

**TITLE:** CASUISTRY OF DERMATOPHYTE FUNGI IDENTIFIED IN THE LABORATORY OF VETERINARY MICROBIOLOGICAL DIAGNOSIS - UFRRJ

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**ABSTRACT:**

Dermatophytosis is a superficial skin disease caused by dermatophyte fungi. They are classified as zoophilic, geophilic or anthropophilic fungi, according to their normal habitat. *Microsporum canis*, *M. gypseum*, and *Trichophyton* spp. are the species more often related to infection in animals. In the veterinary routine, lesions are usually characterized by rounded alopecic regions with erythematous margin, with or without pruritus. The purpose of this study was to assess the casuistry of dermatophytes isolated in the Laboratory of Veterinary Microbiology Diagnostic of UFRRJ obtained from dogs and cats assisted at the Veterinary Hospital of UFRRJ. A total of 233 animals (170 dogs and 63 cats) with skin lesions (alopecia, crusting, and scaling) were examined from January 2016 to April 2017. Direct microscopy of the samples was carried out with KOH 20% clarifying solution, searching for arthroconidia and other fungal structures. Plucked hairs and epidermal scales from the skin lesions of affected dogs and cats were inoculated on a selective medium for pathogenic fungi. Culture slants were incubated at 30 °C for up to 30 days and examined at 2–3 day intervals for fungal growth. Laboratory identification of the fungal isolates was based on their colonial and microscopic morphological characteristics. Of the 233 samples examined, 8 (3.4%) were positive for fungal elements by direct microscopic examination, and 37 (15.9%) were culture positive for dermatophytes. Prevalence of *M. canis* showed the highest rate (43.3%), as observed by other authors, followed by *Trichophyton* sp. (29.7%) and *M. gypseum* (27.0%). The correct diagnosis of dermatophytosis is essential for the proper treatment of the animal and for the control and prevention of the disease to humans, due to the zoonotic character of the fungi. The Laboratory of Veterinary Microbiology Diagnostic of UFRRJ contributes with services and data that assist in the epidemiology of dermatophytosis in dogs and cats.

**Keywords:** dermatophytosis, diagnosis, dogs, cats