POLIPHENOLS CONTENT IN RAW COWPEA (Vigna unguiculata L. Walp.)

Daniela S. Viana, <u>Lucia M. J. de Carvalho*</u>, Elenilda J. Pereira, José L. V. de Carvalho, Marilia R. Nutti, Maurisrael M. Rocha, Mariana C. Nunes.

*Rio de Janeiro Federal University – Pharmacy College – Avenida Carlos Chagas Filho, 373 – bloco L, sala 17 – Laboratório de Tecnologia e Análise Instrumental de Alimentos, Rio de Janeiro, Brazil.

Known in the Brazilian Northeast as "cowpea" or "string bean", is an important crop in this region and considered an alternative source of income and staplefood for the population. In the state of Paraiba, the cowpea is grown in almost all micro regions, where it holds 75% of areas cultivated with beans. Thus, exerts effective participation in the diet of the population, constitute a good source of protein and carbohydrates at low cost. Beans contain antinutritional factors that have adverse and beneficial effects for health. Among them, polyphenols are the main contributors to the low digestibility of the beans in humans. The aim of this study was to determine the content of polyphenols in different cultivars of cowpea (BRS Xiquexique, BRS Tumucumaque and BRS Aracê). The quantification of total polyphenols was performed using the Folin Ciocalteau method using the gallic acid as standard. The results showed that in 100 g of the raw cowpea total polyphenol content was 442 mg of gallic acid (GA) in BRS Aracê, while BRS Xiquexique and Tumucumaque had lower levels, 304 and 382 mg AG, respectively. These values are higher than in common beans (*Phaseolus vulgaris*) found previously by others researchers (204 mg and 211 mg AG). It is concluded that the analyzed cowpea cultivars had a good content of phenolic compounds when compared to another bean cultivar.