

Identification and density of coccidian parasites of birds kept in the rehabilitation center of the Serra dos Órgãos National Park, Teresópolis, RJ

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The Serra dos Órgãos National Park is a Federal Conservation Unit, subordinated to the Chico Mendes Institute for Biodiversity Conservation, which has the objective of preserving the national ecosystem. This park has more than 400 bird species identified. Studies on parasites are important for birds in a locality, both in terms of biodiversity and in pathogenicity to the host bird. Among parasitic diseases in birds, coccidiosis is one of the main causes of enteritis. Coccidiosis may be asymptomatic or may manifest severe symptoms and even lead to death. In this context, the aim of this study was to examine the feces from birds kept in the rehabilitation center of the Serra dos Órgãos National Park in southeastern Brazil to determine what coccidian parasites were present. So far, fecal samples were collected from 20 birds kept temporarily in the rehabilitation center of the Serra dos Órgãos National Park for treatment and release in the wild, or for directing to other major rehabilitation centers in southeastern Brazil, as the Center for Triage of Wild Animals of the Municipality of Seropédica, State of Rio de Janeiro. The fecal samples were collected individually from a sheet of paper towel placed on the bottom of each cage, after cleaning in the late afternoon. Samples were placed in centrifuge tubes containing a potassium dichromate 2.5% solution at 1:6 (v/v), and carried to the Laboratório de Biologia de Coccídios, UFRRJ. Samples were incubated at room temperature for 10 days. Oocysts were isolated by flotation in Sheather's solution and quantified by OPD (oocysts per fecal drop) conferring the densities. Morphological observations, photomicrographs and measurements were made using an optical microscope coupled to a digital camera. Most of the birds whose fecal samples were collected were in treatment for release, with the exception of some amputees birds or with untreatable lesions. These birds were: 6 *Psittacara leucophthalmus* (Müller, 1776); 1 *Brotogeris tirica* (Gmelin, 1788); 1 *Tangara palmarum* (Wied, 1821); 5 *Caracara plancus* Miller, 1777; 1 *Nyctibius aethereus* (Wied, 1820); 2 *Ramphastos toco* Müller, 1776; 1 *Pteroglossus bailloni* (Vieillot, 1819); 1 *Rupornis magnirostris* (Gmelin, 1788); 1 *Athene cunicularia* (Molina, 1782); and 1 *Micrastur semitorquatus* (Vieillot, 1817). Only 2 birds were positive for coccidian parasites: 1 *P. leucophthalmus* positive for an *Eimeria* sp. with density of 30 OPD; and 1 *T. palmarum* positive for an *Isospora* sp. with density of 1,551 OPD. These unidentified coccidian species are still in the process of identification, however these fairly initial results already report the identification of two genera of coccidia and their densities. In addition, it is noteworthy mentioning that the future results of identifications and densities may be strongly correlated with certain birds and/or clinical signs, assisting decision making in the conservation of species and/or biotopes, and in the treatment and release of birds.

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