LECTIN ACCUMULATES BUT NOT PROTEINASE INHIBITORS IN MECHANICALLY WOUNDED LEAVES OF IPOMOEA ASARIFOLIA

<u>Hévila O. Salles</u>¹, Ivna R. S. Melo², Lúcia Betânia S. Andrade³, Ilka M. Vasconcelos², José Tadeu A. Oliveira²

¹Embrapa Caprinos, Sobral, Ceará, Brazil; ²Departamento de Bioquímica e Biologia Molecular, Universidade Federal do Ceará, Fortaleza, Brazil; ³Universidade Estadual Vale do Acaraú, Biologia, Sobral, Ceará, Brazil.

Plant proteinase inhibitors and lectin are usually expressed in response to herbivore insects, pathogens and wounding. In this study, mechanical injury was used aiming to induce the expression of these proteins in leaves of *Ipomoea asarifolia*. Excised leaves were mechanically injured (6 mm - cuttings), maintained at 25 °C, in darkness, under humid atmosphere, and collected at 0, 24, 48, 72 and 96 hours after treatment. Leaf proteins were extracted (1:3, m/v) in 25 mM Tris-HCl, pH 7.5, containing 3% PVPP and 5 mM ascorbic acid. Then, the extracts were assayed for lectin, papain and trypsin inhibitory activity during the times described above. Significant time-course increase in lectin activity in the extracts of wounded leaves was observed whereas the trypsin and papain inhibitory activities decreased as compared to uninjured controls. These results suggest a possible involvement of the lectin but not the trypsin and papain inhibitors on the protection of *Ipomea asarifolia* against mechanical injury.

Key words: *Ipomoea asarifolia*, wound-response, proteinase inhibitors, lectin.

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