of Lithuania (2000-2001 and 2011-2012).