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## Book of Abstracts

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Antimicrobial activity of lactococcal and enterococcal strains isolated from artisanal products from North West of Italy toward *Listeria monocytogenes*

Dal Bello, B., Rantsiou, K., Ambrosoli, R., Zeppa, G. and Coccolin, L.

Department of Exploitation and Protection of the Agricultural and Forestry Resources, University of Turin, Italy

*Listeria monocytogenes* is a foodborne pathogenic Gram-positive bacterium that is widely distributed in soil, sewage, fresh water sediments and effluents, and is frequently carried in the intestinal tract of animals and humans. Biocontrol of *L. monocytogenes* by bacteriocin-producing lactic acid bacteria or by bacteriocin extracts has attracted great attention in recent years and new preservation strategies to control growth of *L. monocytogenes* have been developed, including the application of the bacteriocin nisin (Food and Drug Administration, 1988). In this work, we have investigated the potential role as bioprotection agents of autochthonous lactococcal and enterococcal strains isolated from fresh and fermented artisanal products (cheese and meat) of Piedmont region (North West of Italy) determining their antimicrobial spectrum of activity towards different foodborne spoilage and pathogenic microorganisms. Bacteriocin-producing strains were identified by molecular methods and genetic determinants encoding the antimicrobial proteins were targeted by PCR. Thirty-nine strains of *Lactococcus lactis* exhibited inhibition towards *L. monocytogenes* NCTC 10527 and most of them (26 strains) showed the presence of the genes responsible for the nisins A and Z production. Regarding *Enterococcus* spp., 31 strains showed inhibition activity towards *L. monocytogenes* NCTC 10527 and the presence of the genes responsible for the enterocins A and P production was determined. It is interesting to underline that for some strains it was not possible to identify any known bacteriocins. In this study a high incidence of bacteriocin producing strains was observed. In the future, the possible use of these active strains could be a new way to ensure safety of foods.