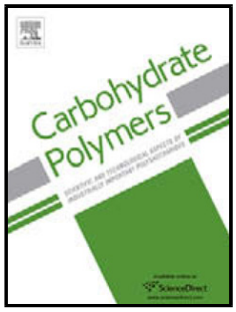


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PII: S0144-8617(18)30874-9
DOI: https://doi.org/10.1016/j.carbpol.2018.07.084
Reference: CARP 13884

To appear in:

Received date: 29-3-2018
Revised date: 13-7-2018
Accepted date: 27-7-2018

Please cite this article as: Perez JJ, Francois NJ, Maroniche GA, Borrajo MP, Pereyra MA, Creus CM, A novel, green, low-cost chitosan-starch hydrogel as potential delivery system for plant growth-promoting bacteria, *Carbohydrate Polymers* (2018), https://doi.org/10.1016/j.carbpol.2018.07.084

# A novel, green, low-cost chitosan-starch hydrogel as potential delivery system for plant growth-promoting bacteria

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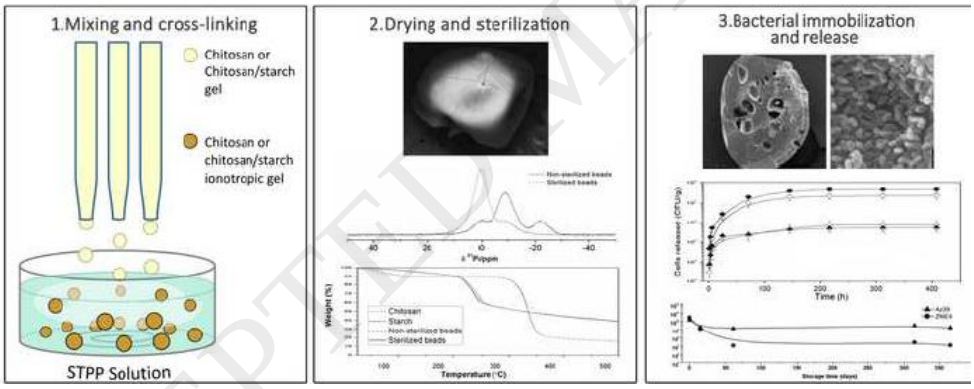
## Graphical abstract




## Highlights

- A biodegradable biopolymeric matrix of chitosan-starch was developed.
- Steam sterilization of the matrix increased its swelling equilibrium.
- Macrobeads supported the survival of bacteria at high levels for more than a year.
- Bacterial release from macrospheres was gradual both in water and soil.
- The developed material showed potential as a support for biofertilizers.