CFELL: A LECTIN PURIFIED FROM LEAF EXTRACT OF CAESALPINIA FERREA

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Lectins are proteins that bind carbohydrates specifically and reversibly; these proteins have been used in biological and medicinal investigations. *Caesalpinia ferrea* is a legume mainly distributed in the North and Northeast regions of Brazil. Different species of *Caesalpinia* are used in popular medicine, a justification to isolate and purify lectins from the genus. *C. ferrea* leaf lectin (CfeLL) was purified from the extract prepared in citrate phosphate buffer, pH 6.5, and cromatographed on chitin colunm; CfeLL was eluted with 1.0 M acetic acid (pH 4.0). Hemagglutinating activity (HA) was made with different erythrocytes and glycoproteins, as well as temperatures (30-100°C, 30 min). CfeLL HA was partially inibited by glycoproteins (fetuin, rabbit an fetal serum). Polyacrylamide gel electrophoresis identified CfeLL as a basic protein. In conclusion, CfeLL was purified from leaf extract in chitin column; the thermoresistant and basic protein showed potential antimicrobial effect.

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