



**STUDYING THE EFFECT OF *TRIGONELLA FOENUM GRAECUM* ON
HYMENOLEPIS NANA IN MICE**

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ABSTRACT

This study carried out to test the efficacy of *Trigonella foenum graecum* (plant, stems and leaves water extract and seeds water extract) on *Hymenolepis nana* infection, in vivo and in vitro. In vivo study, Blab/c mice were used, infected with *H. nana* were orally administrated (60mg/ml) water leaves and stems extract, (60mg/ml) water seeds extract and (200mg/day) fresh plant given as food. It was found that the efficacy of fresh plant had reached 87.1% after 6 days post treatment, while the efficacy of leaves and stems and seed water extract reached 85.33% and 86.66% after 9 and 8 days respectively after treatment. For in vitro study, it was found that the water plant extract had killed the embryo inside the egg within 12 hours, and no infection occurs after inoculated to the mice.

Keywords: *Trigonella foenum graecum*, Water Extract, *Hymenolepis nana*

INTRODUCTION

Hymenolepis nana, the dwarf tapeworm, is the smallest tapeworm to infect humans. This cestode belongs to a large family known as Hymenolepididae [1]. Up to 75 million people are carriers of *H. nana* globally [2]. The infection can have an epidemiologically important impact on family units, because it is the only tapeworm that can transmitted directly from human to human and because internal autoinfection may occur [3]. *H. nana* infection is most often asymptomatic, heavy infection can cause weakness, headache,

anorixea, irritability, abdominal pain, itching around the anus and diarrhea [4].

Antihelminthics are those agents that expel parasitic worms (helminthes) from the body, by either stunning or killing them [5]. The plants are known to provide a rich source of botanical anthelmintics [6, 7]. A number of medicinal plants have been used to treat parasitic infections in man and animals [8]. *Trigonella foenum graecum* (Fenugreek) is a Leguminosae crop cultivated throughout the world and known for its forage potential and