

JOLITA RADUŠIENĖ

CONTACT INFORMATION

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EDUCATION AND ACADEMIC DEGREE

1979–1990 Doctor degree of Biomedical sciences Botany (04 B)
(Vilniusd university and Institute of Botany).
Topic of the thesis: “Marsh bird's-foot in the anthropogenized landscape of Lithuania. Study of biological, ecological and phytocenological features”, supervision – dr. V. Marčiulionis. Field of research: studies of chemical and biological properties. Assessment of economic value and feed potential.

1973 – 1978 Vilnius university, Biologist, Biology and Chemistry master.
Topic of the thesis: "The current state of the relict meadows described 25 years ago in the Nevėžis lower floodplain", supervisor prof. M. Ivanauskienė. The work was carried out at Vilnius University, Department of Botany and Microbiology.

ACADEMIC RANK

2009 Ass. Professor, Kaunas University of Medicine

PROFESSIONAL EXPERIENCE

2022 05 – now **Senior researcher**
Laboratory of Economic Botany, Nature Research Centre

2012 – 2022 **Leader researcher**
Laboratory of Economic Botany, Nature Research Centre

2010 – 2012 **Senior researcher**
Institute of Botany, Nature Research Centre

1996 – 2010 Laboratory of Economic Botany, Institute of Botany

1992 – 1996 **Researcher**
Laboratory of Economic Botany, Institute of Botany

1990 – 1992 **Fellow Researcher**
Institute of Botany

1983 – 1990 **Lab. Assistant**
Institute of Botany

1979 – 1983 **Graduate student**
Laboratory of Plant Resources, Institute of Botany

RESEARCH INTERESTS

Field of research: studies of phenotypic diversification and stability of genetic resources of local and alien plant species, development of their conservation strategy. The search for new producers of medicinal and aromatic raw materials, chromatographic studies of the qualitative and quantitative

composition of polyphenolic and essential oil compounds, their phenetic significance for the taxonomy, determination of the biological activity of raw materials *in vitro*, evaluation of the potential use of plant raw materials.

PUBLICATIONS

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

1. Radušienė J., Karpavičienė B., Marksa M., Ivanauskas L., Raudonė L. (2022) Distribution patterns of essential oil terpenes in native and invasive *Solidago* species and their comparative assessment. *Plants*, 11 (9): art. no. 1159.
2. Raudonė L.; Radušienė J., Seyis F., Yayla F., Vilkickytė G., Marksa M., Ivanauskas L., Cırak C. (2022) Distribution of phenolic compounds and antioxidant activity in plant parts and populations of seven underutilized wild *Achillea* species. *Plants*, 11, 447.
3. Cırak C., Radušienė J., Kurtarc E.S., Marksa M., Ivanauskas L. (2020) *In vitro* plant regeneration and jasmonic acid induced bioactive chemical accumulations in two *Hypericum* species from Turkey. *South African Journal of Botany*, 128: 312–318.
4. Marksa M., Zymone K., Ivanauskas L., Radušienė J., Pukalskas A., Raudonė L. (2020) Antioxidant profiles of leaves and inflorescences of native, invasive and hybrid *Solidago* species. *Industrial Crops and Products*, 145: 112123.
5. Cırak C, Radušienė J. (2019) Factors affecting the variation of bioactive compounds in *Hypericum* species. *Biologia Futura*. 70 (3): 198–209.
6. Radušienė J., Marksa M., Ivanauskas L., Jakštas V., Caliskan O., Kurt D., Odabas M.S. Cırak C. (2019) Effect of nitrogen on herb production, secondary metabolites and antioxidant activities of *Hypericum pruinatum* under nitrogen application. *Industrial Crops and Products*. 139: UNSP 111519
7. Radušienė J., Marksa M., Karpavičienė B. (2018) Assessment of *Solidago x niedereederi* origin based on the accumulation of phenolic compounds in plant raw materials. *Weed Science*. 66 (3): 324-330.

Scientific articles published in conference proceedings, indexed in „Clarivate Analytics Web of Science“ database:

1. Šveistytė L., **Radušienė J.**, Labokas J., Karpavičienė B., Loziene K. (2016) Conservation of medicinal and aromatic plants. 6th International Symposium Breeding Research on Medicinal and Aromatic Plants (BREEDMAP 6). 453: 128-130. DOI: 10.5073/jka.2016.453.045
2. **Radušienė J.**, Stanius Ž., Cırak C, Odabas M. (2011) Quantitative effects of temperature and light intensity on accumulation of bioactive compounds in *St. John's Wort*. 28th International Horticultural Congress on Science and Horticulture for People (IHC2010): A New Look at Medicinal and Aromatic Plants Seminar. *Acta Horticulturae* 925: 135-140.
3. **Radušienė J.**, Gudaitytė O., Benetis R. (2011) Assessment of *Achillea cartilaginea* introduced from wild to collection. 28th International Horticultural Congress on Science and Horticulture for People (IHC2010): A New Look at Medicinal and Aromatic Plants Seminar. *Acta Horticulturae* 925: 83-88.
4. **Radušienė J.**, Stanius Ž., Mačkinaitė R., Karpavičienė B., Cırak C. (2011) Effect of biostress on accumulation of secondary metabolites in two *Hypericum* species. *Planta Medica* 77(12): 1375-1376.

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

1. Abraham E.M, Chatzopoulou P., Geirdal A., Kyriazopoulos A. P, Labokas J., Magnúsdóttir, L., Marčeta, M., Keča L.O., **Radušienė J.**, Stoyanova M., Stoyanov N., Vasile D. (2020)

- The NWFPs from understory plants in Europe (WG3). In: Vacik, H., Hale, M., Spiecker, H., Pettenella, D., Tomé, T. Non-Wood Forest Products in Europe. Ecology and management of mushrooms, tree products, understory plants and animal products. BoD, Norderstedt, p. 305–338. BoD, Norderstedt, 416 p. ISBN: 978-3-7494-7546-9.
- Labokas, J., Karpavičienė, B., Šveistytė, L., **Radušienė, J.**, Ložienė, K. 2012. Towards In Situ Conservation of Crop Wild Relatives in Lithuania. In: Maxted, N., Dulloo, M. E., Ford-Lloyd, B.V., Frese, L., Iriondo, J.M., Carvalho, M. A. A. P. de (eds.). Agrobiodiversity Conservation: Securing the Diversity of Crop Wild Relatives and Landraces. P. 91–95. CABI Publishing 2012. ISBN 978-1-84593-851-2.

PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS

- 2016 – 2019 **principal investigator** (representative in Lithuania) ECPGR Project: Promoting the implementation and the establishment of the European MAP Collection (MAP EUROCOLLECTION), 2016-2019. Coordinator: Ana Maria Barata, Portugal.
- 2013 – 2015 **project manager** MIP-50/2013 project: Species diversity and biotypes of the genus *Solidago*, abundance regulation and utilization.
- 2010 – 2013 **principal investigator** European Program on Plant Genetic Resources (ECPGR) project: Conservation and characterization of oregano (*Origanum vulgare* L.) wild populations in Europe.
- 2010 – 2013 **principal investigator** National science program "Lithuanian ecosystems: climate change and human impact", project LEK-10025: "The influence of the neophytic moss *Camphylopus introflexus* on the formation of peatland communities".

INTERNSHIP AND TRAINING

- 1999 (two months) Research internship: "Chromatographic research of medicinal plants", at Center for Plant Biology, Trondheim University of Science and Technology (Trondheim, Norway).
- 1997 (one month) Training of International Plant Genetic Resources Institute (IPGRI) Darwin Initiative: "Conservation Strategy for Plant Genetic Resources" (Budapest, Hungary).
- 1994 (two month) Research internship: "Phytochemical research on medicinal plants", Department of Horticulture, Swedish Agricultural University (Balsgard, Sweden).
- 1992 (three month) Research internship: "Chromatographic research of medicinal plants" at Uppsala University Center for Biological Medicine (Sweden, Uppsala).

PARTICIPATION IN SCIENTIFIC CONFERENCES

International scientific conferences:

- Raudone L., Marksa M., Zymone K., Radušienė J., Ivanauskas, L. (2020) HPLC-ABTS profiling of phenolics and fast acting antioxidants in *Solidago* L. PSE e-Congress 2020 "Plant Derived Natural Products as Pharmacological and Nutraceutical Tools". September 15, 18, 22, 25, 2020 October 6, 9, 13, 16, 2020 / Phytochemical Society of Europe.
- Pavalkytė G., Mickutė K., Kubilienė A., Sadauskienė I., Marksa M., Radušienė J. (2019) The effect of *Solidago gigantea* L. extract on malondialdehyde (MDA) level in mice liver.

The 22nd Annual International Scientific-Practical Conference „BaltPharm Forum 2019“ „Pharmacists as Drug Experts: Their Role in Health Care System“. April 13–14, 2019, Kaunas, Lithuania.

3. Garbuzaitė E., Ivanauskas I., Marksa M., Radušienė J. (2018) Determination of phenolic compounds and antioxidant activity of *Hypericum* plant using spectrophotometric method. Pharmaceutical science and practice: problems, achievements, prospects. Proceedings of the II scientific-practical internet conference with international participation, April 27, 2018, Kharkiv.

PARTICIPATION IN THE STUDY PROCESS

Supervision of PhD students:

Biomedical sciences Botany (04B)

Odetā Dissertation topic: "Evaluation of morphological, chemical and 2004-2008
Gudaitytė karyological diversification of plants of the genus *Achillea*".

Biomedical sciences Botany (04B)

Edita Dissertation topic: "Phenotypic diversification, selection and 1999-2003
Bagdonaitė utilization possibilities of *Hypericum perforatum* and *H. maculatum*".

Scientific consultant:

Biomedical sciences Pharmacy (09 B)

Raimondas Evaluation of phenolic compounds composition and biological 2004–2008
Benetis activity of plants of the genus yarrow (*Achillea* L.)

OTHERS

Expert activity;

2018 Scientific external of Belmont Forum - BiodivERsA International
2017 –2022 Lithuanian Business Support Agency
2011- now Research Council of Lithuania
2008 – 2022 Agency for Science, Innovation and Technology (MITA)

Editorial activity

Editor-in-Chief *Botanica Lithuanica* (from 2018 *Botanica*).