Abstract

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Title of thesis: Epidemiology of Ascaridia galli infection and efficacy of some ethnomedicinal plants against Ascaridia galli.

Epidemiological study of Ascaridia galli infection in Pantnagar and surrounding areas was done in present investigation. Five organized poultry farms; P. R. C. and Meat Market, Rudrapur situated in District Udham Singh Nagar and Rampur were examined. Farm data, were collected and postmortem examination were performed to know the status of aforesaid problem. Overall prevalence of Ascaridia galli was 28.93% at five organized farm. Ascaridia galli prevalence was higher in grower birds (39%) followed by adult birds (26%). Birds kept in deep litter system were found to be having higher prevalence (32.19%) as compared to those maintained in cage system (24.98%). Temporal analysis revealed maximum prevalence during summer season (34.15%) followed by rainy season (28.13%).

Efficacy of some medicinal plants was tested in vitro against Ascaridia galli. Study revealed Embelia ribes had highest efficacy (68%) against Ascaridia galli followed by Vernonia anthelmintica (65%) and Scindapus officinalis (57.5%). Chemical examinations of these plants were also done. A orange yellow coloured unknown compound was isolated from seeds of Embelia ribes and tested in vitro. HPLC of this unknown compound was performed and maximum absorbance was seen at 290 nm. Paper and thin layer chromatography of these plants was also done which revealed one or two spots with variable Rf values in different extracts.