TITLE: SEARCH FOR *Aspergillus* sp. IN CHICKEN EGGS (*Gallus gallus domesticus*) FOR HUMAN CONSUMPTION.

AUTHORS: [1]VASCONCELOS, A.B.; [1]SILVA, K.P.C.; [1]FERREIRA, M.N.S.; [1]BOAVENTURA NETO, O; [2]VASCONCELOS, C.B.; [2]CERQUEIRA, L.A.; [3]MENEGHEL, C.C.L.S.

INSTITUTION: [1] UFAL – UNIVERSIDADE FEDERAL DE ALAGOAS (FAZENDA SÃO LUIZ S/N – ZONA RURAL – CEP: 57700-000 VIÇOSA – AL). [2]CESMAC – CENTRO UNIVERSITÁRIO CESMAC **(**ROD. DR. IB GATTO MARINHO FALCÃO, 1028 - PRAIA DO FRANCÊS, MAL. DEODORO - AL, 57160-000.). UVV – UNIVERSIDADE VILA VELHA (R.LUÍS JOSÉ, 21 - BOA VISTA, VILA VELHA - ES, 29102-920)

ABSTRACT:

The objective of this study was to investigate the presence of *Aspergillus sp*. in the shell and contents of chicken eggs from four farms in the State of Alagoas (AL), which were intended for human consumption. Samples were collected during the period from January to February 2017 totaling 30 eggs per farm. After the field harvest, the eggs were sent to Infectious Diseases Laboratory of the Federal University of Alagoas for microbiological analysis. Eggshell and egg contents of each farm were studied and the samples submitted to maceration, homogenization, immersion in BHI broth and incubated at 37ºC for 24 hours. Then, they were inoculated into Petri dishes containing Sabouraud agar for 14 days (room temperature). Blades were made using the *imprint* technique to identify the fungi stained with methylene blue and visualized by light microscopy. The identification of fungi was based on the morphological and phenotypic characteristics of each fungal colony. Based on the data obtained it was possible to perceive the presence of *Aspergillus* sp. in 50% of the farms studied. Results showed that from the eight bark samples, four fungal colonies presented lively growth, and the same happened with the analysis of the content, where of the eight samples investigated, four had fungal colonies confirmed. 75% (3/4) of the fungal colonies of the bark samples were positive for *Aspergillus* sp., while the percentage obtained for *Aspergillus* sp. in the content samples was 50% (2/4). In the eggshells analyzed, the study also showed the presence of *Penicillium* sp. in 25% (1/4). In the content samples, *Penicillium* sp. 50% (2/4). Thus, our studies revealed an expressive risk of fungal infections and a probable increase of outbreaks in patients caused by ingestion of contaminated foods, which would represent a latent threat to public health.

Keywords: Aspergillosis, Poultry, Public health.