



新式亞種醋酸菌 *Gluconacetobacter intermedius* FST213-1 於細菌性纖維素生產之應用

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簡歷： 2010/08 至 2011/07 博士後研究員，美國亞歷桑納大學化工暨環境研究所
2011/07 至 2014~ 專任合聘教授，國立台灣大學生物科技所/食品科技所



市場及需求：

細菌性纖維於台灣主要用以食品加工、美容及生醫敷材等用途。

技術摘要(含成果)：

由發酵產品中，獲得一可生產細菌性纖維之菌種，經過菌種鑑定後發現，其種別為 *Gluconacetobacter intermedius*，經比對及生化特性鑑定後，確認為未被發現之亞種，其生產細菌性纖維之能力與產業常用菌種 *Gluconacetobacter hansenii* 23769 相比，產量約可高 2.5 倍，適合於工業上用以做為生產細菌性纖維之菌種。

優勢：

具有細菌性纖維高產量之優勢

競爭產品：

Gluconacetobacter hansenii 23769

專利現況：

聯絡方式(請不用填)： 臺大產學合作總中心

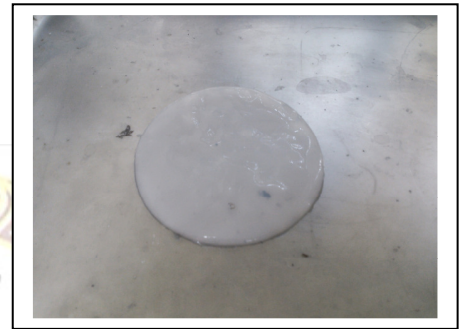
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Application of new subspecies *Gluconacetobacter intermedius* FST213-1 for producing bacterial cellulose.

PI : Prof. Kuan-Chen Cheng

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Institute of Biotechnology, National Taiwan University.



Experience:

2010/08-2011/07 Post doctor, Research Associate,
Chemical and Environmental Engineering, The
University of Arizona, Tucson, AZ.

2011/07~ Assistant Professor, Graduate Institute of Food Science & Technology/
Institute of Biotechnology, National Taiwan University, Taipei, Taiwan.

Market Needs:

Application of bacterial cellulose is major used as wound dressing in wound healing, as food additive in food processing.

Our Technology:

A bacterial cellulose (BCel) producing strain is isolated from fermentation product, and identified as new subspecies *Gluconacetobacter intermedius* FST213-1 (*G. intermedius* FST213-1). *G. intermedius* FST213-1 exhibits higher BCEL productivity (2.5 fold) compared to *Gluconacetobacter hansenii* 23769, which is used to produce BCEL in industrial level. Therefore, *G. intermedius* FST213-1 is suitable as a potential BCEL producing strain.

Strength:

G. intermedius FST213-1 exhibits higher BCEL productivity.

Competing Products:

Gluconacetobacter hansenii 23769.

Intellectual Properties:

Our research group are well-experimented in production and application of bacterial cellulose. We also published various bacterial cellulose related papers in international journal.

Contact (do not need to fill out):

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