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## List of Abbreviations

Abbreviation	Elaboration
PRTC	Poultry Research and Training Institute
CVASU	Chittagong Veterinary and Animal sciences University
n	Number
mg	Milligram
µg	Microgram
kg	Kilogram
Vol	Volume
®	Registered
RPMI 1640	Roselein Park Memorial Institute
h	Hour
TBZ	Triclabendazole
NITRO	Nitroxynil
F.	Fasciola

## **PLAGIARISM CERTIFICATE**

I, Probir Deb, would like to strongly assure that I have performed all the works furnished here in this report. The information has been collected from books, national and international journals, websites and other references. All references have been acknowledged duly.

Therefore, I hold entire responsibility of collection, complication, preservation and publication of all data accumulation here in this report.

The Author

July, 2016

## Abstract

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Triclabendazole and Nitroxynil are commonly used to reduce the *Fasciola's* burden in domestic animals of Bangladesh. We investigated the effect of triclabendazole and nitroxynil against adult *Fasciola gigantica*. *In vitro* experiments with triclabendazole and nitroxynil were performed on *Fasciola gigantica* of domestic cows. The *in vitro* assays were evaluated by means of viability based on fluke motility. Fifty percent effective dose values of 2.7 mg/kg and 5mg/kg of body weight were calculated for monotherapy of triclabendazole and nitroxynil respectively, against adult *F. gigantica*. In this study, we observed that triclabendazole and nitroxynil have potent *in vitro* fasciocidal activity. But triclabendazole show more potent drug for Fasciola than nitroxynil. When combined, synergistic but also antagonistic effects depending on the doses administered were observed, which should be elucidated in more detail in future studies.

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**Keywords:** Triclabendazole, Nitroxynil, *In vitro*, Fasciocidal, *Fasciola giagntica*.