

Personal Information

Dr. Niklas Möhring

Born 07/04/1989 in Mülheim, Germany.

ResearcherID: Y-3732-2019

ORCID ID: <https://orcid.org/0000-0003-0292-4402>

Professional Experience

- 01/02/2021 – now **Centre d'Etudes Biologiques de Chizé, CNRS, France**
Postdoctoral Fellow of the Swiss National Science Foundation
- 01/08/2020 – now **Independent Expert**
EU Pilot Project "Developing a farmers' toolbox for integrated pest management practices from across the Union"
- 01/09/2019 – 31/12/2020 **AECP Group, ETH Zurich, Switzerland**
Postdoctoral Researcher and Lecturer
- 01/02/2016 – 31/07/2019 **AECP Group, ETH Zurich, Switzerland**
Researcher, PhD Candidate
- 01/08/2015 – 31/01/2016 **Production Economics Group, University Bonn, Germany**
Research Assistant

Education

- 01/02/2016 – 02/04/2019 **Doctor of Science ETH (PhD)**
AECP Group, ETH Zurich, Switzerland
"Reducing Pesticide Use Risks: An Economic Analysis"
Committee: Robert Finger, ETH Zurich, Switzerland; Alain Carpentier, INRAE, France; Stefan Hirsch, TU Munich, Germany

Awarded with the SIAF award for an outstanding PhD thesis in Economics at the University Zurich or ETH Zurich and the Hans-Vontobel award for an outstanding PhD thesis in Agricultural Sciences
- 01/10/ 2013 – 01/09/2015 **M.Sc. (double degree) in Agricultural Economics**
University Bonn, Germany and
Wageningen University and Research Center, Netherlands
- 01/04/2010 – 01/09/2013 **B.Sc. in Economics**
University Münster, Germany and Universidad del País Vasco, Spain

Projects/Funding

- 01/02/2021 – now **"Towards effective and efficient pest management in agriculture"**
(Project lead and acquisition, [Grant 199245](#))
Postdoctoral Fellowship of the Swiss National Science Foundation
- 01/08/2019 – 31/12/2020 **"PestiFreeWheat" Project (Project lead together with Robert Finger)**
Determinants, Barriers, and Challenges for the introduction of a pesticide-free wheat production system in Switzerland.
Together with producer organizations (IP-SUISSE), food processors (JOWA), and retailers (MIGROS) – funded by the ETH Foundation (contribution to proposal writing).

01/08/2015 – 31/01/2016

"Incentive taxes on pesticides: Economic analysis, experiences from Europe and the effects of accompanying measures." (Assistance)
Economic and quantitative analysis of incentive taxes on pesticides and review of experiences in Europe.
Project for the Federal Office for Agriculture in Switzerland

Prizes and Awards

03/06/2021

Hans Vontobel Award for outstanding discoveries in the field of Agricultural Sciences

19/03/2021

Best presentation award 2021 of the Swiss Agricultural Economics and Sociology Association

01/09/2020

SIAF Award for an outstanding PhD thesis in Economics at the University Zurich or ETH Zurich

Participation in industrial innovation

01/08/2019 – 31/12/2020

Supporting producer organizations (IP-SUISSE), food processors (JOWA), and retailers (MIGROS) in developing a large-scale program for (non-organic) pesticide-free wheat production in Switzerland.

Teaching

Feb. 2016 – now

Supervision of 5 Bachelor theses and 4 Master theses at the Agricultural Economics and Policy Group, ETH Zurich

2020 (fall semester)

Lecturer: bachelor-level course "Mikroökonomie des Agrar- und Lebensmittelsektors" at ETH Zurich

2020 (fall semester)

Guest lecturer: Master-level course "Risk Analysis and Management in Agriculture" at ETH Zurich

2020 (spring semester)

Lecturer: Master-level course "Current Topics in Agricultural Economics and Policy" at ETH Zurich (co-supervision)

2019 (fall semester)

Guest lecturer: Master-level course "Risk Analysis and Management in Agriculture" at ETH Zurich

2016 (fall semester)

Lecturer: Master-level course "Research Project in Food and Resource Economics" at ETH Zurich (co-supervision)

Scientific Reviewing Activities

Scientific Journals

Nature Sustainability, Agricultural Economics, Sustainability, Science of the Total Environment, Risk Analysis, Pest Management Science, Appetite, Journal of Environmental Management, Journal of Cleaner Production, Environmental Modelling & Assessment

Others

French National Research Agency (ANR)

Active Memberships

Memberships

European Association of Agricultural Economists

Publications in peer-reviewed scientific journals

- Mesnager, R., Straw, E.A., Antoniou, M.N. ... **Möhring, N.**, ... *et al.* (2021). Improving pesticide-use data for the EU. *Nature Ecology & Evolution*.
- Möhring, N.**, Kudsk, P., Ørum, J. E., Jørgensen, L., N., Finger, R. (2021). An R package to calculate potential environmental and human health risks from pesticides using the 'Pesticide Load Indicator'. *Computers and Electronics in Agriculture* (accepted).
- Möhring, N.**, Ingold, K., Kudsk., P., Martin-Laurent, F., Niggli, U., Siegrist, M., Studer, B., Walter, A. and Finger, R. (2020). Pathways for Advancing Pesticide Policies. *Nature Food*, 1, 535–540.
- Möhring, N.**, Dalhaus, T., Enjolras, G., Finger, R. (2020). Crop Insurance and Pesticide Use in European Agriculture. *Agricultural Systems*, 184, 102902.
- Möhring, N.**, Wuepper, D., Musa, T., & Finger, R. (2020). Why farmers deviate from recommended pesticide timing: The role of uncertainty and information. *Pest Management Science*, 76 (8), pp. 2787-2798.
- Möhring, N.**, Bozzola, M., Hirsch, S., & Finger, R. (2020). Are pesticides risk decreasing? The relevance of pesticide indicator choice in empirical analysis. *Agricultural Economics*, 51(3), pp. 429-444.
- Böcker, T., Britz, W., **Möhring, N.** and Finger, R. (2020). An economic and environmental assessment of a glyphosate ban for the example of maize production. *European Review of Agricultural Economics*, 47(2), pp. 371-402.
- Hirsch, S., Mishra, A.K., **Möhring, N.** and Finger, R. (2020). Revisiting Firm Flexibility and Efficiency: Evidence from the EU Dairy Processing Industry. *European Review of Agricultural Economics*, 47(3), pp. 971-1008.
- Möhring, N.**, Gaba, S. and Finger, R., (2019). Quantity based indicators fail to identify extreme pesticide risks. *Science of the Total Environment*, 646, pp.503-523.
- Böcker, T., **Möhring, N.**, and Finger, R. (2019). Herbicide free agriculture? A bio-economic modelling application to Swiss wheat production. *Agricultural Systems*, 173, 378-392.
- Finger, R., **Möhring, N.**, Dalhaus, T. and Böcker, T., (2017). Revisiting pesticide taxation schemes. *Ecological Economics*, 134, pp.263-266.

Peer-reviewed monographs

- Möhring, N.** (2019). *Reducing Pesticide Use Risks: An Economic Analysis* (Doctoral dissertation, ETH Zurich).

Work under consideration

- Möhring, N.**, Finger, R. Pesticide-free but not organic: adoption of a large-scale wheat production standard in Switzerland (In Review).
- Möhring, N.**, Finger, R., Dalhaus, T. Extreme heat reduces insecticide use under real field conditions. (In Review)
- Finger, R., **Möhring, N.** Farmer perception of environmental effects of pesticides drives adoption of pesticide-free adoption (In Review).
- Wang, Y., **Möhring, N.**, Finger, R. Information transmission and agricultural innovation spillovers: The case of pesticide-free wheat production (In Review)

Unpublished work (publications in preparation)

- Möhring, N.**, Gaba, S., Bretagnolle, V. Navigating the debate on optimal pesticide use levels: an interdisciplinary perspective.
- Möhring, N.**, Bretagnolle, V., Gaba, S. Field-level pesticide use trends in Western France from 2005-2020.
- Möhring, N.**, Ba, M., N., Braga, A., de Vries, W., Gaba, S., Gagic, V., Kudsk, P., Larsen, A., Mesnage, R., Niggli, U., Qaim, M., Schreinemachers, P., Stamm, C., Finger R. Key challenges for sustainable pest management in the 21st century.
- Möhring, N.**, Huber, R., Finger, R. Combined ex-ante and ex-post assessments of tools and programs for sustainable agriculture: The case of pesticide-free wheat in Switzerland.

Möhring, N., Schaub, S., Mueller, A. Scaling-up the adoption of organic farming: a systematic literature review of policy recommendations from research.

Möhring, N., Mark, J., Finger, R. Comparing the adoption of a pesticide-free wheat and spelt production program in Switzerland.

Möhring, N., Gaba, S. Revisiting optimal timing: a win-win solution for sustainable pest management?

Finger, R., **Möhring, N.,** Kudsk, P. Economic Costs of a Glyphosate Ban in Europe – A Review

Devilliers, E., **Möhring, N.,** Finger, R. Estimation of production functions in low- and high-input farming systems.

Dakpo, H. K., **Möhring, N.,** Finger, R. Pesticides environmental and health spill overs on agricultural output: the case of Swiss wheat producers.

Conference contributions

Möhring, N. (2021). Towards pesticide-free agriculture: creating links across actors and disciplines. *Conference "Social sciences for pesticide policies" Paris, October 19-21st 2021.*

Möhring, N., Ingold, K., Larsen, A., Finger, R. (2021). Organized session: Pesticide policies for a sustainable and resilient agriculture. *Landscape conference, 2021.*

Möhring, N., Dalhaus, T., Finger, R. (2021). Climate Change and Pesticide Use - Extreme heat effects on insecticide use in potatoes. *Schweizerische Gesellschaft für Agrarwirtschaft und Agrarsoziologie. SGA, Switzerland. Awarded with the Best Presentation Award 2021.*

Möhring, N., Finger, R. (2021). Pesticide-Free Agriculture? - Determinants, Barriers and Challenges for the Adoption of a Private Wheat Production Standard in Switzerland. *175th EAAE seminar 13th-15th May, 2021, The wind of change of sustainability standards. Sailing economic, governance and policy perspective. EAAE, Gargnano, Italy (accepted for presentation –conference postponed to 2021).*

Möhring, N., Wuepper, D., Musa, T., & Finger, R. (2020). Uncertainty, Information and Timing of Pesticide Applications. *XVI EAAE Congress. Raising the Impact of Agricultural Economics: Multidisciplinarity, Stakeholder Engagement and Novel Approaches. EAAE, Prague, Czech Republic (accepted for presentation –conference postponed to 2021).*

Möhring, N., Bozzola, M., Hirsch, S., & Finger, R. (2017). The Risk Effects Of Pesticides-Evidence From Swiss Wheat Production. *XV EAAE Congress. Towards Sustainable AGRI-Food Systems. Balancing Between Markets and Society. EAAE, Parma, Italy.*

Möhring, N., Gaba, S. and Finger, R. (2017). Indicators for pesticide use and pesticide policies: extreme events and their interrelation. *Schweizerische Gesellschaft für Agrarwirtschaft und Agrarsoziologie. SGA, Chur, Switzerland.*

Möhring, N. and Finger, R. (2016). Determinants of Pesticide Use in Swiss crop production. *Schweizerische Gesellschaft für Agrarwirtschaft und Agrarsoziologie. SGA, Grangeneuve, Switzerland.*

Finger, R., **Möhring, N.,** Dalhaus, T. & Enjolras, G., (2016). Crop insurance and pesticide use. *156th EAAE Seminar October 3-4, 2016, Prospects for agricultural insurance in Europe. EAAE, Wageningen, Netherlands.*

Communication and dissemination events

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|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27/09/2021 | Presentation Environmental Economics Seminar, Toulouse School of Economics (TSE): “Pesticide-free agriculture? The adoption of a large-scale wheat production standard in Switzerland.” |
| 21/09/2021 | Presentation Grande séminaire commun GRANEM – IRHS, Université Angers : “Pathways for advancing pesticide policies” |
| 13/04/2021 | Presentation ETH Agri-Food Alumni Science Forum: “Die Etablierung eines grossflächigen Programmes zur pflanzenschutzmittelfreien Weizenproduktion in der Schweiz” |

- 18/03/2021 Presentation 28. Jahresversammlung der Schweiz. Gesellschaft für Pflanzenbauwissenschaften: “Pfade zu einer ganzheitlichen Pflanzenschutz Politik”
- 20/10/2020 Organization of a public webinar on “Pathways for advancing pesticide policies” together with World Food System Center, ETH Zurich
- 30/09/2020 Organization of a public webinar on “Pesticide policies in Europe – what can we learn from other countries?” together with Von-Thuenen Institute, Germany
- 07/05/2020 Organization of the outreach event «Virtual Informal Drinks: Pesticide-Free Agriculture» for the sustainability community together with GreenBuzz Zurich.
- 03/04/2019 Scientific expert panel: Pesticides: What Does Science say? Outreach event aimed at the general public, organized by the World Food System Center, ETH Zürich, Switzerland.

Publications for communication and dissemination

- Finger, R., **Möhring, N.** (08/10/2020). The quest for a holistic pesticide policy [Blog post on the "ETH Zukunftsblog" aimed at the science community, stakeholders, and the general public].
- Möhring, N.** (02/09/2020). L'assurance récolte : produit miracle ou faux espoir contre l'utilisation des pesticides ? Une étude des exploitations agricoles en France et en Suisse [Blog post on the «Agrarpolitik-Blog» aimed at stakeholders and the general public].
- Möhring, N.** (06/04/2020). Pourquoi les agriculteurs s'écartent-ils du calendrier recommandé pour l'utilisation des produits phytosanitaires ? [Blog post on the «Agrarpolitik-Blog» aimed at stakeholders and the general public]
- Möhring, N.** (03/03/2020). Est-ce que les produits phytosanitaires diminuent les risques économiques ? [Blog post on the «Agrarpolitik-Blog» aimed at stakeholders and the general public]
- Möhring, N.** (14/05/2019). Reduktion von Risiken aus dem Pflanzenschutzmitteleinsatz – eine ökonomische Analyse [Blog post on the «Agrarpolitik-Blog» aimed at stakeholders and the general public].
- Finger, R., **Möhring, N.** (31/08/2018). Measuring quantity alone does not determine the risk [Blog post on the "ETH Zukunftsblog" aimed at the science community, stakeholders, and the general public].
- Finger, R., Böcker, T, **Möhring, N.** and Dalhaus, T., (2017). Incentive taxes on pesticides: Economic analysis, experiences from Europe and the effects of accompanying measures. *Agrarforschung Schweiz* 8(5), pp.176-183. [Dissemination of project findings to the Swiss agricultural community]

Personal Skills

- Languages
- German (Native Speaker)
 - English (Full Professional Proficiency – C2)
 - French (Working Proficiency – B2)
 - Spanish (Working Proficiency – B2)