

TITLE: DETECTION OF MICROORGANISMS IN CONDIMENTS AND SPICES COMMERCIALIZED IN CUIABÁ /MT

AUTHORS: ASSIS, A. F.; COSTA, R. B.; RIZZOTTO, D. F.; SIQUEIRA, N. P.; SANTOS, M. F.; GOLIN, R.; CAIXETA, D. S.

INSTITUTION: UNIVERSIDADE FEDERAL DE MATO GROSSO, FACULDADE DE ARQUITETURA, ENGENHARIA E TECNOLOGIA, DEPARTAMENTO DE ENGENHARIA SANITÁRIA E AMBIENTAL, CUIABÁ, MT (AVENIDA FERNANDO CORRÊA DA COSTA, Nº 2367 - BAIRRO BOA ESPERANÇA. CEP 78060-900, CUIABÁ – MT, BRAZIL)

ABSTRACT: As in most natural foods, condiments and spices when stored and stored in places with poor sanitary conditions trigger the growth of microorganisms. Considering that many condiments and spices are consumed in natura, the objective of this study was to analyze the presence of filamentous fungi, yeasts and bacteria, of natural products commercialized in the city of Cuiabá / MT. The samples were obtained in different commercial establishments and in bulk in April 2016. Ten types of spices and spices of different brands were obtained: black pepper (*Piper nigrum* L.), oregano (*Origanum vulgare*), cinnamon sticks (*Cinnamomum zeylanicum*), clove (*Syzygium aromaticum*), parrot leaf (*Laurusnobilis*), sweet grass (*Pimpinella ansium* L.), annatto (*Bixa orellana* L.), rosemary (*Rosmarinus officinalis*), turmeric (*Curcuma longa* L.) and cumin (*Cuminum cyminum* L.). For the analysis of the samples the spread plating technique was performed using the culture medium Sabouraud Agar Dextrose. From 35 samples analyzed, 54.28%, 80% and 77.14%, the presence of yeasts, bacteria and filamentous fungi, respectively, was observed. In the bulk samples, only the black pepper was absent from the three microbial groups, while in the oregano only the presence of filamentous fungi was detected. In addition, in the cumin and clove of wood, there was no presence of filamentous fungi and yeasts, respectively. The consumption of in natura products contaminated with microorganisms is a major public health problem, as it can trigger serious toxoinfections.

Keywords: natural products, microorganisms, contamination.