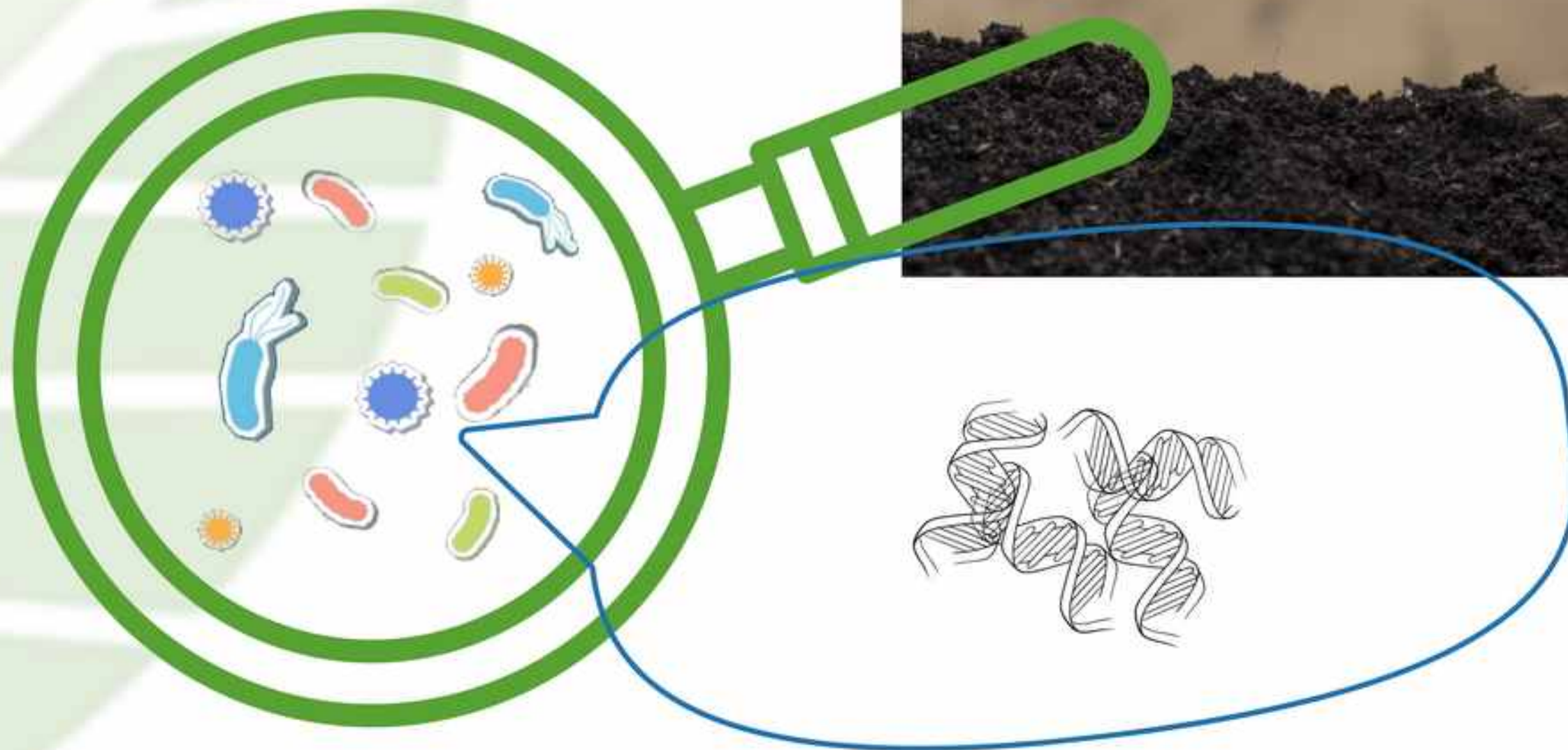


# Lo studio del microbiota: valutazione della diversità microbica dei suoli coltivati

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# Microorganismi



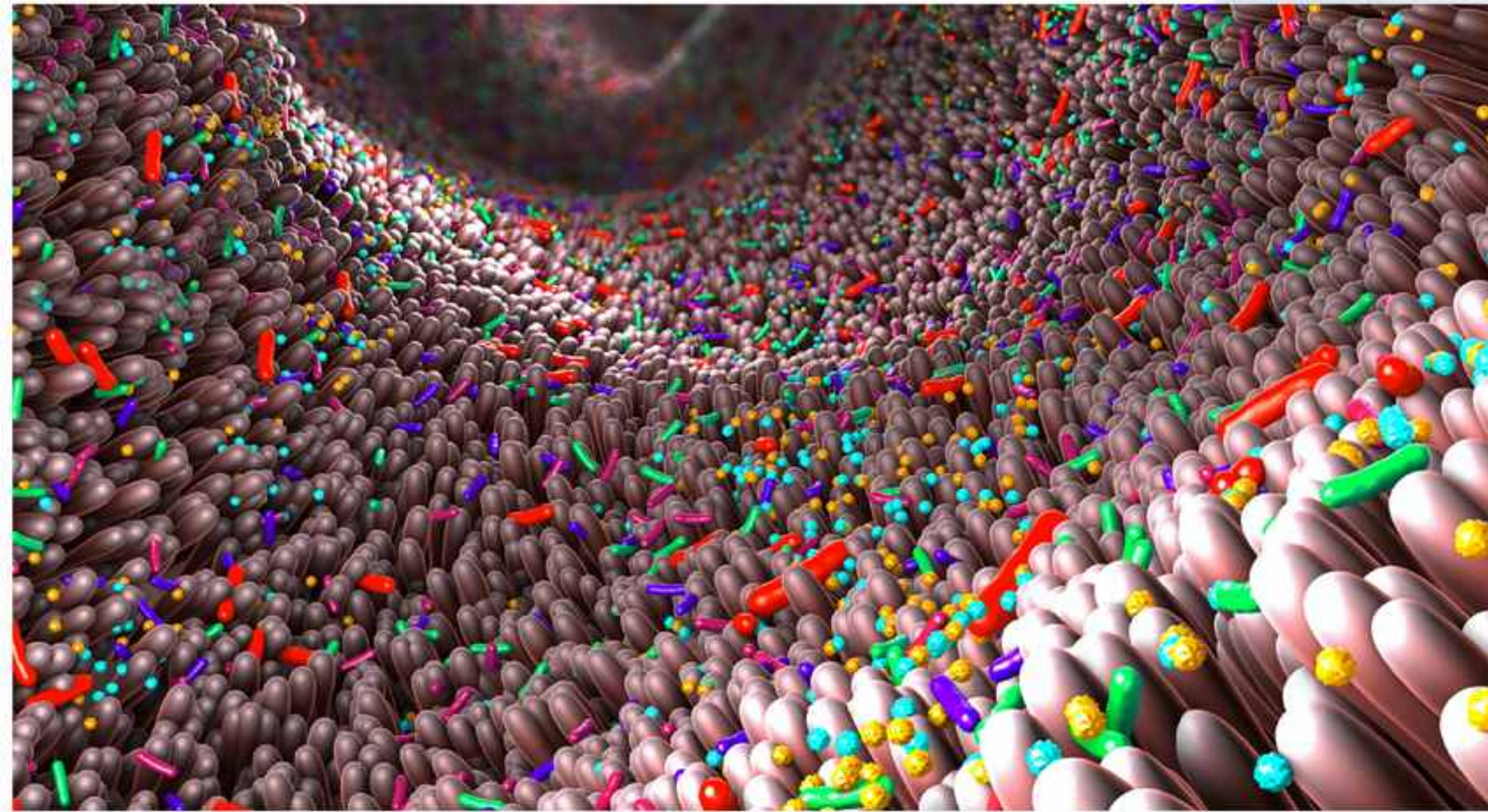
**microBIOMA**

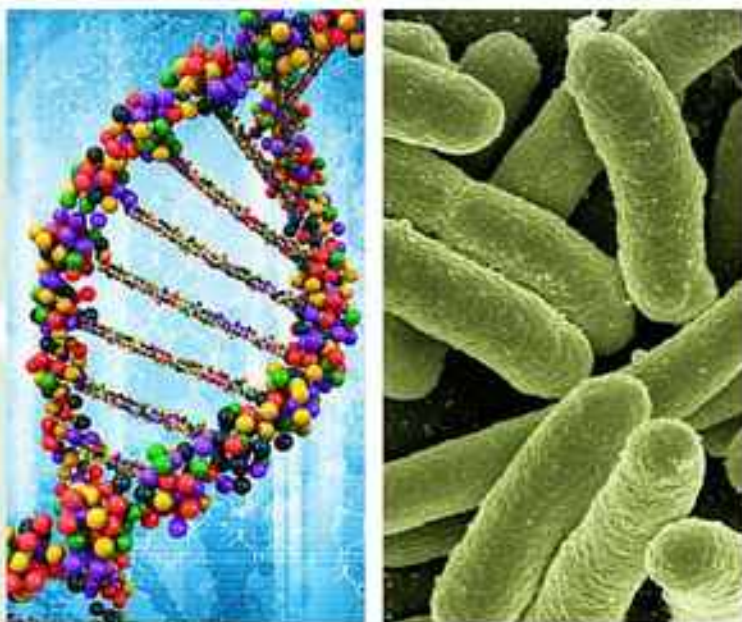


Microbiota

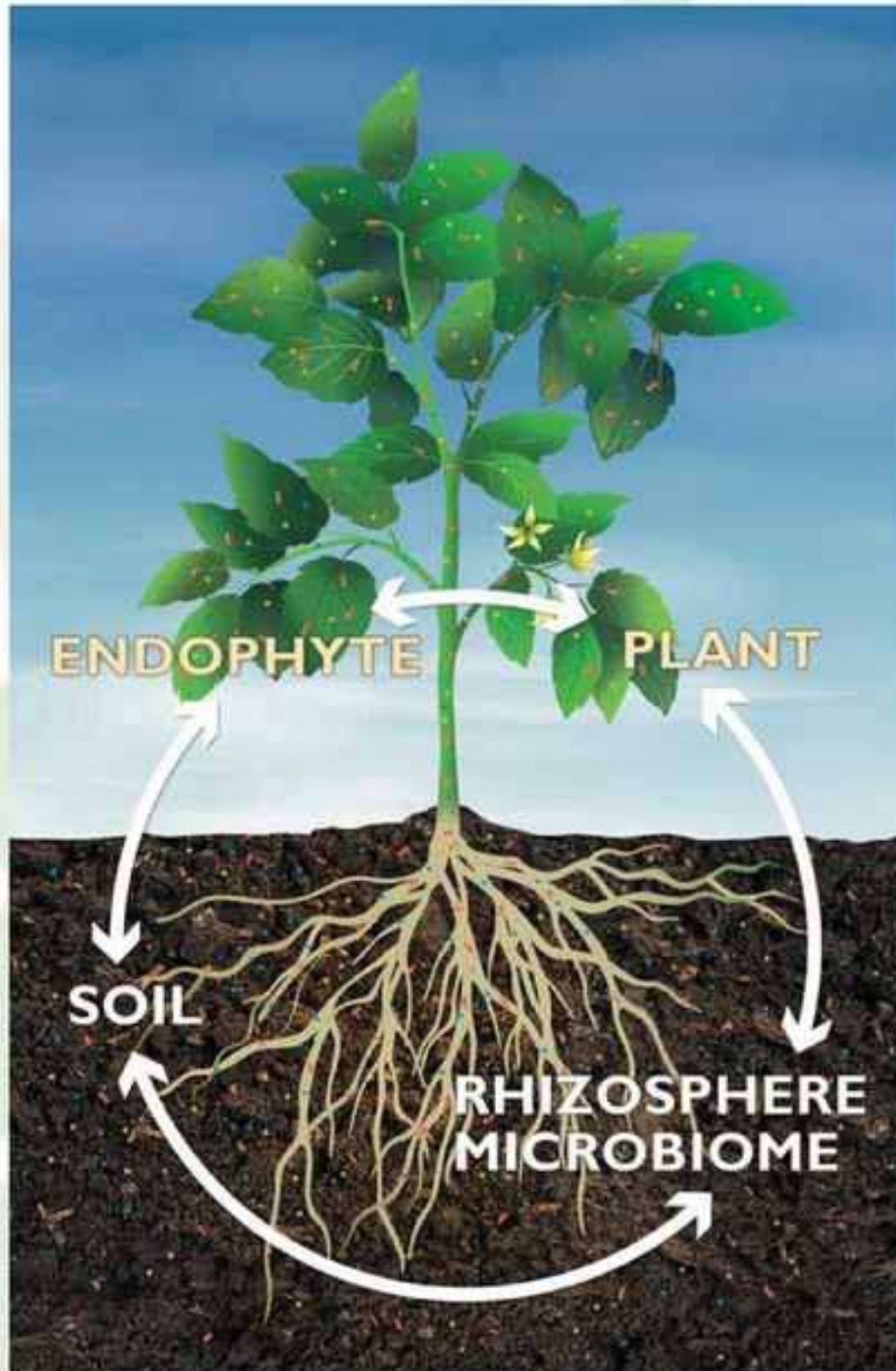
Microbioma

Il termine micro**BIOTA** fa riferimento alla totalità dei singoli **microrganismi** (batteri, funghi, protozoi, etc) che vivono e colonizzano uno **specifico ambiente**.





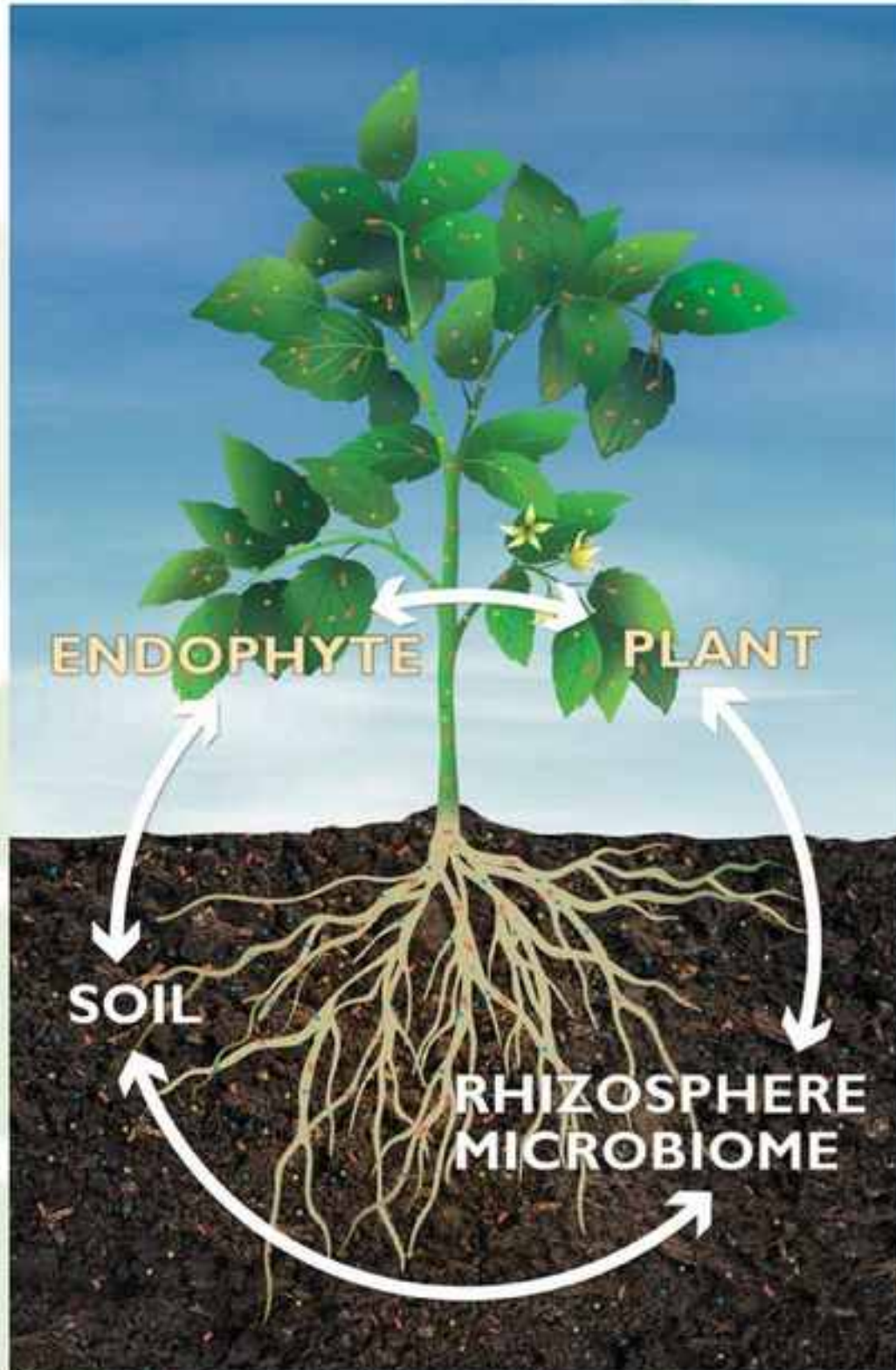
Il termine **microBIOMA** indica la totalità del patrimonio genetico posseduto dal **microbiota**, cioè i geni che quest'ultimo è in grado di *esprimere*.



# Cosa studiamo?

# microBIOTA

## Microrganismi utili



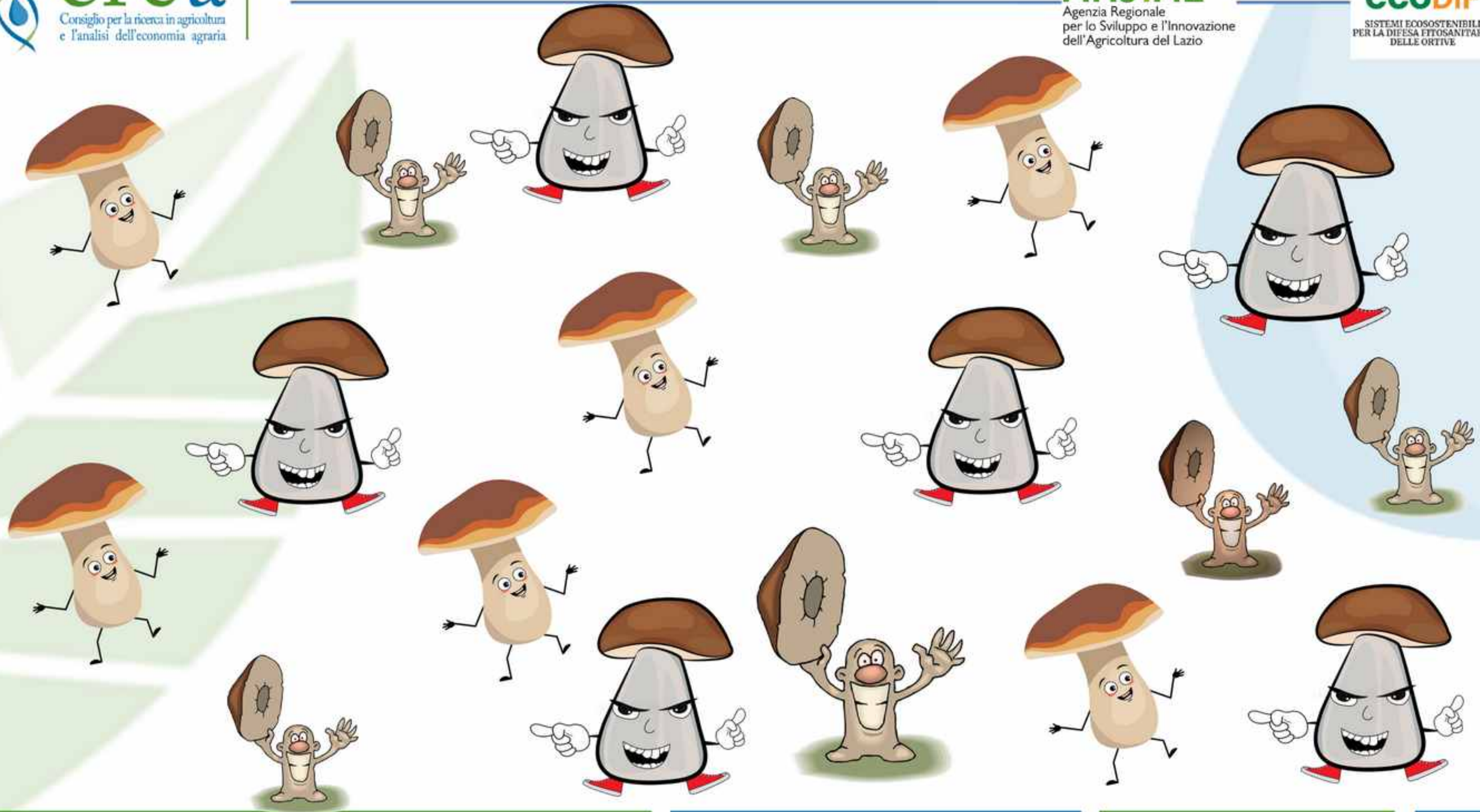
## Microrganismi fitopatogeni

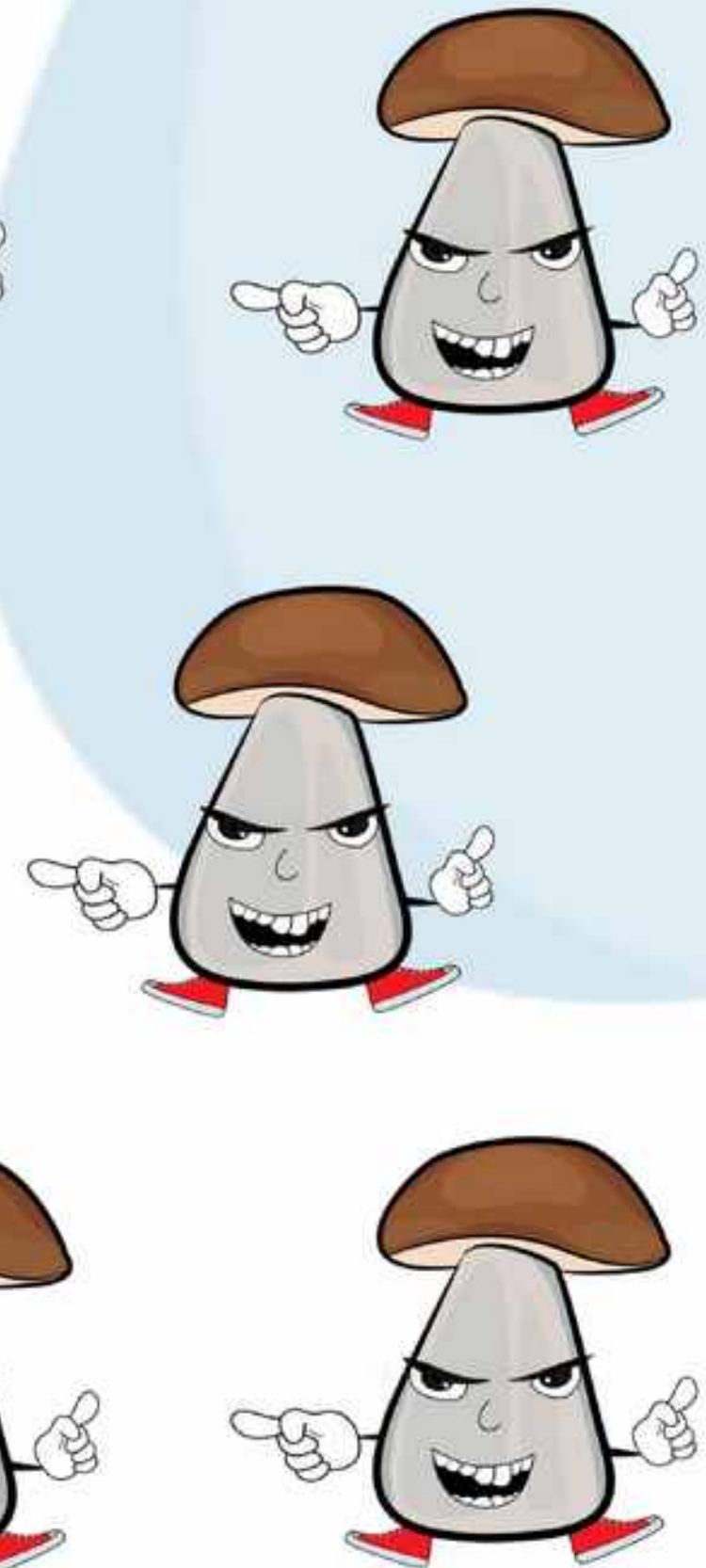
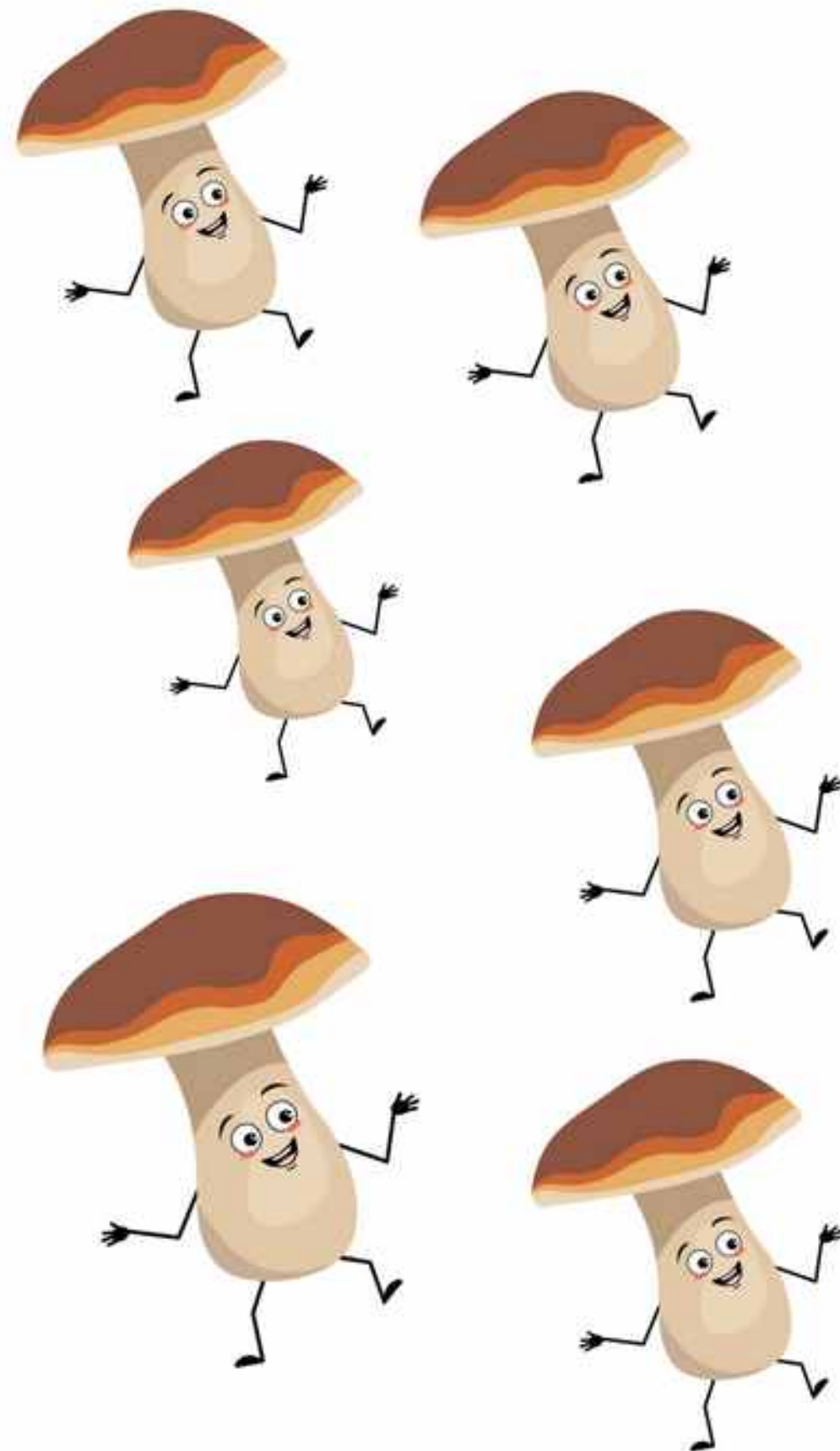
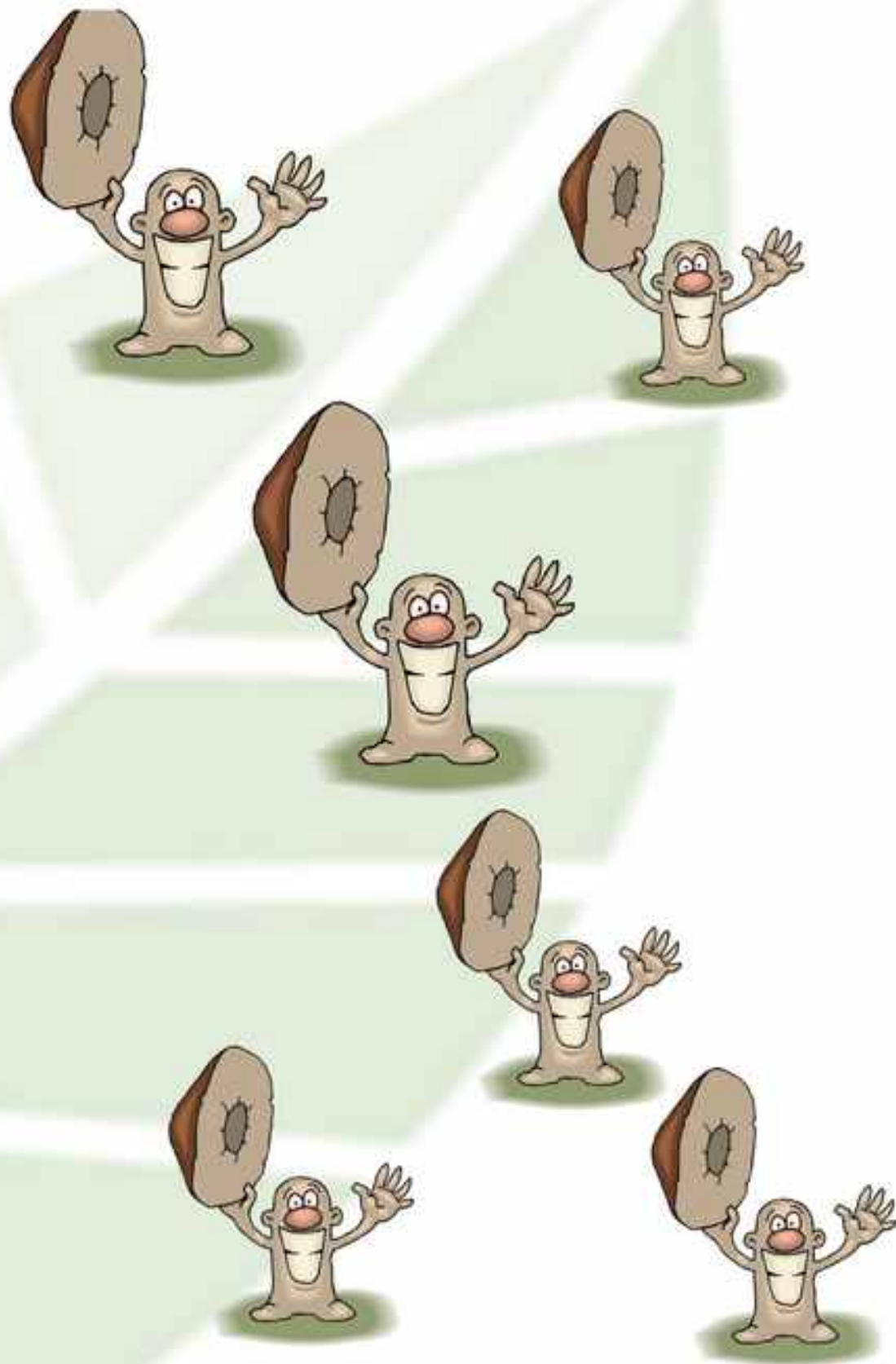


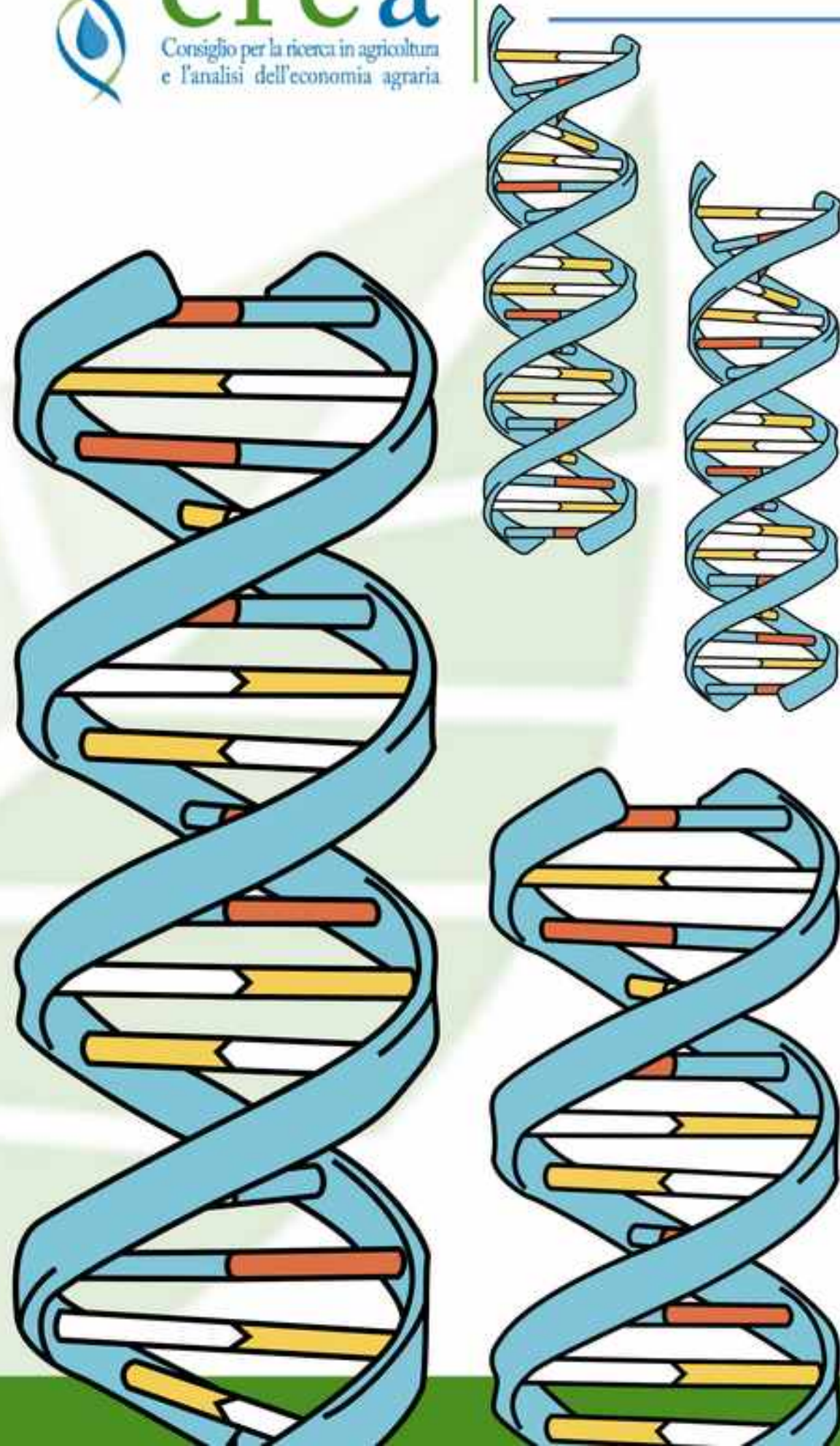
# Qual'è lo scopo del lavoro?



# Ricerca nel microbiota di marcatori della salute del suolo

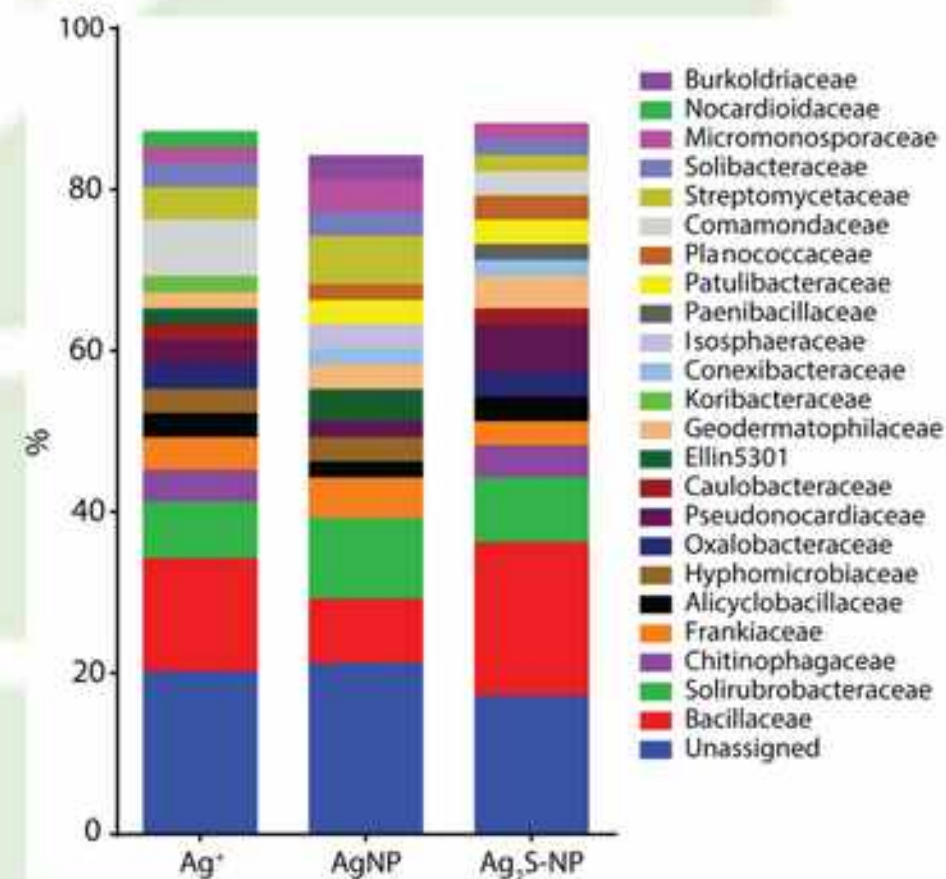
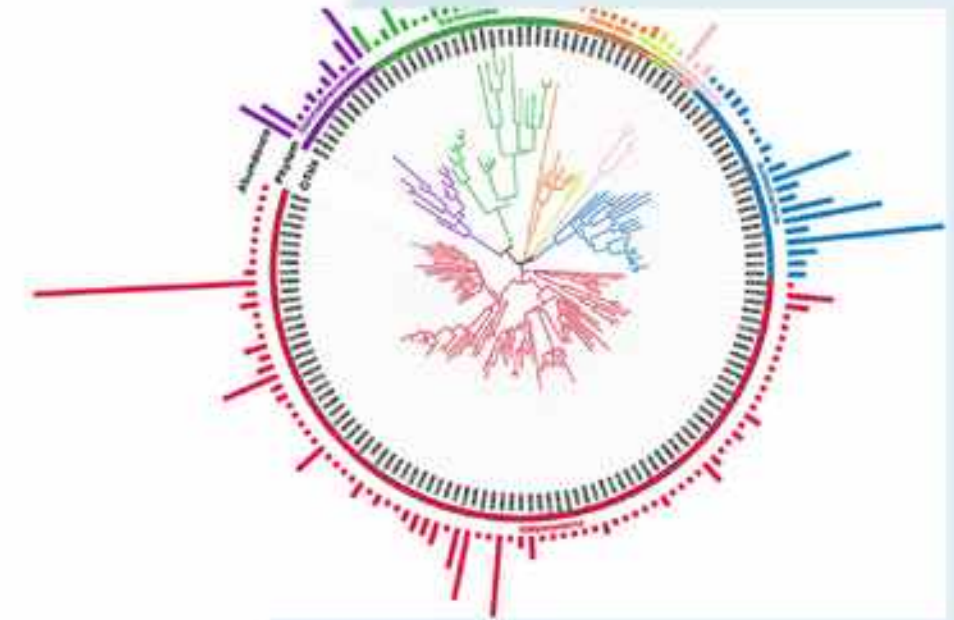




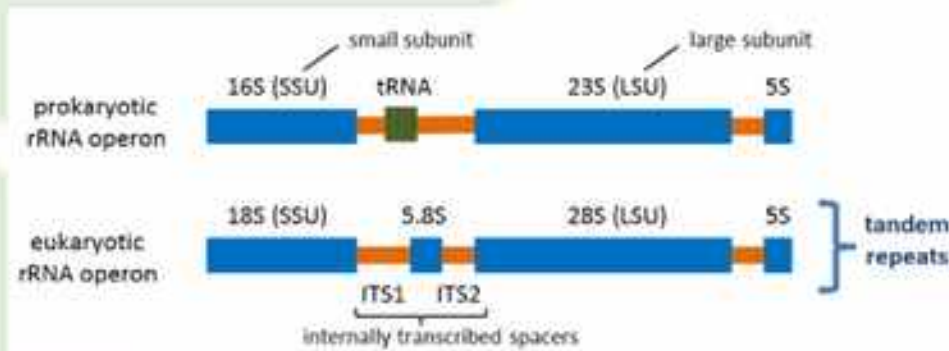
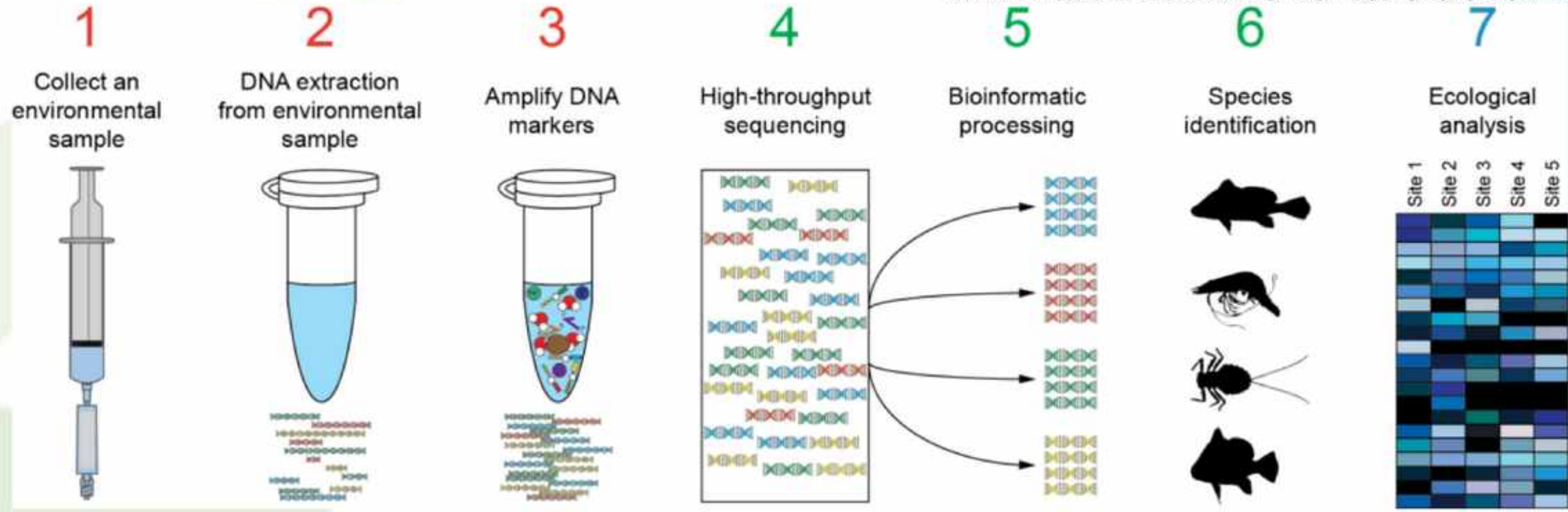


# Metagenomica

La **metagenomica** è un approccio basato sull'utilizzo di tecniche genomiche moderne per lo studio di **comunità microbiche** direttamente nel loro **ambiente naturale**



<http://www.sixthresearcher.com/amplicon-sequencing-and-high-throughput-genotyping-metagenomics/>

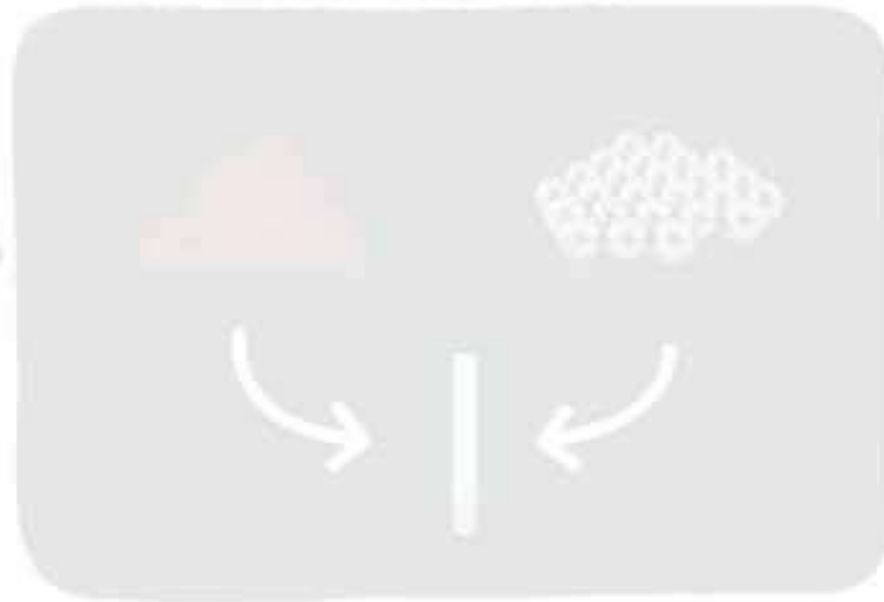


Il **metabarcoding** è un approccio basato sull'utilizzo di sequenziamento di **marcatori molecolari** genetici specifici a seconda del tipo di ricerca

**SAMPLE TYPE**



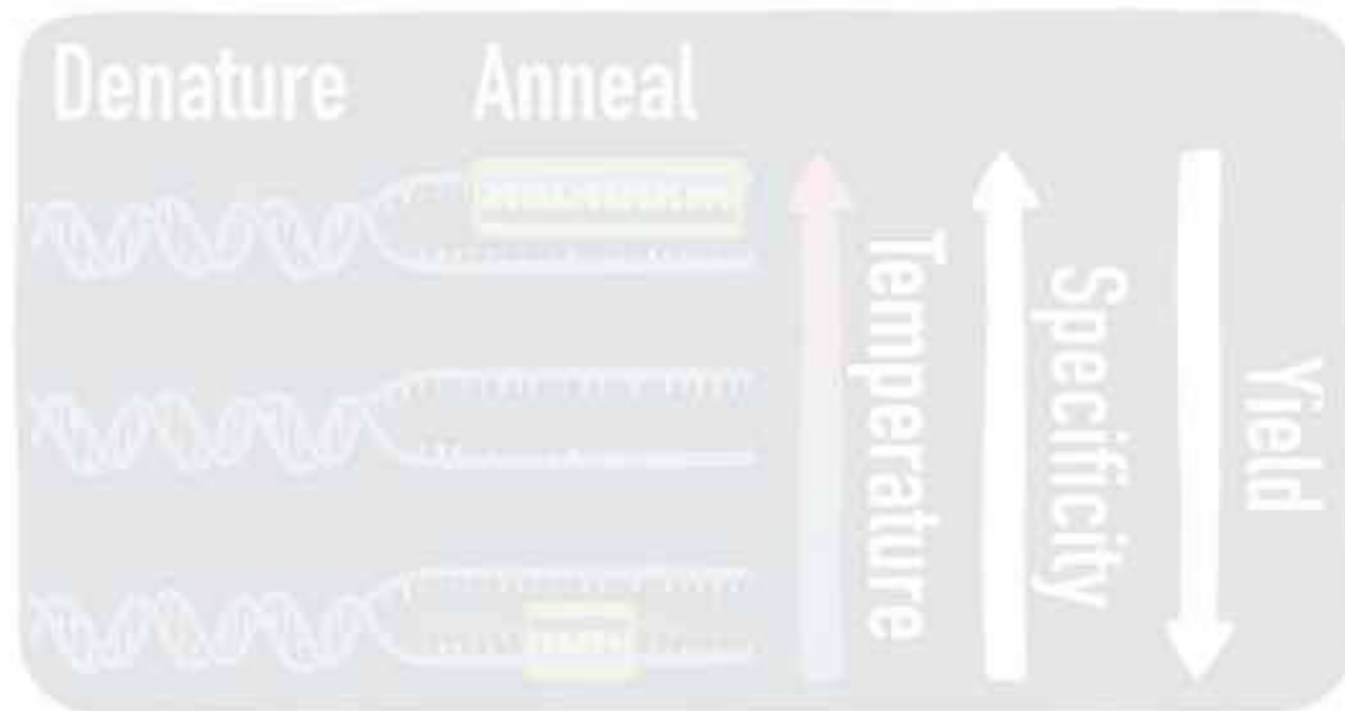
**PRE-PROCESSING**



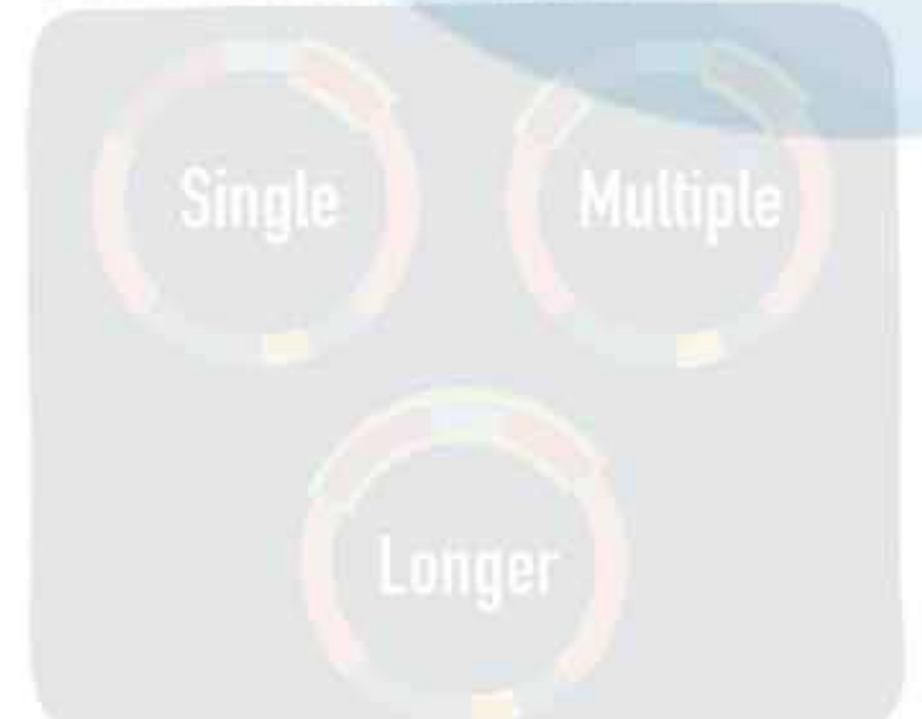
**DNA EXTRACTION**



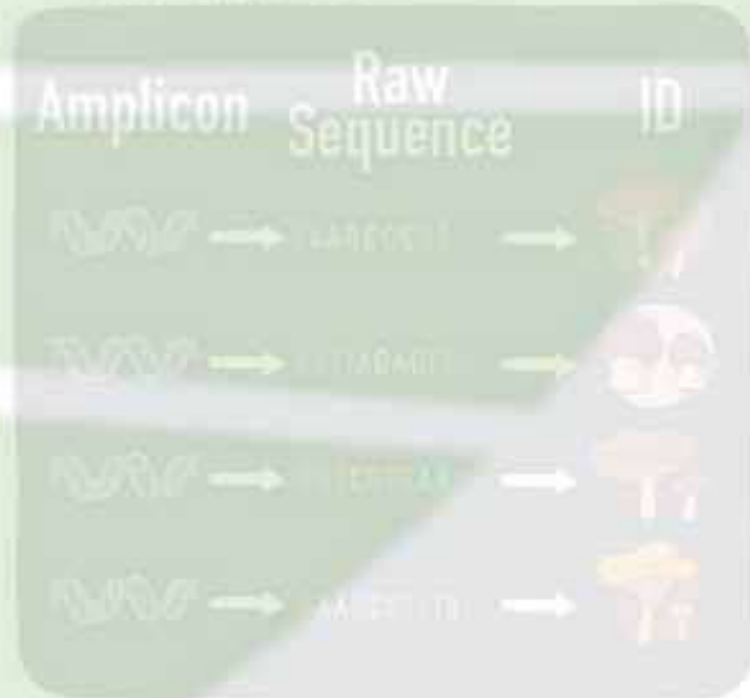
**PCR AMPLIFICATION**



**MARKER SELECTION**



**SEQUENCING**

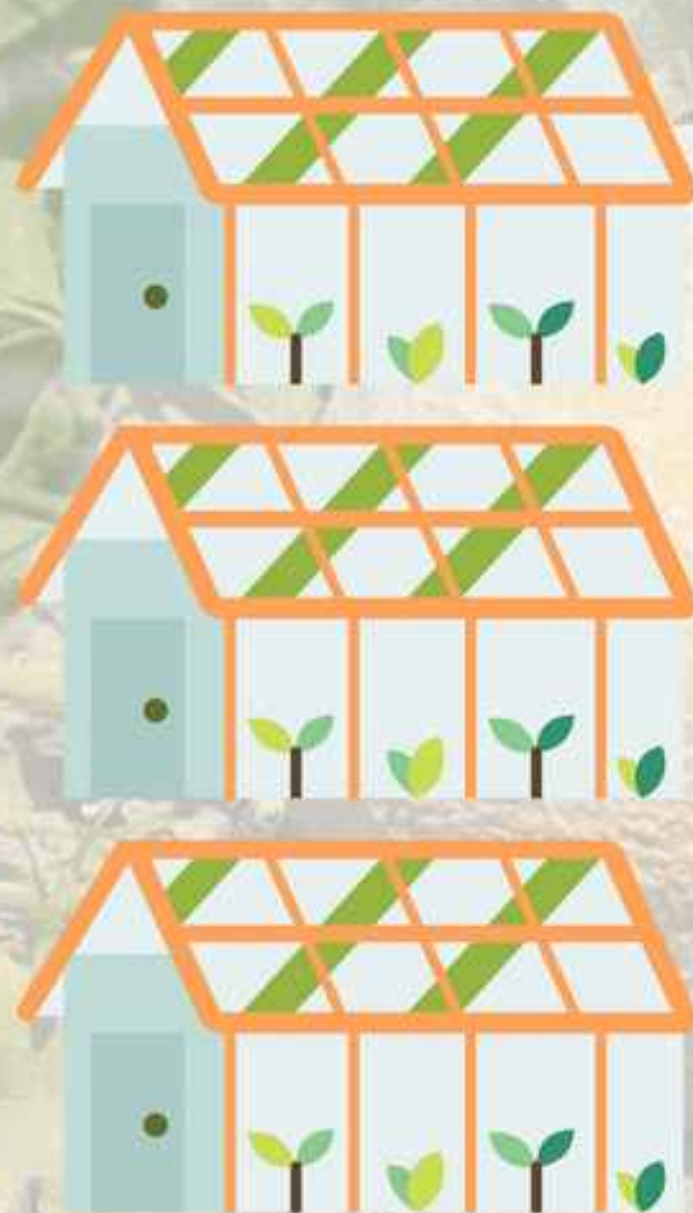




# Disegno Sperimentale

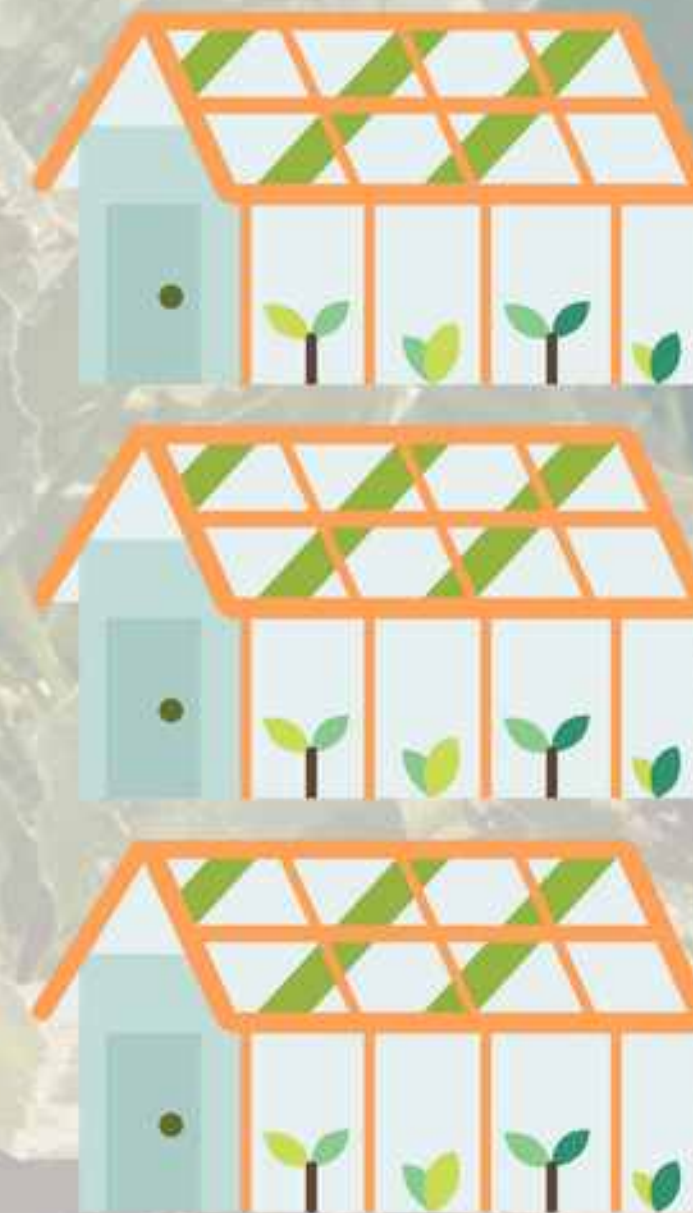
# Controllo

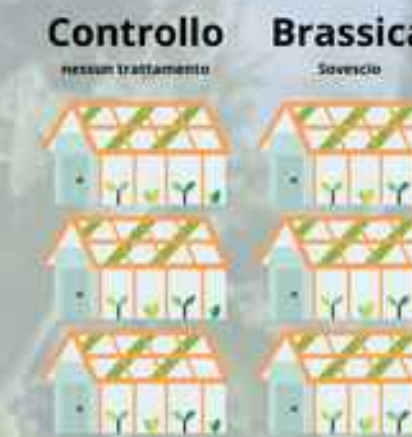
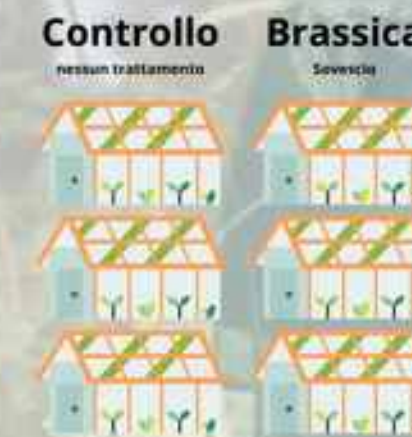
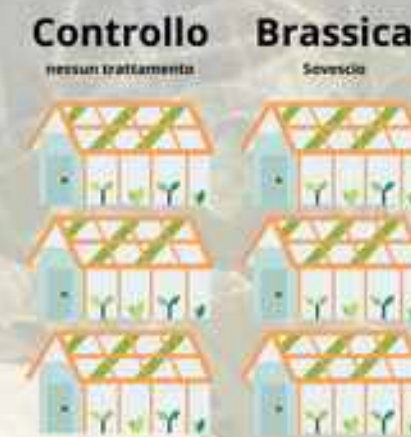
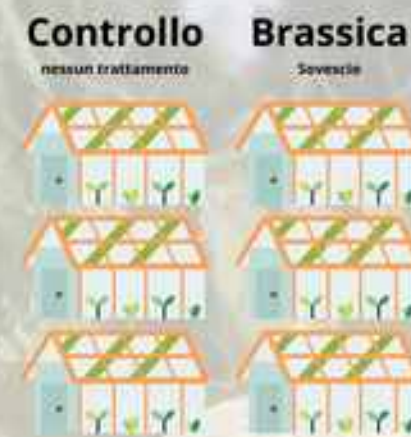
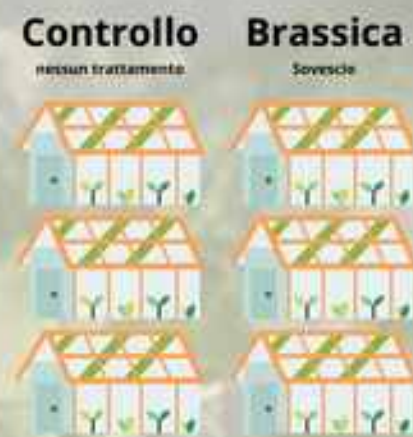
nessun trattamento



# Brassica

Sovescio





**Tempo 0**

**Tempo 1**

**Tempo 2**

**Tempo 3**

**Tempo 4**

**Tempo 5**

**Tempo 6**

11/2021

01/2022

07/2022

09/2022

01/2023

03/2023

06/2023

Pre-  
Interramento  
Brassica

Post-  
Interramento  
Brassica

Post- secondo  
Trapianto  
Melone

Post- seconda  
Raccolta  
Melone

Pre-Secondo  
Interramento  
Brassica

Post-  
Interramento  
Brassica e  
Trapianto  
Melone

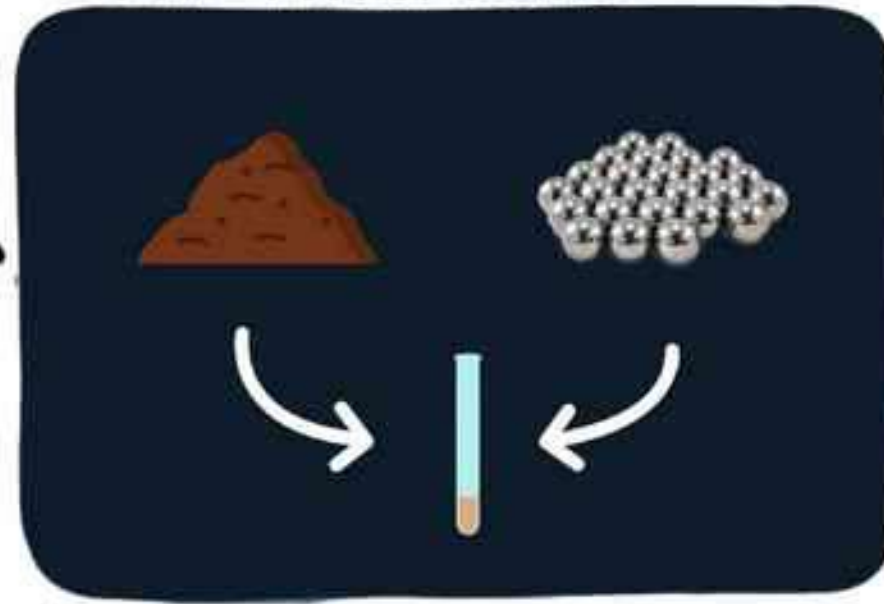
Post-Ultima  
Raccolta



**SAMPLE TYPE**

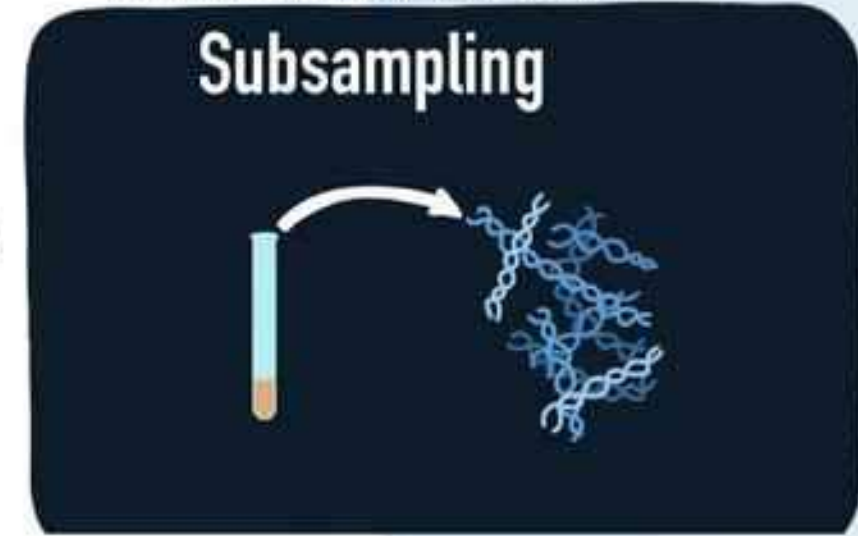


**PRE-PROCESSING**

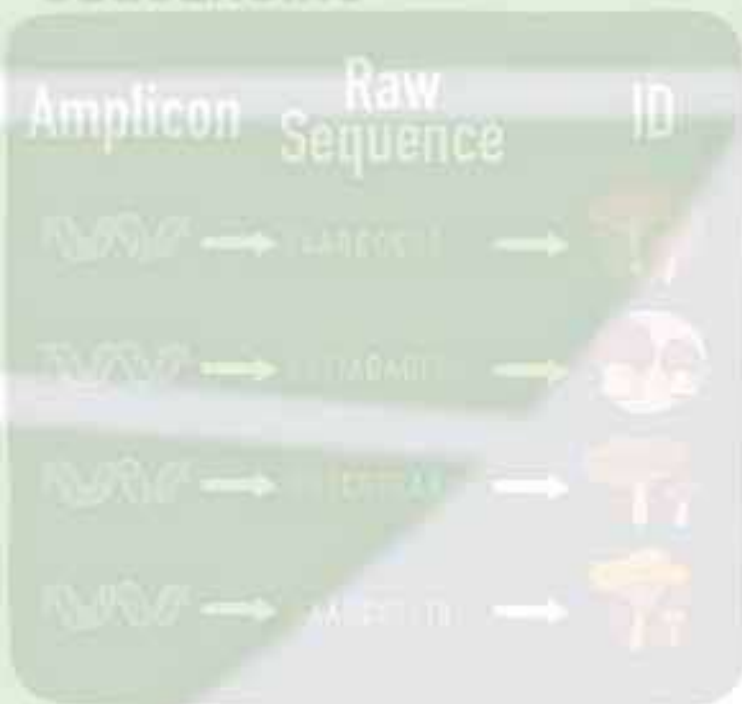


**DNA EXTRACTION**

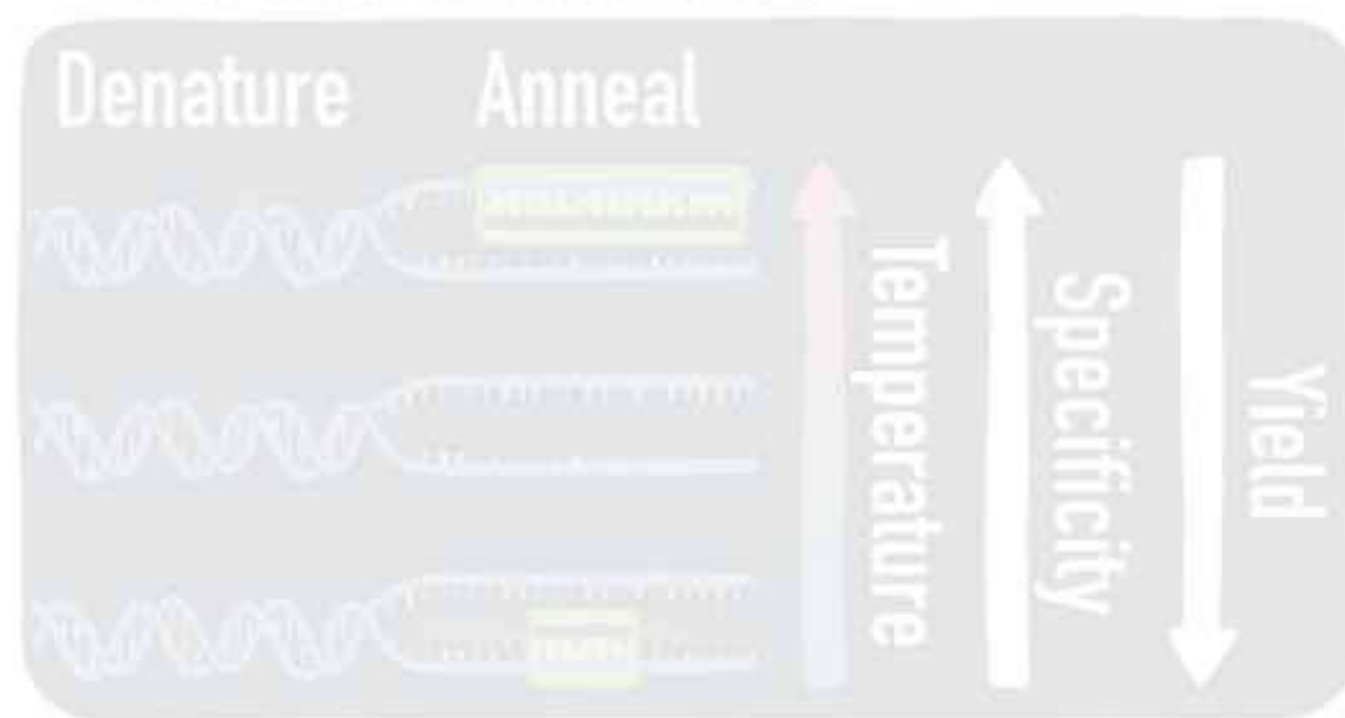
**Subsampling**



**SEQUENCING**



**PCR AMPLIFICATION**



**MARKER SELECTION**

