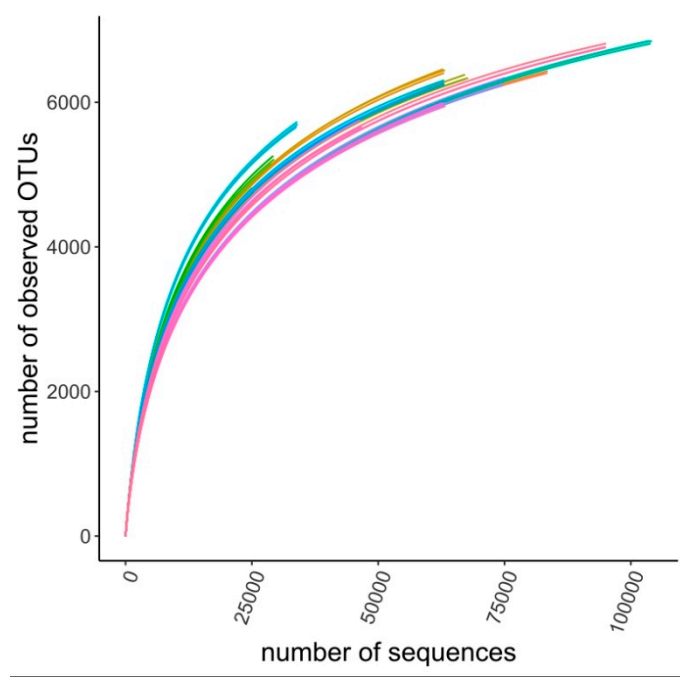


# A new perspective for vineyard terroirs identity: looking for microbial indicator species by Long Read Nanopore Sequencing

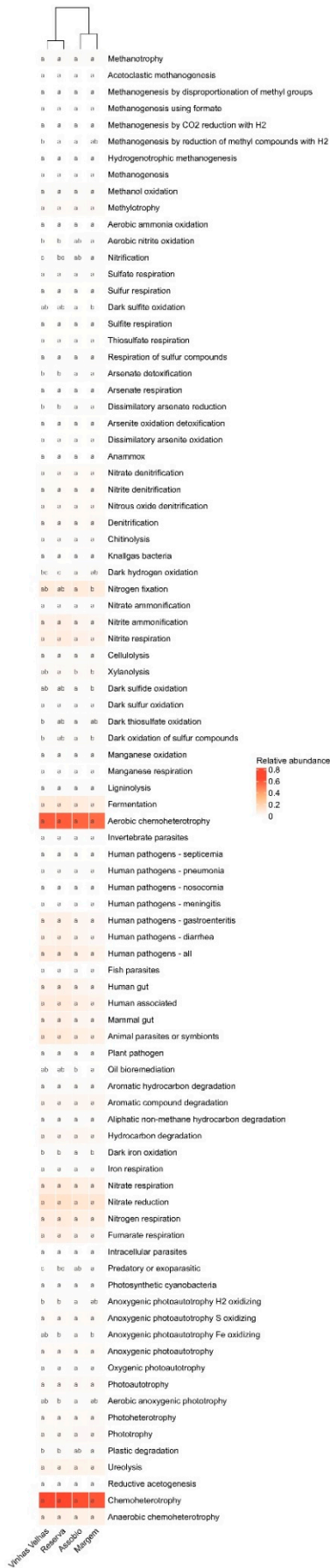
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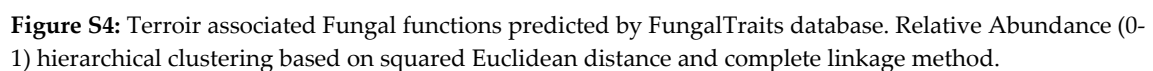


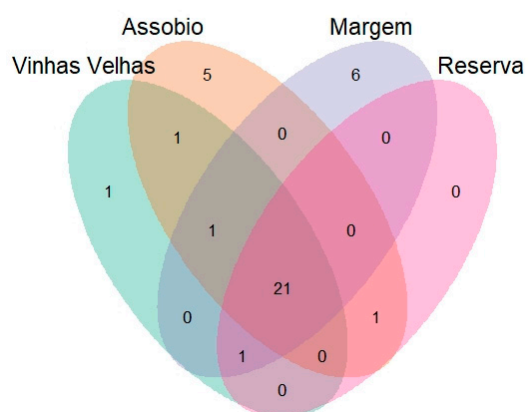
**Figure S1:** Rarefaction curve showing number of observed taxa in each terroir sample.





**Figure S3:** Terroir associated Prokaryotes function predicted by FAPROTAX database. Relative Abundance (0-1) hierarchical clustering based on squared Euclidean distance and complete linkage method.





**Figure S5:** Venn diagram representing the terroir where the 37 identified potential indicator species can be found.

**Table S3:** Number different taxonomic level present in each Terroir.

	Number of different taxonomic levels					
	Phylum	Class	Order	Family	Genus	Species
Assobio	57	135	331	798	2 355	7 300
Margem	60	138	335	798	2 366	7 301
Reserva	58	134	330	789	2 325	7 131
Vinhas Velhas	61	141	339	798	2 343	7 238
Total	67	149	351	841	2 633	8 558

**Table S4:** Abundance of detected pathogens in Quinta dos Murças terroirs soils.

	Vinhas Velhas	Assobio	Margem	Reserva
<i>Plasmopara viticola</i>	$4.44 \times 10^{-5} \pm 4.21 \times 10^{-5}$	$2.22 \times 10^{-5} \pm 2.90 \times 10^{-5}$	$5.77 \times 10^{-5} \pm 5.32 \times 10^{-5}$	$4.44 \times 10^{-5} \pm 4.44 \times 10^{-5}$
<i>Botrytis cinerea</i>	0	$2.22 \times 10^{-5} \pm 4.05 \times 10^{-5}$	0	$2.22 \times 10^{-5} \pm 2.22 \times 10^{-5}$
<i>Erysiphe necator</i>	$1.33 \times 10^{-5} \pm 2.00 \times 10^{-5}$	0	0	0
<i>Phaeomoniella chlamydospora</i>	$1.33 \times 10^{-5} \pm 2.82 \times 10^{-5}$	$3.99 \times 10^{-5} \pm 3.46 \times 10^{-5}$	$4.88 \times 10^{-5} \pm 5.91 \times 10^{-5}$	$3.10 \times 10^{-5} \pm 3.10 \times 10^{-5}$
<i>Phaeoacremonium minimum</i>	$5.77 \times 10^{-5} \pm 4.05 \times 10^{-5}$	$8.43 \times 10^{-5} \pm 5.80 \times 10^{-5}$	$5.59 \times 10^{-4} \pm 6.39 \times 10^{-4}$	$4.44 \times 10^{-5} \pm 4.44 \times 10^{-5}$
<i>Eutypa lata</i>	$1.15 \times 10^{-4} \pm 7.32 \times 10^{-5}$	$6.65 \times 10^{-5} \pm 6.91 \times 10^{-5}$	$1.38 \times 10^{-4} \pm 1.18 \times 10^{-4}$	$1.02 \times 10^{-4} \pm 1.02 \times 10^{-4}$
<i>Lasiodiplodia theobromae</i>	$7.54 \times 10^{-5} \pm 4.66 \times 10^{-5}$	$7.98 \times 10^{-5} \pm 6.62 \times 10^{-5}$	$1.29 \times 10^{-4} \pm 2.66 \times 10^{-5}$	$3.99 \times 10^{-5} \pm 3.99 \times 10^{-5}$
<i>Neofusicoccum parvum</i>	$3.55 \times 10^{-5} \pm 3.70 \times 10^{-5}$	$6.21 \times 10^{-5} \pm 4.51 \times 10^{-5}$	$9.31 \times 10^{-5} \pm 4.89 \times 10^{-5}$	$4.44 \times 10^{-5} \pm 4.44 \times 10^{-5}$
<i>Botryosphaeria dothidea</i>	0	0	$8.87 \times 10^{-6} \pm 1.76 \times 10^{-5}$	0
<i>Fomitiporia mediterranea</i>	$3.1 \times 10^{-5} \pm 4.36 \times 10^{-5}$	$1.77 \times 10^{-5} \pm 4.05 \times 10^{-5}$	$2.22 \times 10^{-5} \pm 4.51 \times 10^{-5}$	$1.77 \times 10^{-5} \pm 1.77 \times 10^{-5}$



