

KAMIL KONOWALIK

EDUCATION

- 2009 - 2014 University of Regensburg (Germany), International Graduate School of Life Sciences, section Molecular Ecology and Evolution, Ph.D. degree in natural sciences (Dr. rer. nat.)
Institute of Plant Sciences, Plant Evolution Group (AG Oberprieler), dissertation: "Reconstructing reticulate relationships in the polyploid complex of *Leucanthemum* Mill. (Compositae, Anthemideae)"
- 2007 - 2009 University of Wrocław, major: Biology, specialization: Botany, Master's degree
Institute of Plant Biology, Department of Plant Morphology and Development, thesis: "Morphological and cytogenetic characteristics of wormwood (*Artemisia absinthium* var. *absinthium* L.) and its endemic variation from the Pieniny Mountains (*Artemisia absinthium* var. *calcigena* Rehm)"
- 2004 - 2007 University of Wrocław, major: Biology, specialization: Botany, Bachelor's degree
Institute of Plant Biology, Department of Biodiversity and Vegetation Protection
- 2001 - 2004 General Upper Secondary School no 3 in Lubin (school with a German emphasis),
the finalist of Knowledge of Ecology National Competition - Lower Silesia Governor
Award for learning achievements

EXPERIENCE

- 12.2015-present Wrocław University of Environmental and Life Sciences (Poland), Faculty of Biology and Animal Science, Institute of Environmental Biology, Department of Plant Biology, *assistant professor*
- 2016-present *laboratory manager* in the Department of Plant Biology (Wrocław University of Environmental and Life Sciences) – complete laboratory management: planning and arranging furniture and equipment, choosing and buying new equipment, performing all technical work, supervising students and other workers, dealing with work safety regulations
- 09.2016 – 10.2016 University of Veracruz (Xalapa, Mexico), research stay under the Erasmus Mundus MayaNet programme
- 2014 - 2015 Wrocław University of Environmental and Life Sciences, *lecturer (part-time contracts)*
- 11.2009 - 09.2014 University of Regensburg (Germany), Faculty of Biology and Preclinical Medicine, Institute of Plant Sciences, Plant Evolution Group - AG Prof. Dr. Christoph Oberprieler
academic staff member (half position),
 - conducting classes for students of biology in English (laboratory practice)
 - DFG grant executor (OB 155/10-1): "Consequences of polyploidy: Phylogeny, phyloecology, and expression of duplicated genes in *Leucanthemum* Mill. (Compositae, Anthemideae)"
 - parental leave from 24.09.2013 to 24.09.2014
- 2008 University of Paris-Sud (Orsay, France), scientific internship as part of research project: "Cytogenetic characterisation (FISH) of *Artemisia absinthium*"
- 2008 - 2009 University of Barcelona (Spain), Faculty of Pharmacy, research project under the LLP-Erasmus: "Cytogenetic characterisation of *Artemisia absinthium*"

07.2008 - 08.2008	Medicus Medical Center Co., Dublin, Ireland, <i>technical staff</i>
08.2007 - 09.2007	Medicus Medical Center Co., Dublin, Ireland, <i>technical staff</i>
07.2007	Wigry National Park, <i>volunteer</i>
10.2006 - 10.2007	WWF, campaign to enlarge national park in Białowieża Forest, <i>volunteer</i>
10.2006 - 04.2007	Herbarium, University of Wrocław, <i>volunteer</i>

SKILLS

- Driving license cat. B
- Polish – native speaker
- English – advanced level
- German – basic level
- Catalan, Spanish – conversational level
- Knowledge and practice in many laboratory techniques i.e. flow cytometry, PCR, RT-PCR, chromosome counting, fluorescence in situ hybridization (FISH), sequencer operation (Beckman Coulter CEQ), microtome operation
- Phylogenetic reconstructions
- Statistical programs handling (R, Statistica, SPSS)
- Spatial analysis with usage of geographic information systems (GIS) programs (ArcGIS, DivaGIS, qGIS, R) and ecological niche modelling (Maxent, Phylodlim, R)
- Library preparation and analysis of sequences from Roche 454 (Next Generation Sequencing)
- Experience in fieldwork and plant identification
- Laboratory management
- Basic knowledge of HTML programming
- Competent computer user (MS Office, Corel, Adobe, and many others)

COURSES & WORKSHOPS

- „Integrated and Ecological Gardening, third edition“, postgraduate studies (two semesters 2020/2021), Wrocław University of Environmental and Life Sciences (Wrocław, Poland)
- Fortbildungsveranstaltung für Projektleiter und Beauftragte für Biologische Sicherheit (BBS) nach §§ 15 und 17 Gentechnikverordnung, University of Regensburg (course for project managers and clerks regarding safety in laboratories with a higher standard of safety) (Regensburg, Germany)
- Einführung in Geoinformationssysteme, ArcGIS 10, University of Regensburg (GIS training)
- SSB Phylogenetics Symposium and Software School (Austin, TX, USA)
- museOMICS workshop 2021 (virtual)

ADDITIONAL INFORMATION

Publications:

Liu, L., Low, S.L., Sakaguchi, S., Feng, Y., Ge, B., **Konowalik, K.**, Li, P. 2021. Development of nuclear and chloroplast polymorphic microsatellites for *Crossostephium chinense* (Asteraceae). *Molecular Biology Reports* 48, 6259–6267.

Liu Z.H., Low S.L., Cai M.Q., Ru Y.L., **Konowalik K.**, Li P. 2021. Complete plastome of *Carlina acaulis* and implications on systematics of the tribe Cardueae (Asteraceae). *Annales Botanici Fennici* 58 (4-6), 313–320.

Kolanowska M., Michalska E., **Konowalik K.**, 2021. The impact of global warming on the niches and pollinator availability of sexually deceptive orchid with a single pollen vector. *Science of The Total Environment* 795, 148850.

Konowalik, K., Nosol, A. 2021. Evaluation metrics and validation of presence-only species distribution models based on distributional maps with varying coverage. *Scientific Reports* 11, 1482 (2021).

Tomasello, S., **Konowalik, K.**, 2020. On the *Leucanthemopsis alpina* (L.) Heywood growing in the Illyrian region. *PhytoKeys* 161, 27–40.

Konowalik, A., Najbar, A., **Konowalik, K.**, Dylewski, Ł., Frydlewicz, M., Kisiel, P., Starzecka, A., Zaleśna, A., Kolenda, K., 2020. Amphibians in an urban environment: a case study from a central European city (Wrocław, Poland). *Urban Ecosystems* 23, 235–243.

Proćków, M., **Konowalik, K.**, Proćków, J., 2019. Contrasting effects of climate change on the European and global potential distributions of two Mediterranean helicoid terrestrial gastropods. *Regional Environmental Change* 19, 2637–2650.

Konowalik, K., Kolanowska, M., 2018. Climatic niche shift and possible future spread of the invasive South African Orchid *Disa bracteata* in Australia and adjacent areas. *PeerJ* 6, e6107.

Oberprieler, C., **Konowalik, K.**, Fackelmann, A., Vogt, R., 2018. Polyploid speciation across a suture zone: phylogeography and species delimitation in S French *Leucanthemum* Mill. representatives (Compositae–Anthemideae). *Plant Systematics and Evolution* 304, 1141–1155.

Vogt, R., **Konowalik, K.**, Oberprieler, C., 2018. Karyological analysis reveals two new polyploid marguerite taxa (*Leucanthemum*, Compositae–Anthemideae) in S France and NW Italy. *Willdenowia* 48, 221–226.

Konowalik, K., Proćków, M., Proćków, J., Aug. 2017. Climatic niche of *Selinum alatum* (Apiaceae, Selineae), a new invasive plant species in Central Europe and its alterations according to the climate change scenarios: Are the European mountains threatened by invasion? *PLOS ONE* 12 (8), e0182793+.

Oberprieler, C., Wagner, F., Tomasello, S., **Konowalik, K.**, Jul. 2017. A permutation approach for inferring species networks from gene trees in polyploid complexes by minimising deep coalescences. *Methods in Ecology and Evolution* 8 (7), 835–849.

Kolanowska, M., Grochocka, E., **Konowalik, K.**, May 2017. Phylogenetic climatic niche conservatism and evolution of climatic suitability in Neotropical Angraecinae (Vandaeae, Orchidaceae) and their closest African relatives. *PeerJ* 5:e3328

Stutz, S., Hinz, H. L., **Konowalik, K.**, Müller-Schärer, H., Oberprieler, C., Schaffner, U., Sep. 2016. Ploidy level in the genus *Leucanthemum* correlates with resistance to a specialist herbivore. *Ecosphere* 7 (9):e01460.

Kolanowska, M., Mystkowska, K., Kras, M., Dudek, M., **Konowalik, K.**, Aug. 2016. Evolution of the climatic tolerance and postglacial range changes of the most primitive orchids (Apostasioideae) within Sundaland, Wallacea and Sahul. *PeerJ* 4, e2384+.

Konowalik, K., Wagner, F., Tomasello, S., Vogt, R., Oberprieler, C., 2015. Detecting reticulate relationships among diploid *Leucanthemum* Mill. (Compositae, Anthemideae) taxa using multilocus species tree reconstruction methods and AFLP fingerprinting. *Molecular Phylogenetics and Evolution* 92, 308–328.

Kolanowska, M., **Konowalik, K.**, 2014. Niche Conservatism and Future Changes in the Potential Area Coverage of *Arundina graminifolia*, an Invasive Orchid Species from Southeast Asia. *Biotropica* 46 (2), 157–165.

Oberprieler, C., Greiner, R., **Konowalik, K.**, Vogt, R., 2014. The reticulate evolutionary history of the polyploid NW Iberian *Leucanthemum pluriflorum* clan (Compositae, Anthemideae) as inferred from nrDNA ETS sequence diversity and eco-climatological niche-modelling. *Molecular Phylogenetics and Evolution* 70, 478–491.

Oberprieler, C., **Konowalik, K.**, Altpeter, S., Siegert, E., Lo Presti, R. M., Greiner, R., Vogt, R., 2012. Filling of eco-climatological niches in a polyploid complex – a case study in the plant genus *Leucanthemum* Mill. (Compositae, Anthemideae) from the Iberian Peninsula. *Flora - Morphology, Distribution, Functional Ecology of Plants* 207 (12), 862-867.

Konowalik, K., Kreitschitz, A., 2012. Morphological and anatomical characteristics of *Artemisia absinthium* var. *absinthium* and its polish endemic variety *A. absinthium* var. *calcigena*. *Plant Systematics and Evolution* 298 (7), 1325-1336.

Konowalik, K., Garcia, S., Pellicer, J., Kreitschitz, A., Vallès, J., 2010. Cytogenetic characterisation of *Artemisia absinthium* (Asteraceae, Anthemideae) and its polish endemic var. *calcigena*. *Annales Botanici Fennici* 47 (6), 477-488.

Other publications:

Kolenda, K., Kisiel, P., Konieczny, K., Kuśmierk, N., Starzecka, A., **Konowalik, K.**, 2020. Nowe dane o występowaniu trzaski górskiej *Ichthyosaura alpestris* w północno-wschodniej części Dolnego Śląska (New data on the occurrence of the Alpine newt *Ichthyosaura alpestris* in the north-eastern part of Lower Silesia). *Chrońmy Przyrodę Ojczystą*, vol. 75, no. 6, 2019, pp. 459-469.

Najbar, A., Konowalik, A., Frydlewicz, M., Kisiel, P., Kolenda, K., **Konowalik, K.**, Starzecka, A., Zaleśna, A., 2019. Płazy miasta Wrocławia—zagrożenia i zalecenia ochronne. *Chrońmy Przyrodę Ojczystą*, vol. 75, no. 2, pp. 98-112.

Grants:

“Phylogeography and hybridization within Carpathian ox-eye daisies (*Leucanthemum*, Compositae)” - principal investigator, 2017-ongoing, funding 561230 PLN (125000 EUR), National Science Centre in Poland (grant nr: 2016/23/D/NZ8/00935)

“Phylogeny of three sections within genus *Centaurea* (Compositae)” - principal investigator, 2019, funding 4318.43 PLN (946 EUR) from Polish Ministry of Science and Higher Education (through Wrocław University of Environmental and Life Sciences)

“Phylogeny and biogeography of genus *Chrysanthellum* Rich. (Coreopsideae, Asteraceae)” - principal investigator, 2018-2019, funding 10232 PLN (2245 EUR) from Polish Ministry of Science and Higher Education (through Wrocław University of Environmental and Life Sciences)

“Analysis of variability of selected chloroplast markers in phylogeographic studies of *Pleurospermum austriacum* (Apiaceae)” - principal investigator, 2017-2018, funding 9999.60 PLN (2200 EUR) from Polish Ministry of Science and Higher Education (through Wrocław University of Environmental and Life Sciences)

Participation in organizations:

since 2021	International Biogeography Society
since 2015	Polish Botanical Society (ordinary member)
2016 - 2017	American Society of Naturalists
2011 - 2013	International Association for Plant Taxonomy (ordinary member)
2009 - 2011	Polish Botanical Society (extraordinary member)
2007 - 2009	Activity in the Student Scientific Association of Experimental Biology
2004 - 2009	Activity in the Student Scientific Association of Plant Systematics
2004 - 2006	Activity in the Student Scientific Association of Ornithologists

Participation in conferences:

2022	International Biogeography Society, 10th Biennial conference, Vancouver, Canada. (Konowalik, K., poster: “Molecular markers and ecological niche modeling uncover migration routes of the Carpathian endemic round leaved ox-eye daisy (<i>Leucanthemum rotundifolium</i>)”)
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- 2021 Early Career Biogeographers Conference 2021, Amsterdam, the Netherlands (virtual). (Konowalik, K., poster: "Phylogeography and ecological niche modeling reveal migration routes of the Carpathian endemic plant *Leucanthemum rotundifolium* (Compositae, Anthemideae)") – *virtual*
- 2016 Evolution 2016, Austin, USA. (Konowalik, K., poster: "Niche conservatism in plant species with bipolar disjunction")
- 2014 Botany 2014, Boise, USA. (Oberprieler, C., Greiner, R., Konowalik, K., Talianova, M., Tomasello, S., Wagner, F., Vogt, R., presentation: "Consequences of polyploidy: Phylogeny, phyloecology, and expression of duplicated genes in *Leucanthemum* Mill. (Compositae, Anthemideae).") – *without attendance*
- 2013 Botany 2013, New Orleans, USA (Konowalik, K., Wagner, F., Tomasello, S., Greiner, R., Vogt, R., Oberprieler, C., poster: "Scrutinizing homoploid hybrid speciation in the genus *Leucanthemum* (Compositae, Anthemideae) using species tree reconstruction methods") – *without attendance*
- 2012 21st International Symposium "Biodiversity and Evolutionary Biology" of the German Botanical Society (DBG), Mainz, Germany (Konowalik, K., Tomasello, S., Vogt, R., Oberprieler, C., presentation: "Using next-generation sequencing techniques for the reconstruction of reticulate evolution on the polyploid complexes of *Leucanthemum* and *Leucanthemopsis* (Compositae, Anthemideae)")
- 2011 BioSystematics, Botanic Garden and Botanical Museum Berlin-Dahlem, Freie Universität Berlin, Germany (Konowalik, K., Altpeter, S., Siegert, E., Vogt, R., Lo Presti, R. M., Oberprieler, C., poster: "Is time influencing the filling of ecological niches after the emerging of polyploid species? A case study in the genus *Leucanthemum* Mill. (Compositae, Anthemideae) from the Iberian peninsula")
- 2009 IV Conference of Polish Society of Experimental Plant Biology "Experimental Plant Biology. Why not?!", Jagiellonian University in Kraków, Poland (Konowalik, K., Garcia, S., Pellicer, J., Kreitschitz, A., Vallès, J., poster: "Is *Artemisia absinthium* var. *calcigena* a well defined endemic taxon? Morphological, anatomical and cytogenetic characteristics of *Artemisia absinthium* var. *absinthium* and var. *calcigena*.")
- 2008 International Cloudberry Conference, Krkonošský Národní Park, Czech Republic (Konowalik, K., et al., presentation: "Centres of synanthropization in Karkonosze National Park")
- 2006 Conference of Polish Student Scientific Organizations in Life Sciences, University of Warmia and Mazury in Olsztyn, Poland (Konowalik, K., Śliwiński, M., poster: "Synantropijne gatunki roślin naczyniowych w rezerwach byłego województwa wrocławskiego", [Synanthropic vascular plants in nature reserves of former Wrocław voivodeship])
- 2005 Conference of Polish Student Scientific Organizations in Life Sciences, Pomerania Academy, Słupsk, Poland (Dziuba, C., Konowalik, K., Rudy, M., Suchan, T., poster: "Nowe stanowisko turzycy patagońskiej *Carex magellanica* w polskiej części Puszczy Rominckiej", [New stand of *Carex magellanica* in Polish part of Romincka primeval forest], award for the best poster)

Reviewer in scientific journals:

Annals of Botany (2020), Plant Biosystems (2019), Plant Systematics and Evolution (2018), International Journal of Environmental Research (2018), Ecological Research (2018), BMC Evolutionary Biology (2017), Edukacja biologiczna i środowiskowa (2016), Acta Oecologica (2016), Folia Geobotanica (2013), Folia Geobotanica (2012)

Reviewer for grant agencies:

European Commission: Maria Skłodowska-Curie Individual Fellowships (2021), European Commission: Maria Skłodowska-Curie Individual Fellowships (2020), Czech Science Foundation (2019), Czech Science Foundation (2017)

Awards:

Rector's Award for outstanding academic achievements, 3rd degree (2021)

INTERESTS

- scientific interests, including: the influence of polyploidization and hybridization on the evolution of plants, plant speciation, biogeography and systematics of plants, the impact of glaciation on the flora of Europe, evolutionary biology
- gardening, traveling, folk culture, history

REFEREES

- Prof. Dr. Christoph Oberprieler, University of Regensburg, e-mail: Christoph.Oberprieler@biologie.uni-regensburg.de
- Prof. Dr. Joan Vallès, University of Barcelona, e-mail: joanvalles@ub.edu
- Dr. Agnieszka Kreitschitz, University of Wrocław, e-mail: agnieszka.kreitschitz@uni.wroc.pl