Sporotrichosis is a subacute or chronic disease that affects humans and animals occurring for the most instances, because of traumatic inoculation of genus *Sporothrix*. Due to the wide distribution in the environment, we can see that there is close relationship between the disease and occupations related to ground handling and outdoor activity. Added to this fact the antropozonotic character of this mycosis, where the agent inoculation occurs through the scratch and/or bite of cats affected or not for the pathology. Sample survey in the state of Rio de Janeiro showed a significant increase in the number of cases in the last decade, standing out in such an epidemic the role of domestic cats in the transmission to human patients. This study highlights the increase in the number of cases diagnosed of animal with sporotrichosis in the period between January 2012 and June 2015 by the Laboratório de Leveduras Patogênicas e Ambientais – Instituto de Veterinária – UFRRJ, located on the campus of Seropédica, RJ. Swabs containing secretion from ulcerated lesions in dogs and cats were processed. After quality evaluation of the sample, the process was performed with simultaneous seeding on agar Sabouraud Dextrose and selective medium for pathogenic fungi (Mycosel®), incubated at 25 ° C for up to 15 days. Simultaneously, cytological evaluation, using Fuchsin was performed, aiming to research yeast-like structures. Morphological and termidimorphism evaluation characterized the isolate as belonging to the complex *S. schenckii*. Of the total of 605 samples suspected received, 242 (40%) isolates further characterized as belonging to the complex *S. schenckii*. Of these, 203 were derived from cats (83.88%) and 39 dogs (16.12%). It has further increased the number of positive cases accompanied years, totaling 36 in 2012, 79 in 2013, 101 in 2014 and 25 until June 2015. Thus, it appears that the numbers in human patients and animals increased simultaneously, there is correlation with zoonotic mycoses. The location of the laboratory and the source of most of the patients attended in the Hospital Veterinário de Pequenos Animais da UFRRJ demonstrate that sporotrichosis is not limited only to the state capital. The control of animal sporotrichosis is a major challenge for disease control in Rio de Janeiro, requiring the implementation of preventive and educational policies broadly and easier access to treatment.

**Key-word:** Sporotrichosis, zoonosis, *Sporothrix*