

International Equisetological Association - Equisetum, Equisetaceae



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Walkowiak R. J., and *Equisetum telmateia* Ehrh.

WORLD EQUISETUM PROGRAM - RESEARCH SERVICE
INTERNATIONAL EQUISETOLOGICAL ASSOCIATION

RADOSLAW JANUSZ WALKOWIAK
BIOLOGIST, BIOPHYSICIST & HONORARY DOCTOR
EXPERT IN APPLIED BIOLOGY & PLANT BIOLOGY

Biology Expert; Biophysicist; Botany Expert; Analytical Microbiologist; Expert in Water Testing-Treatment
<https://grassrootsjournals.org/gjnr-full-profile.php#radoslaw-janusz>
Master of Science in Biology-Biophysics & Honorary Doctor of Biology-Botany
Certified Genetic Engineer; Certified Microbiologist; Data Expert

Birthplace: 1985 in Przemyśl, Subcarpathian Voivodeship
Poland PL, European Union EU
radekwalkowiak@tlen.pl • iea.wep@gmail.com (title: radek)

Summary:

Passionate about plant biology, specifically in plant systematics, phylogenetic taxonomy of Equisetum, Equisetaceae, Tortula muralis complex, Marchantia polymorpha complex, botanical nomenclature and history of botanical explorations and discovery, conservation biology / Molecular spectroscopy, especially 1,3,4-thiadiazoles and interactions between toxins and the cell membrane, bio-active compounds; in vitro plant breeding; applied microbiology; water research.

Education:

2009, **Magister (MSc, Hons), Biology**, University of Life Sciences in Lublin, Poland, Faculty of Biology and Animal Breeding, Majors: Applied Biology, Plant Biology, Biophysics

Thesis: " Spectroscopic study of molecular organization of 2-amino-1,3,4-thiadiazol derivative in the model systems of biological significance " .

Supervisor: Professor Mariusz Gagoś, PhD, DSc (Faculty of Production Engineering, Department of Physics, Laboratory of Biophysics)

2010, **Equisetology Doctor (EqD, HonD), Biology, Botany**, Major: Plant Taxonomy, Scientific Honorary Title

International Equisetological Association & World Equisetum Program, International Research Botany Group - International Botany Project, Non Profit Research Institute - Research Service - Botanical Team

Thesis: " A Taxonomic Study of the Genus Equisetum (Horsetail) " .

Supervisor: Executive Committee – International Equisetological Association

2010, **Certified Genetic Engineer; Certified Microbiologist; Data Expert**
Polish Academy of Sciences, Warsaw, Poland

Service, Research Experience:

2008 (present)

Scientific Member - plant taxonomy, paleobotany, plant ecophysiology

International Equisetological Association & World Equisetum Program, International Research Botany Group - International Botany Project, Non Profit Research Institute - Research Service - Botanical Team

Member of Executive Committee, Executive President, Program Manager
and Botanist, Scientific Curator

2010 (present)

Scientific Adviser - biology, biochemistry, laboratory
" Coach " Tutoring Center & Professional Tutoring Services
Poland & Czech Republic (Slovakia) area

2021 (present)

Data & Lab Analyst - physicochemistry, microbiology, water, sewage, sludges
PWIK Przemysl, Water Utility Company, Przemysl, Poland
Laboratory Section

2009 – 2010

Research Biologist - biochemistry, proteomics, cytogenetics
Nencki Institute of Experimental Biology Polish Academy of Sciences in Warsaw,
Poland
Department of Cell Biology, Laboratory of Plasma Membrane Receptors

2012 – 2013

Research Assistant - parasitology, immunology, molecular biology
W. Stefanski Institute of Parasitology Polish Academy of Sciences in Warsaw, Poland
Department of Molecular Biology, Laboratory of Physiology

2014 – 2015

Research Member - plant biology, agronomy, plant genetics
University of Rzeszow, Faculty of Biology and Agriculture, Rzeszow, Poland
Department of Plant Physiology and Biotechnology, Laboratory of in vitro Plant
culture

&

2022 (present)

Research Expert - applications of modern biology
Applied Biology Hub, Applications of Biology, London, United Kingdom
Scientific Cluster

WORLD EQUISETUM
International Equisetological Association

Full Membership:

The International Equisetological Association (IEA)
Executive Member

The International Waterlily & Water Gardening Society (IWGS)
Individual Member

The " Coach " Tutoring Center (CTC)
Co-Executive Member

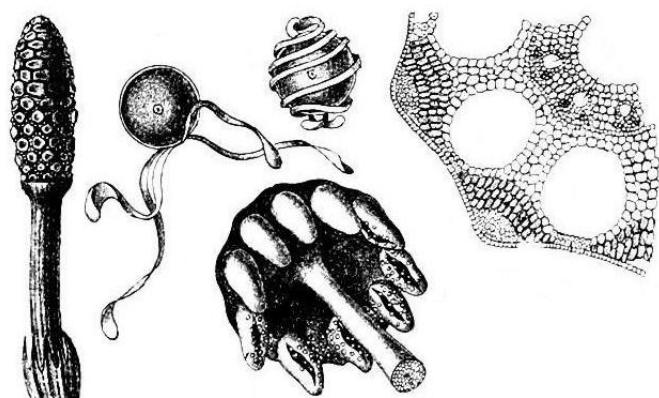
Nature Lab | Communication, International Experts Group, Washington, D.C.
Senior-Expert-Appraiser (biology, laboratory analysis)

Educational Base for Plant Science, Beijing, China
Senior Contact for Plant Biology

International Interdisciplinary Group of Experts, Bratislava, Slovakia, EU
IIGE Fellow – Biology Expert

&

Grassroots Journal of Natural Resources, Grassroots Institute, Montreal, Canada
Full Member of the Editorial Board
<https://grassrootsjournals.org/gjnr-full-profile.php#radoslaw-janusz>



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Current journal roles:

Peer Reviewer:

Grassroots Journal of Natural Resources
International Journal of Plant & Soil Science
Asian Plant Research Journal
Journal of Applied Life Sciences International
International Journal of Environment and Climate Change
PLANT CELL BIOTECHNOLOGY AND MOLECULAR BIOLOGY
Journal of Pharmaceutical Research International
Asian Journal of Chemical Sciences
Current Journal of Applied Science and Technology
Journal of Advances in Microbiology
Asian Journal of Advances in Agricultural Research
Asian Journal of Research in Crop Science
European Journal of Nutrition & Food Safety
Journal of Experimental Agriculture International
Microbiology Research Journal International
Asian Journal of Biotechnology and Bioresource Technology
Asian Journal of Research in Botany
Asian Soil Research Journal
European Journal of Medicinal Plants
Asian Journal of Soil Science and Plant Nutrition
Asian Journal of Agricultural and Horticultural Research
Asian Research Journal of Agriculture
International Journal of Biochemistry Biophysics & Molecular Biology
B P International

Editorial Board Member:

Grassroots Journal of Natural Resources
International Journal of Biochemistry Biophysics & Molecular Biology
The Journal for Young Researchers

Journal Publications:

/ A compact series of publications concerning advanced scientific spectroscopic analysis of the molecular organization of chemical compounds in model systems of biological importance /

Matwijczuk, A.; Karcz, D.; Matwijczuk, A.; Górecki, A.; Niemczynowicz, A.; **Walkowiak, R.**; Adwent, L.; Szcześ, A.; Chruściel, E.; Niewiadomy, A.: *Spectroscopic studies of dual fluorescence in 2-(4-fluorophenylamino)-5-(2,4-dihydroxybenzeno)-1,3,4-thiadiazole: effect of molecular aggregation in a micellar system*. European Biophysics Journal with Biophysics Letters Vol. 48, Suppl. 1, 2019, DOI:10.1007/s00249-019-01373-4

Monika Kędzierska-Matysek, Arkadiusz Matwijczuk, Mariusz Florek, Joanna Barłowska, Anna Wolanciuk, Alicja Matwijczuk, Edyta Chruściel, **Radosław Walkowiak**, Dariusz Karcz, Bożena Gladyszewska: *Application of FTIR spectroscopy for analysis of the quality of honey*. BIO Web of Conferences 10, 02008 (2018); 01/2018; 10:02008., DOI:10.1051/bioconf/20181002008 / Published by: EDP Sciences

Arkadiusz Paweł Matwijczuk, Dariusz Karcz, **Radosław Janusz Walkowiak**, Justyna Furso, Bożena Gladyszewska, Sławomir Wybraniec, Andrzej Niewiadomy, Grzegorz P. Karwasz, Mariusz Gagoś: *Effect of Solvent Polarizability on the Keto/Enol Equilibrium of Selected Bioactive Molecules from the 1,3,4-Thiadiazole Group with a 2,4-Hydroxyphenyl Function*. The Journal of Physical Chemistry A 01/2017; 121(7)., DOI:10.1021/acs.jpca.6b08707

Arkadiusz Matwijczuk, Dariusz Karcz, **Radosław Walkowiak**, Alicja Matwijczuk, Andrzej Niewiadomy, Sławomir Wybraniec, Grzegorz Karwasz, Mariusz Gagoś: *Keto-enol tautomerism of 2-(4-fluorophenyl)-5-(2,4-dihydroxyphenyl)-1,3,4-thiadiazole. Spectroscopic studies. Tautomeria keto-enolowa w 2-(4-fluorofenylo)-5-(2,4-dihydroksyfenylo)-1,3,4-tiadiazolu. Badania spektroskopowe*. Przemysł Chemiczny 10/2016; 1(10):40-44., DOI:10.15199/62.2016.10.7

/ Microbiology /

Radoslaw Janusz Walkowiak. *Enterococcus faecalis – Short Report*. 2023. Applied Biology Hub - Non-Profit. 1317-20230322., DOI:10.6084/m9.figshare.22320529

Radoslaw Janusz Walkowiak. *Escherichia coli – Short Report*. 4(1): 2022. GJNFS.MS.ID.000580. Global Journal of Nutrition & Food Science., DOI:10.33552/GJNFS.2022.04.000580

/ Plant Biology /

Radoslaw Janusz Walkowiak. *Equisetum variegatum - Short Notes*. 2024. Applied Biology Hub - Non-Profit. 0041-2024 & IEA Paper 2024., DOI:10.6084/m9.figshare.24948885

Radoslaw Janusz Walkowiak. *Brachythecium rutabulum - Small Collection*. 2023. Applied Biology Hub - Non-Profit. 1418-20230917., DOI:10.6084/m9.figshare.24155715

Botanical Reports:

Radosław Walkowiak: *Equisetum, Przemysl, Poland. IEA Collection of Equisetum 2023* © IEA Paper 2023. Presentation, Botanical Report, Scientific data. The International Equisetological Association and World Equisetum Program, Research Service, DOI:10.13140/RG.2.2.33173.09442

Radosław Walkowiak: *Equisetum, Przemysl, Poland. IEA Collection of Equisetum 2022* © IEA Paper 2022. Presentation, Botanical Report, Scientific data. The International Equisetological Association and World Equisetum Program, Research Service, DOI:10.13140/RG.2.2.21460.88962

Radosław Walkowiak: *Asplenium ruta-muraria ssp. ruta-muraria, CTC Digital Plant Collection 2021.* Report number: 09 / 2021 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.18979.17446

Radosław Walkowiak: *Short Note of Radula complanata & Porella platyphylla, CTC Digital Plant Collection 2021.* Report number: 04 / 2021 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.12214.42569

Radosław Walkowiak: *Hedera helix ssp. helix, leaves of a wild specimen, CTC Digital Plant Collection 2020.* Report number: 12 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.25227.92962

Radosław Walkowiak: *Marchantia polymorpha ssp. ruderalis, CTC Digital Plant Collection 2020.* Report number: 10 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.22020.35200

Radosław Walkowiak: *Asplenium ruta-muraria ssp. ruta-muraria, CTC Digital Plant Collection 2020.* Report number: 10 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.15060.42882

Radosław Walkowiak: *Short Note of Asplenium ruta-muraria ssp. ruta-muraria, CTC, 2020.* Report number: 09 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.18578.27846

Radosław Walkowiak: *Equisetum palustre, IEA Collection of Equisetum 2020,* DOI:10.13140/RG.2.2.27881.11369

Radosław Walkowiak, Marek Nowicki: *Short Note of Equisetum arvense,* IEA PAPER 2020, DOI:10.13140/RG.2.2.36605.59363

Radosław Walkowiak: *Short Note of Juncus effusus ssp. effusus, CTC, 2020.* Report number: 07 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.18826.90561

Radosław Walkowiak: *Short Notes of Marchantia polymorpha, CTC, 2020.* Report number: 06 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.27703.75681

Radosław Walkowiak, Julie Shelp: *Equisetum (telmateia) braunii*. Affiliation: IEA PAPER 2020, DOI:10.13140/RG.2.2.36533.83681

Radosław Walkowiak, Akira Takeuchi: *Short Note of Xanthoria parietina*, CTC, 2020. Report number: 03 / 2020 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.10084.32648

Radosław Walkowiak: *Equisetum palustre*. Affiliation: IEA PAPER 2019, IEA Collection of Equisetum 2019, DOI:10.13140/RG.2.2.23369.90725

Radosław Walkowiak, Akira Takeuchi: *Short Notes of Tortula muralis*, CTC, 2019. Report number: 02 / 2019 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.21526.40006

Marek Nowicki, **Radosław Walkowiak**: *Carex sylvatica*, Pieniny National Park (Slovakia), CTC, 2019. Report number: 07 / 2019 / " COACH " TUTORING CENTER / CTC Biology Team, DOI:10.13140/RG.2.2.12382.38720

Radosław Walkowiak, Marek Nowicki: *Short Notes of Equisetum arvense*. Affiliation: IEA PAPER 2018, DOI:10.13140/RG.2.2.13479.04008

Radosław Walkowiak: *Equisetum arvense L.*, IEA Paper, IEA Research Service, 2018. Affiliation: IEA PAPER 2018, IEA Research Service 2018, DOI:10.13140/RG.2.2.15089.99681

Radosław Walkowiak: *Equisetum hyemale*, 25.12.17. Affiliation: IEA PAPER 2018, DOI:10.13140/RG.2.2.18709.42726

Radosław Walkowiak: *Classification of Pteridophytes*. Affiliation: IEA PAPER 2017, DOI:10.13140/RG.2.2.29934.20809

Walkowiak R., Stein A., Walkowiak J., Sakai Z.: *Equisetum telmateia subsp. telmateia - Pogórze Przemyskie, Poland*. Affiliation: IEA PAPER 2016, DOI:10.13140/RG.2.2.34318.77120

Ang L., **Walkowiak R. J.**, Chan W.: *Short Taxonomic Notes of Genus Equisetum (Horsetail)*. Affiliation: IEA PAPER 2015, DOI:10.13140/RG.2.2.29285.60644/2

Covac A., Nowicki M., **Walkowiak R. J.**: *Equisetum variegatum - Breeding from the roots*. Affiliation: IEA PAPER 2014/2015, DOI:10.13140/RG.2.2.34971.77602

Nowicki M., **Walkowiak R. J.**: *Equisetum sp. - Nature Reserve in Poland / 2014*. Affiliation: IEA PAPER 2014, DOI:10.13140/RG.2.2.25691.87846

Husby Ch. E., **Walkowiak R. J.**: *An Introduction to the Genus Equisetum (Horsetail) and the Class Equisetopsida (Sphenopsida) as a whole*. Affiliation: IEA PAPER 2012, DOI:10.13140/RG.2.2.11669.52961

Radosław Janusz Walkowiak: *A Taxonomic Study of the Genus Equisetum (Horsetail)*. Affiliation: IEA PAPER 2011, DOI:10.13140/RG.2.2.21694.18249

Radosław Walkowiak: *Equisetophyta*. Affiliation: IEA PAPER 2009, DOI:10.13140/RG.2.2.10631.70567

Nowicki M., **Walkowiak R. J.:** *Equisetum telmateia - Nature Reserve in Poland / 2009*. Affiliation: IEA PAPER 2009, DOI:10.13140/RG.2.2.27579.31525

Covac A., Nowicki M., **Walkowiak R. J.**, Hunter P.: *New insights into plant development - International Equisetological Association*. Affiliation: IEA PAPER 2008, DOI:10.13140/RG.2.2.16962.48325

Radosław Janusz Walkowiak: *Equisetum Taxonomy, IEA Paper 2008, Version of 2008-10-04, Retrieved 2011-11-07*. Affiliation: IEA PAPER 2008(2011), DOI:10.13140/RG.2.2.30082.79043

WORLD EQUISETUM
International Equisetological Association

Grants, awards, and scholarships:

Excellence in Mentoring Award, Bratislava, Slovakia

Award

- Awarded February 2023

Tutor Professor and Team Award (Nature Education)

Poland, Czech Republic, Slovakia

Award

- Awarded September 2020

Doctor ad honorem, Plant Propagation, Connecticut, USA

Honorary Title

Award

- Awarded April 2016

Scientiae Doctor, Biology, Arizona, USA, Honorary Title

(Expert Level of Genus Equisetum, Ferns and Plant Taxonomy)

Award

- Awarded September 2015

Phytotherapy Doctor, Ohio, USA

(Expert Level)

Award

- Awarded July 2015

Doctor pro hac vice, Plant Biology, China

(Expert Level)

Award

- Awarded May 2015

Honorary Doctor, Esq., Biology, Botany, Bangladesh

(Expert Level)

Award

- Awarded January 2015

Doctor ad personam, Botany, Japan

(Expert Level)

Award

- Awarded November 2013

Silver Laurel (Botanical Research, Publication), Wyoming, USA

Award

- Awarded May 2011

**Equisetology Doctor (EqD, HonD), Botany, Major: Plant Taxonomy
USA, Honorary Title; Official Honorary Doctorate in Biology, Botany;
Full entitling to use the Title of Doctor / Honorary Doctor**

Award

- Awarded October 2010

International Equisetological Association

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Net:

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<http://orcid.org/0000-0002-4225-7985>
<https://www.webofscience.com/wos/author/record/2429087>
<https://internationalequisetologicalassociation.yolasite.com/radek-walkowiak.php>
<https://grassrootsjournals.org/gjnr-full-profile.php#radoslaw-janusz>
<https://www.inaturalist.org/people/radekwalkowiak>
<https://plantae.org/community/members/radoslaw-walkowiak>
https://figshare.com/authors/Radoslaw_Walkowiak/9414263

Web of Science ResearcherID ABE-9201-2021

Scopus Author ID: 57195291447

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