



A REVIEW :

Plant lectins and their insecticidal potential

■ YARASI BHARATHI

ARTICLE CHRONICLE :

Received :

15.07.2017;

Accepted :

30.07.2017

SUMMARY : Lectins are a group of sugar-binding proteins that recognize specific carbohydrate structures and agglutinate a variety of animal cells by binding to cell-surface glycoproteins and glycolipids. Many biological processes in nature are triggered and nurtured by protein carbohydrate recognition and protein-protein interactions. Lectins mediate cell-cell and host-pathogen interactions through the specific recognition of carbohydrates present on the cell surface. As they occur in all classes and families of organisms, significant amounts of lectins are contained in most foodstuffs. Moreover, lectins are generally resistant to heat denaturation and gut proteolysis, and thereby affect the entire digestive tract and its bacterial population, thus have an impact on body metabolism and health. Consequently, lectins are important physiologically active ingredients and a source of potent exogenous biological signals in the diet.

How to cite this article : Bharathi, Yarasi (2017). Plant lectins and their insecticidal potential. *Agric. Update*, 12(TECHSEAR-5) : 1465-1474; DOI: 10.15740/HAS/AU/12.TECHSEAR(5)2017/1465-1474.

KEY WORDS :

Plant lectins,
Merolectins,
Hololectins

Author for correspondence :

YARASI BHARATHI

Regional Sugarcane and
Rice Research Station
(PJ TSAU), RUDRUR
(TELANGANA) INDIA