

# IDENTIFICATION OF LIGNOCELLULOSE-DEGRADING ENZYMES USING METAGENOMIC APPROACHES



CENTRE OF BIOLOGICAL ENGINEERING



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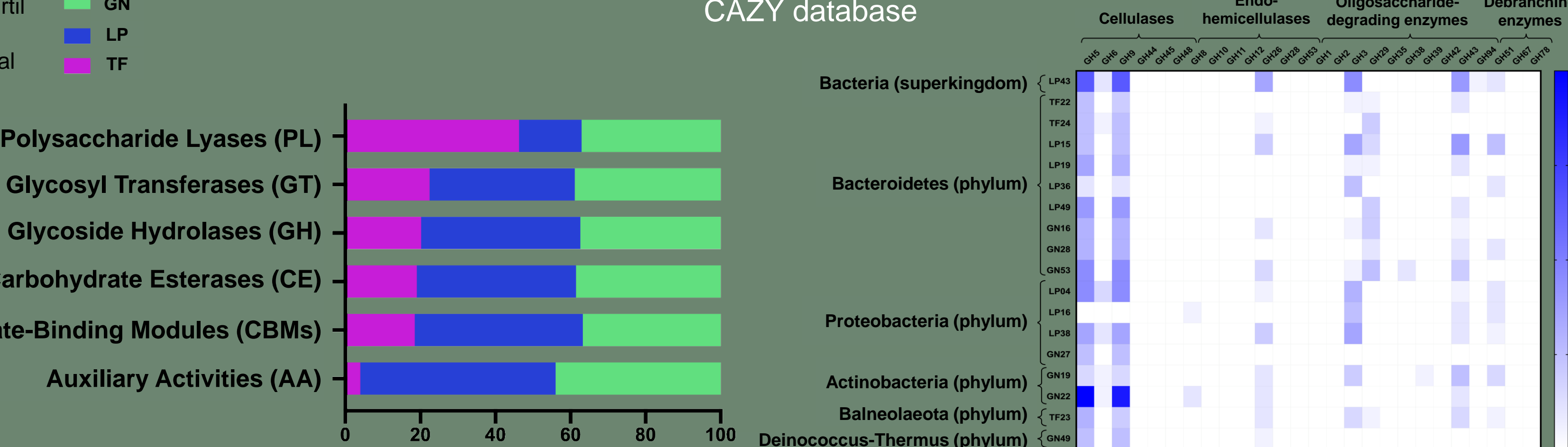
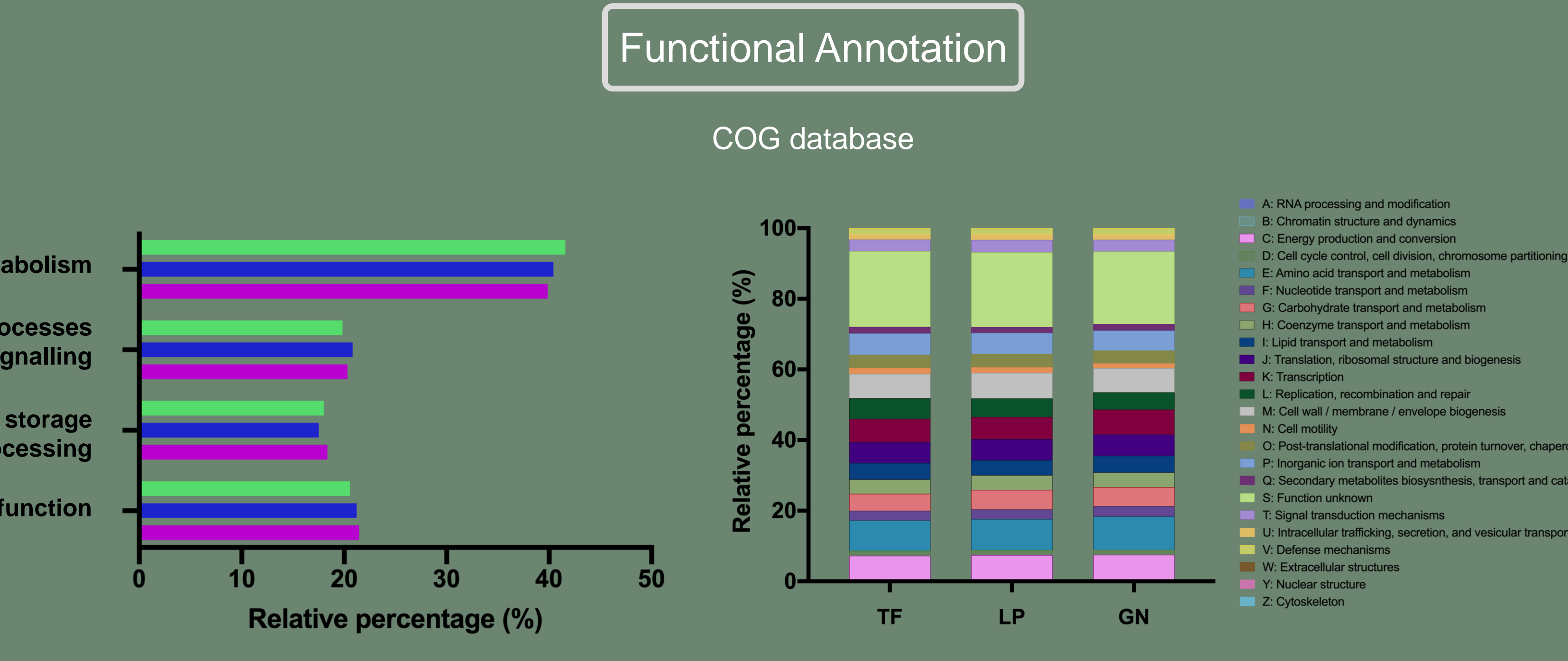
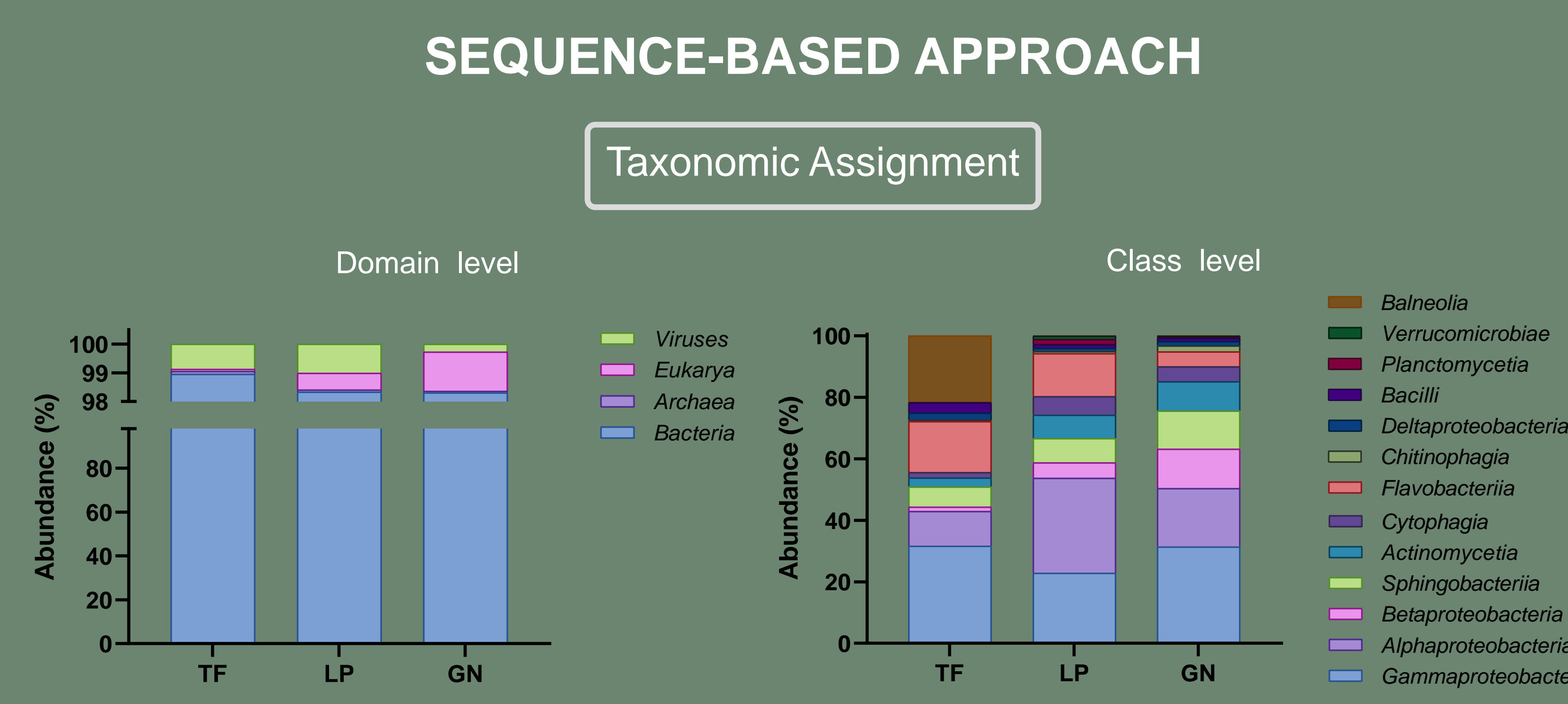
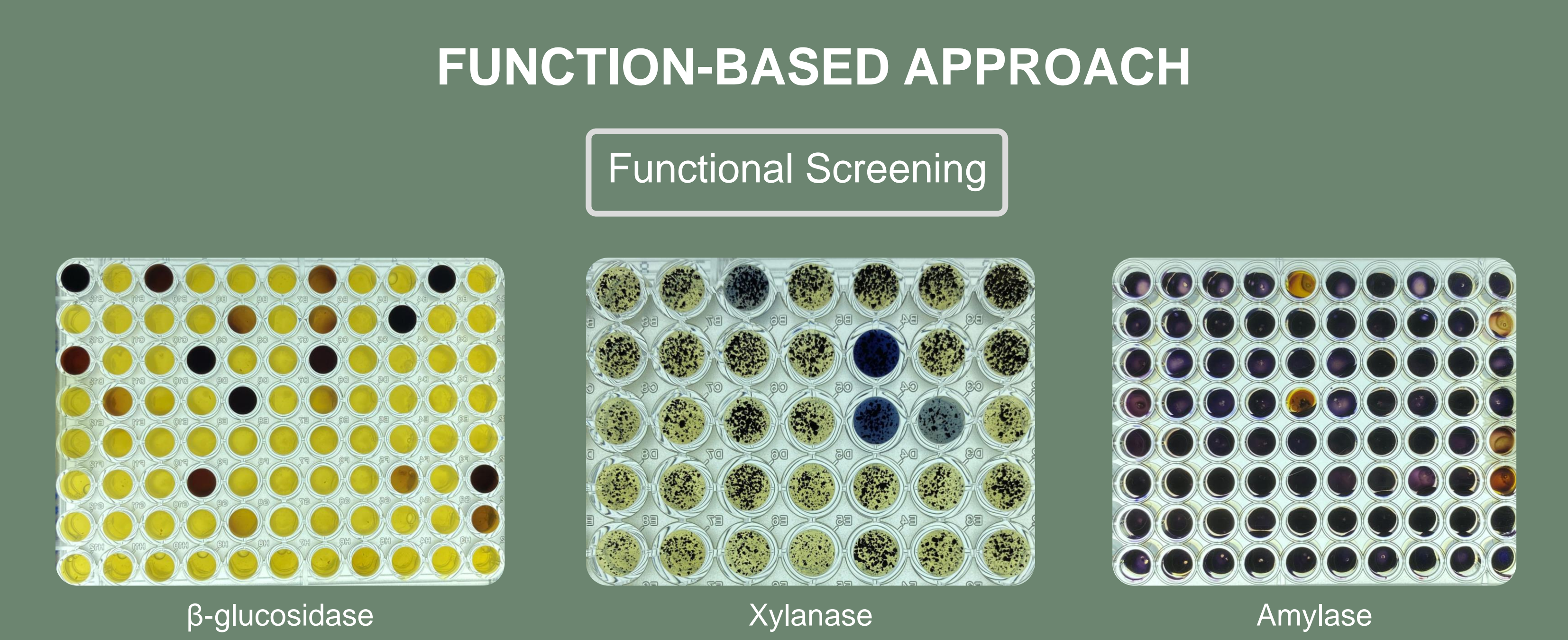
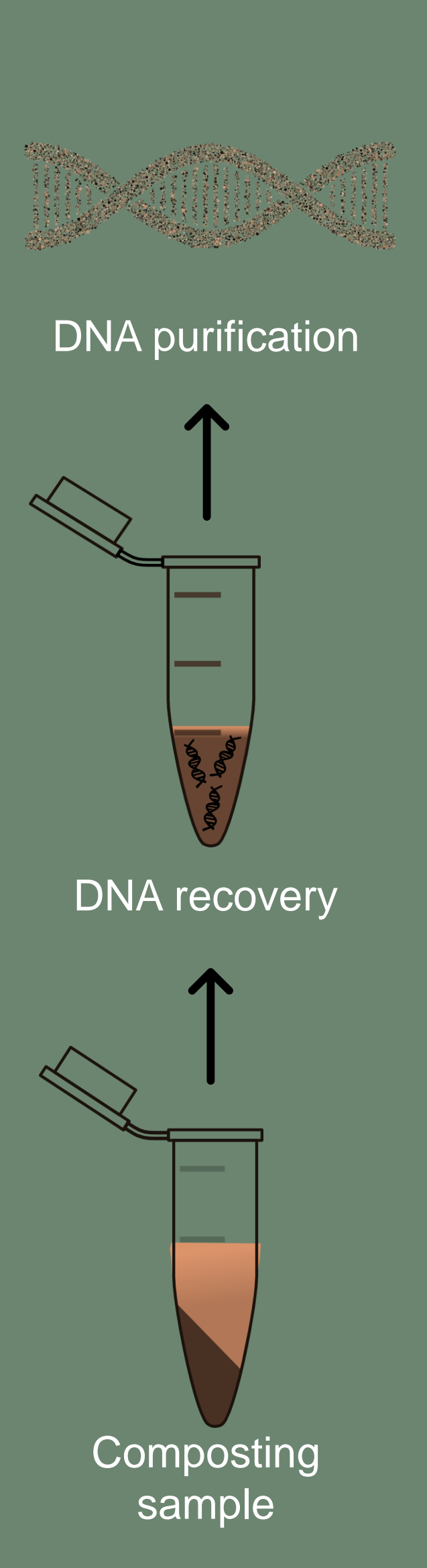
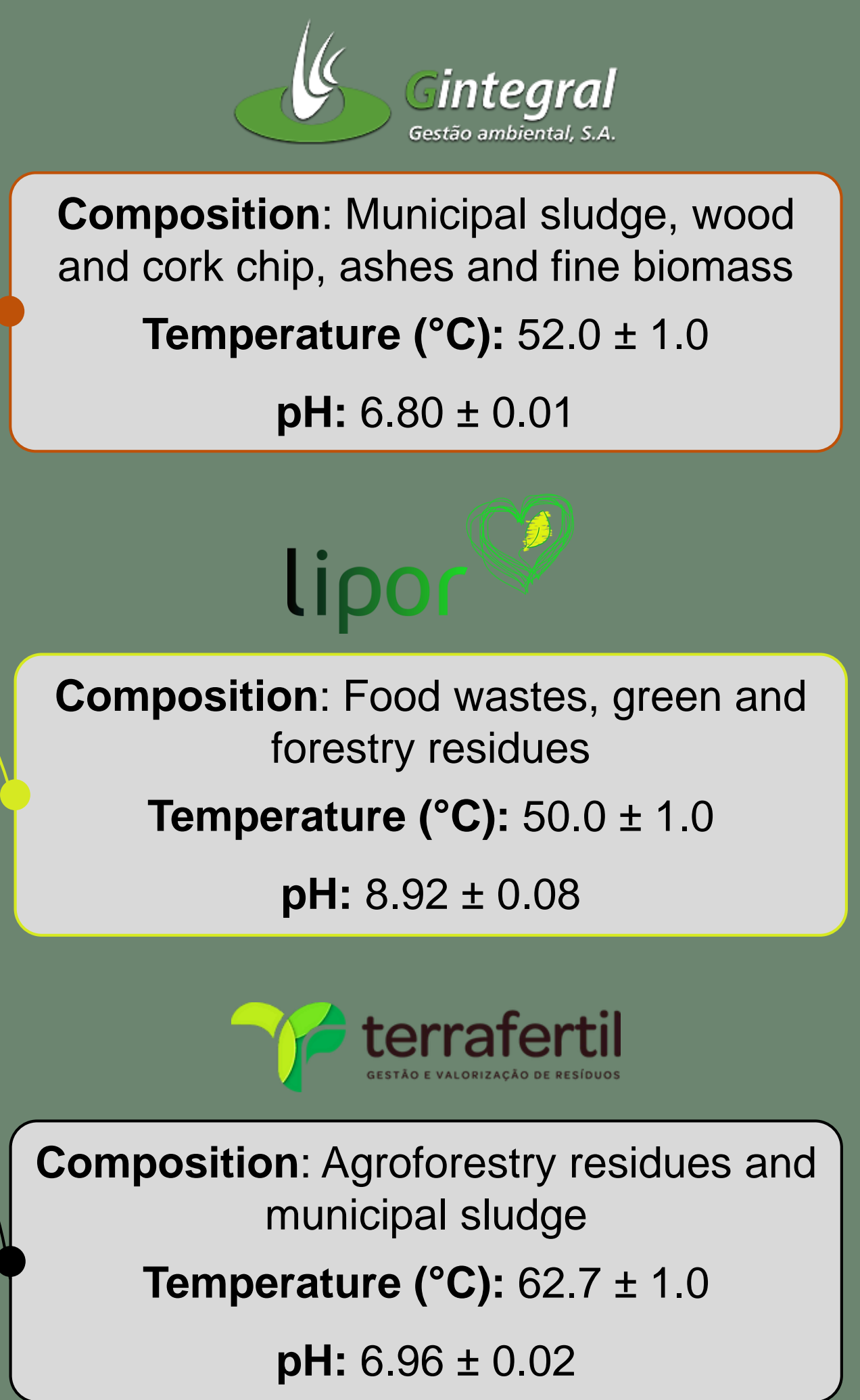
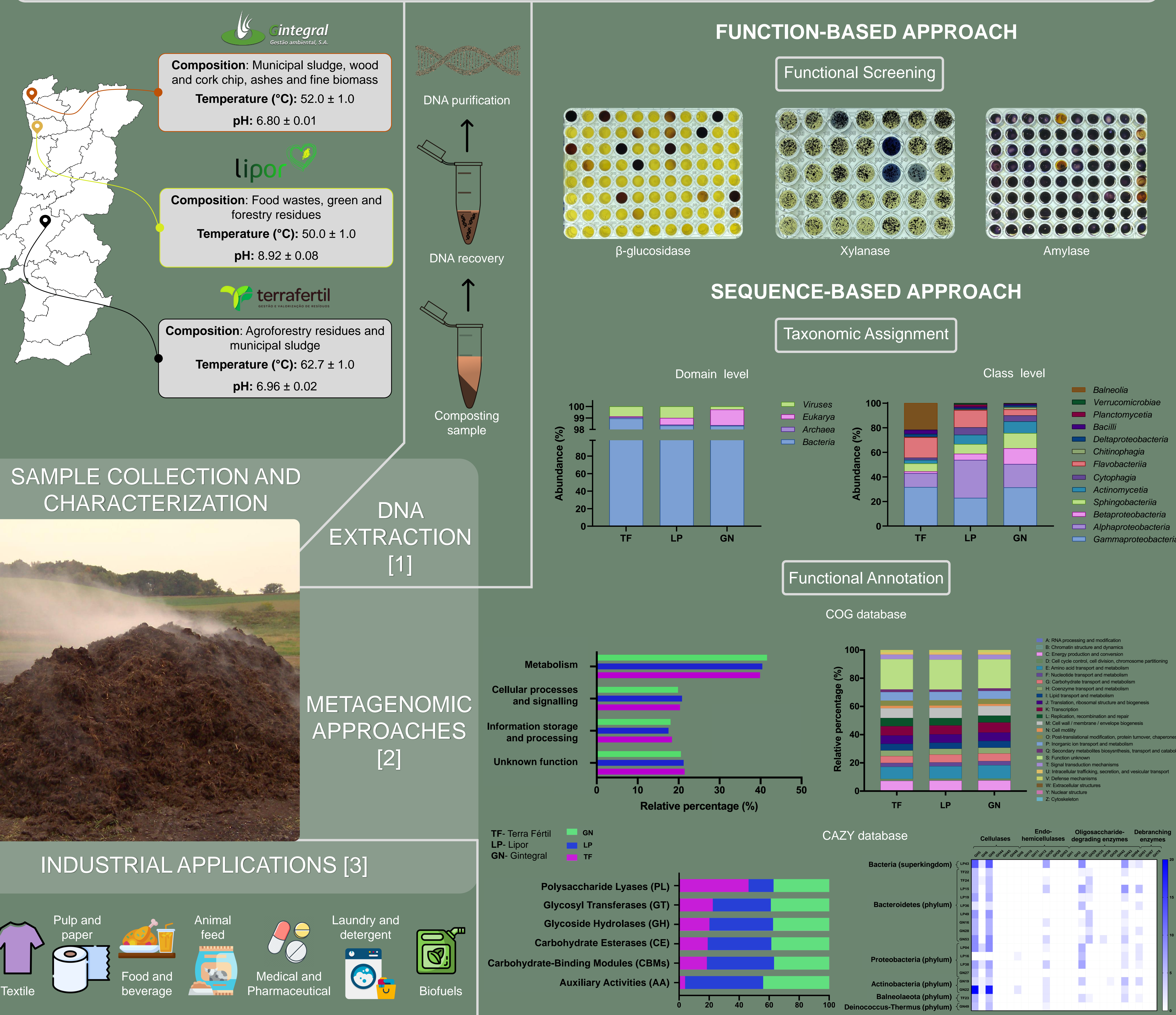
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## ABSTRACT

Composting units which handle lignocellulosic residues are suitable sources of novel and promising lignocellulose-degrading enzymes such as cellulases, xylanases and amylases. These enzymes have practical application in many industries where lignocellulose is converted into several added-value bioproducts. However, the effective conversion of lignocellulose by a sustainable process is currently incomplete. Therefore, there is a need to find novel and robust catalysts to overcome this fact. Function- and sequence-based metagenomic approaches were used to identify novel lignocellulose-degrading enzymes with interesting industrial applications.



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