

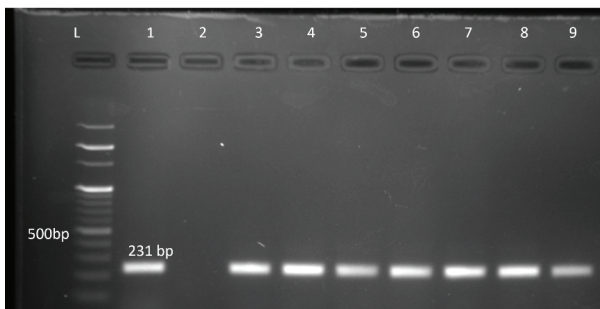


## Molecular characterization of Shigatoxigenic *Escherichia coli* (STEC) in sheep and goat in Krishna district of Andhra Pradesh

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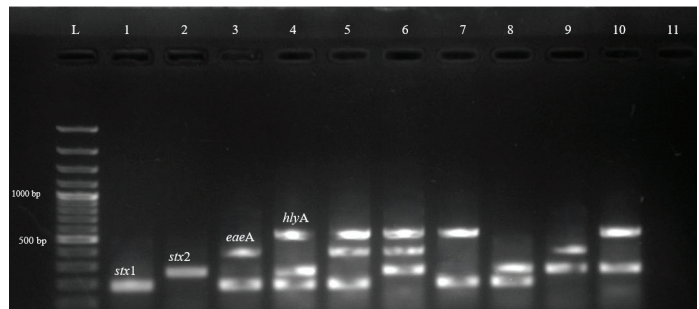
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Received :05 July 2025; Accepted :30 December 2025



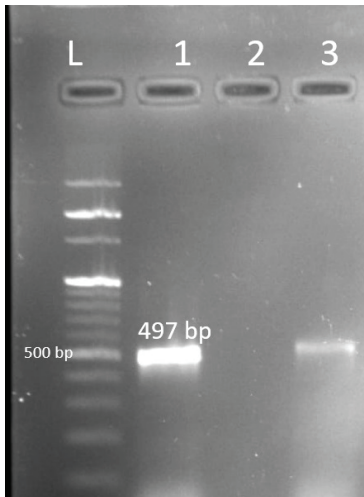
Lane L: 100 bp DNA ladder,  
 Lane 1: Positive control of *E. coli* (ATCC 25922)  
 Lane 2: Negative control (nuclease free water)  
 Lane 3: *E. coli* isolate from faecal sample of adult goat  
 Lane 4: *E. coli* isolate from faecal sample of lamb  
 Lane 5: *E. coli* isolate from faecal sample of kid  
 Lane 6: *E. coli* isolate from farm water sample,  
 Lane 7: *E. coli* isolate from feed sample,  
 Lane 8: *E. coli* isolate from hand swab of farm worker  
 Lane 9: *E. coli* isolate from faecal sample of adult sheep

Supplementary Figure 1: Gel photograph showing the species specific E16SrRNA gene of *E. coli*



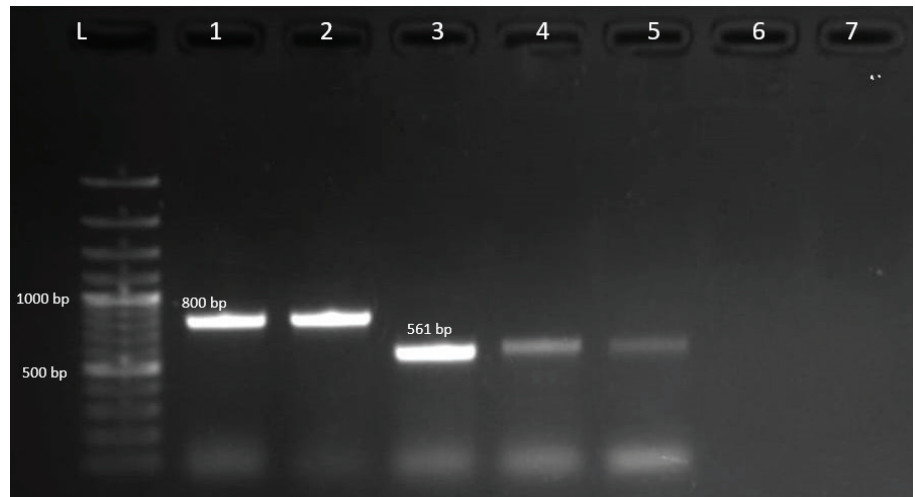
Lane L: DNA ladder (100 bp)  
 Lane 1: STEC isolate showing *stx1* gene (180 bp)  
 Lane 2: STEC isolate showing *stx2* gene (255 bp)  
 Lane 3: STEC isolate showing *stx1*(180bp) and *eaeA* gene (384 bp)  
 Lane 4: STEC isolate showing *stx1*(180 bp), *stx2* (255 bp) and *hlyA* gene (534 bp)  
 Lane 5: STEC isolate showing *stx1*(180 bp), *eaeA* gene (384 bp) and *hlyA* gene (534bp)  
 Lane 6: STEC isolate showing *stx2* (255bp), *eaeA* (384 bp) and *hlyA* gene (534 bp)  
 Lane 7: STEC isolate showing *stx1* (180 bp) and *hlyA* gene (534bp)  
 Lane 8: STEC isolate showing *stx1* (180 bp) and *stx2* gene (255 bp)  
 Lane 9: STEC isolate showing *stx2* (255 bp) and *eaeA* gene (384 bp)  
 Lane 10: STEC isolate showing *stx2* (255 bp) and *hlyA* (534bp)  
 Lane 11: Negative control (nuclease free water)

Supplementary Figure 2: Gel photograph showing virulence genes of *E. coli*



Lane L: DNA ladder (100 bp)  
 Lane 1: Positive control  
 (*E. coli* O157:H7 ATCC 43888)  
 Lane 2: Negative control (nuclease  
 free water),  
 Lane 3: *E. coli* O157 isolate from  
 lamb of farm E (EFL1)

Supplementary Figure 3: Gel  
 photograph of *E. coli* O157 targeting  
 rfbE gene



Lane L: DNA ladder (100 bp)  
 Lane 1: STEC showing *bla*<sub>TEM</sub> (IFK3),  
 Lane 2: STEC showing *bla*<sub>TEM</sub> (EFK2)  
 Lane 3: STEC showing *bla*<sub>CTXM-9</sub> (QFL4)

Supplementary Figure 4: Gel photograph of STEC showing different ESBLs by m-PCR assay