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## Helmintofauna em cardeais, *Paroaria dominicana* (L.) (Passeriformes, Emberizidae): Taxonomia e ecologia de populações e de comunidades de parasitos

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**Abstract. Helminthofauna in *Paroaria dominicana* (L.) (Passeriformes, Emberizidae): Taxonomy and ecology of population and communities of parasites.** The present work aimed to study the *Paroaria dominicana* (Linnaeus, 1758) helminthofauna, as well as diagnosing the helminth forms populations and communities organization in the hosts, besides searching for indications on the existing relation between helminth parasitism and the birds immune response, indicated by the spleen sizes. From February to November 2003, 102 *P. dominicana* specimens were necropsiated, originated from IBAMA/JF wild birds illegal trade apprehensions and donated, already dead, to the Federal University of Juiz de Fora - UFJF. Accordingly to the occurrence bulletin, these birds were originated from Bahia state. All collected helminths were quantified and treated in accordance with usual helminthological techniques. For studying helminths distribution and populations richness we used ecological parameters of prevalence, intensity and abundance and the Margalef ( $d_{Mg}$ ), Simpson ( $c$ ), Berger-Parker ( $d$ ), Brillouin ( $h$ ) and Pielou ( $j$ ) richness indices. The weights of spleens were obtained with the use of a precision scale, with magnification=10<sup>-4</sup>g. In the analysis, only species that presented a bigger than 5% prevalence, were used. The *P. dominicana* helminth component community were constituted by six species, being four of them, nematoid species: *Diplotrriaena bargusinica*, *Aprocta caudata*, *Aprocta sp.* and *Capillaria sp.*; one trematode species, *Platynosomum illiciens*; and an acantocephal species, *Mediorhynchus emberizae*. All species showed low prevalencies and infection intensities, a superdisperse distribution pattern in the hosts population and a high interspecific interactivity index, indicating to be an isolationist community. Sex influence was not detected on the parasitism occurrence and intensity, and this could be related to the absence of an accentuated sexual dimorphism and the fact that both males and females invest in a similar manner on the parental care. All found helminth species are heteroxens, indicating that feeding and habitat were determinants to the *P. dominicana* helminth community structuration. It was observed a significative difference between parasited and nonparasited birds spleens weights. The three helminth species, *D. bargusinica*, *A. caudata* e *P. illiciens*, were related to birds that presented minor spleen sizes, and this could indicate that parasites tends to infect decreased immune capacity individuals, in *P. dominicana*. In the parasited birds, the *P. illiciens* trematode abundancy positively correlated with the spleens weights, probably indicating that this species is responsible for unchaining a more accentuated immune response in the studied birds.

**Keywords:** parasitism ecology, birds, spleen, helminths, Brazil.