

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

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Source: AFRICAN JOURNAL OF MICROBIOLOGY RESEARCH **Volume:** 5 **Issue:** 4 **Pages:** 334-339
Published: FEB 18 2011

Times Cited: 0 (from Web of Science)

Cited References: 41 [[view related records](#)]  [Citation Map](#)

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.

Accession Number: WOS:000293694300001

Document Type: Article

Language: English

Author Keywords: *Enterococcus faecalis*; bacteriocin; chourico; sensitivity; oxgall

Keywords Plus: DRY FERMENTED SAUSAGES; ANTIMICROBIAL ACTIVITY; STAPHYLOCOCCUS-AUREUS; MEAT-PRODUCTS; LISTERIA-MONOCYTOGENES; SAFETY ASPECTS; ENTEROLYSIN-A; LACTIC-ACID; FAECIUM; CHEESE

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Publisher: ACADEMIC JOURNALS, P O BOX 5170-00200 NAIROBI, VICTORIA ISLAND, LAGOS 73023, NIGERIA

Web of Science Category: Microbiology

Subject Category: Microbiology

IDS Number: 804ZE

ISSN: 1996-0808