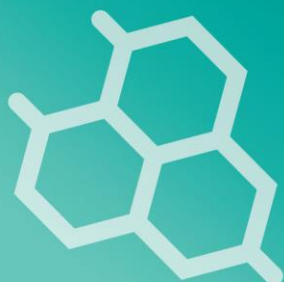


ISSN: 2663-9513 (Online)

ISSN: 2663-9505 (Print)



# South Asian Journal of **BIOLOGICAL RESEARCH**



## **PREVALENCE OF BUFFALO DISEASES AND RESPONSE TO TREATMENT OF PARASITIC DISEASES**

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**To cite the article:** Md. Nayan Mondal<sup>1</sup>, Md. Shajedur Rahman<sup>2</sup>, Md. Nurnoby Islam<sup>3</sup>, Nazmi Ara Rumi<sup>4</sup>,  
Md. Asaduzzaman Nur<sup>5</sup> (2024). *PREVALENCE OF BUFFALO DISEASES AND RESPONSE TO TREATMENT OF  
PARASITIC DISEASES*, 5(2):25-35.

**Link to this article:** <http://aiipub.com/journals/sajbr-240109-10012/>

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## PREVALENCE OF BUFFALO DISEASES AND RESPONSE TO TREATMENT OF PARASITIC DISEASES

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### ARTICLE INFO

**Article Type:** Research

**Received:** 9, Jan. 2024.

**Accepted:** 24, Jan. 2024.

**Published:** 27, Jan. 2024.

### KEYWORDS:

Buffalo, Disease, Prevalence, Therapy, Parasitic.

### ABSTRACT

The study was conducted to investigate the buffalo diseases with relation to age, sex and seasonal variation and response to treatment of parasitic diseases with different commercial anthelmintic in Rangpur district of Bangladesh. The study was conducted for a period of one year from October 2021 to September 2022. A total of 197 clinically ill buffaloes were examined for diagnosis of diseases based on history, clinical findings, and microscopic examination of feces for parasitic egg detection. The diseases were categorized into different groups according to their etiology. In this study, the highest prevalence was seen by parasitic disease (50.7%) followed by bacterial diseases (21.3%), viral diseases (18.8%), external parasitic disease (3.6%), protozoan disease (2.5%) and lowest by metabolic disease (1.5%) and fungal (1.5%) respectively. The prevalence of diseases was significantly ( $p < 0.05$ ) higher (49.3%) in above 2 years age group and lowest (15.2%) in 0 to 6 months age group. Disease prevalence was significantly ( $p < 0.05$ ) more in male buffaloes (60.9%) and less (39.1%) in female buffaloes. Based on season, it was found that the prevalence of diseases was significantly ( $p < 0.05$ ) highest in summer season (39.1%), moderate in winter season (35.5%) and lowest in rainy season (25.1%). Six species of gastrointestinal parasites were identified, they are *Fasciola gigantica* (20.3%), *Paramphistomum sp* (15.2%), *Haemonchus contortus* (3.0%), *Toxocara vitulorum* (7.6%), *Trichostrongyloides sp* (2.5%) and *Moniezia sp* (2.0%). Sixty buffaloes infected with parasitic disease were divided into six equal groups for anthelmintic treatment and each group contained

10 buffaloes and the efficacy was determined by EPG. Treatment with Nitroxylin (Oxinil ® Techno) @ 1.5 ml/ 50kg body weight against fascioliasis significantly ( $p < 0.05$ ) reduce the EPG on day 7, 14 and 21 post – treatment as 54.04%, 70.68% 100% respectively and Triclabendazole (Fasinil® Techno) @ 15 mg/kg body weight also significantly ( $p < 0.05$ ) reduce the EPG on day 7, 14, 21 and 28 post –treatment as 53.94%, 60.04%, 83.36% and 100% respectively. Treatment with Tetramisole (2gm) +Oxyclozanide (1.4 gm) (Tetranid ® Techno) @ 1 bolus / 150 kg body weight against nematodiasis was significantly ( $p < 0.01$ ) reduces the EPG of feces on day 7, 14, 21 and 28 post –treatment 52.61%, 59.28%, 72.80% and 100% respectively and Levamisole (Levavet ® Acme) @ 7.5 mg/ kg body weight against nematodiasis was significantly ( $p < 0.01$ ) reduces the EPG of feces on day 7, 14, and 21 post-treatment day 60.02%, 83.39% and 100% respectively. Anthelmintic treatment also increases the body weight of buffaloes after 3 months of treatment.



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