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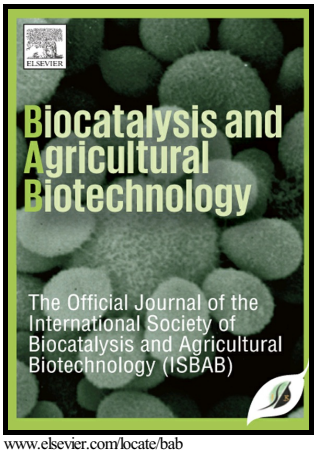


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# Synthesis of α-chloroacetophenones with $NH_4Cl$/Oxone® *in situ* followed by bioreduction with whole cells of marine-derived fungi

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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 α-chloroketones **2a-c** with oxone® and $NH_4Cl$ 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*