

Vol. 11 (4): 737-742 (2021)

## PREVALENCE AND CHARACTERIZATION OF *STAPHYLOCOCCUS AUREUS* FROM MARKET MILK

Khushboo Sahito<sup>1</sup>, Aijaz Hussain Soomro<sup>1</sup>, Tahseen Fatima Miano<sup>1\*</sup>,  
Raja Ghazanfar Ali Sahito<sup>2</sup>

<sup>1</sup>Sindh Agriculture University, Institute of Food Sciences and Technology, Tando Jam, Pakistan;

<sup>2</sup>University of Cologne, Institute of Neurophysiology, Germany;

\*Corresponding Author Tahseen Fatima Miano, e-mail: [tahseenfm@yahoo.com](mailto:tahseenfm@yahoo.com);

Received June 2021; Accepted July 2021; Published August 2021;

DOI: <https://doi.org/10.31407/ijeess11.410>

### ABSTRACT

This study designed to check the prevalence and to characterize *Staphylococcus aureus* isolates from market milk. The total number of 20 marketed milk samples were randomly collected from different locations of Hyderabad district of Sindh, Pakistan. The *S. aureus* were isolated on Mannitol Salt agar, among the presumptive *S.aureus* isolates an overall 15 milk samples observed contaminated with *S. aureus* showing a prevalence rate of 75%. For genotypic characterization, DNA extracted from the isolates and all the isolates identified by species, specific primers targeting 16S rRNA that showed 750bp PCR amplified product. Antibioqram profile showed susceptibilities of the isolates against five antibiotics using the Kirby-Bauer disc diffusion method. The antibiotic ciprofloxacin showed higher susceptibility rate followed by norfloxacin, tetracycline, oxytetracycline and ampicillin.

**Keywords:** Microbes, toxins, antibiotics, contamination, milk.