

**Title: ISOLATION AND VIRULENCE “IN VITRO” OF YEAST OF THE MUCOSA MYCOBIOTA CERVICAL-VAGINAL OF BITCHES**

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**Summary:**

Under normal conditions, the reproductive tract microflora has variable composition and number, and it can, eventually, show an overgrowth, becoming pathogenic. Fungal agents have been linked to conditions such as miscarriage and infertility in several domestic species, and because of these reports, the knowledge of their presence and virulence in the study area provides grants to better understand situations of changes in the mucous membranes of the reproductive tract. The objective was to verify the species of yeast present in cervical-vaginal mucosa of bitches and the power of virulence "in vitro" by the isolated protease and phospholipase production trials. Were used 40 bitches from 6 months with no age limit, no distinction with respect to race, which underwent clinical / behavioral and complementary tests to check the healthiness. Samples were collected using a cervical-vaginal lavage performed with sterile saline. Washed for each animal was maintained under refrigeration for further processing. For isolation, the samples were sown on the surface of the culture medium Brain Heart Infusion agar plus chloramphenicol. The evaluation of the production of protease and phospholipase was performed "in vitro" using specific means, accompanying the development of the colonies and the halos development related to the production of these enzymes. Of the 40 dogs used for collection of gynecological material in 33 (82.5%) was obtained as fungal growth. From the 60 isolates obtained, 21 (35.0%) were identified as *Candida* spp, 19 (31.66%) *Malassezia* spp, 13 (21.66%) *Rhodotorula* spp and 7 (11.66%) *Trichosporon* spp. Of the 60 strains tested for production of protease and phospholipase, 22 (36.66%) were negative, 20 (33.33%) positive and 18 (30.0%) strong positive in relation producing protease samples. In relation production fosfolipase samples 27 (45.0%) were negative, 23 (38.33%) strong positive and 10 (16.66%) positive. The majority of the isolates showed some degree of virulence considering the production capacity of protease and phospholipase. Thus, the knowledge of micro-organisms potentially causing disorders in the reproductive tract of dogs is perhaps the solution of numerous disorders poorly controlled and explained in veterinary medicine.

**Keywords:** enzyme production, microbiota yeast, reproductive tract