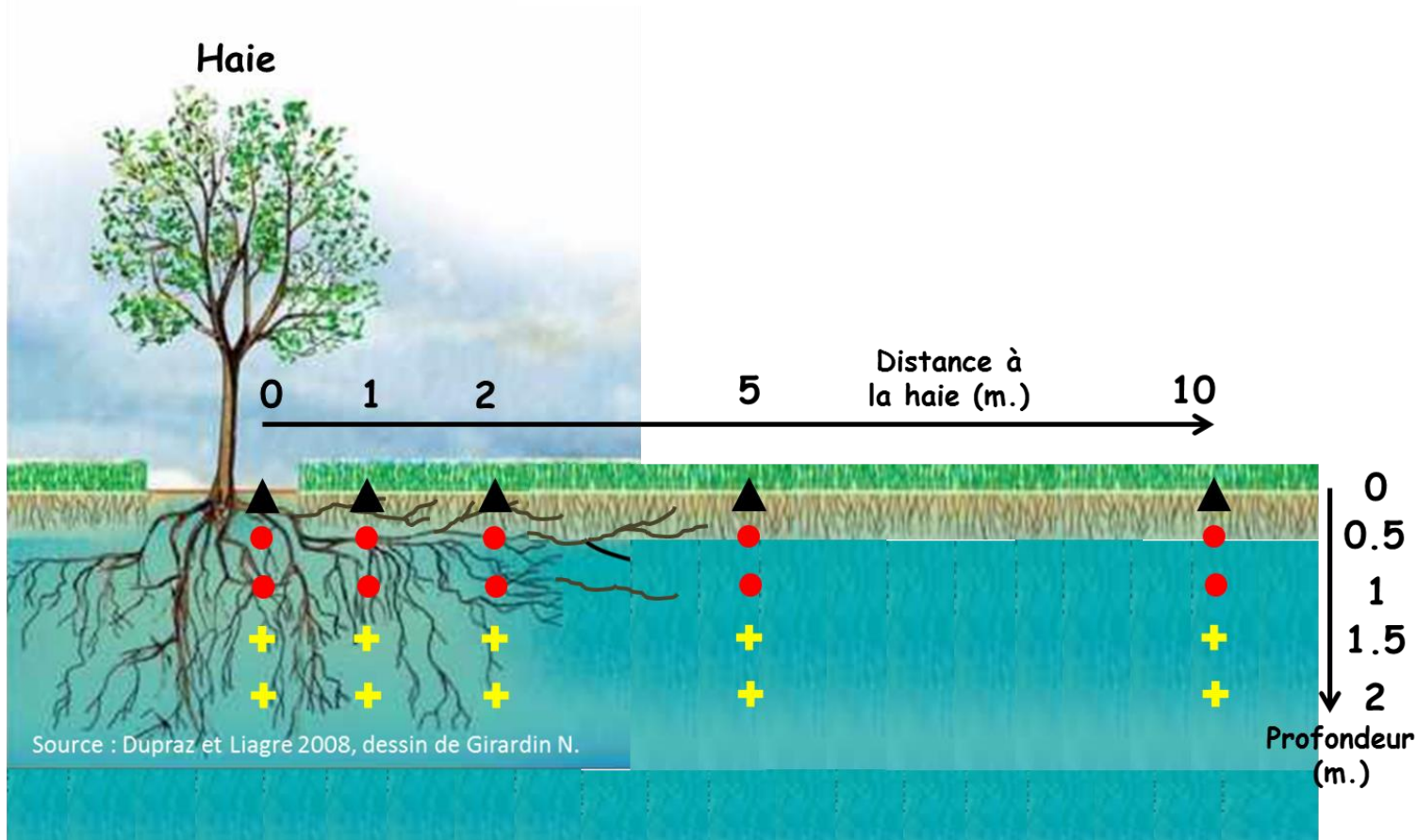


# LA HAIE VUE DE DESSOUS

## QUELS INTÉRÊTS ?

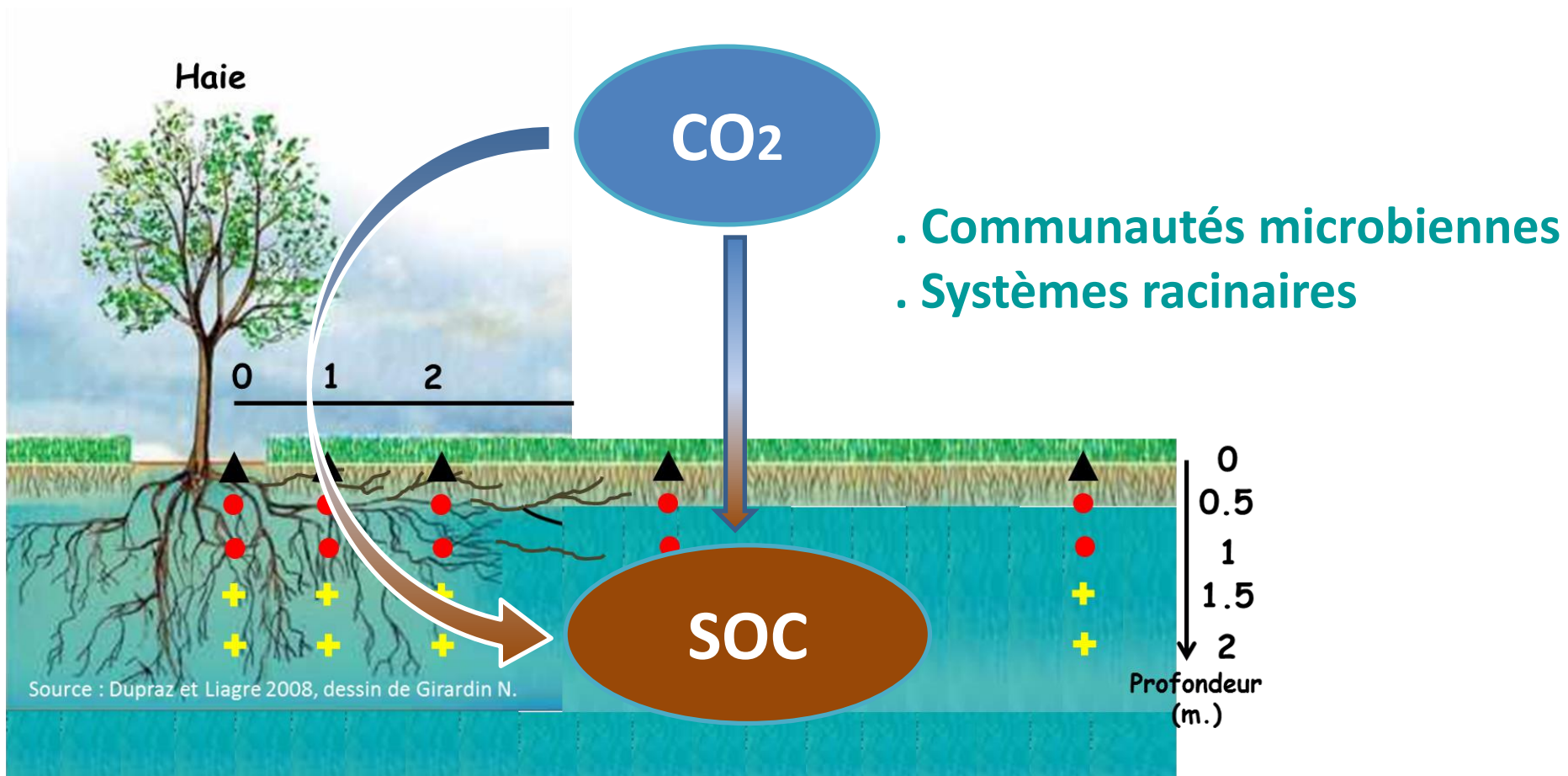
*Yogan Monnier, Juliette Bodez, Alexia Stokes, Mao Zhun, Jean-Luc Maeght, Rémi Cardinael, Isabelle Bertrand, Sébastien Arlès, Sara Parisot*

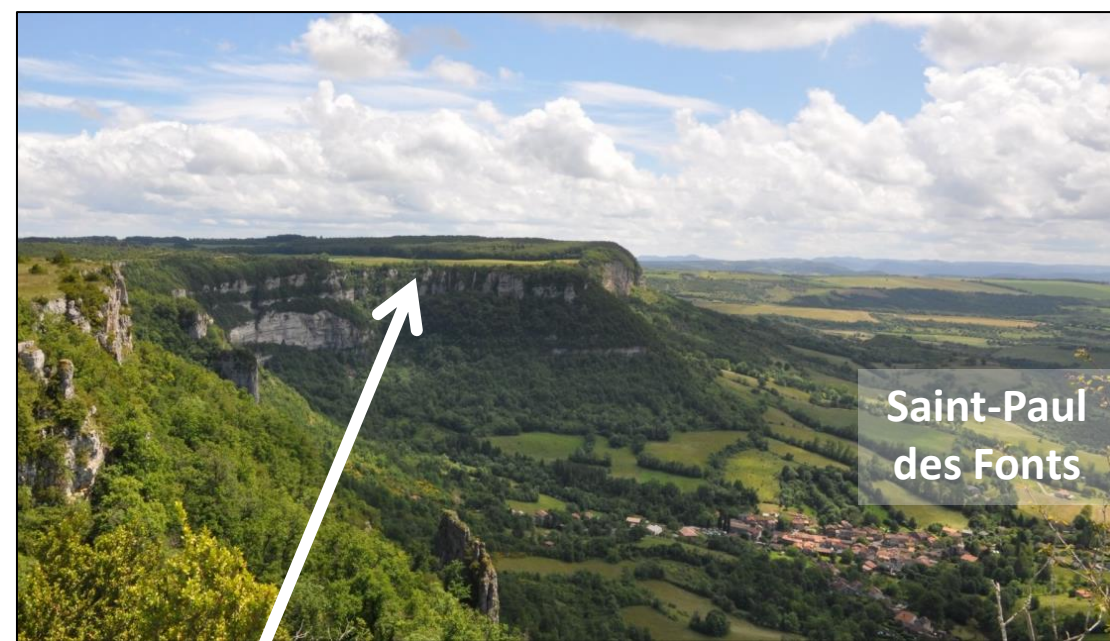


# LA HAIE VUE DE DESSOUS

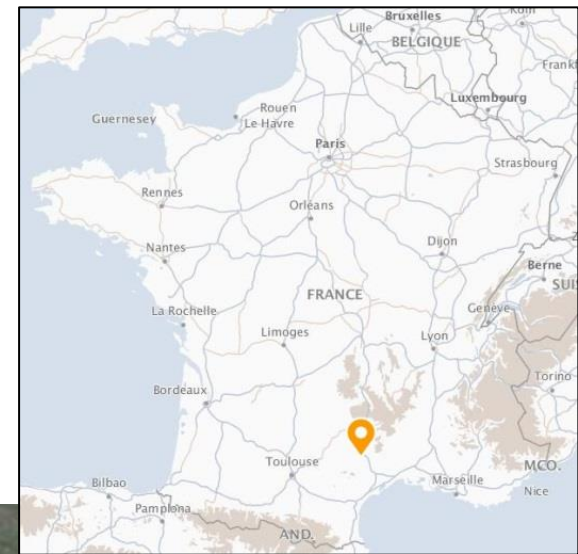
QUELS INTÉRÊTS ?

JUSQU'OU ?





Saint-Paul  
des Fonts



Causse du  
Larzac

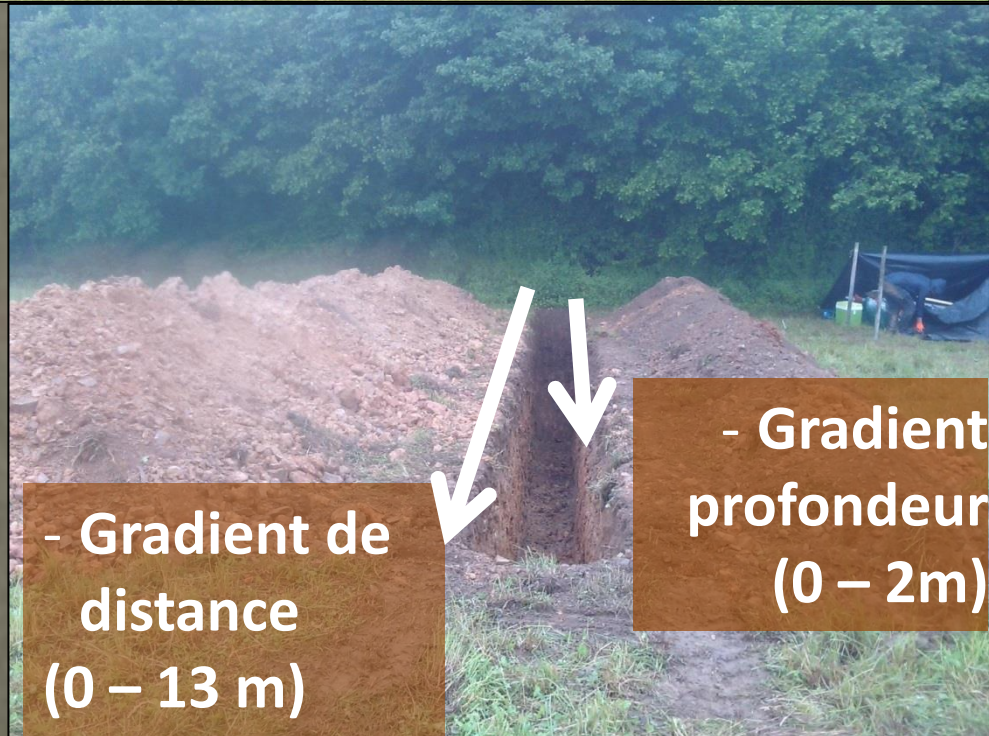
## Domaine de la Fage



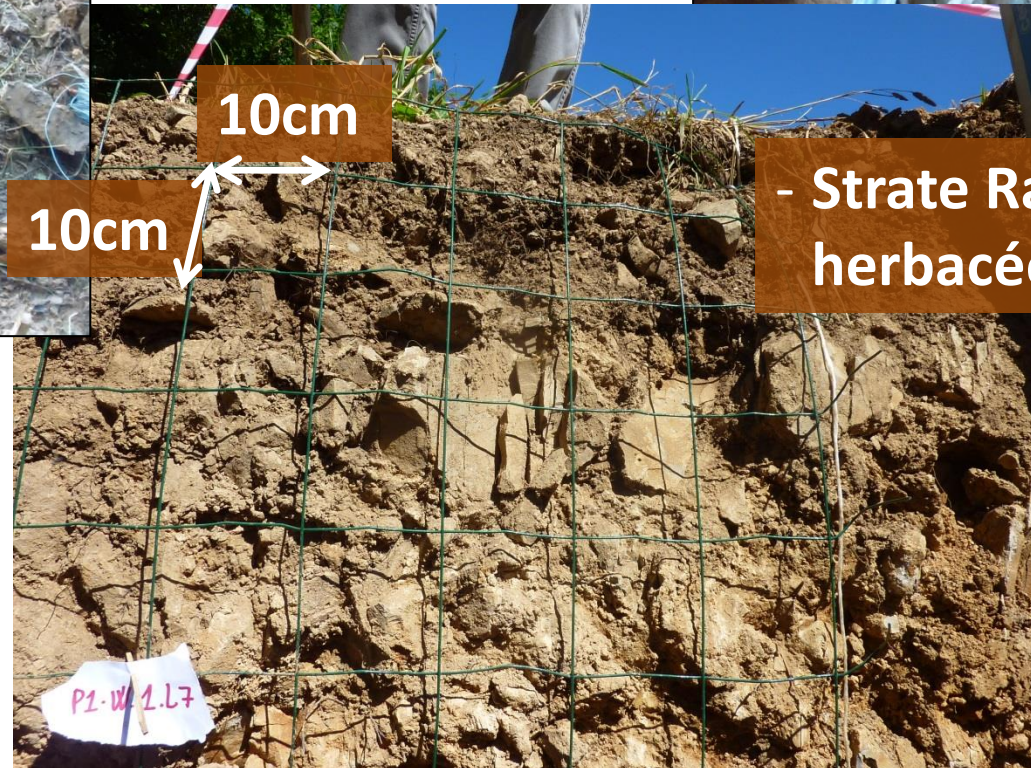
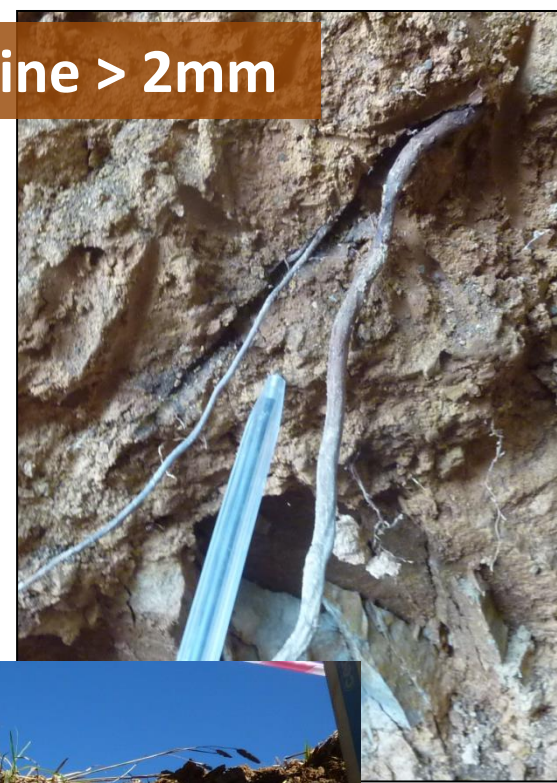
Saint-Beaulize



INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE  
Domaine de la Fage  
12250 Le Viala-du-Pas-de-Jaux- FRANCE  
Tél. : 05 65 99 02 16

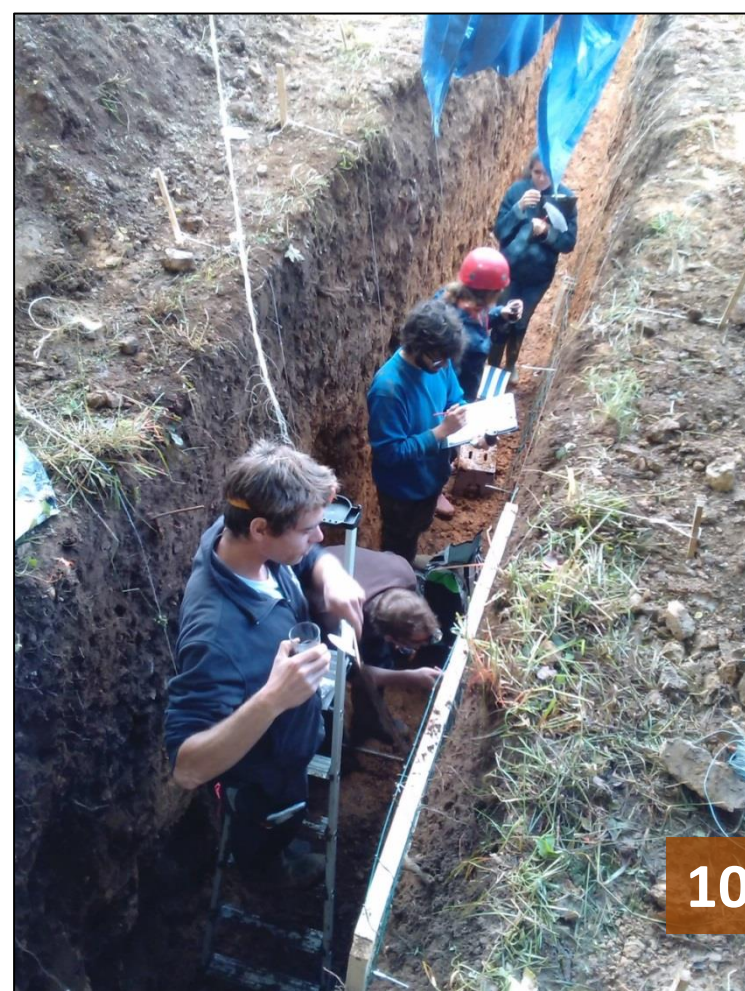


- Racine > 2mm

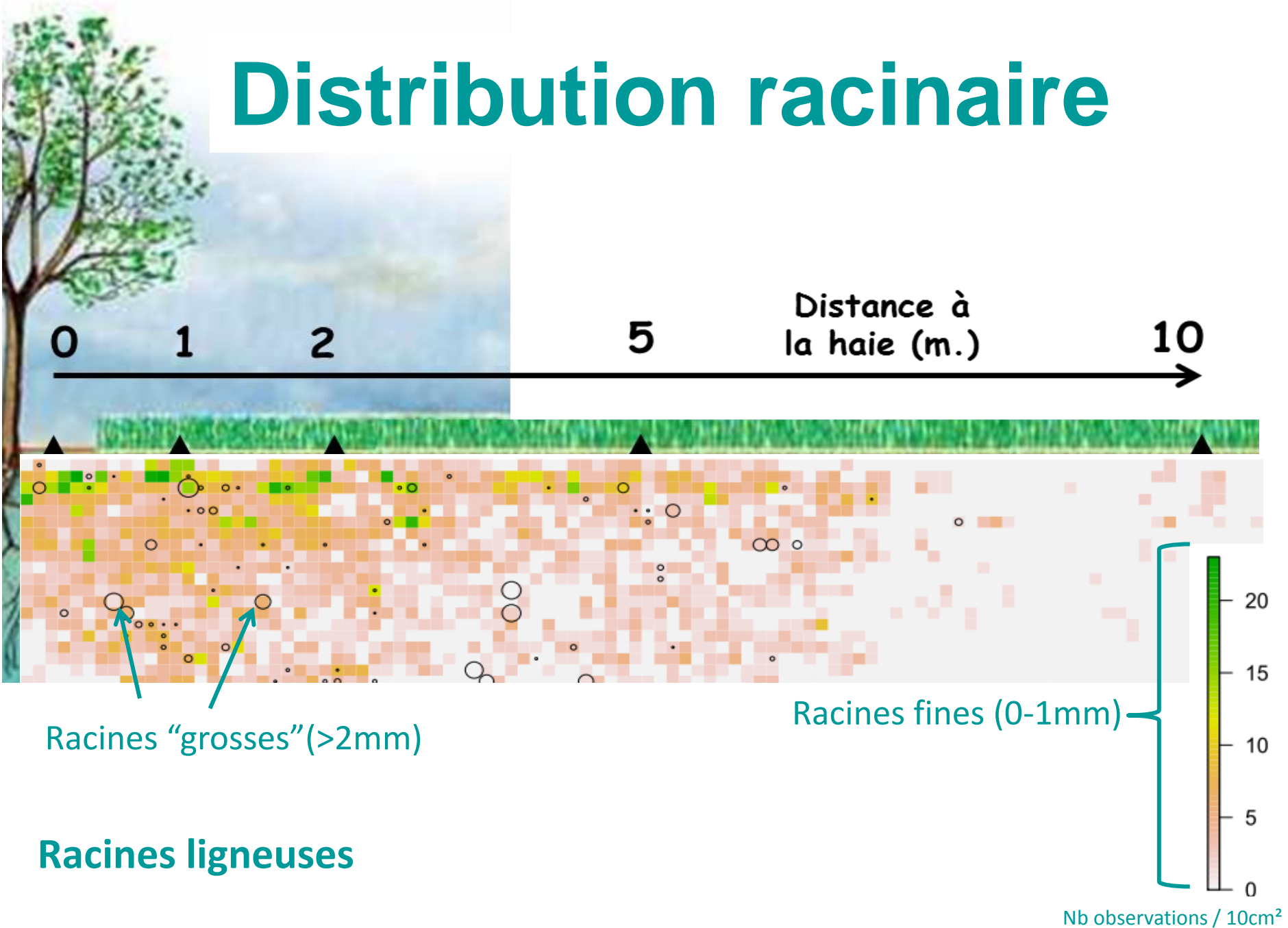


- Strate Racines herbacées

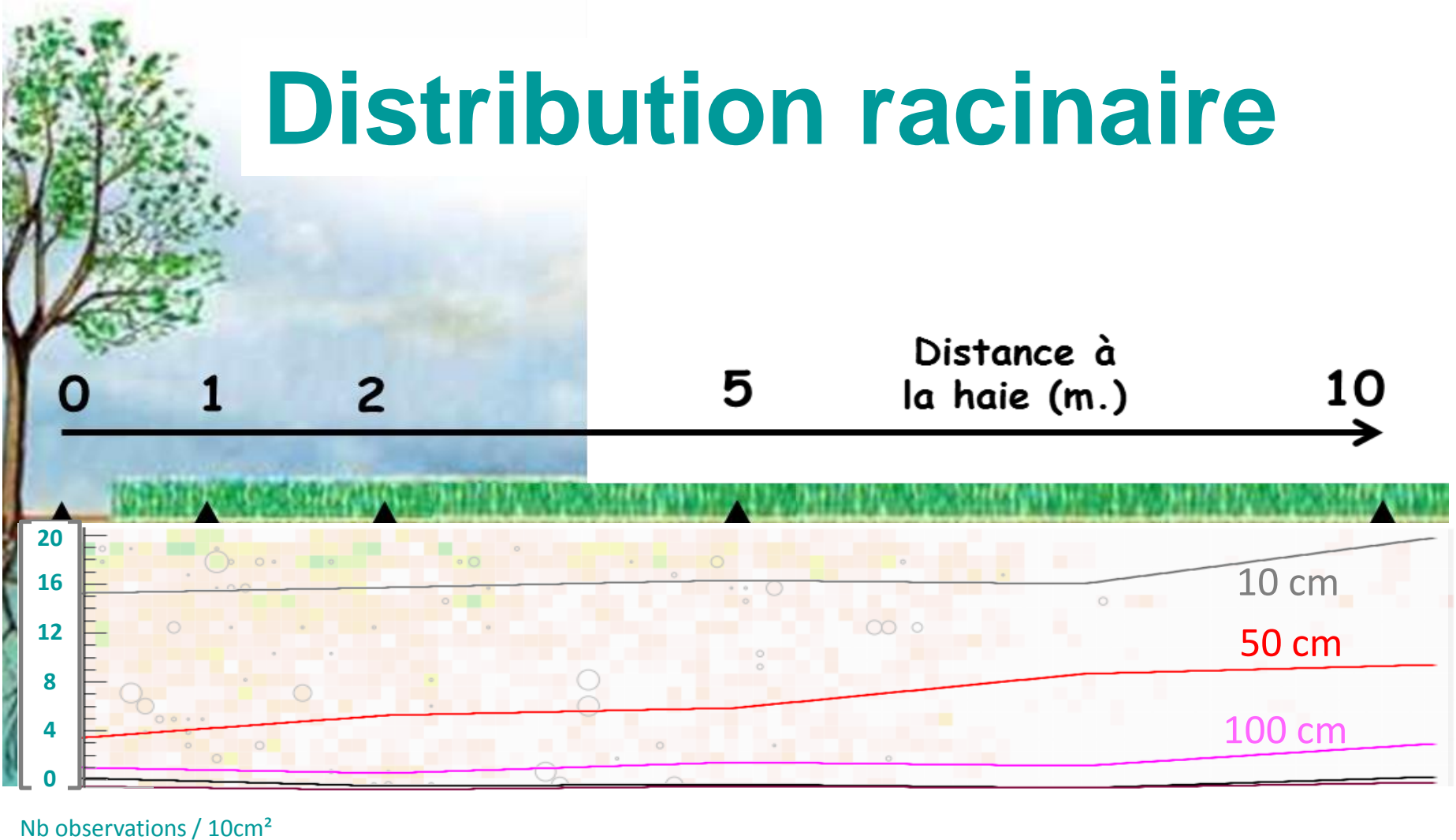
. Cartographie racinaire (10\*10 cm)



# Distribution racinaire



# Distribution racinaire

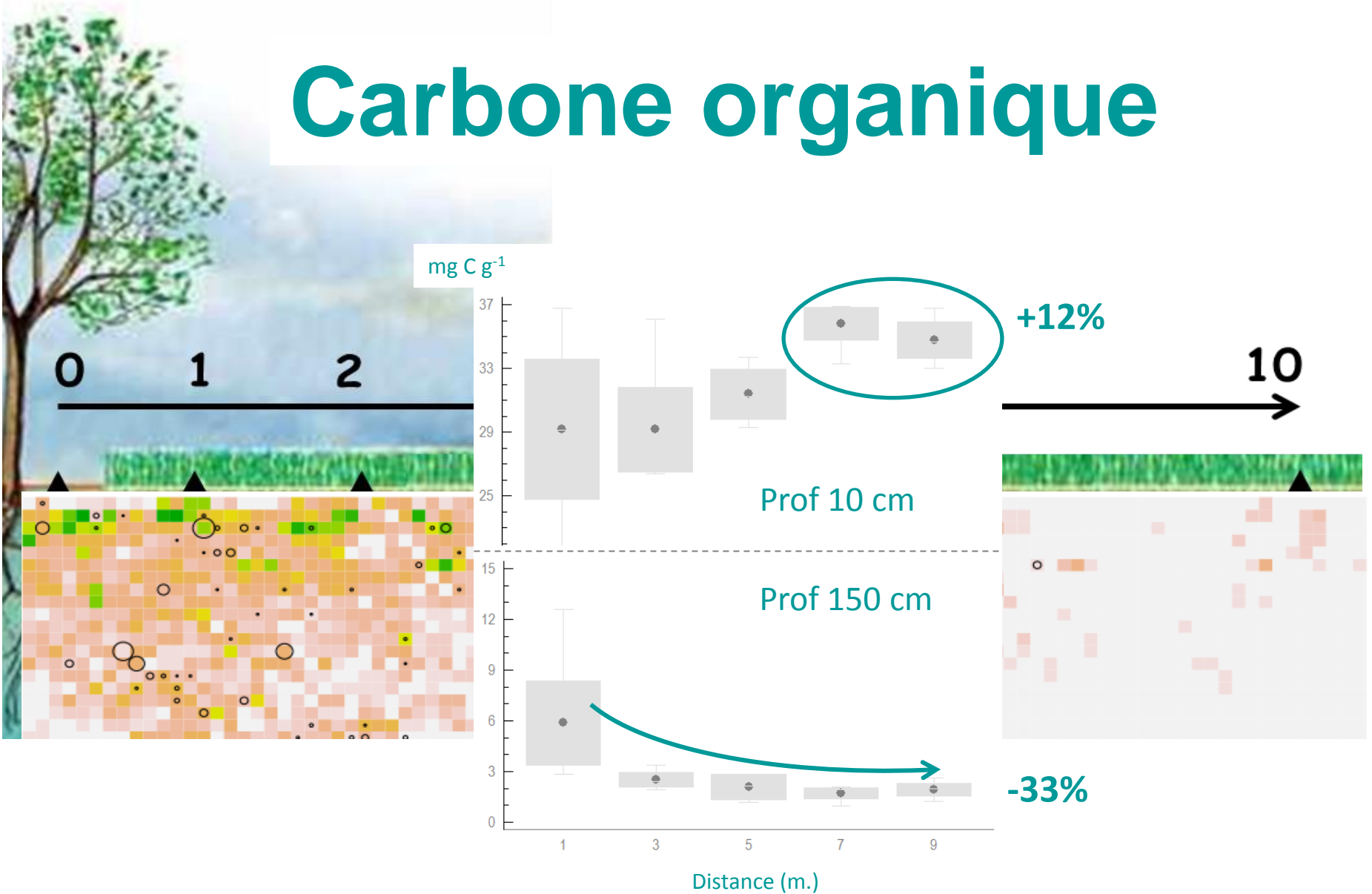


## Racines Herbacées

. Chevauchement des niches d'exploration racinaire arbre/culture

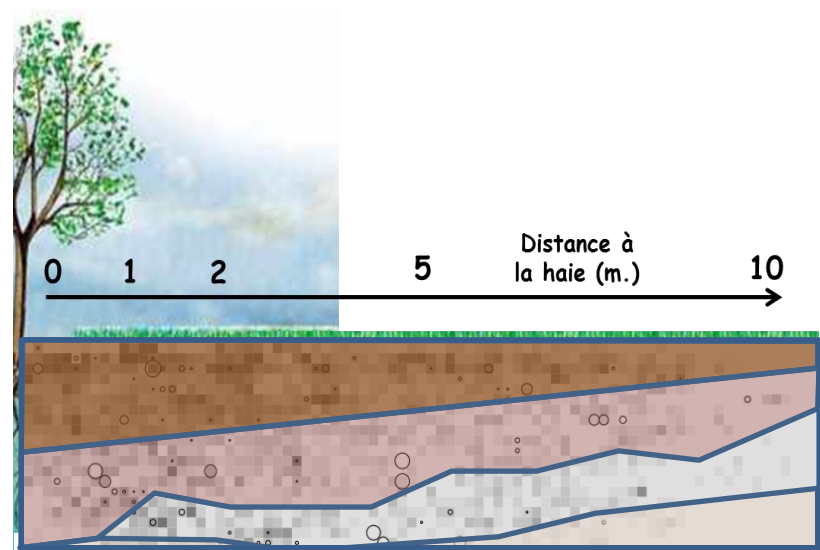
. Compétition sous-terrainne

# Carbone organique



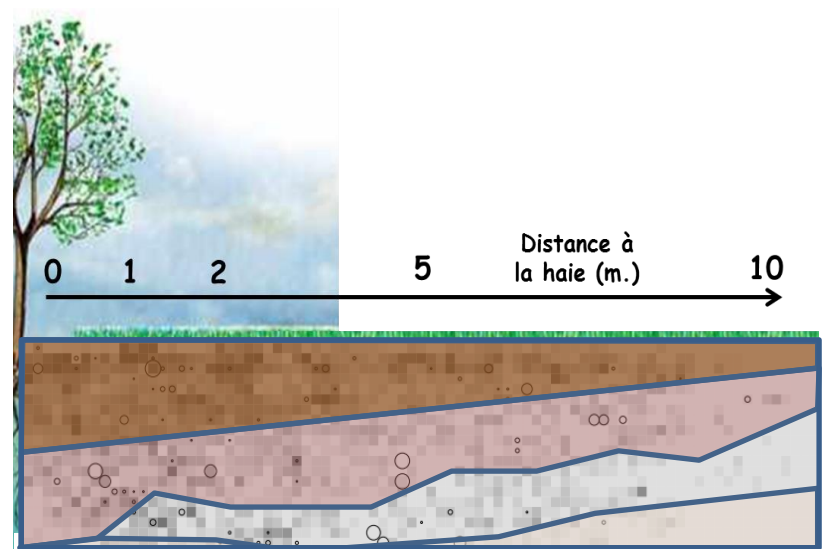
Evolution des teneurs en carbone organique avec la distance et la profondeur

# Stock de Carbone

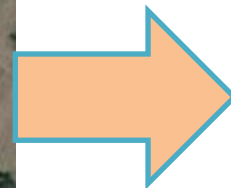


. Horizons de sol différents

# Stock de Carbone

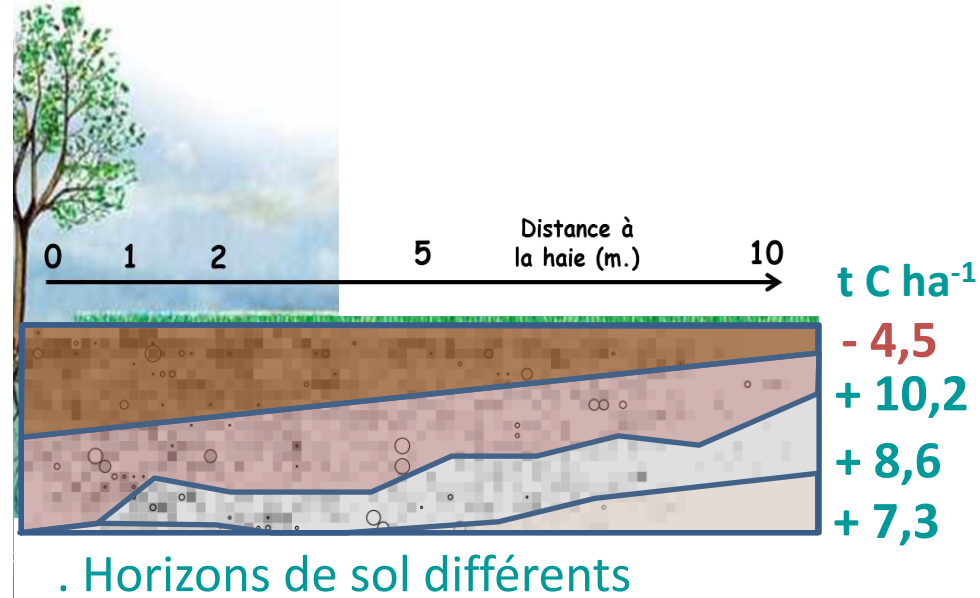


. Horizons de sol différents



**+ 21,7 t C ha<sup>-1</sup>**

# Stock de Carbone



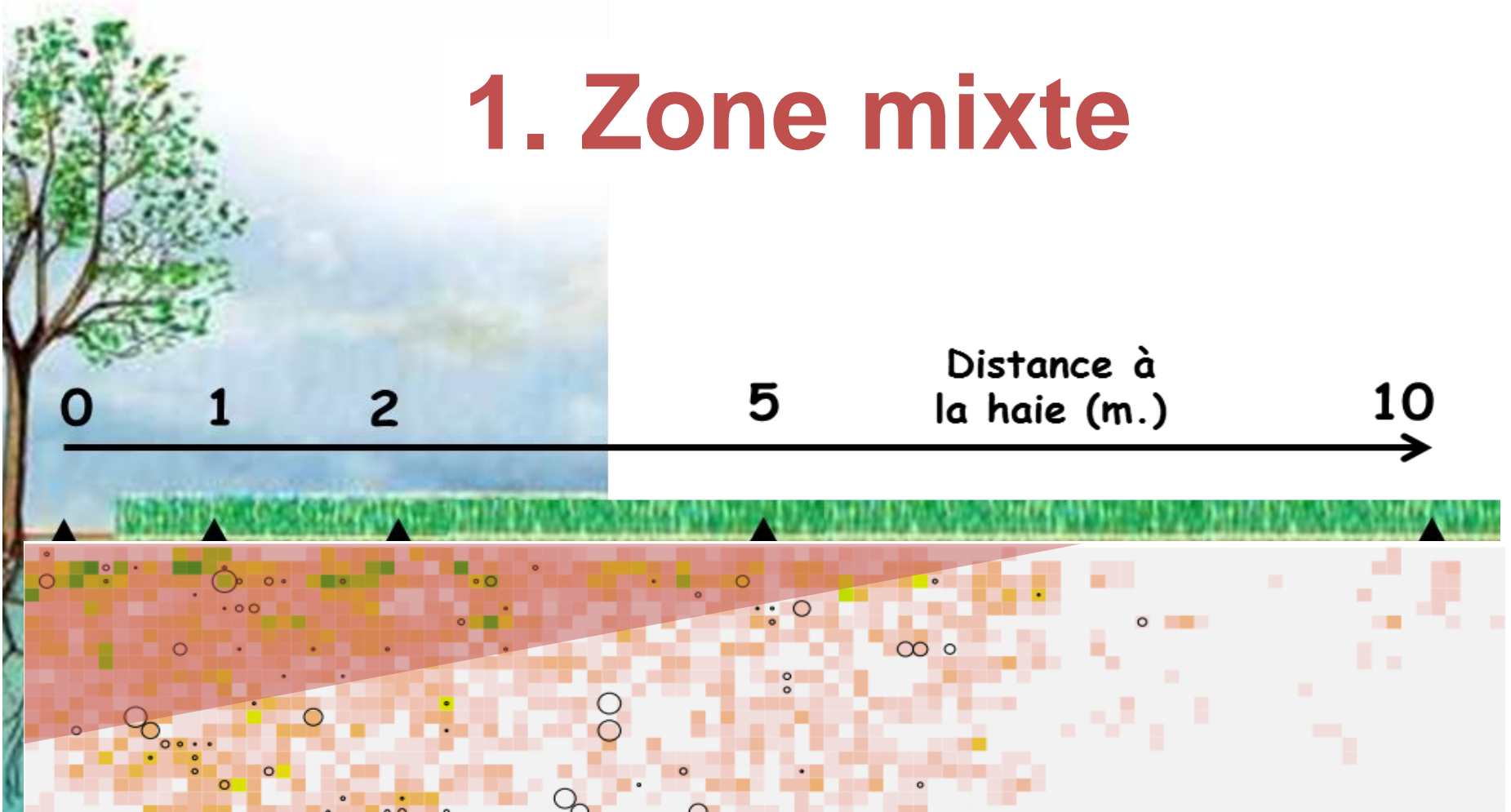
➔ + 21,7 t C ha<sup>-1</sup>



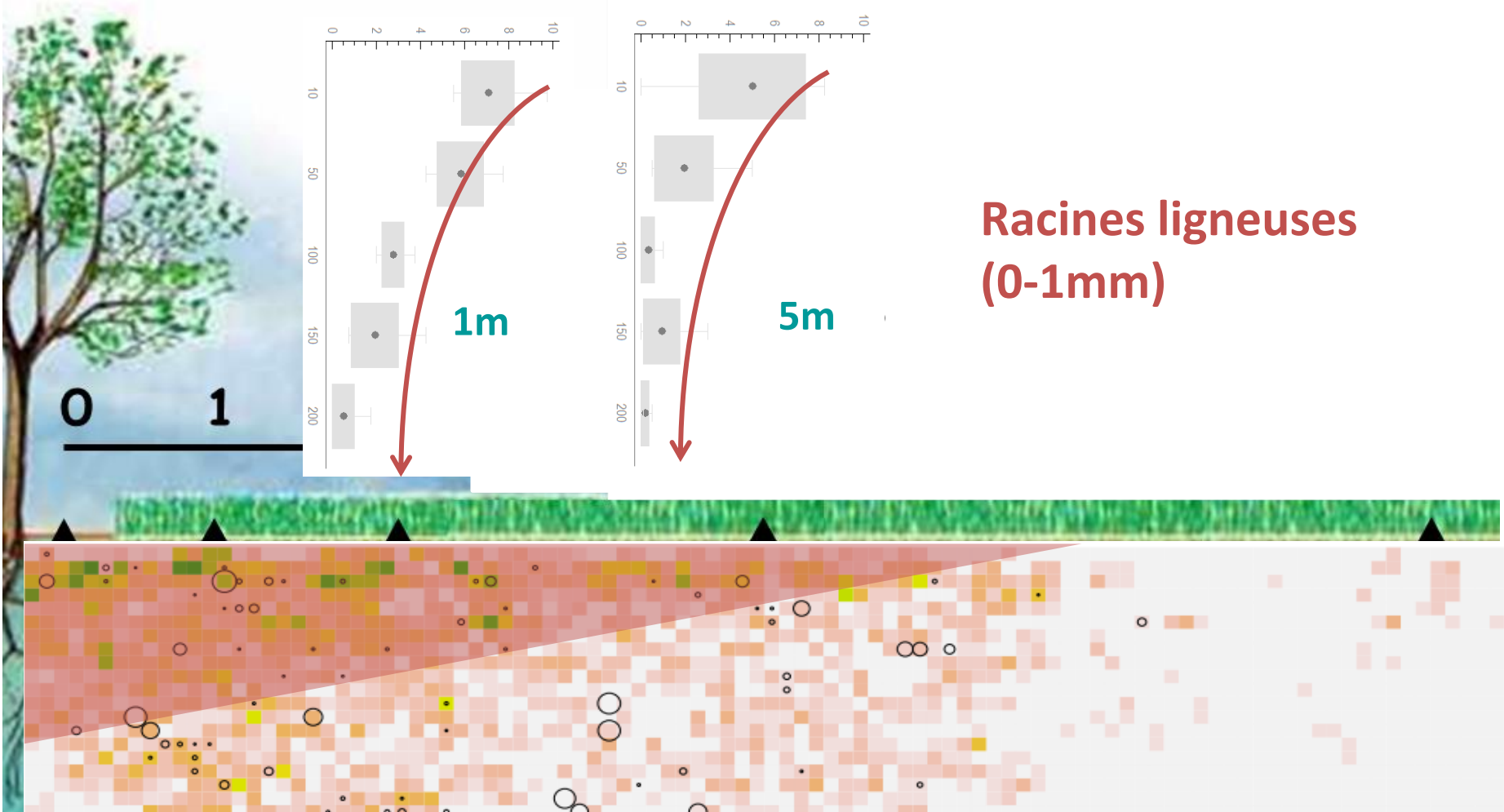
**Merci de votre attention !**



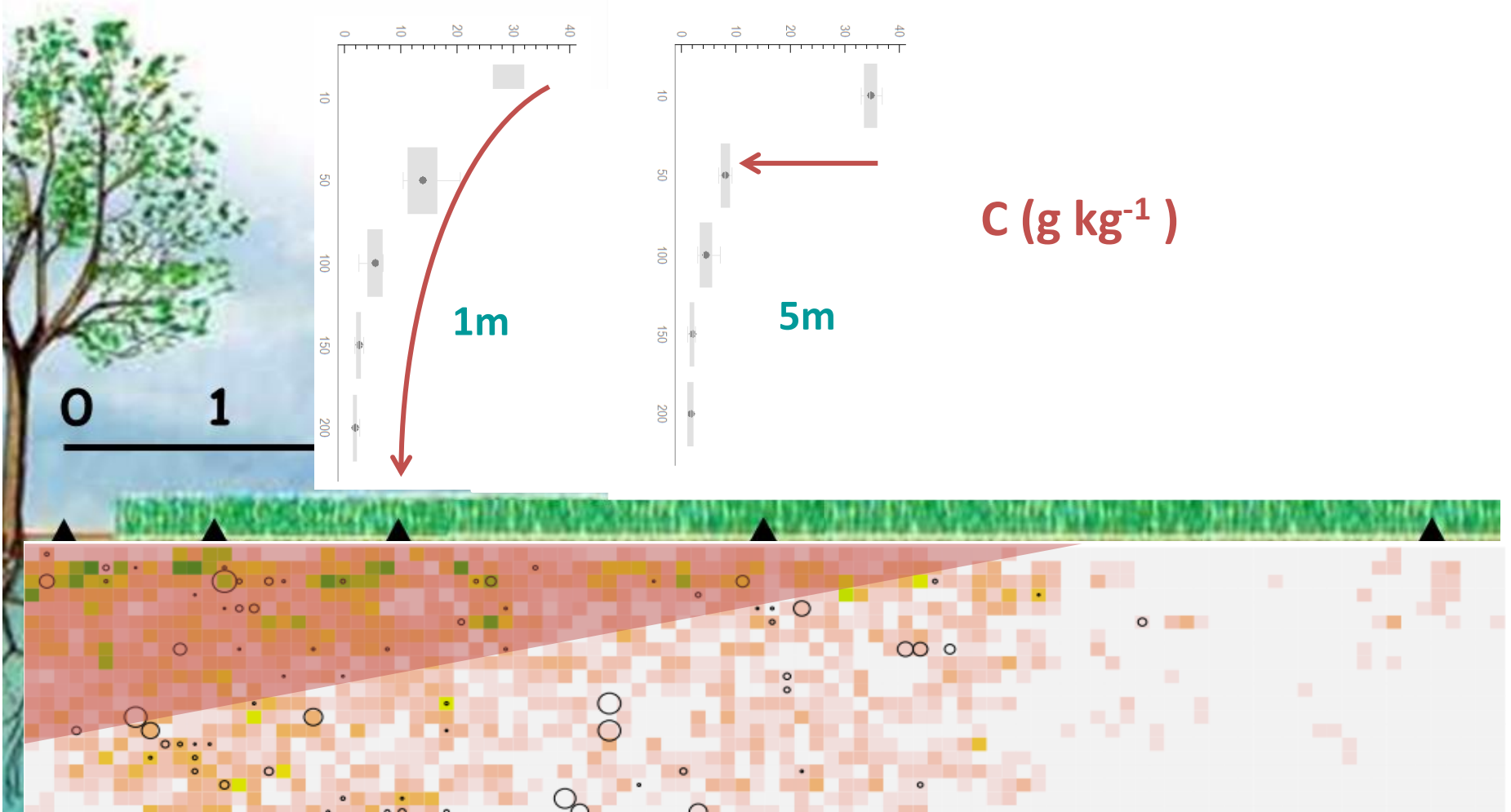
# 1. Zone mixte



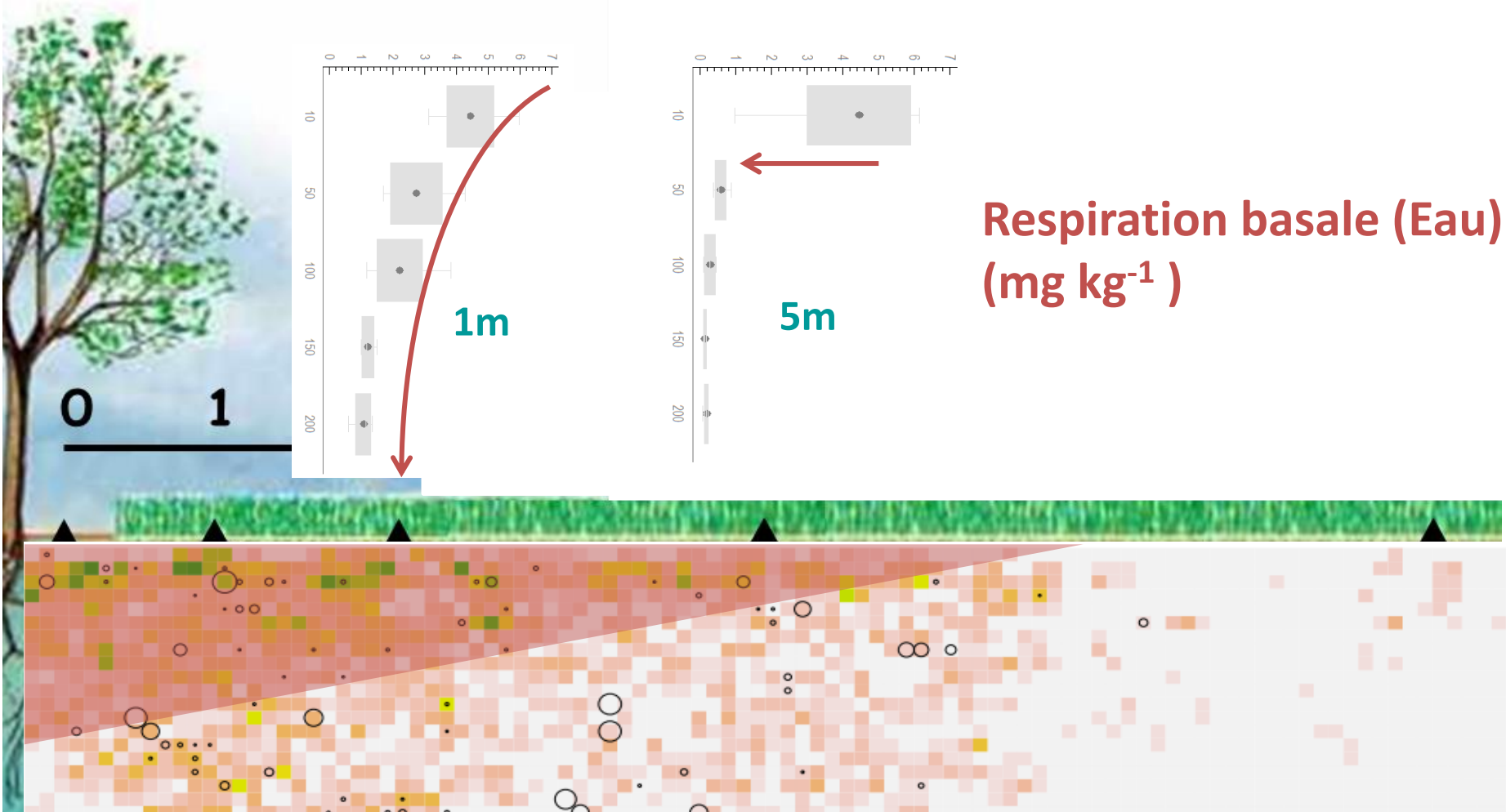
- . **Racines** : Forte biomasse et diversité
- . **Microorganismes** : Faible biomasse / Forte efficacité
- . **Carbone** : Teneur élevée en surface et profondeur



- . **Racines** : Forte biomasse et diversité
- . **Microorganismes** : Faible biomasse / Forte efficacité
- . **Carbone** : Teneur élevée en surface et profondeur

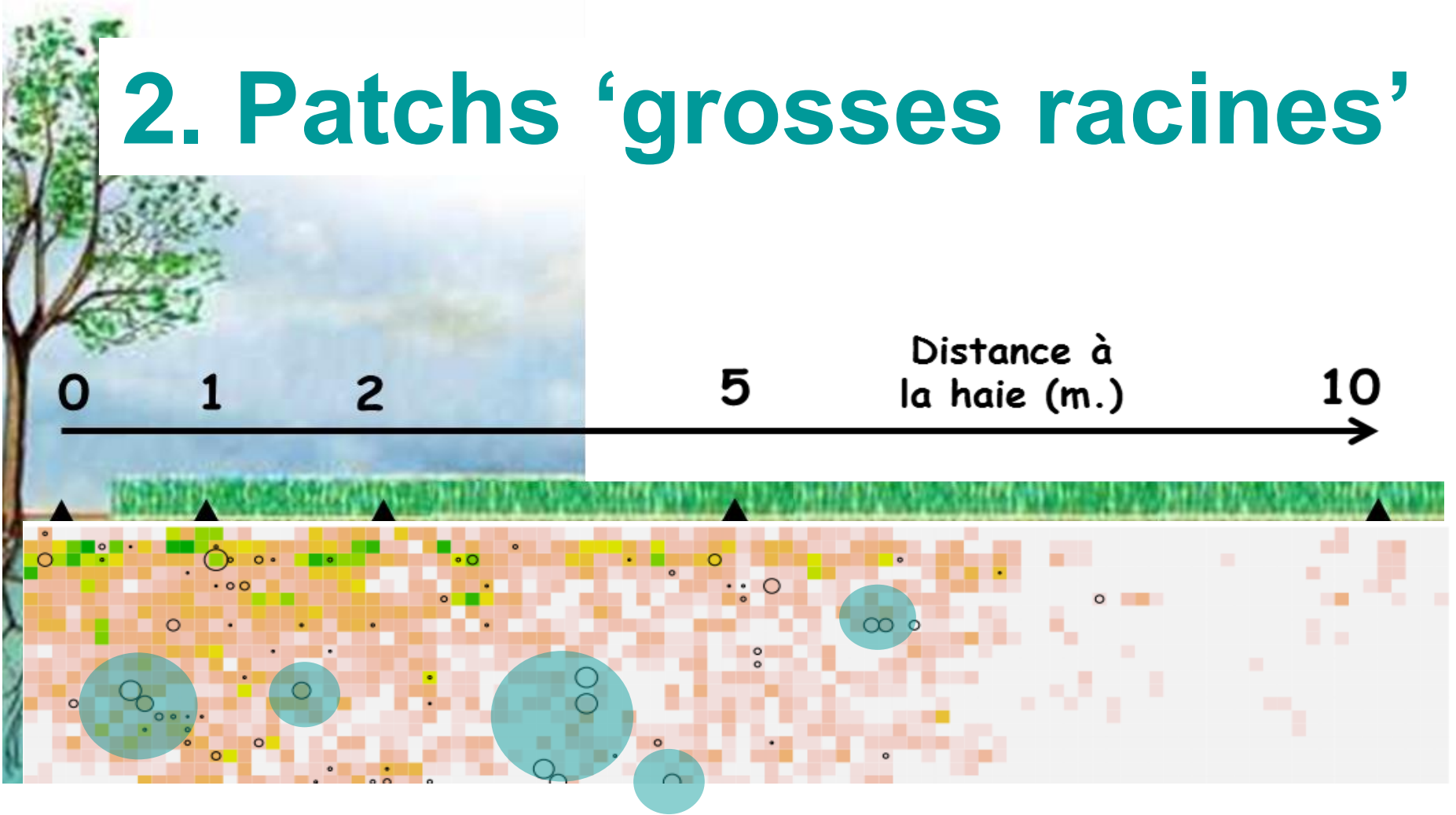


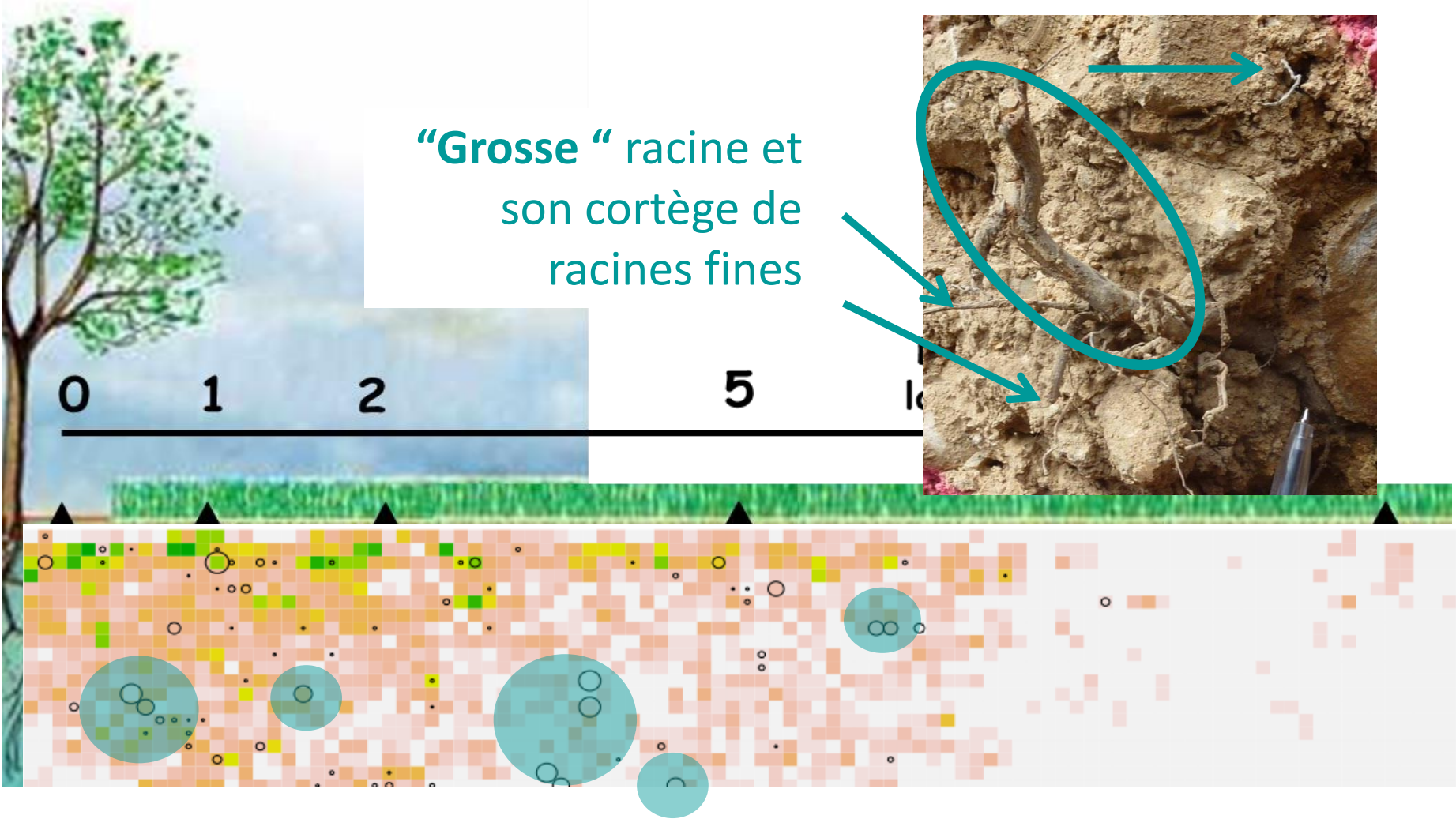
- . **Racines** : Forte biomasse et diversité
- . **Microorganismes** : Faible biomasse / Forte efficacité
- . **Carbone** : Teneur élevée en surface et profondeur



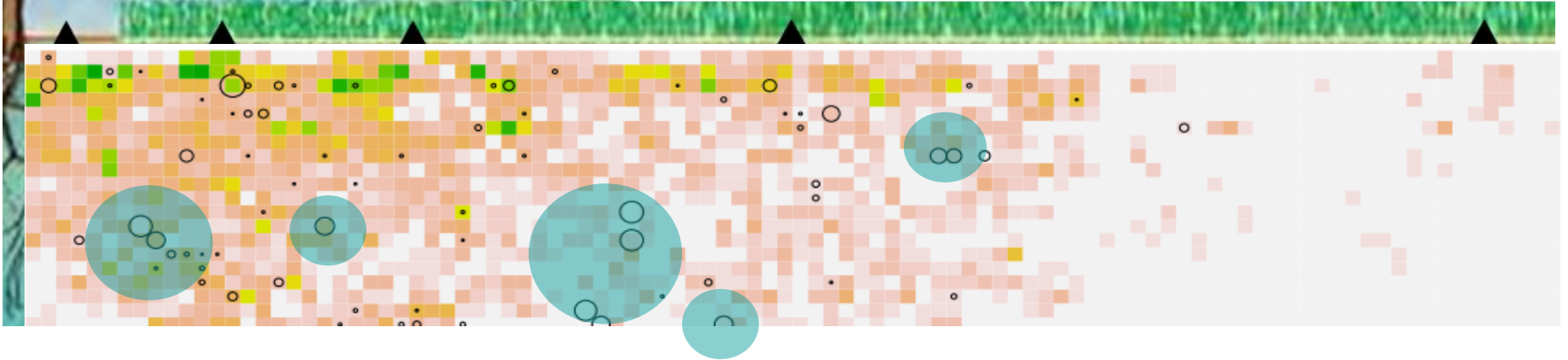
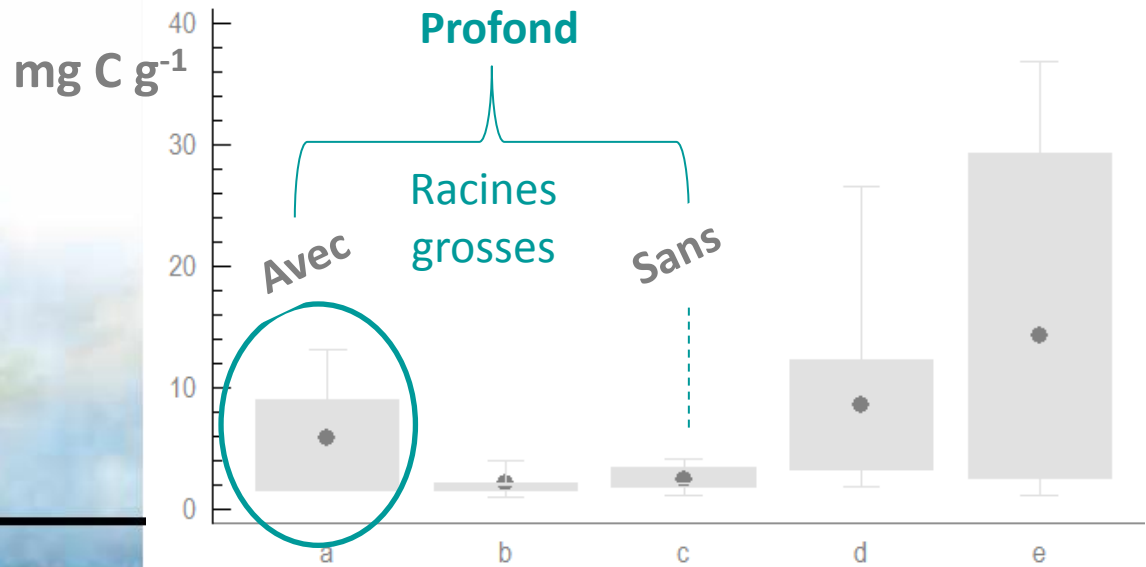
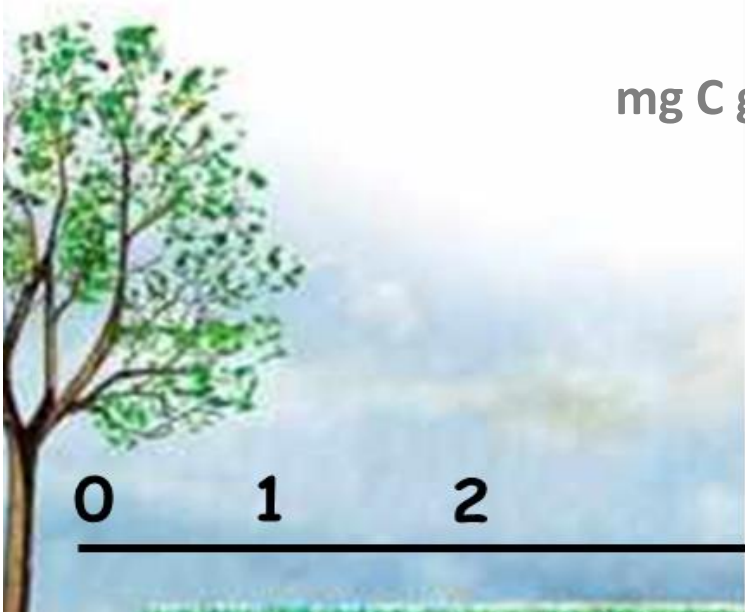
- . **Racines** : Forte biomasse et diversité
- . **Microorganismes** : Faible biomasse / Forte efficacité
- . **Carbone** : Teneur élevée en surface et profondeur

# 2. Patches 'grosses racines'

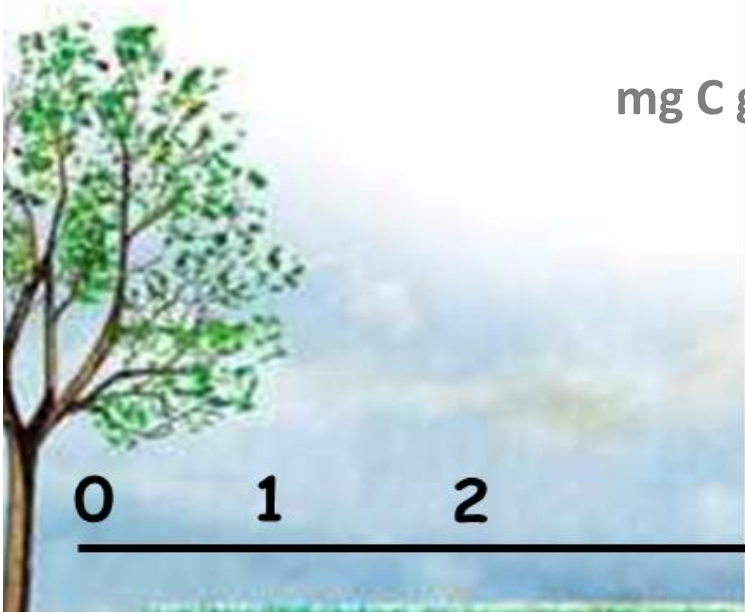




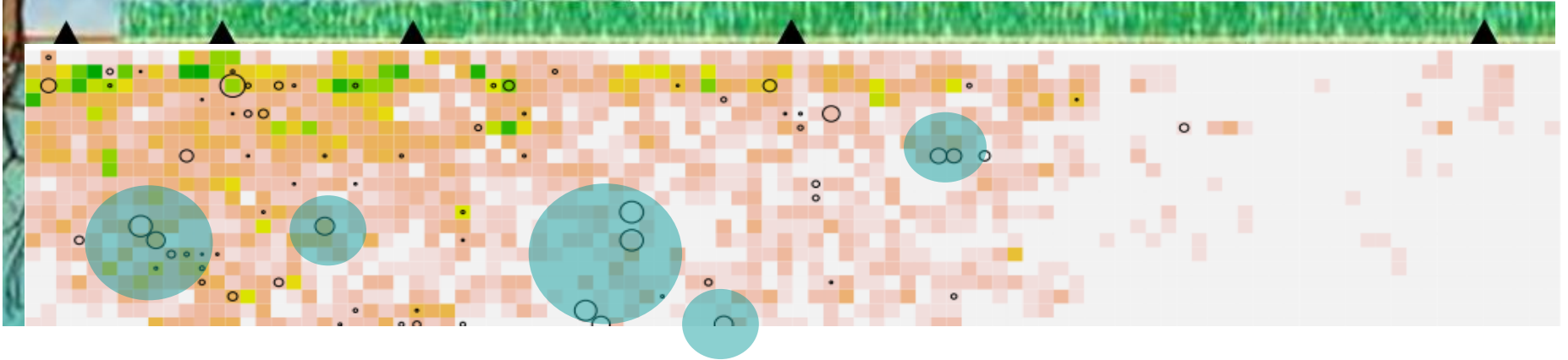
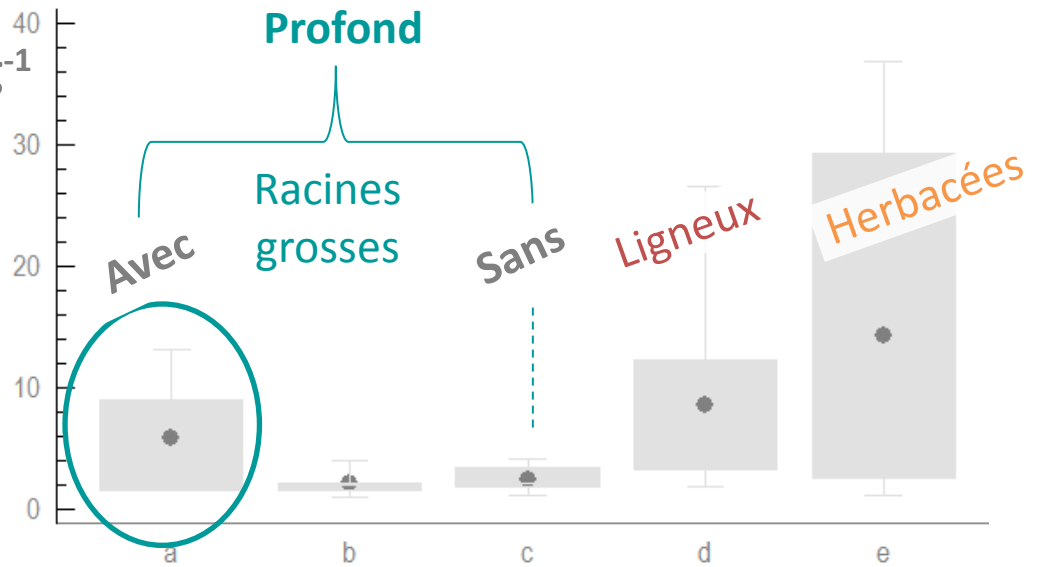
. Racines : par 'patch' / centrées sur grosses racines / pérennes



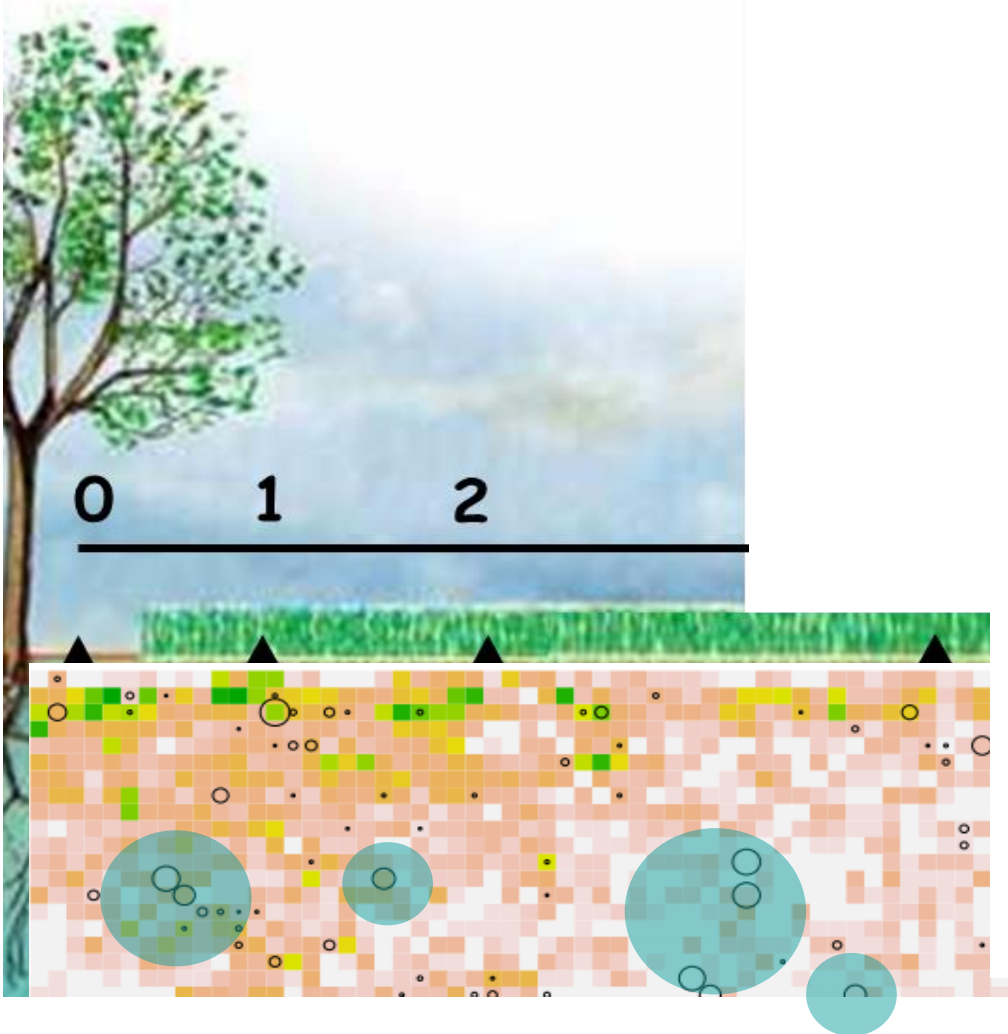
. Racines : par 'patch' / centrées sur grosses racines / pérennes



mg C g<sup>-1</sup>

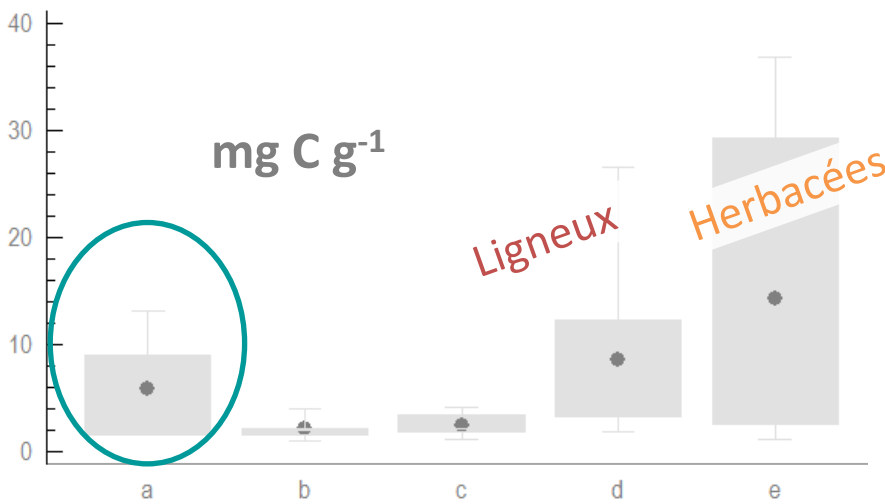
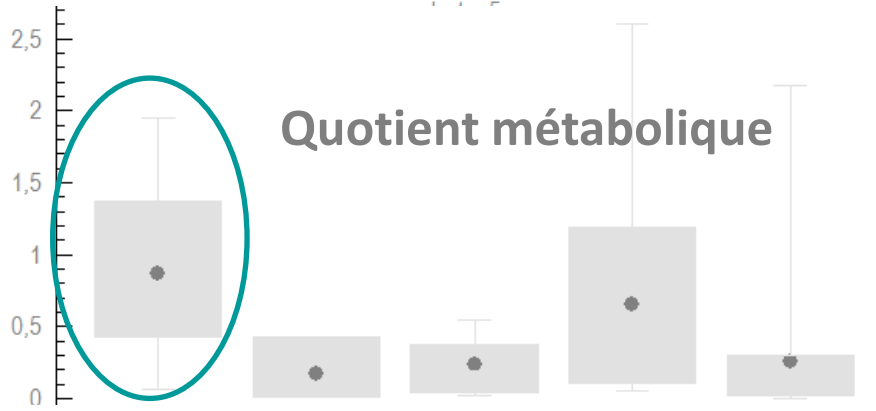
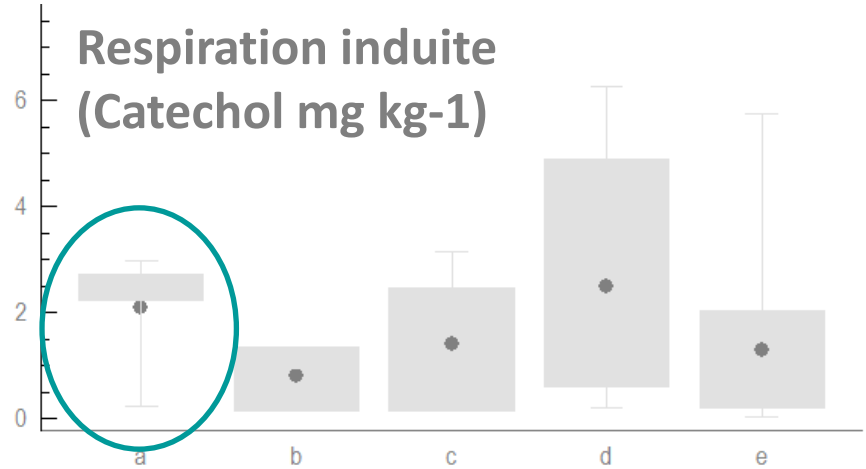


. Racines : par 'patch' / centrées sur grosses racines / pérennes

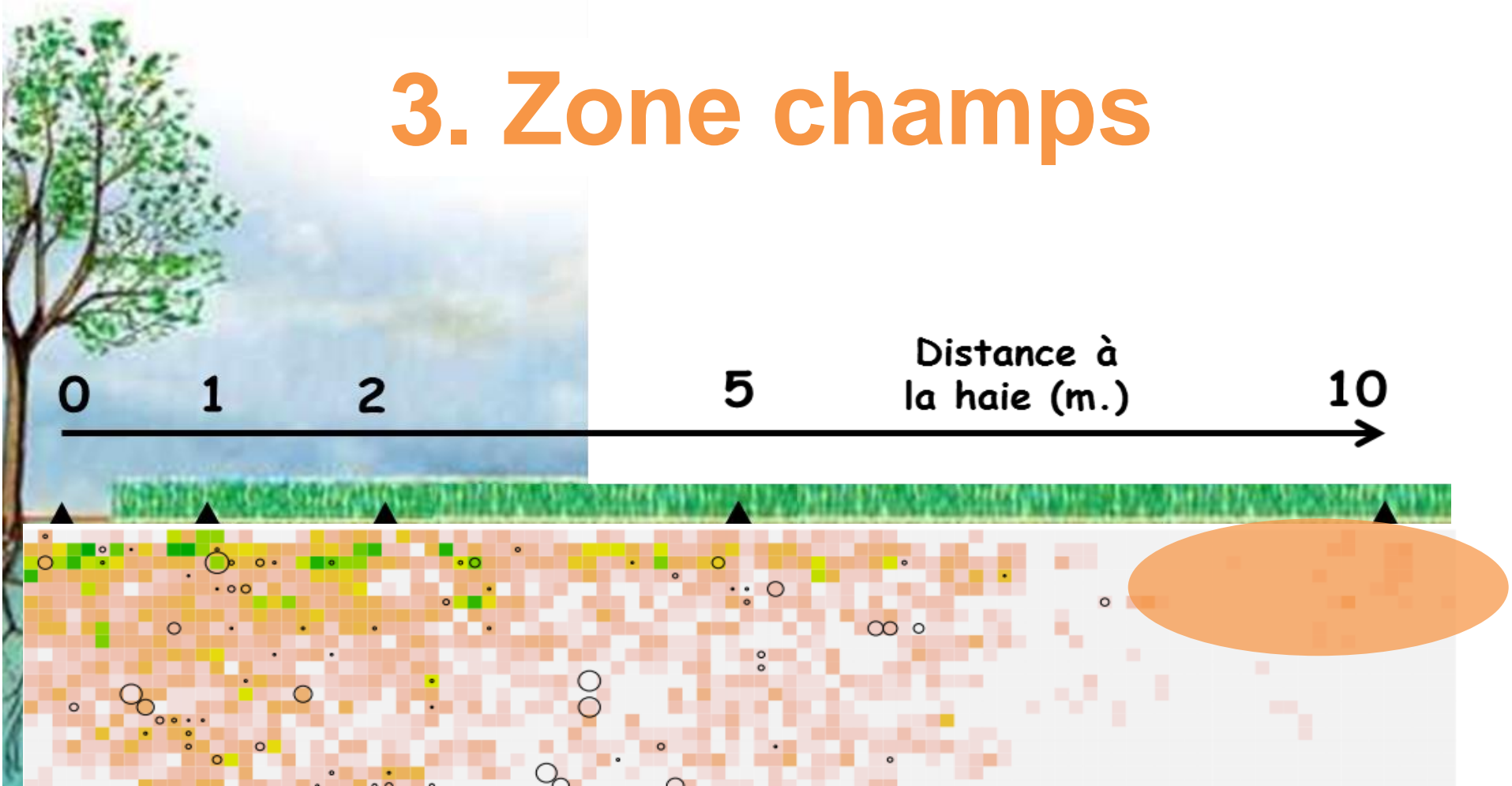


**Microorganismes** : Communautés spécialisées / Forte efficacité

**Carbone** : Teneurs élevées par / à profondeur



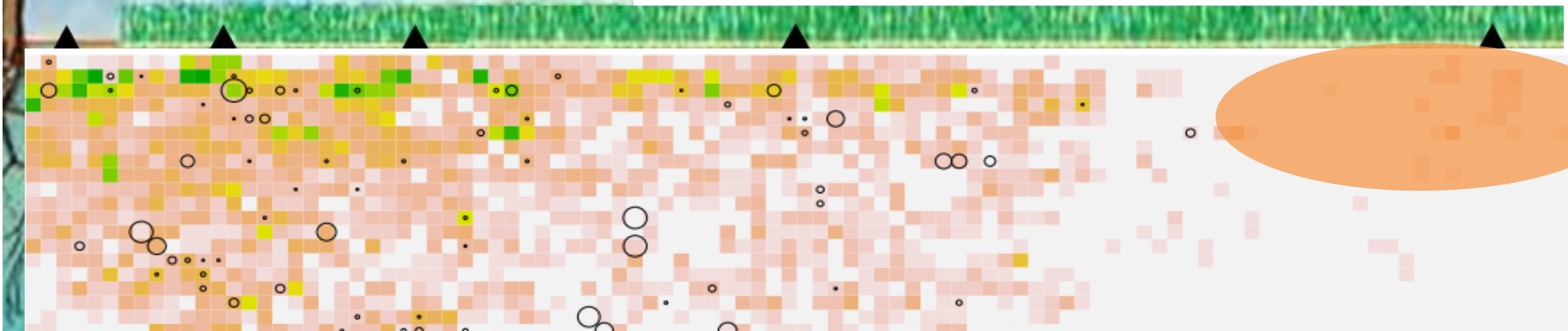
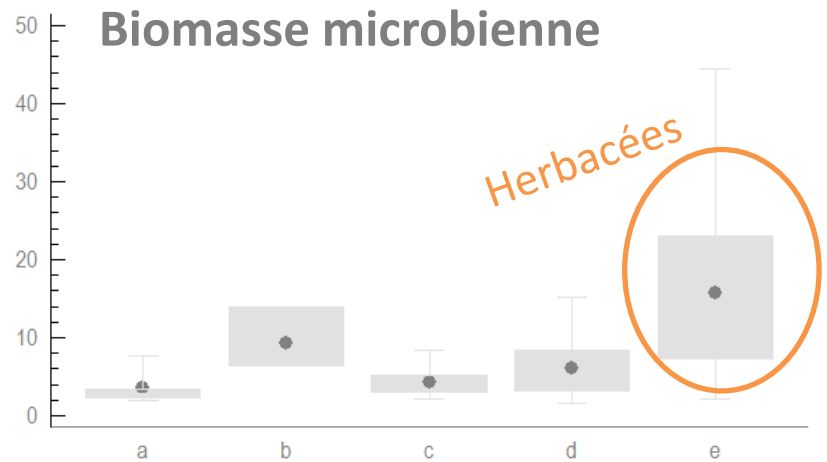
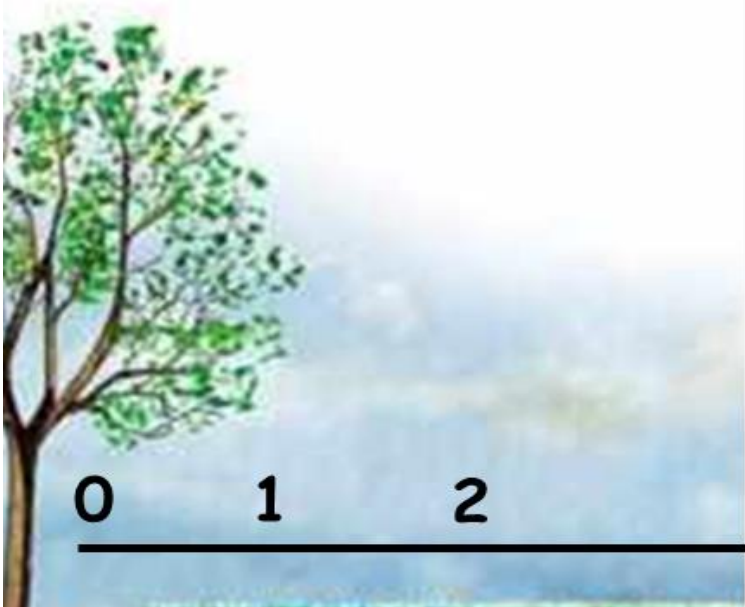
# 3. Zone champs



**Racines** : En surface, fines

**Microorganismes** : Forte biomasse / faible efficacité

**Carbone** : Forte concentration en surface



**Racines** : En surface, fines

**Microorganismes** : Forte biomasse / faible efficacité

**Carbone** : Forte concentration en surface



The diagram illustrates the vertical distribution of microbial activity in soil. A horizontal axis at the top is marked with 0, 1, 2, and 5, representing depth. A black arrow points to the right along this axis. A blue shaded region covers the surface from 0 to approximately 2.5. Below the surface, a green layer represents vegetation. The soil is depicted with a pinkish-red background, overlaid with a grid of small colored squares (yellow, green, orange) and various sized circles (blue, grey, white) representing microbial activity. A large orange oval is positioned on the right side of the diagram, overlapping the soil profile.

**Effet global 'Arbre',**  
gradient en surface et  
profondeur, forte activité  
microbienne

**Effet 'champs',** important  
mais limité en surface

. **Effet 'grosses racines',** microorganismes spécialisés

=> pour un stockage de carbone durable ?

















P1\_W\_D2\_L6

8  
9  
10

PA-V-15-10

