



## **Agroforestry : back to the roots**

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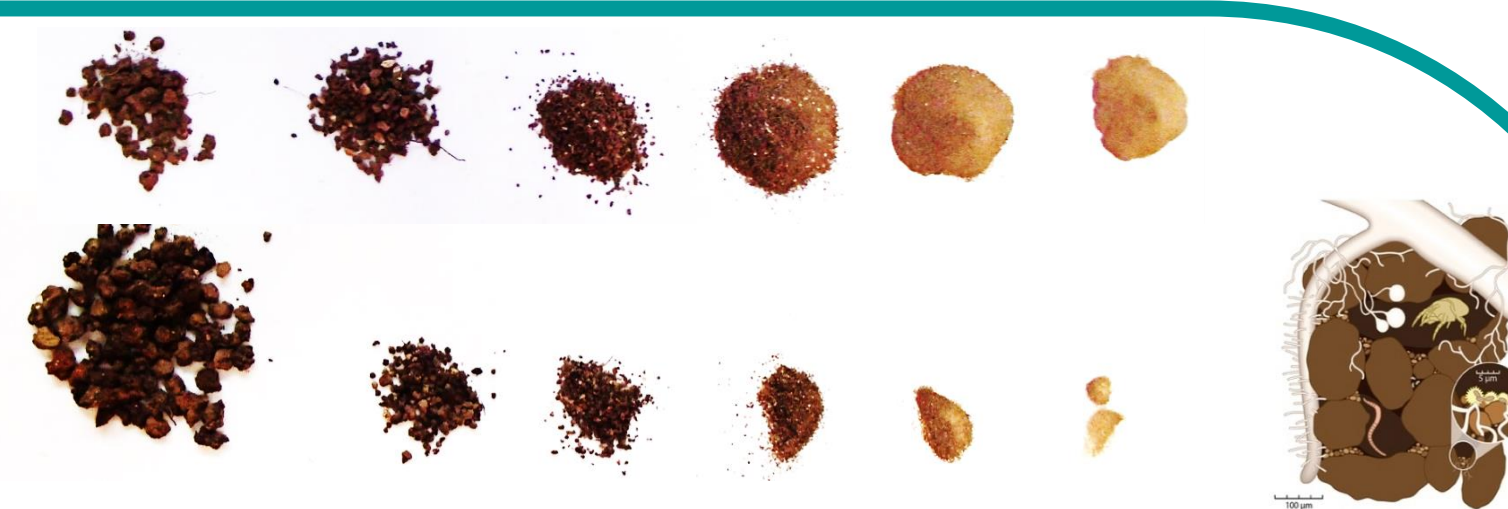
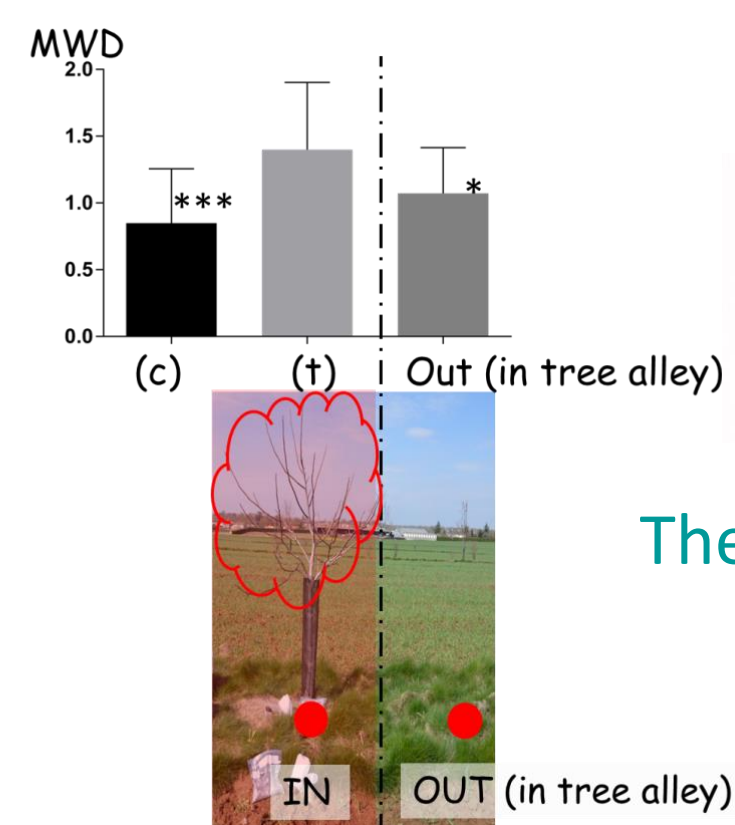


# AGROFORESTRY: BACK

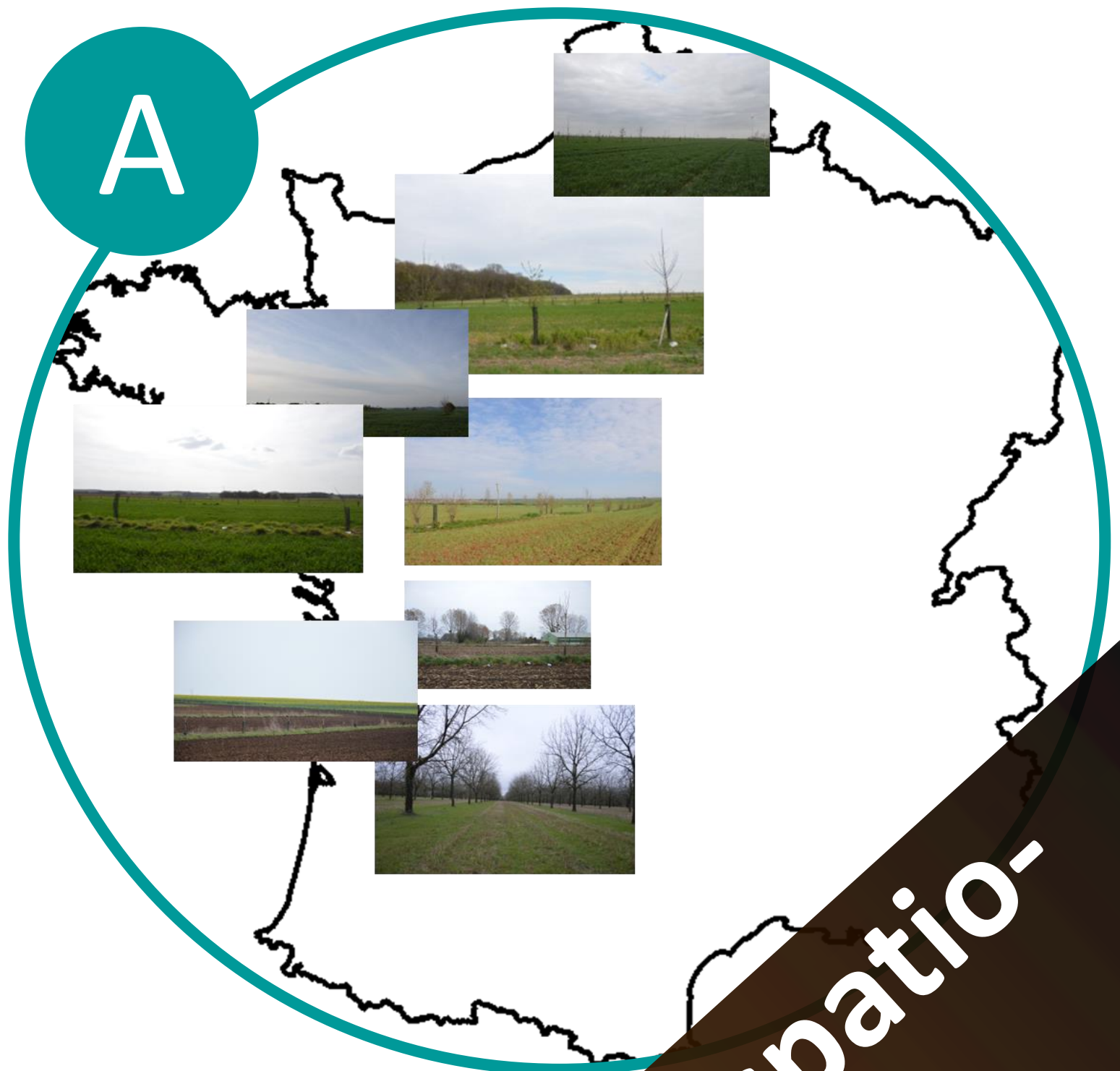
## TO THE ROOTS

Impact of root profile on soil microbial functioning: what are the consequences for belowground ecosystem services?

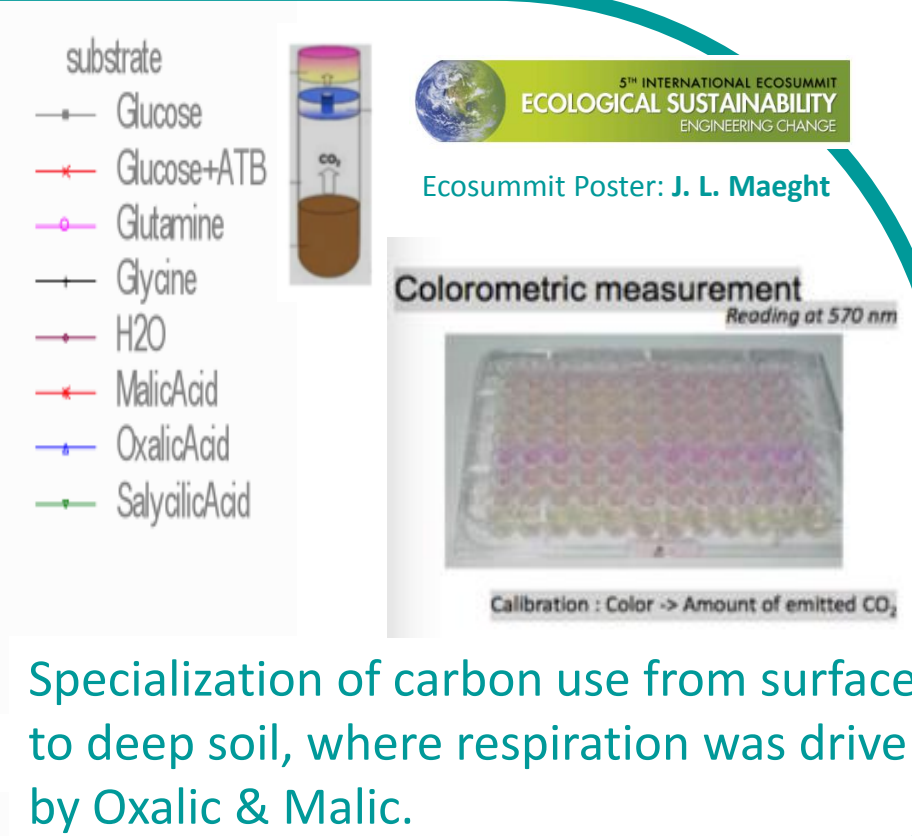
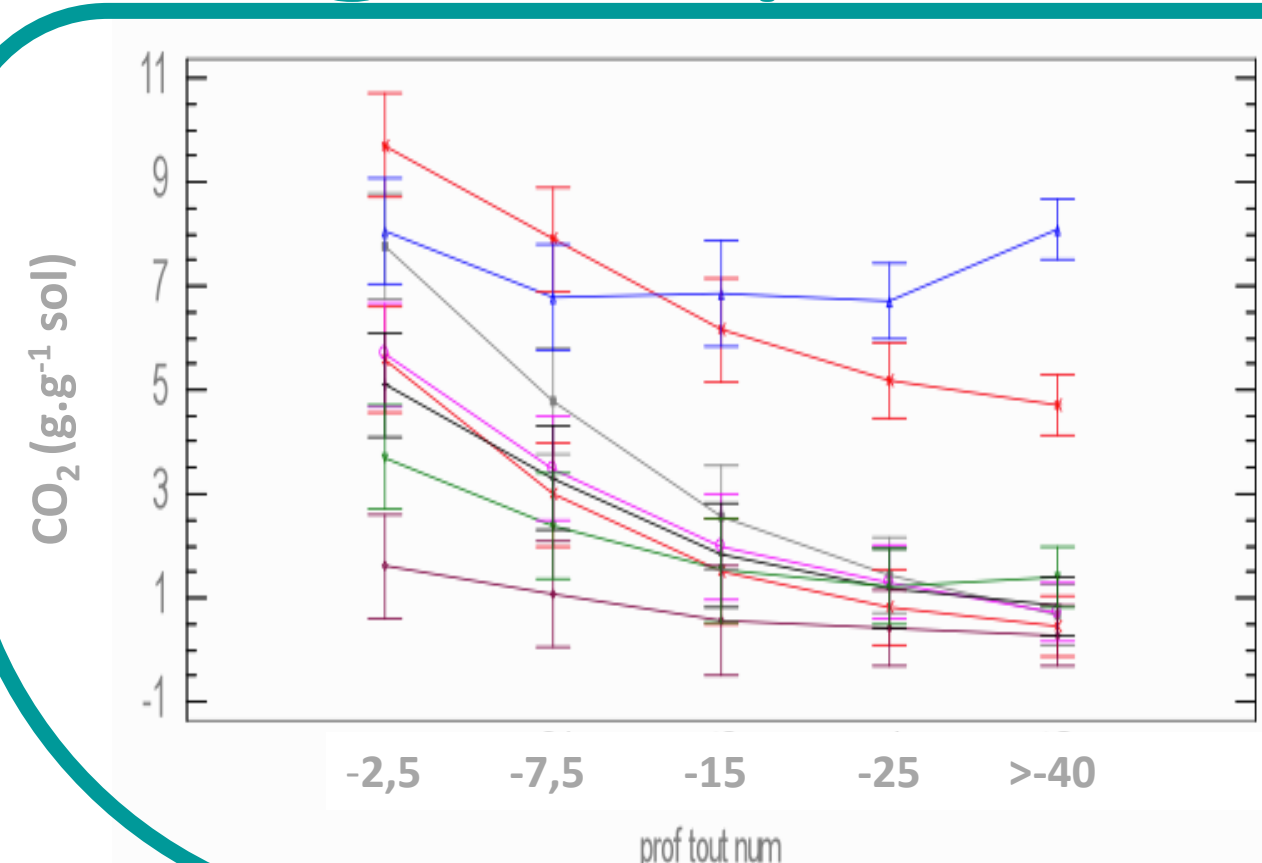
### A More tree roots, more stable aggregates



The presence of ligneous roots increases stability of soil aggregates, even in presence of permanent herbaceous cover  
=> towards a specific role of tree roots ?



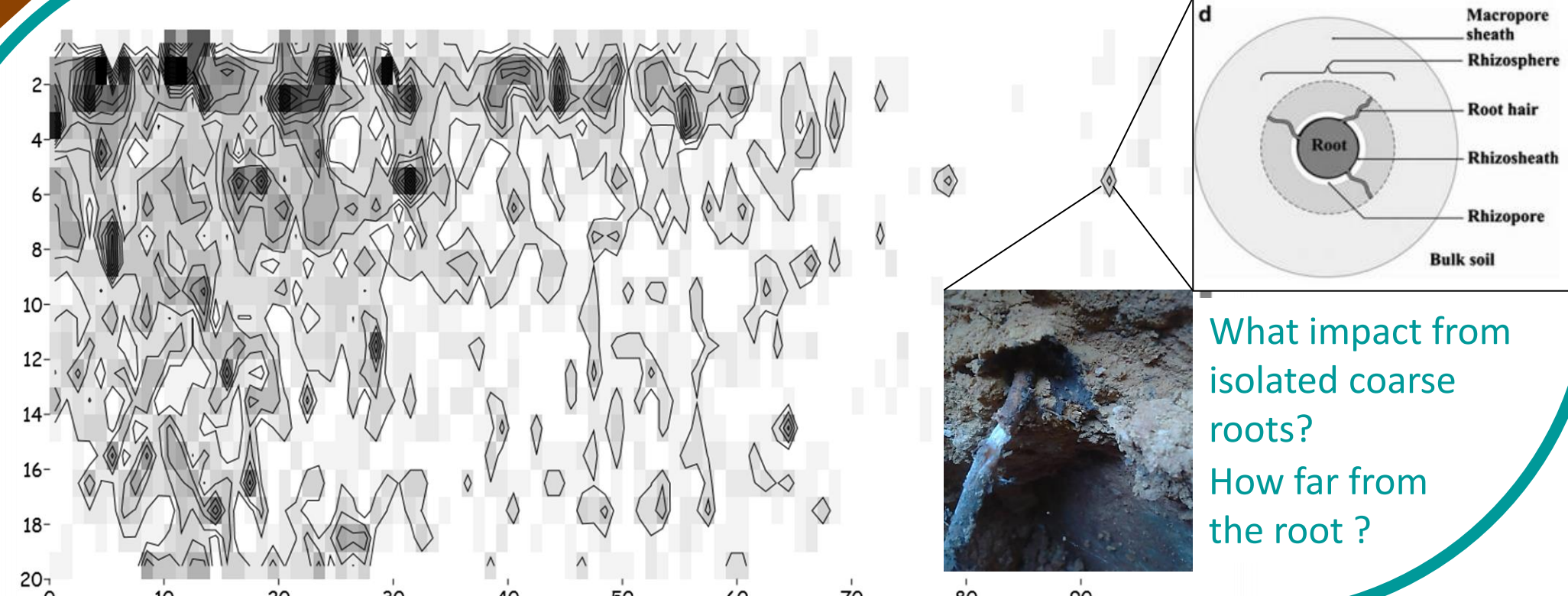
### B Going deeper, working better



From microbial dynamic to soil erosion, tree roots play an important role all along the spatio-temporal gradient, from centimeters to territory, from days to decades.

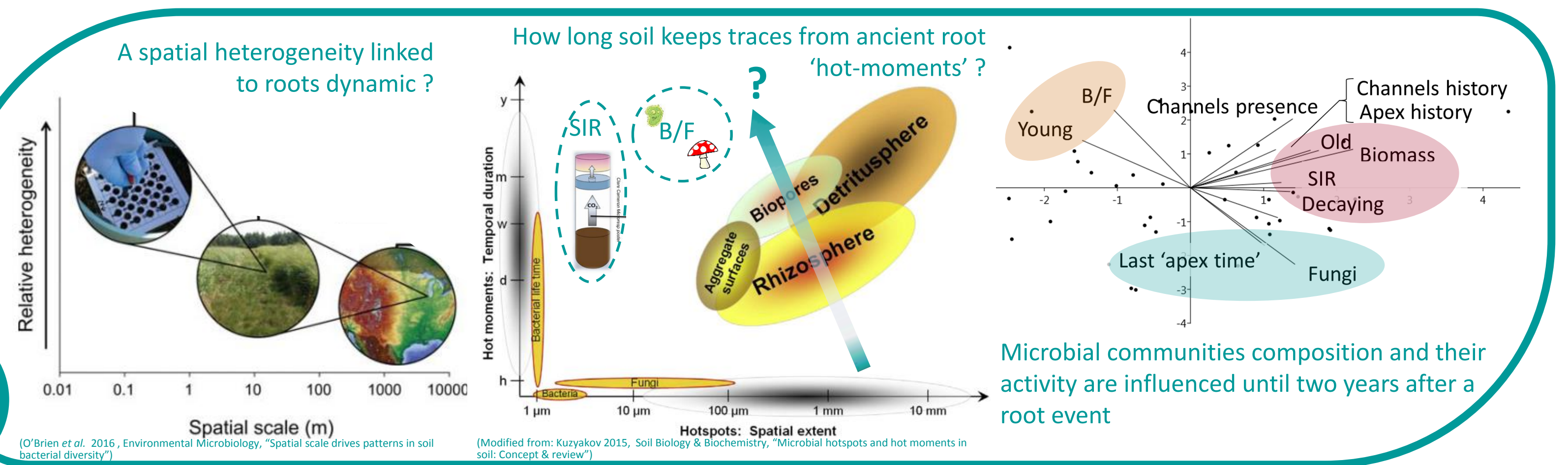


Soil properties linked to tree roots distribution, a matter of meters (Ghestem et al. 2013, Biogeochem)

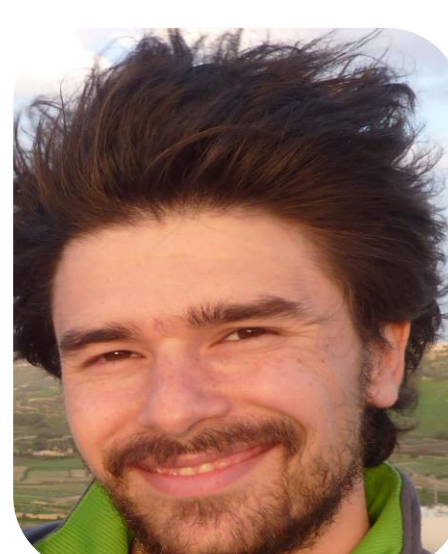


How much distribution matters ?

D

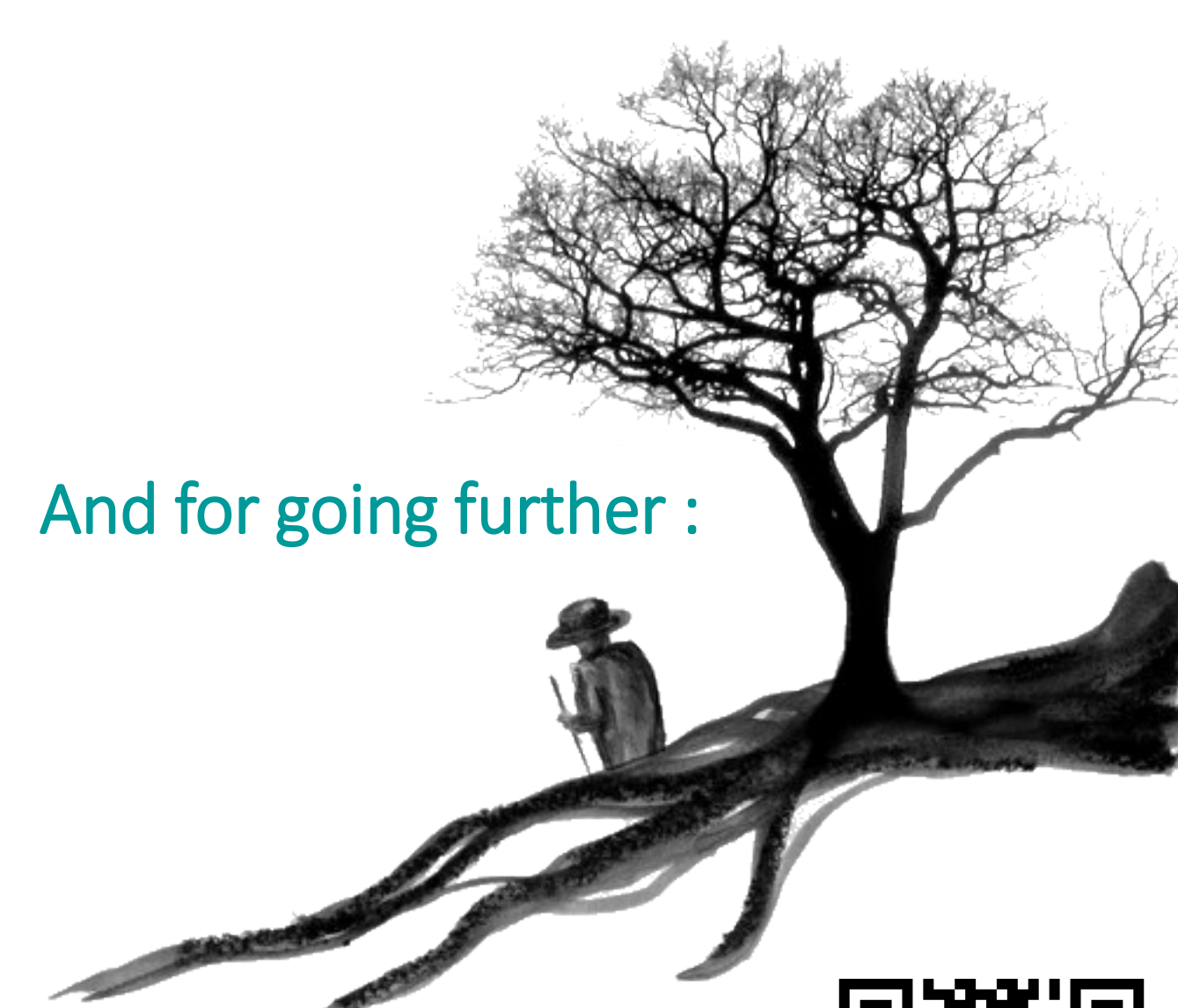


The 'root history' impacts microbial process



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And for going further :



"L'homme qui plantait des arbres"

"The man who planted trees" J. Giono



And a lot of thank s to all these guys who have spent some time helping me digging science deeper...

