PROXIMATE ANALYSIS AND ANTINUTRICIONAL FACTORS OF Caesalpinia ferrea Mart. Ex. Tul. (LEGUMINOSAE:CAESALPINIOIDEAE) SEEDS

<u>Oliveira, C.C.</u>¹, Cavalheiro, M.G.¹, Farias, D.F.¹, Rocha-Bezerra, L.C.B.¹, Sousa, N.M.¹, Maia, A.A.B.², Vasconcelos, I.M.², Carvalho, A.F.U.¹.

¹Departamento de Biologia, Universidade Federal do Ceará, Ceará, Brazil; ²Departamento de Bioquímica e Biologia Molecular, Universidade Federal do Ceará, Ceará, Brazil.

Many species of the Leguminosae have been studied as alternative sources of plants protein to be use in animal/human nutrition. However, despite their high content of proteins, these species contain antinutritional compounds which might limit their utilization. This study aimed to analyse the proximal composition and the antinutritional factors of *C. ferrea* seeds. The results showed high protein contents ($42.71 \pm 1.62g \ 100g^{-1}$), even greater than those decribed for soybean (*Glicyne max*) (33.10 to $47.60 \ g \ 100g^{-1}$), according to Campello (2002). The contents of lipids, ash and dietary fiber were 7.18 ± 0.08 , 5.60 ± 0.22 and $37.66 \pm 0.83g \ 100g^{-1}$, respectively. The trypsin inhibition activity was $27.35 \pm 0.19mgTI \ g^{-1}$ which is much lower thant that reported for soybeans ($30.6 \ to \ 62.5mgTI \ g^{-1}$) according to Vasconcelos *et al.* (2001). Hemagglutinating activity against rat erythrocytes and tannins were not detected. In spite of reasonable levels of trypsin inhibitors in these seeds they show great potential for utilization since these antinutrients can be inactivated by thermal treatment.

Supported by: CNPq. Keywords: proximal composition, antinutritional factors, seeds, *Caesalpinia ferrea*