

Christophe Dominik

POSTDOCTORAL RESEARCHER

Theodor-Lieser-Strasse 4, 06120 Halle, Germany

✉ christophe.dominik@ufz.de | 🌐 christophedominik.netlify.com | 🎓 Google Scholar | 📄 Research Gate

📄 Publons | 🐦 Twitter | 10.11.1985 | Married



Summary

Practical experience in landscape ecology, agroecology, community ecology and ecosystem services. 10+ years experience in geographical information systems (GIS) and statistical software (R). 5+ year experience in field work and identification of arthropods. 1+ year abroad work experience (Philippines). Strong interests in landscape ecology, biological control, pollination services, gut microbiome, community ecology, ecosystem services, R and data visualization.

Education

Martin Luther University Halle-Wittenberg

DR. RER. NAT. | MAGNA CUM LAUDE

Halle (Saale), Germany

2019

Université de La Réunion

MASTER OF SCIENCE IN BIODIVERSITY AND TROPICAL ECOSYSTEMS

Saint-Denis, Réunion Island

2011

Université Henri-Poincaré (UHP Nancy-1)

BACHELOR OF SCIENCE IN BIOLOGY OF ORGANISMS AND POPULATIONS

Nancy, France

2009

Research Experience

Helmholtz-Zentrum für Umweltforschung (UFZ)

POSTDOCTORAL RESEARCHER | DEPARTMENT OF COMMUNITY ECOLOGY (BZF)

Halle (Saale), Germany

Jan. 2019 - present

P.I.: Schweiger O. | Main projects: PoshBee, VODOO, INTERCEDE, INTERACT, Safeguard

- Mapping and classification of > 150 study sites using ArcGIS Pro.
- Fieldwork including nectar/haemolymph extraction, pollinator sampling, beekeeping activities, bumblebee experiments, pitfall traps.
- P.I. of a third funded project iNTERACT.
- Co-coordinator and WP leader of the INTERCEDE project.
- Project budget management.
- Supervision of PhD students, Master students and scientific staff.

Helmholtz-Zentrum für Umweltforschung (UFZ)

PHD STUDENT/GUEST SCIENTIST | DEPARTMENT OF COMPUTATIONAL LANDSCAPE ECOLOGY (CLE)

Leipzig, Germany

Jul. 2012 - Dec. 2018

Supervisors: Seppelt R. and Václavík T. | Main project: LEGATO

- Mapping and classification of 30 study sites using ArcGIS 10.
- Landscape heterogeneity quantification via the calculation of landscape metrics (Fragstats).
- Supervision of technical staff.

International Rice Research Institute (IRRI)

GUEST SCIENTIST | CROP AND ENVIRONMENTAL SCIENCES DIVISION (CESD)

Los Baños Laguna, Philippines

Jun. 2013 - Sep. 2014

Advisor: Horgan F.G. | Main project: LEGATO

- Sampling and identification of arthropods (~ 80000 individuals) to morphospecies level (~ 200 species).
- Supervision of field work assistants in the mountainous region of the Philippines.

Centre national de la recherche scientifique (CNRS)

RESEARCH ASSISTANT | LITTORAL, ENVIRONNEMENT, GÉOMATIQUE, TÉLÉDÉTECTION (UMR LETG)

Nantes, France

Mar. 2012 - Jun. 2012

Supervisor: Godet L. | Main project: ECOSAL ATLANTIS

- Bird counts of common European passerine birds in salinas during a two weeks period.
- Mapping of the salinas located in Ré Island using ArcView 3.1 and calculation of landscape metrics (Fragstats).

Centre national de la recherche scientifique (CNRS)

Nantes, France

UNDERGRADUATE RESEARCH STUDENT | LITTORAL, ENVIRONNEMENT, GÉOMATIQUE, TÉLÉDETECTION (UMR LETG)

Feb. 2011 - Jun. 2011

Supervisor: Godet L. | M.Sc.2 Thesis grade: 16.67/20 Rank: 2/17 | Main project: ECOSAL ATLANTIS

- Material/Methods and analysis similar to the research experience carried out in 2012 at the CNRS (see above).

Centre de coopération internationale en recherche agronomique pour le développement (CIRAD)

Saint-Pierre, Réunion Island

UNDERGRADUATE RESEARCH STUDENT | PEUPELEMENTS VÉGÉTAUX ET BIO-AGRESSEURS EN MILIEU TROPICAL (UMR PVBMT)

Jan. 2010 - Jun. 2010

Supervisor: Quilici S. | M.Sc.1 Thesis grade: 15.73/20 Rank: 5/35

- Semi-field experiments: Infestation of four plant species within the Rosacea family with 40 larvae of *C.janthina*.
- Daily survival monitoring and GLM analysis to test the food specificity of *C.janthina* on Rosacea plants.

Presentations

INTERNATIONAL CONFERENCES

SCAPE - Scandinavian Association of Pollination Ecology - Annual Meeting

Höör, Sweden

PAPANIKOLAOU A.D., KÜHN I., FRENZEL M., ..., DOMINIK C., ..., POTTS S.G., ROBERTS S.P.M., SCHWEIGER O.

Oct. 2019

Poster: Wild bee and floral diversity co-vary in response to the direct and indirect impacts of land use.

GfÖ - Ecological Society of Germany, Austria, and Switzerland - Annual Meeting

Vienna, Austria

DOMINIK C., HORGAN F.G., SETTELE J., SEPPELT R., VÁCLAVÍK T.

Sep. 2018

Talk: Landscape composition, configuration, and trophic interactions shape arthropod communities in rice agro-ecosystems.

GfÖ - Ecological Society of Germany, Austria, and Switzerland - Annual Meeting

Göttingen, Germany

DOMINIK C., VÁCLAVÍK T., HORGAN F.G., SETTELE J., SEPPELT R.

Sep. 2015

Talk: Effects of landscape structures on rice agroecosystem biodiversity and biological control across the Philippines.

FONA - Sustainable Land Management - Status Conference

Berlin, Germany

DOMINIK C., VÁCLAVÍK T., HORGAN F.G., SETTELE J., SEPPELT R.

Apr. 2013

Talk: The effects of landscape heterogeneity on the biocontrol-production function in the rice dominated agroecosystems.

PROJECT ANNUAL GENERAL MEETINGS (AGM)

Safeguard - AGM

Online

DOMINIK C., & SCHWEIGER O.

Jan. 2022

Talk: Introduction on how to analyse the impact of landscape structure on pollinator movement and plant reproduction

PoshBee - AGM

Online

DOMINIK C., & SCHWEIGER O.

Jan. 2021

Talk: Can we predict pesticide application within the PoshBee site network?

PoshBee - AGM

Marseille, France

DOMINIK C., & SCHWEIGER O.

Jan. 2020

Talk: Characterization of the landscape structure within the site network: update, status, and next steps

LEGATO - AGM

Banaue, Philippines

DOMINIK C., HORGAN F.G., SETTELE J., SEPPELT R., VÁCLAVÍK T.

Aug. 2016

Talk: The effects of landscape heterogeneity on arthropod communities in rice agro-ecosystems.

LEGATO - AGM

Yogyakarta, Indonesia

DOMINIK C., VÁCLAVÍK T., HORGAN F.G., SETTELE J., SEPPELT R.

Mar. 2015

Talk: The effects of landscape heterogeneity on the biocontrol-production function in the rice dominated agroecosystems.

LEGATO - AGM

Hanoi, Vietnam

DOMINIK C., VÁCLAVÍK T., HORGAN F.G., SETTELE J., SEPPELT R.

Feb. 2013

Talk: The effects of landscape heterogeneity on the biocontrol-production function in the rice dominated agroecosystems.

Research Grants and Funding

iDiv Flexpool Support Fund call

10k EUR

CONSUMABLES FOR GUT MICROBIOME ANALYSES, PATHOGEN SCREENING, AND IMAGING FLOW CYTOMETRY | COORDINATOR

2021

UFZ TB Support Fund

5k EUR

CONSUMABLES FOR GUT MICROBIOME ANALYSES, PATHOGEN SCREENING, AND IMAGING FLOW CYTOMETRY | COORDINATOR

2021

UFZ TB PhD consortium

Three PhD positions

INTERCEDE PROJECT | CO-COORDINATOR AND WP LEADER

2019



Professional Activities and Memberships

RESEARCH PROJECTS

Safeguard: Safeguarding European wild pollinators

INVOLVED SCIENTIST

[Horizon 2020](#)

2021 - present

INTERACT: Impacts of landscape structure, floral resources and land-use intensity on the health of beneficial arthropods in agroecosystems

PRINCIPAL INVESTIGATOR

[iDiv and UFZ support funds](#)

2021

INTERCEDE: Interactions of farmland biodiversity and agricultural ecosystem services under climate change

WP LEADER AND CO-COORDINATOR

[UFZ](#)

2020 - present

VOODOO: Viral eco-evolutionary dynamics of wild and domestic pollinators under global change

INVOLVED SCIENTIST

[BiodivERsA](#)

2020 - present

PoshBee: Pan-european assessment, monitoring, and mitigation of stressors on the health of bees

INVOLVED SCIENTIST

[Horizon 2020](#)

2019 - present

LEGATO: Land-use intensity and ecological engineering - Assessment tools for risks and opportunities in irrigated rice based production systems

INVOLVED SCIENTIST, PHD STUDENT

[BMBF](#)

2011 - 2016

ECOSAL-ATLANTIS: Ecotourism in the Atlantic salt-marshes: a strategy for integral and sustainable development

INVOLVED UNDERGRADUATE, MASTER STUDENT

[INTERREG](#)

2007 - 2013

PEER-REVIEW JOURNALS

Since 2016 N = 31 completed reviews of 23 manuscripts

Landscape Ecology (12), Agriculture Ecosystems & Environment (4), Paddy and Water Environment (3), Journal of Applied Ecology (2), Ecology and Evolution (2), BMC Ecology (2), Basic and Applied Ecology (2), Philosophical Transactions of the Royal Society B (1), Journal of Insect Conservation (1), Insects (1), Scientific Reports (1).

PROFESSIONAL MEMBERSHIPS

Gesellschaft für Ökologie (**GfÖ**), British Ecological Society (**BES**), Société Française d'Écologie (**SFE**).



Professional Outreach

MEDIA INTERVIEWS

Viren bedrohen die Welt der Insekten

[LINK TO THE ARTICLE](#)

[MDR Sachsen](#)

Jul. 2020

PRESS & BLOGS

Better many small than a few large: how landscape configuration affects arthropod communities in rice agroecosystems

[LINK TO THE ARTICLE](#)

[The Applied Ecologist's Blog](#)

Aug. 2018



Professional Supervision

PHD STUDENTS

Heuschele Jonna, Martin Luther University Halle-Wittenberg, Germany

| *Main supervisor*

2020 - present

Liu Yicong, Martin Luther University Halle-Wittenberg, Germany

| *Co-supervisor*

2020 - present

MASTER STUDENTS

Leyrer Dorothea, Friedrich Wilhelm University of Bonn, Germany

| *Main supervisor*

2021 - 2022

Slivensky Cassidy, University of Bremen, Germany

| *Main supervisor*

2021 - 2022

BACHELOR STUDENTS

Priese Carlotta, B.Sc. at Weihenstephan-Triesdorf University, Germany

| *Co-supervisor*

2020 - 2021

Professional Skills

General: Experience in leading and managing multiple interdisciplinary projects, and in supervising staff, doctoral and master students.

Software: R, ArcGIS 3.1/9/10/Pro, Fragstats, Adobe CS5, Markdown, GitHub.

Statistical analyses: ANOVA, LM/LME/GLS/GLM/GLMM, dissimilarity matrices, RLQ, 4th-corner, SEM.

Sampling methods: Sweep-net, suction sampler (blow-vac), pitfall traps, color plates, exclusion nets, point counts.

Pollinators: Haemolymph and nectar extraction, pollinator networks, beekeeping activities (colony assessment, wax and royal jelly sampling), bumblebee experiments.

Fauna identification: European arthropods (depending on Order/Family), tropical rice-arthropods, European passerine birds.

Languages: French (Mother tongue), English (Proficient), German (B1).

Publications

PEER-REVIEW ARTICLES

- First author: 4/6 (67 %)
- Last author: 0/6 (0 %)

6. **Dominik C.**, Seppelt R., Horgan F.G., Settele J., & Václavík T. (2022). Landscape heterogeneity filters functional traits of rice arthropods in tropical agroecosystems. **Ecological Applications**, (*in press*).
<https://dx.doi.org/10.1002/eap.2560>

5. Vanderplanck M., Michez D., Albrecht M., ..., **Dominik C.**, ..., Toktas Y., & Maxence G. (2021). Monitoring bee health in European agro-ecosystems using wing morphology and fat bodies. **One Ecosystem** 6: e63653.
<https://doi.org/10.3897/oneeco.6.e63653>

4. Settele J., Heong K.L., Kühn I., ..., **Dominik C.**, ..., Zhu Z., & Wiemers M. (2018). Rice Ecosystem Services in South-East Asia. **Paddy and Water Environment**, 16: 211-214.
<https://doi.org/10.1007/s10333-018-0656-9>

3. **Dominik C.**, Seppelt R., Horgan F.G., Settele J., & Václavík T. (2018). Landscape composition, configuration, and trophic interactions shape arthropod communities in rice agro-ecosystems. **Journal of Applied Ecology**, 55: 2461-2472.
<https://doi.org/10.1111/1365-2664.13226>

2. **Dominik C.**, Seppelt R., Horgan F.G., Marquez L., Settele J., & Václavík T. (2017). Regional-scale effects override the influence of fine-scale landscape heterogeneity on rice arthropod communities. **Agriculture, Ecosystems & Environment**, 246: 269-278.
<https://doi.org/10.1016/j.agee.2017.06.011>

1. **Dominik C.**, Ménanteau L., Chadenas C., & Godet L. (2012). The influence of salina landscape structures on terrestrial bird distribution in the Guérande basin (Northwestern France). **Bird Study**, 59: 483- 495.
<https://doi.org/10.1080/00063657.2012.715279>

IN REVIEW/PREPARATION

1. Gérard M., Baird E., Breeze T., **Dominik C.**, & Michez D. Impact of crop exposure and agricultural intensification on the phenotypic variation of bees. (*in revisions*)

THESES

2. **Dominik C.** (2019). The effects of landscape heterogeneity on arthropod communities in rice agro-ecosystems. Doctoral Thesis, Martin-Luther-Universität Halle-Wittenberg.
<http://dx.doi.org/10.25673/13861>

1. **Dominik C.** (2011). Influence des structures spatiales des marais salants sur les communautés d'oiseaux terrestres. Master Thesis, Université de La Réunion.
[Link to the thesis](#)

References

Dr. Oliver SCHWEIGER

Department of Community Ecology
Helmholtz-Centre for Environmental Research UFZ - 06120 Halle, Germany

✉ oliver.schweiger@ufz.de

☎ (+49) 345 558 5306

Note: Dr. Schweiger is the PI of my current postdoc at UFZ BZF Halle.

Prof. Dr. Josef SETTELE

Department of Conservation Biology & Social-Ecological Systems
Helmholtz-Centre for Environmental Research UFZ - 06120 Halle, Germany

✉ josef.settele@ufz.de

Note: Prof. Dr. Settele was the main coordinator of the international project (LEGATO), in which I worked as a PhD student. Since then, we have been working on multiple projects together.

Dr. Tomáš VÁCLAVÍK

Department of Ecology & Environmental Sciences
Palacký University Olomouc, Faculty of Science – 78371 Olomouc, Czech Republic

✉ tomas.vaclavik@upol.cz

☎ (+420) 585 634 555

Note: Dr. Václavík co-supervised my work during my PhD. He has great insight of the work I have accomplished as a PhD student.

Prof. Dr. Ralf SEPPELT

Department of Computational Landscape Ecology
Helmholtz Centre for Environmental Research UFZ – 04318 Leipzig, Germany

✉ ralf.seppelt@ufz.de

☎ (+49) 341 235 1250

Note: Prof. Dr. Seppelt was the main supervisor of my PhD work, and gave me the freedom to lead my own research.

Dr. Finbarr G. HORGAN

Environment and Sustainable Resource Management
University College Dublin - Belfield, Dublin 4, Ireland

✉ f.g.horgan@gmail.com

Note: Dr. Horgan and I worked together during my research stay in the Philippines (PhD work). He advised and helped me planning the fieldwork in the Philippines.

Dr. Laurent GODET

UMR LETG
Université de Nantes – BP 81 227 – 44 312 Nantes cedex 3

✉ Laurent.Godet@univ-nantes.fr

☎ (+33) 0253487654

Note: Dr. Godet was my supervisor during my Master project, and ignited my interest in research.