

International Journal of Agricultural Sciences Volume 19 | RAAAHSTSE - 2023 | 91-95

@ DOI:10.15740/HAS/IJAS/19,RAAAHSTSE-2023/91-95 ■ ISSN: 0973-130X Visit us : www.researchjournal.co.in

## **RESEARCH PAPER**

## **Optimization of media components and physical parameter** for alkaline protease production

Sanjay Kumar Yadav\* and Poonam Singh

Department of Molecular and Cellular Engineering, JIBB, Sam Higginbottom University of Agriculture, Technology and Sciences Prayagraj (U.P.) India (Email: sanjaysybt@gmail.com)

Abstract : Protease production by Bacillus licheniformis SK7 was significantly enhanced by optimizing the media components and culture conditions. Placket Burman Design, Central Composite Design and Response Surface Methodology were employed to obtain the optimal medium having the composition of skimmed milk 11.6 gm/L, glycerol 1.16 gm/L, fish meal 7.6 gm/L, ferric chloride 0.1 gm/L and in case of physical parameter maximum protease production 472 unit/ml were reported at pH 10, 37°C of incubation temperature and 48 h incubation periods.

Key Words : Optimization, Protease, Media, Parameter, Incubation

View Point Article : Yadav, Sanjay Kumar and Singh, Poonam (2023). Optimization of media components and physical parameter for alkaline protease production. Internat. J. agric. Sci., 19 (RAAAHSTSE): 91-95, DOI:10.15740/HAS/IJAS/19, RAAAHSTSE-2023/91-95. Copyright@2023: Hind Agri-Horticultural Society.

Article History : Received : 13.03.2023; Accepted : 20.03.2023