WATER ACTIVITY IN POWDER GUARANA (*Paullinia cupana*) AGAINST FUNGI CONTAMINATION

Ariane, M. Pacheco, Augusto Kluczkovski-Junior, Ana Claudia S. Santos. Federal University of Amazonas, Faculty of Pharmaceutical Sciences, R. comendador Alexandre Amorim, 330, Aparecida, 6030-3000 – Manaus-Amazonas – Brasil. email: ariane@ufam.edu.br

The guarana (*Paullinia Cupana*) fruit goes through the processes of cultivation, harvesting, drying, preparation and storing all under natural conditions before being consumed. Therefore, often involves fungi contamination. The water activity level in food is of practical importance as it controls the onset and severity of mould spoilage. This study aimed to quantify the activity of water in the powder and guarana seed. The analysis of water activity was performed in triplicate in an Aqualab series 3TE instrument (Decagon, USA). The guarana samples were divided into 4(four) groups: (a) powder, (b) stick, (c) seed cap, (d) seed without cap and (e) cap. The analysis showed the following values of water activity: powder: 0.46; stick: 0.52; seed cap: 0.5844; seed without the cap 0.5339 and cap: 0.5267. The influence of water activity on microorganisms is complex, combining intrinsic and extrinsic factors. Studies have shown that the heat resistance of microorganisms increases as their water content decreases. The study concluded that there is difference in water activity between the forms of guarana, and monitoring the contamination of the products is required.