

**PARTIAL CHARACTERIZATION OF FROND AND RHIZOME LECTINS FROM
*Microgramma vacciniifolia***

Santana, G. M. S.¹; Albuquerque, L. P.¹; Coelho, L. C. B. B.¹; Paiva, P. M. G.¹

¹Depto. de Bioquímica, Centro de Ciências Biológicas, Universidade Federal de Pernambuco, Pernambuco, Brazil

Lectins constitute a class of proteins that bind reversibly to saccharide moieties with specificity. The aim of this work was the partial characterization of *Microgramma vacciniifolia* lectins. Hemagglutinating activity (HA) was isolated by saline extraction (10% w/v) and ammonium sulphate precipitation (60%). The 0-60% fractions to frond (MvFL) and rhizome (MvRL) lectins were evaluated with rabbit and human erythrocytes; interaction of lectins on agarose gel was also analyzed. HA assay was made in the presence of carbohydrates or ions, as well as at different temperatures and pH values. MvFL and MvRL were submitted to polyacrylamide gel electrophoresis (PAGE) for native and denatured proteins (SDS-PAGE). The highest specific HA was detected with human erythrocytes, types O (MvFL) and A (MvRL). Both lectins showed activity at acidic pH and were thermostable, inhibited by glycoproteins and stimulated with Ca²⁺. MvFL and MyRL had different electrophoretic profiles on SDS-PAGE and both were resolved as an unique protein band on PAGE for acidic protein. Diffusion assay revealed no precipitation lines. In conclusion, different lectins were identified in tissues of *M. vacciniifolia*: MyFL and MyRL did not interact on agarose gel diffusion assay .

Supported by: FACEPE, CNPq.

Key words: lectin, *Microgramma vacciniifolia*, frond, rhizome.