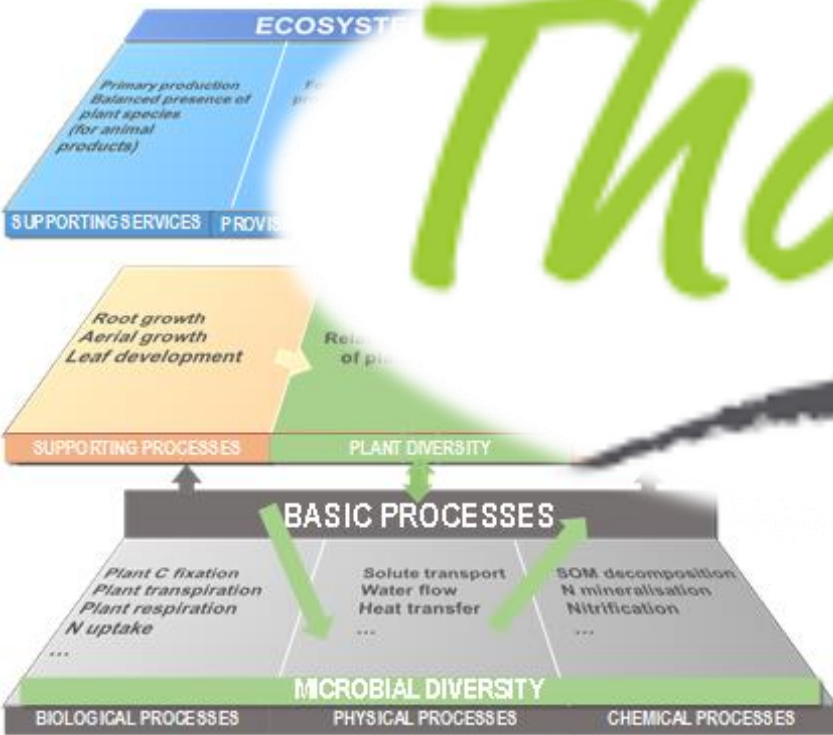


# Integrated modelling of microbial-plant interactions in multi-species agroecosystems: the

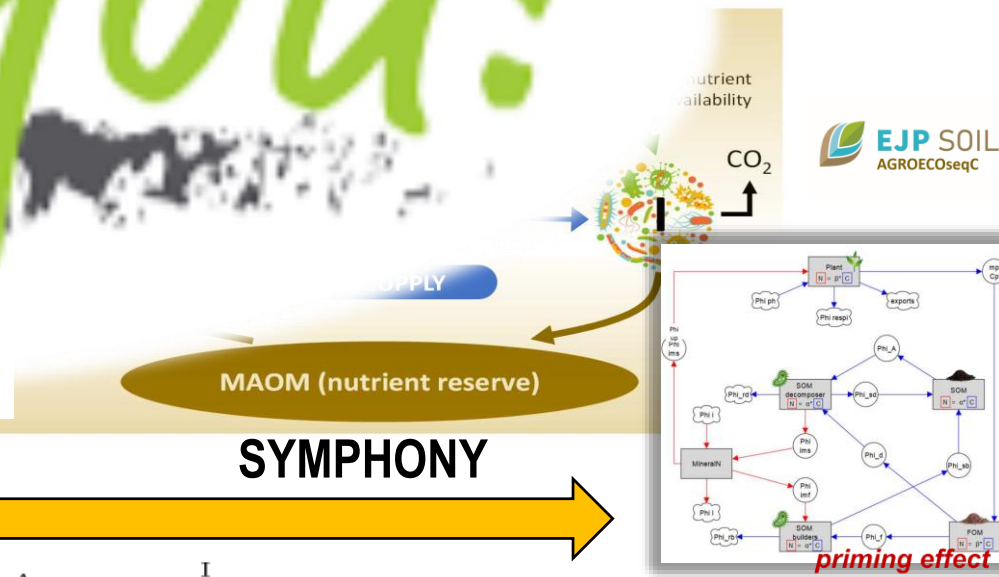
Interactions between plant and soil microbial diversity are essential for regulating C and N fluxes while synchronising nutrient cycling in agroecosystems. MODIMIV develops integrated, explicit and dynamic simulators of multi-species vegetation covers (e.g. grassland cycling in agroecosystems).

# Thank You!

Fontaine et al., 2024, *Global Change Biology*



P [gianni.bellocchi@inrae.fr](mailto:gianni.bellocchi@inrae.fr)  
 Varying C-N ratios  
 Nutrient recycling  
 Root growth and exudates, ...



EJP SOIL AGROECOseqC

$$\lambda_{w,s} = \frac{I}{1 + f_N/\sigma_c \cdot d\sigma_c/dF_N}$$

Perveen et al., 2014, *Global Change Biology*

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