**Comments to the Author**

**Antibiotic Sensitivity test on Nasal Swabs Collected from Calves at Ridiyagama NLDB Dairy farm - A case Study**

Abstract

Calf Pneumonia is a widespread disease among the calves. It has been lead to extensive losses in the dairy sector. Antibiotics are commonly recommended for calf pneumonia, which could be lead to the development of antibiotic resistance which in turn harm on human health. Predisposing factors should be identified to mitigate this condition. This study was aimed to identify the sensitivity of antibiotics against to calf pneumonic condition at Ridiyagama NLDB dairy farm and detected the susceptibility of these isolates to ten commonly used antibiotics which include Norfloxacin (NX 10mcg), Enrofloxacin (EX 10mcg), Streptomycin (S 25mcg), Doxycycline Hydrochloride (DO 30mcg), Trimethoprim (TR 25mcg), Nalidixic Acid (NA 30mcg), Ciprofloxacin (CIP 30mcg), Ampicillin (AMP 10mcg), Amoxicillin (AMX 30mcg) & Tetracycline (TE 30mcg). Based on clinical observations, swabs samples were collected from infected bull and heifer calves of 2 to 8 weeks. Swabbed samples were dipped in lactose agar broth media and then spreaded on prepared Muller Hinton Agar. Kirby Bauer disk diffusion method was conducted, and the inhibition zone's diameters were measured. It exhibited that two samples were resistant to all antibiotic types (sample numbers 15800 & 16024). In one sample (sample number 15390), there was an inhibition zone around the NX 10mcg disc. Of the 10 samples, only one had an inhibition zone around all the antibiotic discs. All other samples did not have an inhibition zone for Trimethoprim (TR 25mcg), Ampicillin (AMP 10mcg), and Amoxicillin (AMX 30mcg). The causative agents of calf pneumonia at NLDB Ridiyagama Farm are highly resistant to Trimethoprim (TR 25mcg), Ampicillin (AMP 10mcg), and Amoxicillin (AMX 30mcg). Since the causative microorganism shows sensitivity to Norfloxacin (NX 10mcg) and Ciprofloxacin (CIP 30mcg), both antibiotics can be used as a quick remedy to mitigate calf pneumonia at the NLDB dairy farm, Ridiyagama. The effectiveness of both antibiotics and their combination with other antibiotics should investigate further to get the best results.

Key Words (5 Words) Antibiotic Resistance, ABST, Antibiotics, Calf Pneumonia