

7th EUROPEAN FOOD SAFETY & STANDARDS CONFERENCE

November 13-14, 2017 | Athens, Greece

Isolation and identification of *Lactobacillus plantarum*, *Lactobacillus sake*, *Lactobacillus curvatus* and *Staphylococcus xylosus* strains from fermented sucuk's natural microbiota

Yagmur Nil Demirel and Zeki Gürlü
Afyon Kocatepe University, Turkey

In this study, it was aimed that molecular characterization of *Lactobacillus plantarum*, *Lactobacillus sake*, *Lactobacillus curvatus* and *Staphylococcus xylosus* which were isolated by classical culture methods from produced traditional sucuk dough's natural microbiota in Afyonkarahisar. A total of 16 different sausage dough samples were collected at different times from different companies that produce sausage by traditional methods in Afyonkarahisar. *L. plantarum*, *L. curvatus*, *L. sake* and *S. xylosus* were isolated from the samples by evaluating various biochemical characteristics. Selected isolates were identified as species by PCR. According to the results of the study, 57.1% *L. plantarum*, 28.6% *L. sake*, 14.3% *L. curvatus* and 5% *S. xylosus* were identified. It was thought that the isolation of *L. plantarum* more than *L. curvatus* and *L. sake* could be related to the better adaptation of the meat environment. *S. xylosus* was inoculated at the same rate in the experimental sucuk groups due to development of color and aroma. According to the results of the study, the composition of sucuk dough, production process, fermentation condition, maturation parameters are important criteria affecting the adaptation of microorganisms to sucuk doughs.

Biography

Yagmur Nil Demirel has completed her PhD at Afyon Kocatepe University, Faculty of Veterinary Medicine, Department of Food Hygiene and Technology in June 2016. She has worked on microorganisms which are isolated from natural microbiota from fermented sucuk. She has published five research articles, three reviews and is a referee to researchers' articles about food hygiene and microbiology. She has been carrying out some projects in her field.

yagmurnildemirel@hotmail.com

Notes: