

## GLOBAL APPLIED MICROBIOLOGY CONFERENCE

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## MICROBIAL &amp; BIOCHEMICAL RESEARCH AND TECHNOLOGIES

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Toronto, Canada**Isolation and identification of *Lactobacillus*, which may be potentially prebiotic sources, from the gastrointestinal tract of chicken**Zehranur Yuksekdog  
Gazi University, Turkey


Antibiotics have been used in poultry industry for decades to promote growth and protect animals from diseases, followed by various side effects. In efforts of searching for a better alternative, prebiotic is of extensive attention. The EPS-based prebiotics that may be used for chicken might be suggested as an effective strategy to decrease infection in chicken. It is only in the last few years that LAB EPS have taken attention with regard to prebiotic potential. For this reason, in experiment 1, 119 bacteria of *Lactobacilli* isolated from the gastrointestinal tract of 24 chicken. For experiment 2, the isolates were tested for their exopolysaccharides production levels. In these isolates, exopolysaccharides production were assessed varies from 43-443 mg/L. In experiment 3, for molecular identification, 11 isolates that produced high EPS were selected. These *Lactobacilli* isolates were acknowledged using 16S rRNA sequence analysis. As a result of the identification, isolates were identified as

*Lactobacillus salivarius* (6 strains), *L. reuteri* (2 strains), *L. aqilis* (2 strains) and *L. saerimneri* (1 strain). These bacteria EPSs may be good alternatives to antibiotics in promoting growth resulting from a beneficial modulation of the intestinal microbiota, which leads to increased efficiency of intestinal digestion in the host animal. Acknowledgements: This research has been supported by General Directorate of Agricultural Research and Policies project coded with TAGEM/15/AR-GE/40.

**Speaker Biography**

Zehranur Yuksekdog has completed her PhD from Gazi University. She is working as Professor Doctor in Gazi University. Her areas of expertise are probiotics, microbial biotechnology, and food microbiology. She has published more than 30 papers in reputed journals and serving as an Editorial Board Member, referees in different reputed journals, and was worked in 20 research projects.

e: zehranur@gazi.edu.tr

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