Anthelmintic activity of papaya latex against patent

*Heligmosomoides polygyrus* infections in mice

F. Satrija\(^a\)b, P. Nansen\(^a\), S. Murtini\(^b\)\(^a\) and S. He\(^b\)

\(^a\) Danish Centre for Experimental Parasitology, Department of Veterinary Microbiology, Royal Veterinary and Agricultural University, 13 Bülowsvæj, DK-1870, Frederiksberg C, Denmark

\(^b\) Laboratory of Helminthology, Department of Parasitology and Pathology, Faculty of Veterinary Medicine, Bogor Agricultural University, Jl. Taman Kencana No. 3, Bogor 16151, Indonesia

Abstract

The purpose of this experiment was to study the possible anthelmintic activity of papaya latex (*Carica papaya*) against *Heligmosomoides polygyrus* in experimentally infected mice. Five groups of BALB/C mice were infected with 100 *Heligmosomoides polygyrus* infective larvae/mouse. After patency (day 22), four groups of mice (groups B, C, D and E) were given papaya latex suspended in water at dose levels of 2, 4, 6 and 8 g of papaya latex/kg body weight, respectively. One group of mice (group A) served as non-treated controls. All animals were necropsied on day 25, i.e. 3 days after treatment, for post-mortem worm counts. The papaya latex showed an antiparasitic efficacy of 55.5, 60.3, 67.9 and 84.5% in groups B, C, D and E, respectively. The results may suggest a potential role of papaya latex as an anthelmintic against patent intestinal nematodes of mammalian hosts.

Author Keywords: Papaya latex; *Carica papaya*; Anthelmintic activity; *Heligmosomoides polygyrus*; Mouse