## SURVEY ON ANTIBIOTIC PREVALENCE IN RAW MILK COLLECTION FROM KURUNEGALA DISTRICT

## P.D.T.D. Senevirathna<sup>1</sup>, S.G. Dunusinghe<sup>2</sup> and W.V.V.R. Weerasingha<sup>1</sup>

 <sup>1</sup>Department of Animal and Food Sciences, Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka.
<sup>2</sup>Agri Services, Nestle Lanka PLC, Kurunegala Factory, Sri Lanka.

Antibiotics are antimicrobial substances given to treat bacterial diseases in humans and animals. Antibiotic residues in milk affect the quality and cause significant health hazard to consumer. This study aimed to detect antibiotic prevalence in raw cow milk collection in Kurunegala district. Questionnaires were used to assess the randomly selected dairy farmers (n = 75), veterinary officers (n = 15), and (n = 15) pharmacists from Kurunegala district. Farmers from Bohingamuwa, Badalgama, Dambadeniya, Polgahawela and Kurunegala were participated in this survey. It was identified that 39% and 29% of cattle were infected by Foot and mouth disease (FMD) and mastitis disease, respectively while a lesser number of cattle were infected by bloat, diarrhoea, pneumonia, and deworming. The highest demanding antibiotics were tetracycline (39%) followed by amoxicillin (35%), which were mostly prescribed by veterinary officers. Hence, 45% of farmers used beta-lactams type antibiotics, such as amoxicillin trihydrate, penicillin and cephalexin while 40% of farmers used tetracyclines such as oxytetracycline. A majority of farmers (85%) participated in the awareness programs conducted by veterinary officers and 87% of farmers were aware of the withdrawal period of antibiotics, which refers to the minimum time from administering the last dose of medication and the production of milk. However, 37% of farmers purchased antibiotics without any prescription issued by a veterinary officer. In conclusion, beta-lactams and tetracycline type antibiotics are widely used by farmers in Kurunegala district with better understanding of withdrawal period. Eighty five per cent of the farmers were more aware of the withdrawal period of antibiotics in the Kurunegala district.

Keywords: Beta-lactams, Cephalexin, Tetracycline, Withdrawal period