

Practical research for climate protection on organic agriculture

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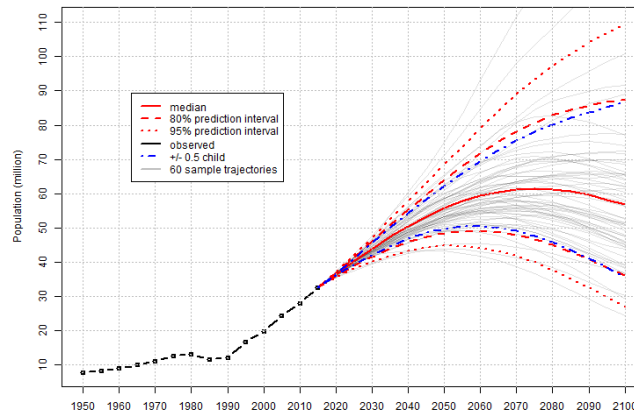


Our food and farming systems will be exposed to future challenges

- Enhanced projected global climate change (IPCC, 2013)



- Enhanced projected population growth (UN report, 2015)



Improved soil quality for climate change mitigation and adaptation



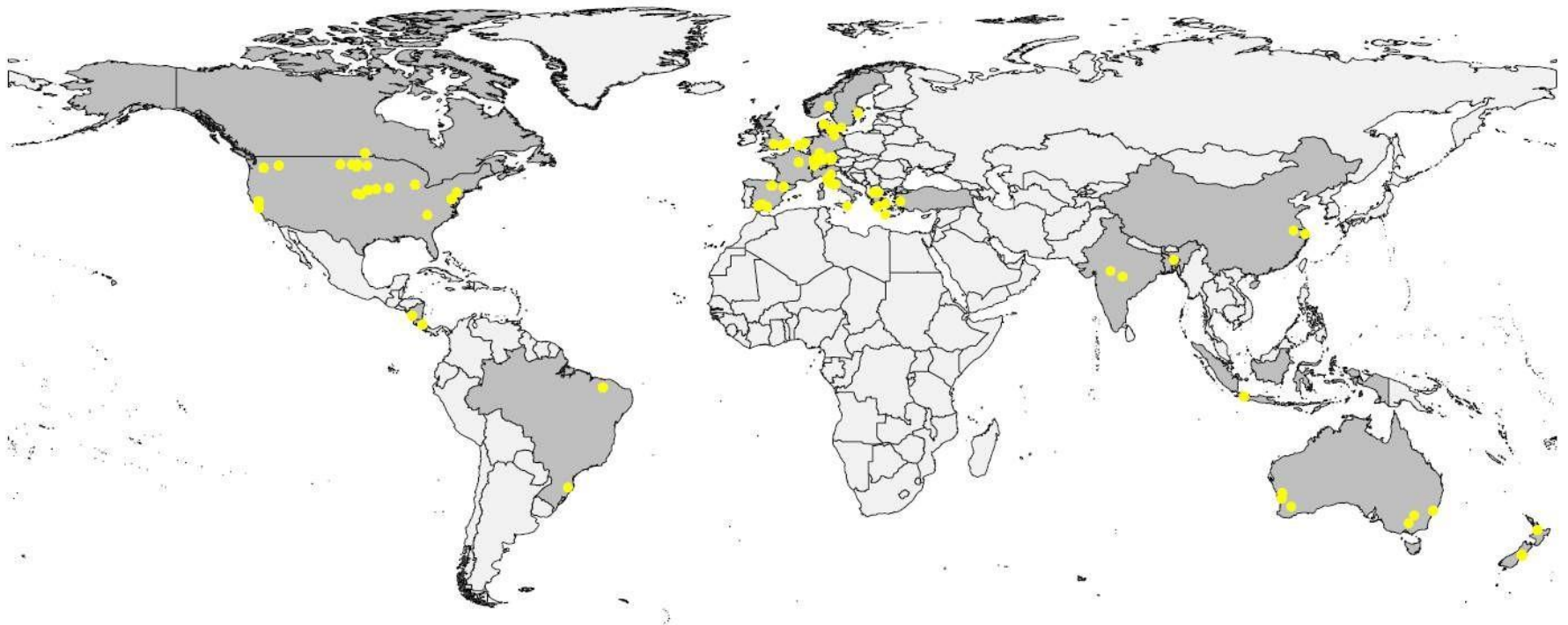
Bio-dynamic farming



**Integrated production (IP),
stockless**

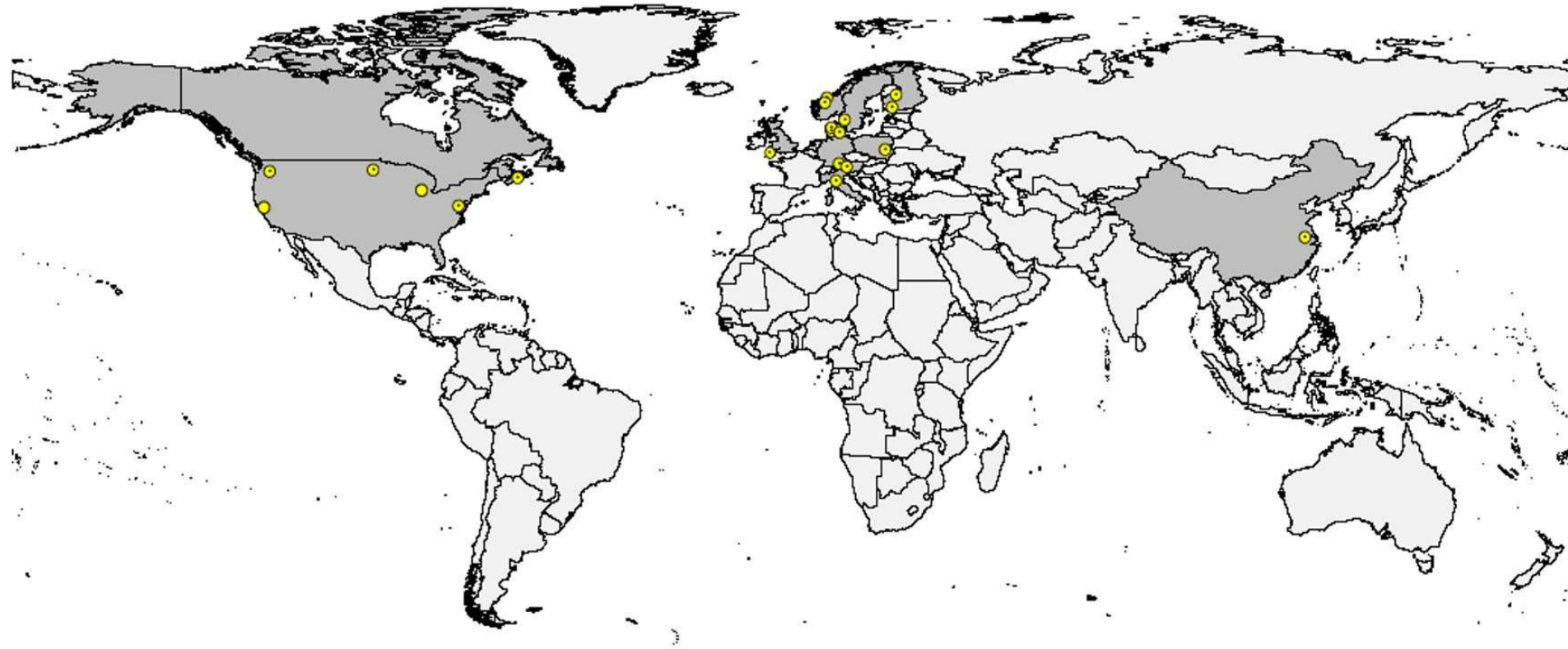
More **soil carbon** under organic management?

Geographic Distribution of farming system (org vs. con) comparisons



74 eligible studies globally with up to 211 pairwise comparisons

Less **nitrous oxide (N₂O)** from organically managed soils?



18 system comparison studies, 98 comparative pairs

More **microbial soil life** in organic farming?



57 eligible studies globally with up to 148 pairwise comparisons

The climate impact of OF has been shown for on-station trials, but what about on-farm, practical trials/research?

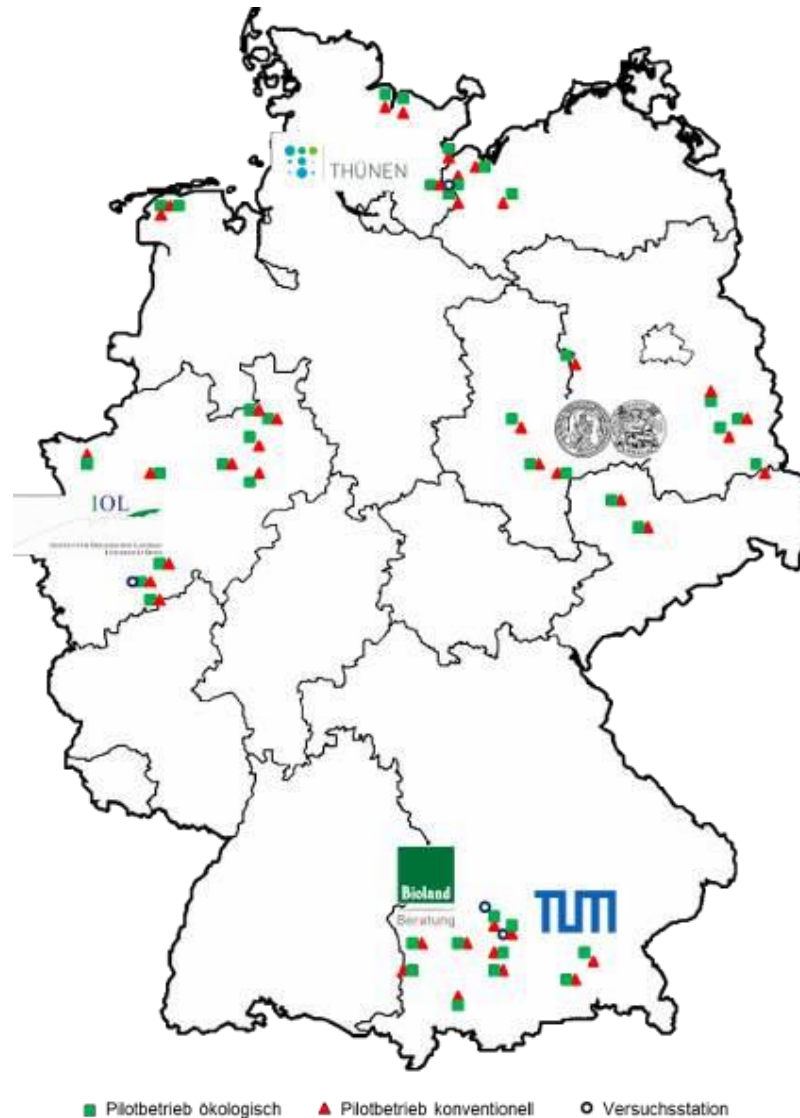


Bio-dynamic farming



**Integrated production (IP),
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Network «Pilotbetriebe»



SOLMACC

- **Setting up a demonstration farm network with 12 organic farms in DE, IT and SE**
- › **Training the farmers to integrate 4 climate-friendly practices into their farming system:**
 - **optimised on-farm nutrient recycling**
 - **optimised crop rotations with legume-grass leys**
 - **optimised tillage system**
 - **Agroforestry**
- › **Demonstrating the practices to local farmers and stakeholders**
- **Monitoring the impact of the new practices on climate change mitigation and adaptation, economic viability and technical feasibility**

