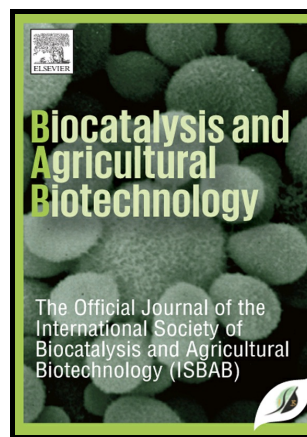


## Author's Accepted Manuscript

Synthesis of  $\alpha$ -chloroacetophenones with  $\text{NH}_4\text{Cl/Oxone}^{\text{®}}$  *in situ* followed by bioreduction with whole cells of marine-derived fungi

Aline T.do B. Morais, Irlon M. Ferreira, David E.Q. Jimenez, André L.M. Porto



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**Synthesis of  $\alpha$ -chloroacetophenones with  $\text{NH}_4\text{Cl}/\text{Oxone}^{\text{®}}$  *in situ* followed  
by bioreduction with whole cells of marine-derived fungi**

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**Abstract**

Chiral chlorohydrins are used as intermediates in the synthesis of various compounds with biological activities. This paper reports the synthesis of  $\alpha$ -chloroketones **2a-c** with oxone<sup>®</sup> and  $\text{NH}_4\text{Cl}$  at reflux via 30 min of exposure to microwave irradiation and conventional heating, *in situ*, followed by reduction with whole cells of marine-derived fungi (*Penicillium citrinum* CBMAI 1186, *Mucor racemosus* CBMAI 847, *Aspergillus sydowii* CBMAI 935, *Penicillium raistrickii* CBMAI 931, and *Penicillium oxalicum*

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