Enzyme Activity and Total Protein in Tissues of *Bauhinia cheilantha* (bong.) Steud Seedling

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*Bauhinia cheilantha* (Bong.) Steud. commonly known as mororó or pata-de-vaca, is a common leguminous plant in the *Caatinga*, which is the principal ecosystem in Brazil’s semi-arid regions. The specie has a socioeconomic importance due to its fodder and medicinal value. The purpose of this study was to analyze the activity of proteolytic, amylolytic and peroxidase enzymes in *Bauhinia cheilantha* (Bong.) Steud seedling. The seeds used in this work were collected in the Graça city - Ceará – Brazil. The seeds were sown and then submitted to germination under laboratory conditions. Then, 33 days after sown, roots, epicotyls, leaf and cotyledon were collected and separate for protein isolation. The proteins were obtained by sodium phosphate buffer (100 mM, pH 6.7, NaCl 0.15 M, polyvinylpyrrolidone 1%; tissue to buffer ratio 1:5 [w/v]) in ice bath for 10 minutes, followed by filtration and centrifugation (10,000 xg for 15 minutes; 4 °C). After, the precipitate was removed and the supernatant was used in enzymatic analyses and protein quantification. The protein quantification was determined by Bradford method. The enzyme activities of supernatant were detected by zymography. The Protein analyses showed higher protein concentration in cotyledon (6.175 mg/g) and leafs (4.650 mg/g), in comparison to epicotyls (1.560 mg/g) and roots (1.132 mg/g). All tissues analyzed showed activity of proteolytic, amylolytic and peroxidase enzymes. *B. cheilantha* seedling demonstrated proteolytic, amylolytic and peroxidase activity, but different protein concentrations per tissue.

**Word Keys:** *Bauhinia cheilantha*, Seedling, Enzymatic analysis

Supported by: CNPq.