**A Study on Low Cost Phage Probiotic Preparation From Livestock**

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**A production report submitted in partial satisfaction of the requirement for the Degree of Doctor of Veterinary Medicine (DVM)**

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**Abstract**

In Bangladesh, poultry industry is an important part of its national economy. This industry has been emerging to supply quality protein to people at the lowest price in the world. The major crisis of this sector is disease problem that cause around 30-40% mortality of poultry as well as loss of production. Increasing multi-drug resistant bacteria is a major cause behind it. An alternative strategy is urgently required to overcome it. Bacteriophages as a promising approach is used for the treatment of bacterial infections. Its killing mechanism differs from antimicrobial agents by rapidly infecting the specific bacterial cell & lysing it without harming the host cell. Still our country unable to establish any phage preparation for that we have to import phage product from foreign countries with a high cost. In this study we are trying to prepare low cost phage probiotic for livestock from locally available source. A protocol was established to count plaques of phages by using available laboratory products. It was an experimental study to see that the protocol can be used for further plaque count or not.

**Keywords:**Emerging, Multi-drug resistance, Plaque count.