

## Prevalence of Bovine Trypanosomosis and Assessment of Knowledge and Practices of Livestock Owners in the Control of Trypanosomosis in Ethiopia

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**Abstract :** Bovine trypanosomosis, caused by Trypanosoma species, is a critical livestock disease in sub-Saharan Africa, with substantial implications for food security, rural economies, and animal health. In Ethiopia, where livestock is a primary source of income for rural communities, the prevalence of trypanosomosis is a major constraint to cattle productivity, especially in regions where tsetse flies, the primary vectors of the disease, are abundant. This study investigates the prevalence of bovine trypanosomosis in Ethiopia and assesses the knowledge, attitudes, and practices of livestock owners regarding the control and prevention of the disease. The study was conducted in selected high-risk areas across Ethiopia, employing a combination of parasitological and molecular diagnostic techniques to determine the prevalence of trypanosomosis in cattle populations. Blood samples were collected from cattle, and diagnostic methods, including blood smear examinations and PCR-based techniques, were used to detect Trypanosoma infections. In addition, a survey was conducted to assess the awareness of livestock owners regarding trypanosomosis, including their knowledge of disease symptoms, transmission routes, and control strategies. Preliminary results indicate that trypanosomosis remains prevalent in many parts of Ethiopia, with infection rates varying significantly depending on geographic location and ecological factors. The study highlights that while livestock owners in some areas possess basic knowledge about the disease, there are significant gaps in their understanding of effective control measures. Many rely on traditional methods, such as the use of herbal remedies or indiscriminate application of trypanocidal drugs, which often prove ineffective and contribute to the development of drug resistance. The findings of this study emphasize the need for targeted interventions to improve the knowledge and practices of livestock owners. Strengthening veterinary services, providing training programs on integrated disease management, and improving access to modern diagnostic tools and effective trypanocidal drugs are essential to combat trypanosomosis in Ethiopia. The study also underscores the importance of comprehensive vector control strategies to reduce the prevalence of Trypanosoma infections and enhance livestock productivity in affected regions.

**Keywords :** Ethiopia, Trypanosomiasis, prevalence, knowledge

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