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植物螯合肽功能的研究进展

(华南理工大学生物科学与工程学院,广东 广州 510006)

Research Advances on Phytochelatins Functions

(School of Biological Science and Bioengineering,South China University of Technology,Guangzhou 510006,China)

- 摘要
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全文: PDF (512 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 植物螯合肽(phytochelatins PC)是由重金属离子诱导而在植物体内合成的一类小分子多肽,它是谷胱甘肽(GSH)衍生的金属离子结合肽.PC能够螯合重金属,从而起到对重金属解毒的作用,它是镉离子的主要解毒物质.因此,提高PC含量是解决土壤重金属污染的重要途径之一.就PC结构、合成与调节以及PC最主要的重金属解毒功能进行了综述,同时展望了PC研究的前景,以期为土壤重金属污染的植物修复技术提供科学指导.

关键词: 植物螯合肽(PC) 重金属解毒功能 植物修复

Abstract: Phytochelatins(PC),derived from glutathione,is a kind of posttranslationally synthesized peptides.It plays a pivotal role in heavy metal ions detoxication by chelating heavy metal ions in living bodies and is the major detoxication substance of cadmium tolerance.So,increasing content of PC is one of important methods to resolve pollution problem induced by heavy metal.In order to provide a scientific approach for phytoremediation to heave metal pollution,this article reviews the structure,synthesis,detoxication function and orther functions of PC,and prospects the further research of PC.

Key words: phytochelatins(PC) detoxication function phytoremediation

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