Preliminary Analysis of Proteic Composition of Exudates from Tubers of Imbu (*Spondias tuberosa*) under dry stress.

<u>Pinto, M.S.T.</u>, Ribeiro, J. M.¹., Oliveira, E. A. G.¹, Araujo, F. P.¹, Fernandes, K.V. S.², Melo, N. F.¹

¹Laboratorio de biotecnologia; Embrapa Semiádido, Petrolina, PE, Brazil. ²Laboratório de Bioquimica de Plantas I, CBB, Universidade Estadual do Norte Fluminense, Campos, RJ, Brazil.

Imbu plant is a native tree in the semiarid areas from Brazil. *S. tuberosa* is a useful species for the poor people this area, due the skill on storage water and organic and inorganic nutrient into underground tuber and its vermifuge proprieties. Although the importance of S. tuberose is great at social and ecological levels, no information exists about its proteic composition. The aim this work was investigate the composition of protein profile in exudates tuber from *S. tuberosa* and its variation under dry stress. The exudates were extracted by grinding from tuber of six months old plants: control plants (wet conditions), and test plants (one month of drying), and submitted to dialysis and liofilization. The powders obtained were submitted to Bradford and SDS-PAGE analysis. Bradford analysis indicated no quantitative protein variation. However, SDS-PAGE shown the mains proteins existent in exudates have the Mr range from 15 up to 50 kDa. The preliminary studies revealed many alterations between protein profiles of control and treated plants. Among these ones, the most highlighted was the occurrence of a 15 kDa protein, only present in exudates from drying stressed plants.

Financed by: FACEPE and CNPq.