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ESBL producing gram negative bacteria from blood samples of GIT patients and from Yamuna river of India and molecules against them from plant source

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Extended spectrum b-lactamases (ESBLs) enzymes are mutant of plasmid-mediated b-lactamases derived from older, broad-Spectrum b-lactamases (e.g., TEM-1, TEM-2, SHV-1), have an extended substrate profile which allows hydrolysis of all cephalosporins, penicillins, and aztreonam. These enzymes are most often found in *E. coli* and *K. pneumonia* and other gram negative bacteria. ESBL can potentially transmit a disease to patients, attendants and residents in the hospital. These bacteria can be spread by these reservoirs if they do not maintain hygienic habits. Worldwide, studies have reported about 2% - 80% ESBL positive isolates that may lead to serious nosocomial and community diseases with multidrug resistance pathogens. Present study also screened TEM and SHV gene in blood isolates and bacterial culture from Yamuna water. The results corroborate the findings of previous works in this field. Furthermore, study is in progress towards screening of novel drug molecules from various plants source against them.

Biography

Avnish Kumar has completed his Ph.D. at the age of 26 years from Dr. B.R. Ambedkar University, Agra and research associate-ship from Central Institute for Research on Goats a premier Institution of Indian Council of Agricultural Research, India. He is teaching M.Sc. students in Department of Biotechnology, School of Life Sciences, Dr. B.R. Ambedkar University, Agra. He has published 17 research and review papers in reputed journals and has been serving as an editorial board member of reputed 4 national & international journals.

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