

Tetrahedron: Asymmetry Vol. 20, No. 4, 2009

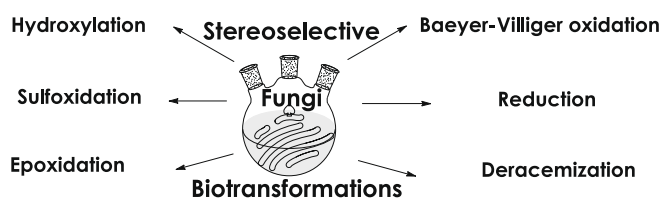
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Report

Stereoselective biotransformations using fungi as biocatalysts

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Keyller Bastos Borges, Warley de Souza Borges, Rosa Durán-Patrón, Mônica Tallarico Pupo*, Pierina Sueli Bonato*, Isidro González Collado*



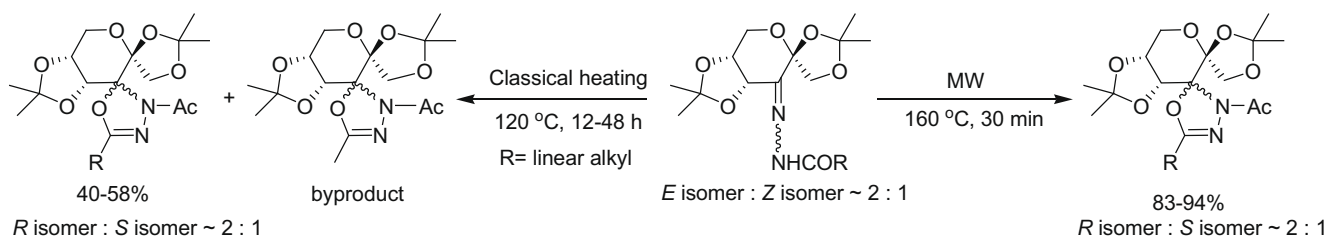
This report reviews the stereoselective reactions mediated by fungi, such as stereoselective hydroxylation, sulfoxidation, epoxidation, Baeyer–Villiger oxidation, deracemization, and stereo- and enantioselective reduction of ketones, published over the period 2000–2007.

Articles

Efficient synthesis of a series of novel fructose-based 3-acetyl-5-alkyl-2,3-dihydro-1,3,4-oxadiazole derivatives and studies of the reaction mechanism

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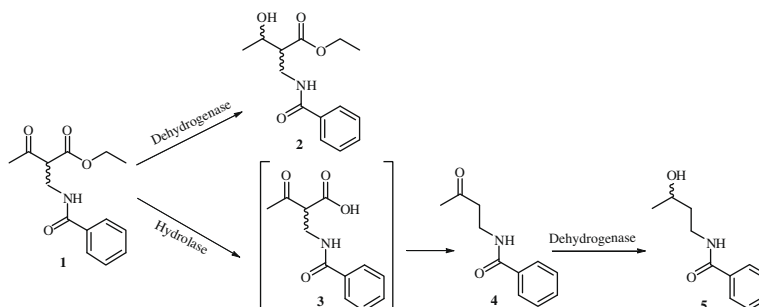
Dong Han, Xiang-Bao Meng, Lin-Na Wang, Hong Liu, Yun Yao, Zhuo Wang, Zhen-Jun Yang, Zhen-Min Liu, Zhong-Jun Li*



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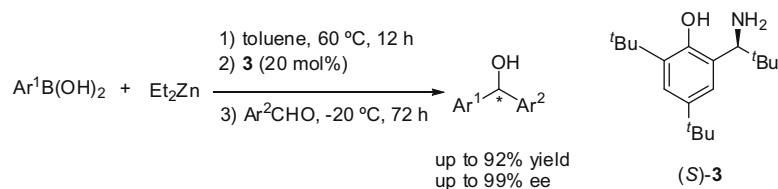
Raffaella Gandolfi*, Edoardo Cesarotti, Francesco Molinari, Diego Romano, Isabella Rimoldi



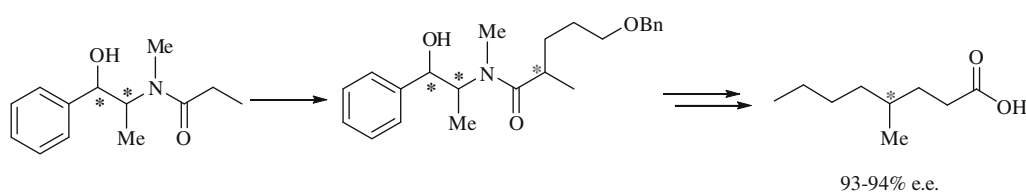
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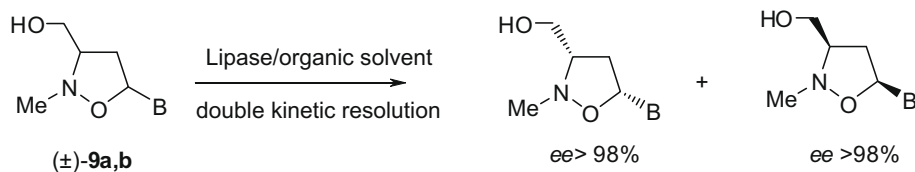
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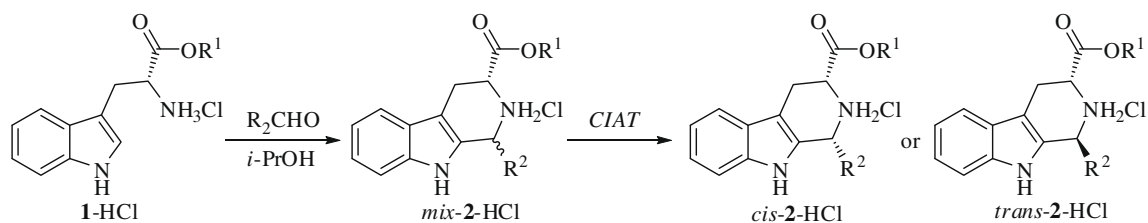
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Caterina Carnovale, Daniela Iannazzo, Giovanni Nicolosi, Anna Piperno*, Claudia Sanfilippo*

B=nucleobase: thymine, (±)-**9a**; cytosine, (±)-**9b****Syntheses of chiral 1,3-disubstituted tetrahydro-β-carbolines via CIAT process: highly stereoselective Pictet–Spengler reaction of D-tryptophan ester hydrochlorides with various aldehydes**

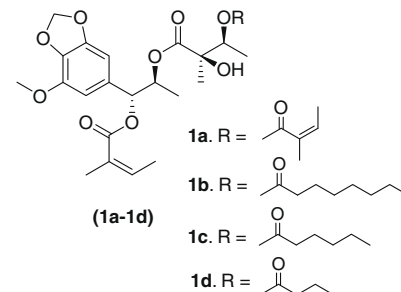
pp 430–439

Sen Xiao, Xia Lu, Xiao-Xin Shi*, Yu Sun, Li-Li Liang, Xin-Hong Yu, Jing Dong

Note: R¹ = Me, Et, *n*-Pr R² = Aryl, Alkyl

The first total synthesis of neohelmanticins A–D, amino derivatives of the 1,2-dihydroxypropane core and biological evaluation pp 440–448

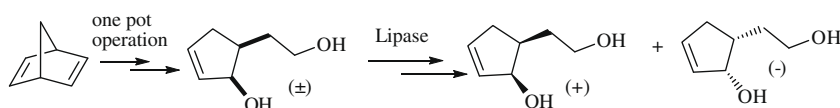
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An efficient synthesis of natural products, neohelmanticins A–D, has been achieved in 15 steps starting from commercially available gallic acid.

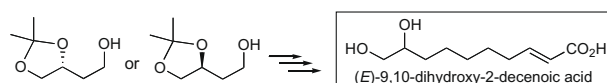
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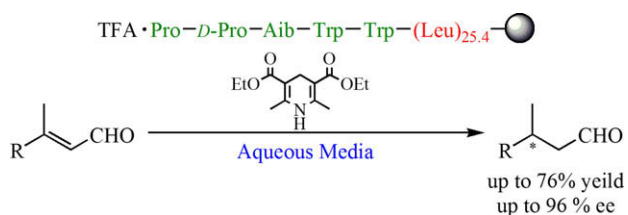
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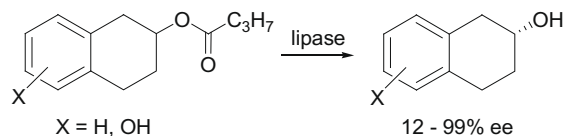
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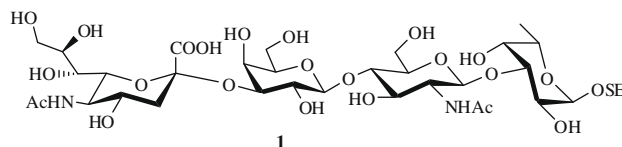
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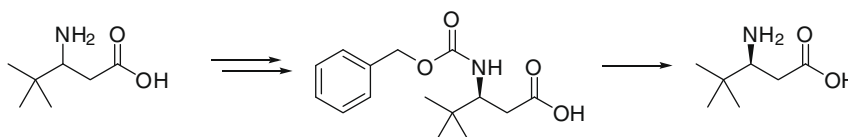
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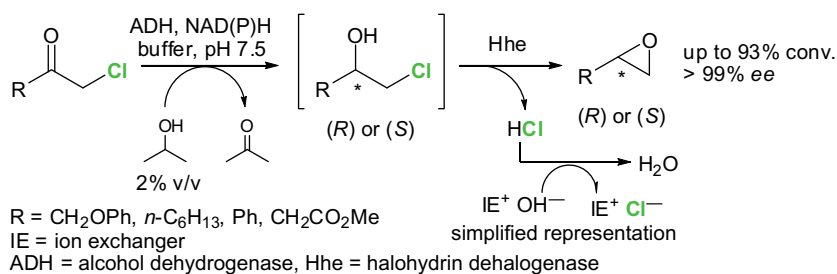
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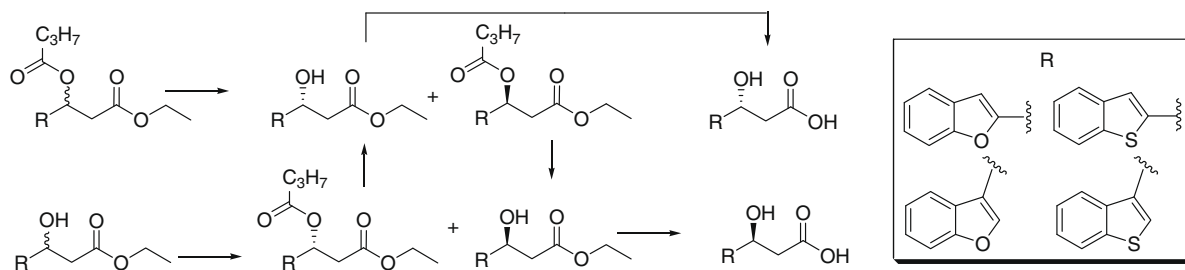
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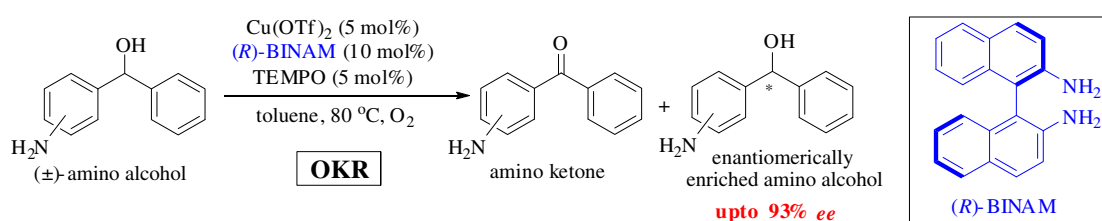


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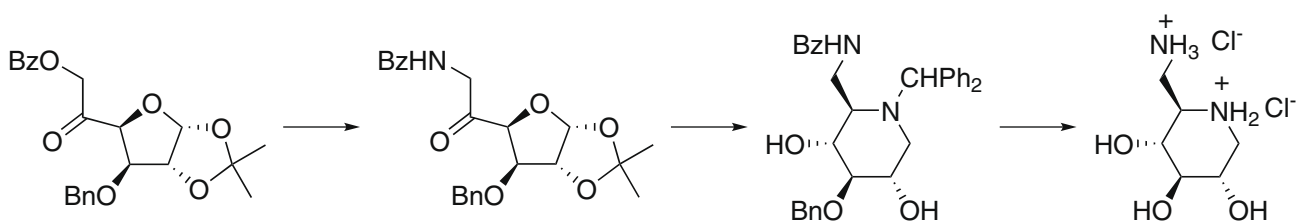
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Sreedevi Mannam, Govindasamy Sekar *



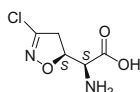
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