

TITLE: DETECTION OF DERMATOPHYTES IN ASYMPTOMATIC CATS INTENDED FOR RESPONSIBLE OWNERSHIP IN THE MUNICIPALITY OF BOA VISTA, RORAIMA.

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ABSTRACT: Dermatophytosis is a superficial mycotic, zoonotic disease, commonly diagnosed in veterinary medicine, caused by fungi of the genus *Microsporum*, *Trichophyton* and *Epidermophyton*. The most commonly isolated dermatophytes in dogs and cats are *Microsporum canis*, *Microsporum gypseum* and *Trichophyton mentagrophytes*. Animals housed by shelters and Non-governmental Organizations (NGOs) are made available for responsible ownership and can carry asymptomatic zoonotic infections such as dermatophytosis. The goal of this study is to detect asymptomatic infection by dermatophytes in felines available for responsible possession in the municipality of Boa Vista, Roraima. Samples were collected from the hair and skin using a felt strip technique, from a total of 70 felines accepted and available for adoption. The collection places were the Zoonoses Surveillance and Control Unit (ZSCU), two non-governmental organization (NGO) and four shelters. The samples were inoculated in a selective fungal culture medium (Mycosel agar) and incubated at 27°C for 14 to 28 days. The identification of the isolates was performed according to Markey et al. (2013), by the technique of adhesive tape stained with cotton blue lactophenol. All animals were mongrel cats which had no history of vaccination. Of the 70 samples analyzed, 18 (25.71%) presented growth of dermatophytes. Of these, 14 (77.78%) were identified as *Microsporum canis*, three (16.66%) *Microsporum nanum*, and one (5.56%) *Trichophyton mentagrophytes*. Regarding the distribution of positive samples by collection points, a variation of 0 to 50% the incidence was observed. It is suggested that the places with greater agglomeration and rotation of animals, presented higher prevalence of the infection. The present results are directly related to the hygienic-sanitary conditions. In the present study all the animals were available for adoption in NGOs, shelters, and ZSCU, having their origin in the great majority of abandoned animals in the street or the shelter door. The results obtained from this work, a high rate of asymptomatic feline reservoirs of dermatophytes, especially *M. canis*, were detected. It is necessary the diagnosis and adoption of prophylactic measures to prevent the transmission of dermatophytes in cats. This disease is one of the reasons for the possible abandonment of the animals due to discontent or fear of the owners.

Keywords: *Microsporum canis*, *Microsporum nanum*, zoonotic disease.