REVIEW OF THE PREVALENCE OF GASTROINTESTINAL NEMATODES IN RUMINANTS ACROSS TROPICAL AFRICA

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Abstract

Gastrointestinal nematodes (GINs) are undoubtedly one of the biggest challenges to livestock productivity in tropical Africa, with high prevalence, pathogenic impacts, and significant economic losses. This review aims to compile available information on the presence, spread, primary agents, detection techniques, causes, and issues related to drug resistance in GINs in domestic ruminants in this region. Surveys conducted across various countries in West, Central, East, and Southern Africa reveal prevalence rates often exceeding 70%, with a predominant presence of Haemonchus contortus. The dynamics of infestations are mostly influenced by geographical and seasonal variations, different diagnostic methods, and extensive livestock systems. Moreover, it is noted that resistance in NGI is increasing against the main classes of anthelmintics, and in several areas, this trend indicates that treatment efficacy is at risk. Accordingly, some recommendations are provided on how to achieve integrated control through epidemiological surveillance, standardized diagnosis, sustainable pasture management, targeted treatments, and genetic selection of resistant animals. This review emphasizes the urgent need for coordinated efforts to better control NGI and improve ruminant health and productivity in tropical African conditions.

Key words: gastrointestinal nematodes, prevalence, ruminants, and tropical Africa