

## **Studies on Coliform Mastitis in River Nile State, Sudan**

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### **Abstract**

The term coliform mastitis is used here to include the mastitides in cattle caused by *E. coli*, *Klebsiella* spp and *Enterobacter* aero genes. A total of 100 bovine milk samples positive for California Mastitis Test (CMT) were collected from different River Nile State localities and submitted for bacteriological examination. 155 bacteria isolated from mastitic milk samples. Gram positive bacteria represented 64% of the total isolates. Coliform bacteria represented 28.4% of the bacteria isolated. The incidence of coliform mastitis was 28.4%. Coliform bacteria were subjected for further confirmation by using Api 20E and VITEK2 identification systems. Isolates scored high probability percentages by using rapid Api20E and automated VITEK2 identification systems. Coliform bacteria isolated from mastitic milk samples were *Escherichia coli* (12.4%), *Klebsiella pneumoniae* (8.4%) and *Enterobacter* aero genes (7.6%). Twenty *E. coli* isolates were examined for enterotoxins production by using suckling mouse test. Fifteen isolates (90.0%) gave positive results with SMT test.

**Keywords:** Coliform Mastitis; API20E; River Nile State.