



The soil microbiome: A key driver of plant health in intercropping



Main results and practical implementation

Our research on soil microorganisms in legume-cereal intercropping systems focused on enzymatic activity, functional diversity and the genetic and taxonomic composition of soil microbial communities. Our findings show that intercropping enhances soil microbial biodiversity, which is crucial for maintaining plant health.



Challenges (and solutions)

Legume-cereal intercropping has positive effects on the soil microbiome. It promotes biodiversity, helps suppress harmful pathogens and promotes overall soil health. Maintaining a healthy and diverse soil microbiome is essential for improving agricultural production, protecting the environment, and enhancing ecosystem services.



Benefits and impact

The soil microbiome plays a key role in plant health and soil productivity. A diverse microbial community in the soil improves the availability and transfer of soil nutrients to plants, promotes plant growth, protects against pathogens and supports soil fertility. Intercropping increases the diversity of microbial communities and enhances plant defense systems against phytopathogens.

Get in touch for more support!

Magdalena Frać, Agata Gryta, Mateusz Mączik,
Priyal Sisodia; IAPAS
m.frac@ipan.lublin.pl; www.ipan.lublin.pl

