**An updated status of microbiogram and its antibiotic compatibility in Nili Ravi Buffaloes**

S. Ahmed1, A. Nasir1, A. Shakoor1, S. Ehtisham-ul-Haque2, R. Ali1, A. H. Tahir1, S. Ullah1

1College of Veterinary and Animal Sciences, 35200, Jhang, (Punjab) Pakistan

**Corresponding author**

Rafaqat Ali

[Rafi.ali99@yahoo.com](mailto:Rafi.ali99@yahoo.com)

+923333768753, +923370777674

**Abstract**

Mastitis is a ubiquitous and frequent infection in dairy animals especially in buffaloes, inflicting significant economic losses in the country. This study was conducted on 100 lactating Nili-Ravi buffaloes in Tehsil Jhang to determine the incidence of mastitis, bacterial isolates from mastitic milk and their anti-microbial sensitivity for effective and economical cure of mastitis by culturing and identification of mastitis pathogens in milk samples from affected quarters and Gram’s staining was done to differentiate the Gram positive and negative organisms. The incidence of subclinical and clinical mastitis was 63±9.4% and 7±5.0%, respectively. *Staphylococcus aureus* was the most predominant isolated bacteria (28.16%) followed by Streptococci (19.41%), Coagulase negative staphylococci (17.47%), *Enterobacter aerogenes* (15.53%), *E. coli* (11.65%) and Bacillus spp. (7.76%), respectively. Bacterial sensitivity was evaluated using frequently administered antibiotics against mastitis. As a result, Enrofloxacin showed highest efficacy (92.22±5.5%) and Tetracycline showed moderate sensitivity (41.1±10.0%) against the mastitogens whereas, 100±0.0% bacterial resistance was observed against Penicillin-G. It was concluded that variety of bacterial organism’s intricate mastitis in Nili-Ravi buffaloes depending upon the prevalent risk factors and thus antibiogramic study must be conducted prior to treatment to enhance the efficacy of treatment.

**Key words:** Mastitis, Nili-Ravi buffaloes, antibiotic sensitivity, Enrofloxacin