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## Patent Search

Invention Title	REMOVAL OF CADMIUM USING PROBIOTIC GLYCOLIPEPTIDES AND METHOD THEREOF
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### Abstract:

ABSTRACT REMOVAL OF CADMIUM USING PROBIOTIC GLYCOLIPEPTIDES AND METHOD THEREOF The present invention relates to removal of Cadmium using probiotic Glycolipopeptides and method thereof. The present invention is intended to remove the cadmium concentration from the spinach surface using a probiotic glycolipopeptide aloe gel. These glycolipopeptides were produced and recovered using non-solvent approach from Probiotic L. pentosus. The present study has various invention claims a novelty clauses such as preparation of base using aloe gel, removal of cadmium up to 97 % in soaking method, non-chemical recovery methods and thereof. The present study is also able to demonstrate the reduction of post-harvest losses in form physical and microbiological spoilages. Present formulation is stable at room temperature and effective same degree up to 3 months of storage. It was also evident that, such formulation also contributed to minimize the use of excess water during washing and splashing.

### Complete Specification

#### DESC:FIELD OF INVENTION:

The present invention relates to develop a novel method for removal of Cadmium using probiotic Glycolipopeptides. The present invention more particularly relates to a formulation containing glycolipopeptides from probiotic bacteria to be used for the removal of cadmium from spinach.

#### BACKGROUND OF THE INVENTION

Spinach foliar surface is commonly contaminated with cadmium (Cd). Cadmium is a rare contaminant but highly toxic element, and consumption of cadmium contaminated spinach is a major source of chronic human problems. The removal of cadmium from spinach surfaces is quite difficult and problem some.

There have been numerous prior-art also available in the public domain and few of them have been mentioned:

US20160193260A1 discloses the new strain Lactobacillus pentosus CECT 7504 and compositions and products comprising said strain and uses in the prevention and/or treatment of candidiasis (oral, intestinal and vaginal) and of bacterial vaginosis.

KR101915463B1 discloses a novel Lactobacillus pentosus HB-8023 strain, and a culture, a probiotic preparation, a pharmaceutical composition, a health functional food composition, and a cosmetic composition including the same. The novel Lactobacillus pentosus HB-8023 strain separated and identified from Jeju tangerine kimchi has excellent acid resistance, biliary resistance and lactic acid production ability, and thereby can be used as a probiotic preparation. Also, the novel Lactobacillus pentosus HB-8023 strain has the antimicrobial activity against various pathogenic bacteria and the expression inhibitory ability for inflammatory cytokines, and thus can be used as an active ingredient of the pharmaceutical composition and food composition.

US9451781B2 discloses a novel strain of cadmium-removing Lactobacillus plantarum bacterium CCFM8610 which has a good tolerance to acidic environments.

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