

## Popular scientific project description for project funded by Ekhagastiftelsen

Popular scientific project description is to be submitted within 2 months of project grant.

Application number:	2021-98
Project title:	Soil inoculation as a strategy to improve traditional Mesoamerican agroecosystem productivity to improve nourishment & food security of rural families
Receiver of grant (name, address):	Dr. Eneas Aguirre-von-Wobeser Centro de Investigación en Alimentación y Desarrollo, A.C. Unidad Regional Hidalgo Boulevard Santa Catarina SN 42163 San Agustín Tlaxiaca, Mexico
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Project start (yyyy-mm-dd): *	2022-01-15
Project end (yyyy-mm-dd): *	2025-01-14
By Ekhagastiftelsen granted sum:	1 055 000 SEK

Project description: (max 150 words)

Traditional Mesoamerican milpas are highly productive polyculture systems centered around maize, beans and squash, which have been cultivated for millennia. However, large variations in productivity are observed under similar climatic conditions and management practices. This project will test the hypothesis that soil microorganisms explain part of this variability, by analyzing soil microbial communities and plant health parameters in a large number of milpas from different climates, soil types and cultural traditions. Furthermore, we will test whether inoculation with soil from best-performing milpas can improve the productivity of less productive ones, under otherwise similar conditions; a practice applied successfully by one indigenous group, which inspired this project. By working closely with farmers, inquiring their self-perceived limitations for productivity, practices and challenges, and thoroughly communicating the findings of this research, the project aims at providing additional tools for milpa agriculture, contributing to food security and healthy nourishment for rural families.

\* Dates for project start and end should be the dates for which the grant is received (Not dates for total project if longer than period for which grant is received)