

## INHIBITORY AND HEMAGGLUTINATING ACTIVITIES IN AMAZONIAN LEGUMINOUS SEEDS

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This work reports the presence of trypsin inhibitors in *Caesalpinia ferrea* var. *cearensis* (CfTI) and *Swartzia polyphylla* (SpTI). Hemagglutinating activity (AHE) was detected in the *Cedrelinga catenaeformis* (CeCL) and *Peltogyne venosa* (PeVL) species. After saline extraction, dialysis and lyophilization, the crude extracts were fractionated using a Sephadex G-100 column. The fractions were used for inhibitory and AHE determination, sugar inhibition and EDTA assays. Bovine trypsin and DL-BAPNA were used for enzymatic assay and AHE was detected using rat erythrocyte suspension (4%). Trypsin residual activity was 17% and 47% after incubation with CfTI (5µg) and SpTI (20µg), respectively. CeCL AHE was inhibited by glucose, sucrose, lactose, galactose, manose, fructose and maltose at a minimum concentration of 0.024mM, in contrast to PeVL, which showed no inhibition by these sugars. These results suggest the occurrence of lectins in these species. EDTA inhibited the hemagglutinating activity of CeCL and PeVL at a final concentrations of 3.125mM and 0.024mM, respectively. In conclusion, the species with inhibitory activity showed no AHE and the species exhibiting AHE revealed no inhibitory activity. Furthermore, this study could contribute to the characterization of new proteins and aggregate value to the non-wood potentiality of Amazon forest products.

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