

## PREVALENCE OF BETA-LACTAMASE RESISTANCE PROFILING OF AEROMONAS SPP. IN THE LOWER GANGA BASIN

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*This study investigates beta-lactamase resistance in Aeromonas spp. isolated from surface water samples collected along the lower Ganga Basin. Among 33 isolates, 24 exhibited multi-drug resistance. High resistance was observed against  $\beta$ -lactamase inhibitors, carbapenems, and cephalosporins. Extended-spectrum  $\beta$ -lactamase (ESBL) production was detected in 56% of isolates, with  $bla_{TEM}$ ,  $bla_{SHV}$ , and  $bla_{CTX-M}$  genes identified. Plasmid-mediated AmpC was found in 15% of isolates. These findings underscore the environmental dissemination of beta-lactamase resistance throughout this biodiversity-rich riverine system.*

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