**TITLE:** EVALUATION OF MICROPARASITES PRESENCE ON LEAVES OF SWISS CHARD (*Beta vulgaris subsp. vulgaris*) SOLD IN SÃO LUÍS/MA.

AUTHORS: MACEDO, A.T.; MACEDO, G.H.R.V.; ARAÚJO, L. G.; COSTA, G.D.E.; SERRA, I.C.P.B.

**INSTITUTION:** CEUMA UNIVERSITY, SÃO LUÍS, MA (RUA JOSUÉ MONTELLO, Nº 1, RENASCENÇA II, CEP 65.075-120, SÃO LUÍS - MA, BRASIL.

## ABSTRACT:

Swiss chard (Beta vulgaris subsp. vulgaris) is one of the most sold leafy vegetables in Brazil. It is essential for health because it is an important source of vitamins and minerals in human food and it is of great importance for public health because it is widely consumed by the population and thus serves as a major vehicle for intestinal diseases transmission by being consumed in natura. The aim of this study is to indicate possible microparasites present in leaves of Swiss chard (Beta vulgaris subsp. vulgaris) sold in open-air fairs and supermarkets of São Luís / MA. A total of 19 samples of Swiss chard were analyzed: 11 from open-air fairs, and 08 from supermarkets, in October 2017. In the laboratory, the first step was the washing of the samples. Thereafter, they were individually rubbed, and then collectively rubbed with 500 mL of distilled water in a 1000 mL Becker. After washing, the water was filtered with a gauze filter for a 500 mL conical cup, remaining in this cup for 05 hours, according by Hoffman-Janer-Pons-Lutz method. Subsequently, the supernatant was discarded, and the sediment was homogenized, placed in a conical tube and subjected to centrifugation for 05 minutes at 2500 RPM. The sediment was analyzed between slide and cover slip under an optical microscope (10x and 40x). Parasitic structures were found in samples from both open-air fairs and supermarkets. From the parasite structures found in the samples: 100% presented Entamoeba coli; 50% Trichomonas spp.; 12.2% Giardia lamblia and Trichuris trichiura; and in 37.5% the presence of free-living parasites was observed. According to the results, it is possible to observe the relevance of hygiene care when handling this vegetable before consuming it, since it can be contaminated easily, regardless of its origin.

Keywords: Microparasites; Beta vulgaris subsp. vulgaris; Public Health.