

The reductions in Total Coliform counts were highly significant across depuration intervals ( $F = 27.3$ ,  $p < 0.01$ ), with the most pronounced effects observed within the first 48 hours.

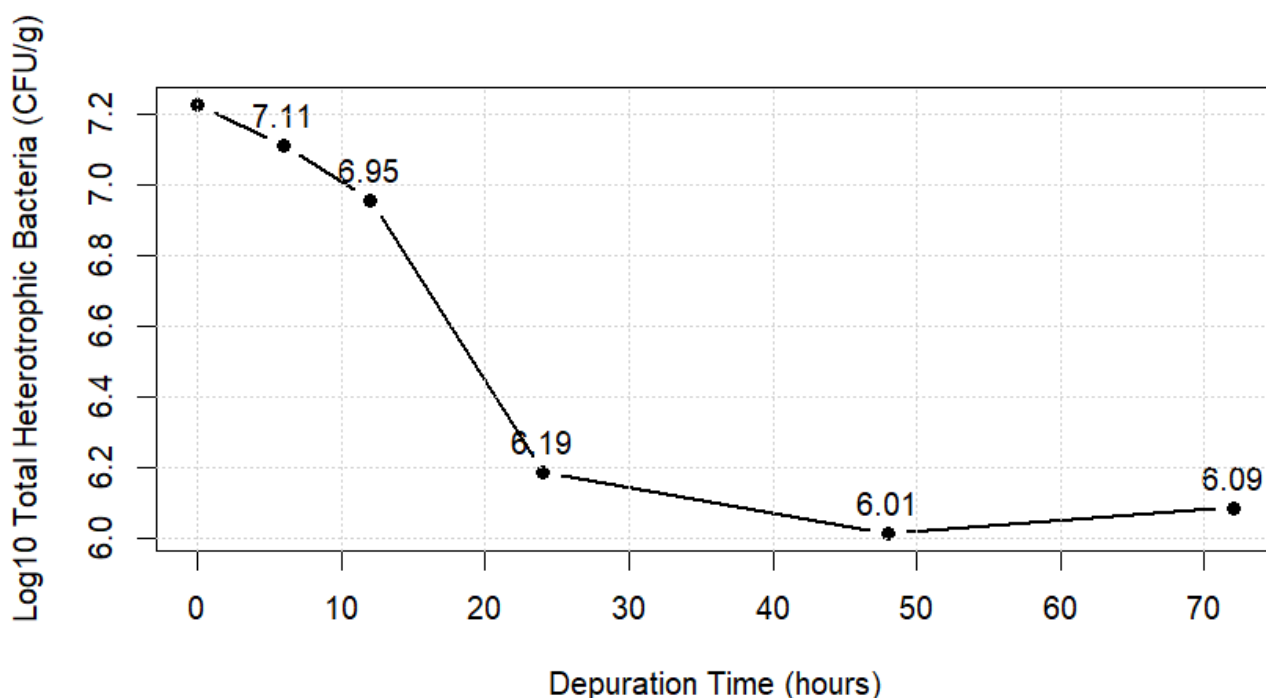


Figure 1 THB reduction in *Villorita cyprinoides* during closed water depuration with a sponge filter

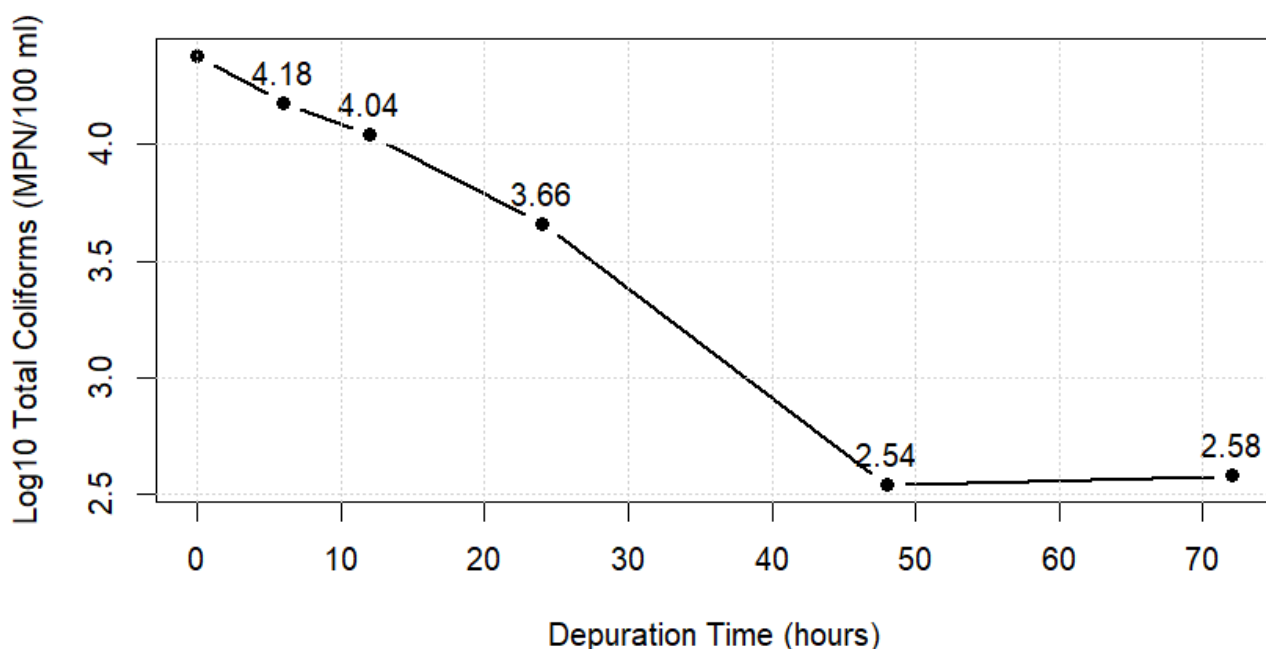


Figure 2 TC reduction in *V. cyprinoides* during closed water depuration with a sponge filter

### 2.2.3 Reduction in Faecal Coliform (FC) count in *Villorita cyprinoides*

The initial Faecal Coliform (FC) concentration in naturally contaminated *Villorita cyprinoides* from the Cochin Estuary was recorded at  $1.5 \times 10^4$  MPN/100 mL (4.17 logs), aligning only with Class C shellfish growing area standards under EU regulations. After 48 hours, FC levels decreased to 230 MPN/100 mL (2.36 logs), and by 72 hours, a total removal rate of 98.45% (1.82 logs) was attained, which falls in the acceptable FC regulatory limits of