



Certificate

This certifies that

Alina Kerner

has successfully completed

Scientific training in the Department of Forest Mycology and Pathology

2026-06-01 — 2026-06-30 (150 hours full-time, 5 ECTS)

within the framework of COST Action CA22142 – Beneficial root-associated microorganisms for sustainable agriculture (ROOT-BENEFIT).

The scientific training including:

- DNA amplification of root-associated fungal communities using ITS primers
- PCR preparation of 64 samples for next-generation sequencing (NGS)
- Bioinformatic processing of fungal metabarcoding data using the **SCATA** pipeline
- Taxonomic assignment and quality control of fungal sequence data
- Functional annotation of fungal communities using **FUNGuild**
- Integration of NGS datasets with environmental metadata
- Comparative analyses of fungal community composition and ecological guilds across pollution gradients
- Scientific discussions on ecological interpretation of fungal community responses to environmental stress and preparation of results for publication

The training was successfully completed, and **Alina Kerner** made valuable contributions to the research activities of the host institution.

Supervisor:

Dr. Kateryna Davydenko, PhD, Researcher

Department of Forest Mycology and Plant Pathology

Swedish University of Agricultural Sciences