

Anthelmintic Effect of Clitoria Ternatea on Paramphistomum Cervi in Buffalo (Bubalus Bubalis) of Udaipur, Rajasthan, India

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Abstract : Helminths including Paramphistomum Cervi (P. cervi) are a major cause of reduced production in livestock or domestic ruminant. Rajasthan is the largest state of India having a maximum number of livestock. The economy of rural people largely depends on livestock such as cow, buffalo, goat and sheep. The prevalence of P. cervi helminth parasite is extremely high in buffalo (Bubalus bubalis) of Udaipur, which causes the disease paramphistomiasis. This disease mainly affects milk, meat, wool production and loss of life of buffalo. Chemotherapy is the only efficient and effective tool to cure and control the helminth P. cervi infection, as efficacious vaccines against helminth have not been developed so far. Various veterinary drugs like Albendazole have been used as the standard drug for eliminating P. cervi from buffalo, but these drugs are unaffordable and inaccessible for poor livestock farmers. The fruits, leaves and seeds of Clitoria ternatea Linn. are known for their ethno-medicinal value and commonly known as "Aprajita" in India. Seed extract of Clitoria ternatea found to have a significant anthelmintic action against Paramphistomum cervi at the dose of 35 mg/ml. The tegument of treated P. cervi was compared with controlled parasites by light microscopy. Treated P. cervi showed extensive distortion and destruction of the tegument including ruptured parenchymal cells, disruption of musculature cells, swelling and vacuolization in tegumental and sub tegumental cells. As a result, it can be concluded that the seeds of Clitoria ternatea can be used as the anthelmintic agent. Key words: Paramphistomiasis, Buffalo, Alcoholic extract, Paramphistomum cervi, Clitoria ternatea.

Keywords : buffalo, Clitoria ternatea, Paramphistomiasis, Paramphistomum cervi

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