

## Parasite Profile and Trends in Parasite Composition in Yellow-Billed Babblers (*Turdoides affinis taprobanus*) in Low Land Wet Zone, Sri Lanka

GIDHS Gammanpila<sup>1#</sup>, TSP Fernando<sup>2</sup>, SS Seneviratne<sup>1</sup> and VAK Fernando<sup>1</sup>

<sup>1</sup> Department of Zoology and Environment Sciences, Faculty of Science,  
University of Colombo, Sri Lanka

<sup>2</sup> Department of Zoology, Faculty of Natural Sciences, The Open University of Sri Lanka,  
Nawala, Sri Lanka

# hansanishashiprabha31@gmail.com

The study's primary objectives were to characterize the parasitic spectrum in Yellow-billed Babblers and investigate trends in parasitism in individuals from different habitat types, flock sizes, and according to the level of host maturity. Thirty-seven birds were sampled from 18 different locations in Sri Lanka's Low Land Wet Zone from November 2021 to May 2022. Identifying and quantifying gastrointestinal parasites from faecal samples were done using direct smears and concentration techniques. Thin, thick, and buffy-coat blood smears were prepared to conduct microscopic identification of haemo-parasites. Ectoparasites were mounted on glass slides for identification. Data were analyzed using Minitab-21 and SPSS-26 software. Parasitic prevalence in the Yellow-billed Babblers was 68%. Five intestinal parasitic species (two protozoans; *Isospora* spp, *Entamoeba* spp, 3 nematode species; *Trichuris* spp, *Strongyloid* spp, and hookworm type eggs), one haemoparasite species (*Trypanosoma* spp) and two ectoparasite species (Family – Philopteridae and Ixodidae spp) were identified. 51.4 % were infected with gastrointestinal parasitic species, 16.2% were infected with ectoparasites and 2.7% were infected with haemoparasites. Among the gastrointestinal parasites, protozoan infections (37.8%) were about two times higher than nematode infections (18.9%). Sub-adults and individuals from large flocks had a high prevalence of parasites. Overall parasitic prevalence was highest in the sub-urban areas while ectoparasitic infections were most prevalent in urban habitats. The only blood parasite recorded, the *Trypanosoma* spp found from the sub-urban habitat is a notable finding as the trypanosomes have zoonotic potential. The study depicts the importance of investigating the parasitic profiles of wild animals in order to prevent zoonoses.

**Keywords:** yellow-billed babbler, urban, ectoparasites, gastrointestinal parasites, haemo-parasites