

PARASITES SPECIES DIVERSITY AND INFECTION INTENSITY OF ORANGUTAN - ECOLOGY FACTORS WITH AN EMPHASIS ON FOOD ITEMS IN THEIR DIET

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The objectives of this study were to compare diversity of intestinal parasites of wild and semi-wild orangutans, under factors influencing their intensity and occurrence. Eight protozoan parasites species were found together with nine metazoan parasites. The prevalence and its seasonal distribution will be presented together with relationship between parasites and season. The variability in parasite community composition is driven by seasonal gradient. Higher prevalence of metazoan parasites was found in semi-wild orangutans than in wild ones. All protozoa recorded at a higher prevalence in wild orangutans were non-pathogenic. The parasite species richness of metazoans together with parasites prevalence is higher where human contact is higher with orangutans due to tourism. There are a number of different factors that affect parasite infection. Our study shows that prevalence of a plant species in the diet corresponds closely with the frequency of its occurrence in the environment, and we suggest that there are only a few plant species with potential medicinal value. Preliminary analysis shows a trend for the prevalence of these species in the diet and their coincidence with parasite presence (based on the Jaccard index of known frequency in nature), cannot be explained by their prevalence in the environment. The study of baseline patterns of parasite infection in wild primate populations is the most important step towards gaining a better understanding of parasite infection dynamics as they relate to primate conservation.

Keywords: parasites, orangutan, diet, medicinal plants, primate ecology