

# Probiotic properties of *Enterococcus faecalis* isolated from Tilapia (*Oreochromis niloticus*) farm environment in Ivory Coast

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## Highlights

- 12 lactic acid bacteria (LAB 1 to 12) showed **strong tolerance to bile salts & pepsin** (simulating GI conditions)
- Most LAB exhibit **antioxidant activity** with both supernatants and intact cells (DPPH).
- Cell surface characterization revealed significant **hydrophobicity** and **auto-aggregation** capacity, supporting **adhesion potential**.
- All LAB showed **antibacterial effect** against 5 pathogen strains.
- Genomic analysis identified all LAB as *Enterococcus faecalis*
- LAB1, LAB10, LAB11 (the best ones) showed **high probiotic probability scores** (ProbML).
- Gene screening revealed **no cytolysin** operon identification supposing **safety profile**.