



Biotransformations of bicyclic trimethylcyclohexane chloro-, bromo- and iodolactones using fungal strains.

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Streszczenie

Abstract Several fungal strains (*Fusarium*, *Botrytis*, *Beauveria*) were screened for their ability to transform three bicyclic halo- γ -lactones with a trimethylcyclohexane ring. Most of the microorganisms carried out hydrolytic dehalogenation and transformed these lactones into two hydroxy- γ -lactones: cis (–)-2-hydroxy-4,4,6-trimethyl-9-oxabicyclo[4.3.0]nonan-8-one and trans (+)-2-hydroxy-4,4,6-trimethyl-9-oxabicyclo[4.3.0]nonan-8-one. The structures of all substrates and products were established on the basis of their spectral data and X-ray analysis. The method presented offers an alternative route to obtaining hydroxylactones with high enantiomeric excess.

Słowa kluczowe

lactones, biotransformations, hydrolytic, dehalogenation, *fusarium* species

Adres publiczny

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