

# Bacteriocinogenic activity of *Enterococcus faecalis* strains from chourico, traditional **sausage** produced in Southern Portugal

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**Abstract:** *Enterococcus faecalis* isolates from chourico (traditional Portugal fermented **sausage**) were studied here with the main impact on bacteriocin production. In bacteriocin-producing strains phenotypic antibiotic profile was tested to check if they are sensitive or resistant. Lactic acid production ranged from 0.581 mmol/L up to 0.783 mmol/L. *Enterococci* grew sufficiently in the medium with 1% concentration of oxgall/bile. From 14 *E. faecalis*, bacteriocin substances (Bs) by 8 strains were found to inhibit the growth at least 1 indicator of 27 (inhibitory zones-10 to 18 mm) by the qualitative method. The effect of Bs of 8 active *E. faecalis* strains was tested also by the quantitative method; Bs of 6 *E. faecalis* inhibited the growth at least of 1 indicator; *E. faecalis* P06/7, P06/13, P06/16 inhibited the growth of *Enterococcus avium* EA5, *Listeria innocua* LMG13568, *Staphylococcus aureus* SA5 (activity: 100 to 1600 AU/ml). The highest activity (1600 AU/ml) showed Bs produced by P06/16 against LMG13568. Taking into account the antibiotic sensitivity and activity in the strain itself, the most promising strains for detailed bacteriocin studies are *E. faecalis* P06/16, P06/7, P06/13 which are mostly antibiotic sensitive and bacteriocin active.

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