DOI: 10.46991/JISEES.2025.SI1.031

Nematode Infections in Intermediate Gastropod Hosts: A Review of Armenian Literature

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ABSTRACT

Gastropoda, one of the most diverse classes of the phylum Mollusca, includes more than 65,000 species of snails and slugs. Their widespread range across different terrains has made them an excellent intermediate host for the transmission of parasitic illnesses, posing a major threat to public health, affecting around 300 million people worldwide. Snail-Transmitted Parasitic Diseases (STPDs) also affect animal health, causing significant economic losses to the agricultural industry and affecting the economy. While the Armenian mollusc fauna, as well as any parasites they carry, have been studied in the past, recent reports of the introduction of the invasive mollusc, *Arion vulgaris*, in Armenia, a well-known intermediate host for various nematodes, highlighted the urgent need to gather and synthesize existing information on mollusc-borne parasites. Thus, a comprehensive literature review of studies conducted in Armenia was performed to consolidate past findings and provide a baseline as a comparison point for future research. The review revealed that most commonly, these intermediate hosts were infected by nematodes such as *Protostrongylus* spp., in addition to *Neostrongylus* spp., *Cystocaulus* spp., *Dictyocaulus* spp., *Sygnamus* spp., and *Muellerius* spp. Over 30 species of terrestrial molluscs were found as intermediate hosts, with the most frequently reported species from the *Deroceras, Georginapaeus, Gigantolimax, Helix, and Pupilla* genera. However, with previous research timelines spanning from 1934 to 2010, this review highlights the need for further studies to update data available on the prevalence and distribution of these parasite species within their intermediate hosts across regions in Armenia, considering current invasions.

Keywords: snail-borne parasites, invasive species, snail-transmitted diseases, zoonotic diseases, mollusca, protostrongylidae

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