

PLANT LECTINS

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Lectins are carbohydrate recognition proteins. The Laboratório de Glicoproteínas of UFPE has been involved on studies of purification, characterization, biotechnological applications and biological activities of plant lectins. Vegetal tissues were chosen due to the broad availability and frequent use by people as herbal remedy or water treatment. Special attention has been driven to evaluate tissues as sources of lectin multiple molecular forms with the purpose to increase the potential use of these versatile proteins. The studies with partially or highly purified plant lectins revealed coagulant, insecticide, antimicrobial, antitumoral and moluscicidal activities. IgG against lectins has been developed and used to evaluate lectin immunoreactivity/immunolocalization. Lectins have also demonstrated a potential as histochemical tools. Plant lectins when immobilized on distinct matrices provided selective affinity supports for glycoconjugate isolation or electrochemical systems to evaluate carbohydrate-lectin complex formation.

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