

Study of Intestinal Parasite of Frog *Rana tigrina*

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ABSTRACT

The intestinal parasites of frog are very common inside the international unlike Pakistan wherein no study be fell on that parasite. The investigation turned into carry out to determine the impact of intestinal parasites inside the intestine of frog (*Rana tigrina*) because it found many instances of intestinal contamination in frogs. in this look at fifty-three frogs (forty female and 13male) was underneath observation occur in 30 days did dissection and look at the parasite below the microscope which attached to the wall of intestine. This observe found extraordinary parasite *Echinostoma* and *Enterobius vermicularius* inflicting gastrointestinal ailment. identification made easy through the everlasting slide manner due to which parasite inner organs visible and may be recognize specimen without difficulty.

Keywords: Intestinal Parasites, *Rana Tigrina*, Investigation, Intestinal Infection, *Echinostoma*, *Enterobius Vermicularius*, Gastrointestinal Disease.

INTRODUCTION

Alongside distinguished reptiles, amphibians, which includes toads, frogs, salamanders, and newts, are these days taken into consideration famous pets international. As reported for other wonderful puppy animals, amphibians are recognized to harbor several gastrointestinal parasites. (Hallinger, *et al.*, 2020) Amphibians are one of the most threatened important groups of animals, with decline in amphibian populations regularly referred to as aid for the declare that we're witnessing a mass extinction occasion. The following reasons of amphibian decline were cautioned: invasive species causing surroundings alternate, over-exploitation of natural environments, adjustments in land use, international environmental change, which include international warming, increased use of pesticides and different polluting chemicals, and the emergence and/or unfold of infectious illnesses. (Chambouvet, *et al.*, 2020)

Although frogs rarely reason waterborne illnesses, several of their internal viruses have the ability to pollute water resources. this is mainly genuine of their intestines. Like many different animals, frogs might also serve as hosts for microorganism, viruses, or parasites which can infect people and purpose sickness. Frogs can be hosts for several parasites that negatively affect their improvement and health. (Valdivia, *et al.*, 2023). The bacteria *Salmonella*, which is present in the intestines of frogs and other amphibians, is the cause of salmonellosis.

Moreover, parasites may additionally regulate host body structure to decorate pathogen proliferation, survival, and transmission. We tested the intrinsic (hosts tendencies) and extrinsic (herbal and anthropogenic events) factors that can determine the outcome of contamination, where human-brought on adjustments of environmental conditions are the maximum dangerous stress or that enhance amphibian publicity and susceptibility to parasites. (Caballero, *et al.*, 2022). Giardiasis is a parasitic ailment brought on by the *Giardia* parasite, which is occasionally detected in water that has been tainted by animal or frog excrement.

Water habitats may be indirectly impacted by chytridiomycosis, a fungal illness that affects frogs but not humans.

METHODOLOGY

The *Rana tigrina* was taken from fresh water and euthanized by chloroform. , liver, stomach, body cavity, kidneys, and urinary bladder were removed with the help of sharp dissecting tool and keep in a petri dish. The intestine was the main organ of frog to study in our research which removed carefully and placed in warm water. The intestine is the smallest organ in the body of frog during dissecting there are more chances of damage. push warm water in the intestine through injection and washed out it cut the intestine from top to bottom and examined this water in the compound microscope to find out the parasite. We had found a lot of alive parasites.

In order to study the body structure of this parasite fixed these specimens in the slide with the help of permanent slide procedure.

RESULT

These parasites are responsible to the fatal infection of frogs may lead to low growth and swollen intestine which couldn't digest food. They may be found in the stomach or intestine. Clinical signs may include blood or mucus in the stools, anemia, and weight-loss.

A varied (40-47) number of parasites, firmly attached in the duodenal wall, totally blocked and clogged the intestinal lumen in the small intestines of six frogs, as demonstrated by a microscopic inspection.

CONCLUSION

The last outcome demonstrates that the intestinal parasite (*Echinostoma* & *Enterobius vermicularius*) is highly infectious parasites which low the growth ratio, cause fatal infection in gastrointestinal track.

The host's compatibility determines the changes that *Echinostoma* causes in the intestinal mucosa. The host's compatibility determines the changes that *Echinostoma* causes in the intestinal mucosa. High levels of infection are induced by the infection in hosts with high compatibility. Consequently, more experimentation is required to control the infection and high death rate.

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