

RESEARCH PAPER

Biofilm formation on food contact surfaces and its inhibition

ASHISH KUMAR*, PREETAM VERMA, SANDEEP KUMAR AND RAMENDRA SONI

Department of Molecular and Cellular Engineering, Jacob School of Biotechnology and Bioengineering, Sam Higginbottom
Institute of Agriculture Technology and Sciences, ALLAHABAD (U.P.) INDIA

ABSTRACT

Almost all moist surfaces are colonized by microbial biofilms. Biofilms implicated in cross-contamination of food products and various human infections such as dental cavities. In this investigation three bacterial samples were used for biofilm formation in 48 hrs in laboratory condition. Biofilms was determined by using spectrophotometric technique to overcome hazardous effect of biofilm on these biomaterials is suggested in this research. To subside the biofilms these parameters were used in the culture and after 24, 48, and 72 hrs. 0 day has been taken at 450 for *S. aureus* and at 600 for both *E. coli* and *Salmonella* spp. The result was found that this chemical parameter showed antimicrobial activity and was capable to inhibit the biofilms formation. The preservatives were more effective acetic acid for maggi bottle, benzoic acid for pickle bottle and sodium sulphite for both fizz bottle and coke cane.

Key Words : *Escherichia coli*, *Staphylococcus aureus*, *Salmonella* spp. Biofilm, Food contact surfaces

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* Author for correspondence

Ashish Kumar, Department of Molecular and Cellular Engineering, Jacob School of Biotechnology and Bioengineering, Sam Higginbottom
Institute of Agriculture Technology and Sciences, ALLAHABAD (U.P.) INDIA (Email: ashish.biotech029@gmail.com)