

## Accepted Manuscript

Title: Optimization of high purity chitin and chitosan production from *Illex argentinus* pens by a combination of enzymatic and chemical processes

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PII: S0144-8617(17)30708-7  
DOI: <http://dx.doi.org/doi:10.1016/j.carbpol.2017.06.070>  
Reference: CARP 12458

To appear in:

Received date: 15-5-2017  
Revised date: 13-6-2017  
Accepted date: 19-6-2017

Please cite this article as: Vázquez, José Antonio., Noriega, Diana., Ramos, Patricia., Valcarcel, Jesus., Novoa-Carballal, Ramon., Pastrana, Lorenzo., Reis, Rui L., & Pérez-Martín, Ricardo I., Optimization of high purity chitin and chitosan production from *Illex argentinus* pens by a combination of enzymatic and chemical processes. *Carbohydrate Polymers* <http://dx.doi.org/10.1016/j.carbpol.2017.06.070>

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## Optimization of high purity chitin and chitosan production from *Illex argentinus pens* by a combination of enzymatic and chemical processes

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### Highlights

- Production of chitin and chitosan from *Illex argentinus pens* was optimised.
- Optimal conditions for chemical and enzymatic proteolysis of squid pen were defined.
- Alkaline deacetylation of chitin was subsequently optimized for chitosan production.
- Best values for chitosan were 61.0-63.7% of NaOH and 14.9-16.4 h of deacetylation.
- Molecular weights of chitosan ranged from 143 to 339 kDa.

### ABSTRACT

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