Organic Farming | 2022 | Volume 8 | Issue 1 | Pages 1-2

DOI: 10.12924/of2022.08010001

ISSN: 2297-6485



Editorial

On-farm Research to Diversify Organic Farming Systems

Moritz Reckling^{1,2,*} and Meike Grosse³

- ¹ Leibniz Centre for Agricultural Landscape Research, Müncheberg, Germany
- ² Swedish University of Agricultural Sciences, Uppsala, Sweden
- 3 Research Institute of Organic Agriculture (FiBL), Frick, Switzerland

* Corresponding author: E-Mail: moritz.reckling@zalf.de

Published: 14 June 2022

Diversification of organic farming systems is a key practice to address current challenges in crop and livestock production. It has the potential to increase the resilience to climate fluctuations and counteracts climate change to some extent by reducing emissions and increasing carbon storage. Diversified crop-livestock systems can also contribute to stop the dramatic loss of biodiversity. Organic farms are already more often mixed crop-livestock farms with more diverse crop rotations, including perennial leys, compared to conventional farms [1]. However, there is a need as well as potential for further increasing diversity on organic farms [2].

On-farm research is an emerging field aiming to transform global agriculture [3] by involving farmers and associated actors in the design and evaluation of farming systems. Research in organic farming could use this potential more widely and systematically to co-design solutions with farmers and advisors. There are inspiring examples of how "living collaborations" with farmers and other actors help to co-design diversified cropping systems e.g. with a focus on legumes [4–6]. However, the co-design process is com-

plex, difficult to describe and often not reported in regular research papers.

The journal *Organic Farming* (ISSN 2297-6485; doi: 10.12924/librello.OF) provides a platform for contributions in diverse areas related to organic farming and food production and will especially welcome articles describing the process and results derived from on-farm research. Recent papers in the journal show a diversity of on-farm research such as farmers assessing the carrying capacity of traditional farming in South East England [7], insights from modified 'Stable Schools' as a consulting tool for organic dairy herds in Northern Germany [8] and related to on-farm organic group certification, a proposal for improving internal control systems' performance [9]. We call for submissions from practically relevant work in organic farming especially with a systems' perspective and integrated solutions for diversified crop-livestock systems.

Since 2021 the journal is led by a new team of two Editors-in-Chief, Dr. Meike Grosse and Dr. Moritz Reckling. We thank the former Editor-in-Chief, Prof. Dr. Thomas Felix Döring for his strong commitment to the journal.

References and Notes

- Barbieri P, Pellerin S, Nesme T. Comparing Crop Rotations Between Organic and Conventional Farming. Scientific Reports. 2017;7. doi:10.1038/s41598-017-14271-6.
- [2] Stein-Bachinger K, Preissel S, Kühne S, Reckling M. More Diverse but Less Intensive Farming Enhances Biodiversity. Trends in Ecology & Evolution. 2022;doi:10.1016/j.tree.2022.01.008.
- [3] Lacoste M, Cook S, McNee M, Gale D, Ingram J, Bellon-Maurel V, et al. On-Farm Experimentation to Transform Global Agriculture. Nature Food. 2021;3. doi:10.1038/s43016-021-00424-4.
- [4] Pelzer E, Mathilde B, Soulié M, Guichard L, Maude Q, Ballot R, et al. Participatory Design of Agronomic Scenarios for the Reintroduction of Legumes into a French Territory. Agricultural Systems. 2020 09;184:102893. doi:10.1016/j.agsy.2020.102893.
- [5] Reckling M, Bergkvist G, Watson C, Stoddard F, Bachinger J. Redesigning Organic Grain Legume Cropping Systems Using Sys-



- tems Agronomy. European Journal of Agronomy. 2020;112:125951. doi:10.1016/j.eja.2019.125951.
- [6] Carton N, Swiergiel W, Tidåker P, Röös E, Carlsson G. On-farm Experiments on Cultivation of Grain Legumes for Food Outcomes from a Farmer–Researcher Collaboration. Renewable Agriculture and Food Systems. 2022;pp. 1–11. doi:10.1017/S1742170522000102.
- [7] Lovatt Smith P, Nobes G. Carrying Capacity of Traditional Farming in South East England: A Case Study. Organic Farming. 2020;6.
- doi:10.12924/of2020.06010014.
- [8] Hansmann V, Volling O, Krömker V. Modified 'Stable Schools' as a Consulting Tool for Organic Dairy Herds. Organic Farming. 2020;6(1):2. doi:10.1017/S1742170522000102.
- [9] Benzing A, Piepho HP. A Proposal for Improving Organic Group Certification Quantification of Internal Control Systems' Performance and Sample Size Determination. Organic Farming. 2021;7. doi:10.12924/of2021.07010007.