Efficacy of antimicrobial activity of garlic extracts on bacterial pathogens commonly found to contaminate meat

L Njue, LW Kanja, JN Ombui, JG Nduhiu, D Obiero

Background: Meat is a major source of food and raw materials for a number of industries, yet a lot of meat is wasted each year due to deterioration as a result of spoilage by microorganisms such as Pseudomonas, Acinetobacter, Moraxella, Bacillus, Campylobacter, Escherichia, Listeria, Clostridium, Salmonella and Staphylococcus species.

Objective: To determine efficacy of antimicrobial activity of garlic extracts on bacterial pathogens commonly found to contaminate meat.

Design: A cross sectional study.

Setting: The Department of Public Health, Pharmacology and Toxicology, Faculty of Veterinary Medicine University of Nairobi.

Subjects: Garlic from Nganoini farm in Laikipia County, Kenya

Results: The results indicated that garlic absolute ethanol extract had the highest efficacy of antimicrobial activity inhibiting all test micro-organisms.

Conclusion: Ethanolic extract can be used as a meat preservative or decontaminant.