

ANTINUTRITIONAL FACTORS OF TEN SEEDS FROM THE FLORA OF CEARÁ STATE, BRAZIL

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Systematic studies have revealed the potential of several native species as new food sources considering their adequate proximal composition and the content of toxic and antinutritional factors which may be responsible for adverse physiological effects or decrease the bioavailability of nutrients. The aim of this work is to analyse the antinutritional factors (trypsin inhibitors, tannins and hemagglutinating activity) of ten seeds from the flora of Ceará State, Brazil. The results showed that the trypsin inhibition activity varied from 3.64 to 27.35mgTI g⁻¹. *Caesalpinia ferrea* (27.35 ± 0.19mgTI g⁻¹) *Dimorphandra gardneriana* (25.75 ± 0.18mgTI g⁻¹) and *Enterolobium contortisiliquum* (26.19 ± 0.05mgTI g⁻¹) were the species with the greatest concentrations of trypsin inhibitors. Nevertheless, these values are lower than those registered for soybeans (30.6 to 62.5mgTI g⁻¹) according to Vasconcelos et al. (2001). Tannins were detected only in three seeds: *Caesalpinia bracteosa* (0.62 ± 0.26g 100g⁻¹), *Hymenaea courbaril* (1.09 ± 0.06g 100g⁻¹) and *Conarus detersus* (3.27 ± 0.03g 100g⁻¹). The seeds with hemagglutinating activity against rats erythrocytes were *Senna rugosa* (8HU against native blood) and *E. contortisiliquum* (4HU against native and proteases treated-blood). All seeds showed at least one antinutritional factor analyzed, which must be inactivated when nutritional evaluation *in vivo* is done.

Supported by: CNPq.

Keywords: antinutritional factors, trypsin inhibitors, tannins, hemagglutinating activity