INNOVATIVE BIOLOGICAL TECHNOLOGY FOR THE PREVENTION AND CONTROL OF ENDOPARASITES IN DOMESTIC WATERFOWL

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Abstract

This study investigates the diversity of endoparasites in domestic waterfowl (ducks and geese) of the family Anatidae, raised in anthropized environments in the Republic of Moldova, and evaluates the potential of a plant-based preparation for their control. Parasitological examinations revealed a diverse endoparasitic fauna, including class Trematoda (Echinostoma revolutum, E. robustum), class Secernentea (Amidostomum acutum, A. anseris, Ascaridia galli, Heterakis gallinarum, Ganguleterakis dispar), and class Conoidasida (Eimeria anseris, E. nocens, E. truncata). Given the prevalence of these parasites, a plant-derived product, Endopalmivet, based on extracts of Tanacetum vulgare, was tested. The product was administered in aqueous solutions of different concentrations, with the 20% solution showing the most promising results under the conditions of this study. Administration was carried out orally via drinking water, either as a single dose (prophylactic approach) or as two administrations at a 14-day interval (therapeutic approach). The results indicate a reduction in parasitic burden, varying depending on the parasite group and experimental conditions. Although the findings suggest promising potential, further rigorous studies are required to confirm efficacy, safety, and practical applicability.

Key words*: biological control, domestic waterfowl, endoparasites, plant extract, Tanacetum vulgare.*