



Which benefits from mycorrhizae and how agricultural practices affects them?

www.eurafagroforestry.eu/afinet/

Mycorrhizae represent a core part of agricultural systems, improving their resilience thanks to mutual benefits (mycorrhizal fungi protecting the plants, cross-feeding, etc.). Mycorrhizae are a powerful lever to keep an agriculture system resilient, functional and productive in a context of climate change.

The Mycoagra project which began in 2017 in France on corn and walnut fields, aims at showing the benefits of mycorrhizae from the environmental, economic, and social point of view, and comparing the impact of agricultural practices on the diversity and quantity of mycorrhizae. One of the main objectives is to help farmers to understand which practices are harmful (tillage, use of pesticides and chemical fertilizers...) and which are beneficial (diversified cover crops especially leguminous plants, direct drilling, organic inputs, agroforestry, use of old varieties...) for mycorrhizae development.

A study made in France showed that direct drilling under green cover without chemical N-fertilization allowed a 35% mycorrhization of the wheat's roots while tillage and chemical N led to less than 3%. The study also showed that there was quasi no difference between the quantity of N absorbed by the mycorrhized wheat and the N-fertilized wheat.

The information provided by Mycoagra in the coming years will guide farmers to organize and manage their systems in a sustainable way encouraging the mycorrhizae establishment and diversity.

For more information:

Mycoagra website:

<https://mycoagra.com/>

A quick explication video by one of the participants (French):

<https://www.youtube.com/watch?v=mf2MDYvwfUc>

A webpage dedicated to news of the project by one of the partners:

<https://agriculture-de-conservation.com/-Mycoagra-.html>

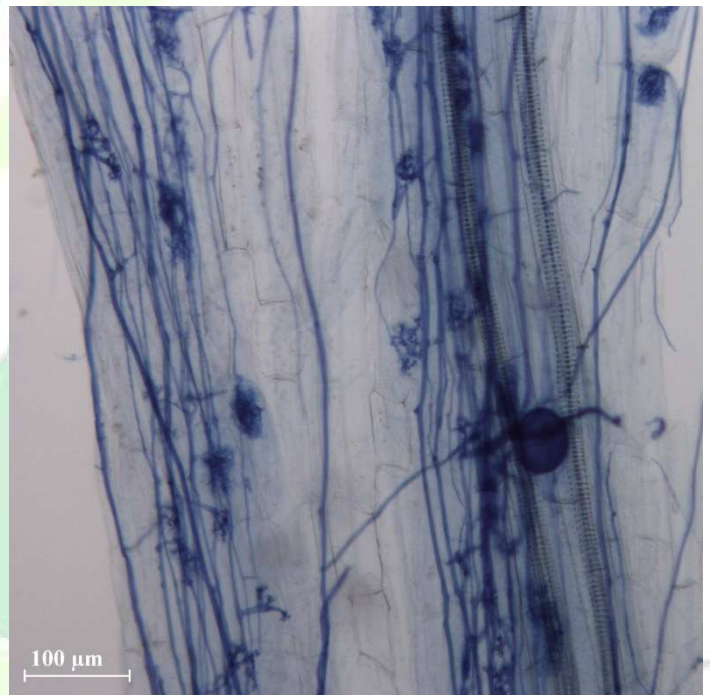


Figure 1. Photo of a mycorrhizal symbiosis in a leek root, Mycoagra

Léo Godard

Association Française d'Agroforesterie (AFAF)