

Tetrahedron Symposium-in-Print Number 134

Natural Product Synthesis

Guest editor: Martin Banwell

Research School of Chemistry, The Australian National University, Canberra, Australia

Contents

Announcement: Tetrahedron Symposia-in-Print
Preface

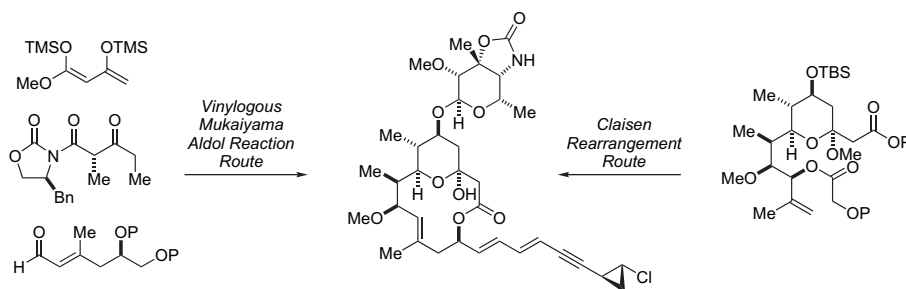
pp 4665–4667
pp 4669–4670

ARTICLES

Enantioselective total synthesis of callipeltoside A: two approaches to the macrolactone fragment

pp 4671–4699

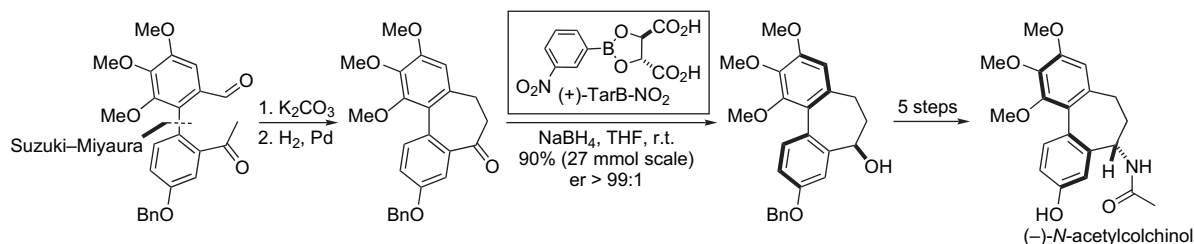
David A. Evans*, Jason D. Burch, Essa Hu, Georg Jaeschke



A synthesis of (aR,7S)-(–)-N-acetylcolchinol and its conjugate with a cyclic RGD peptide

pp 4700–4710

Gilbert Besong, Denis Billen, Indu Dager, Philip Kocienski*, Eric Sliwinski, Lik Ren Tai, F. Thomas Boyle



pp 4711–4717

L-tartrate BDA-protected intermediate **Epipyriculin A**

pp 4718–4735

efomycine M

elaiolide precursor
R = TES or TBS

pp 4736–4757

1: artochamin F

2: artochamin H R = H

3: artochamin I R = Me

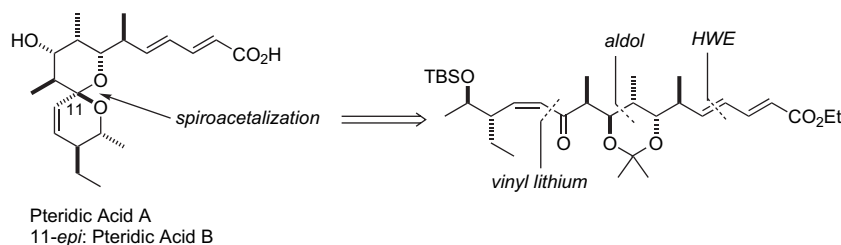
4: artochamin J

pp 4758–4767

Total synthesis of pteridic acids A and B

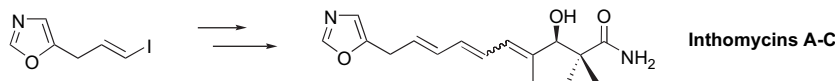
pp 4768–4777

Ian Paterson*, Edward A. Anderson*, Alison D. Findlay, Christopher S. Knappy

**The syntheses of *rac*-inthomycin A, (+)-inthomycin B and (+)-inthomycin C using a unified synthetic approach**

pp 4778–4791

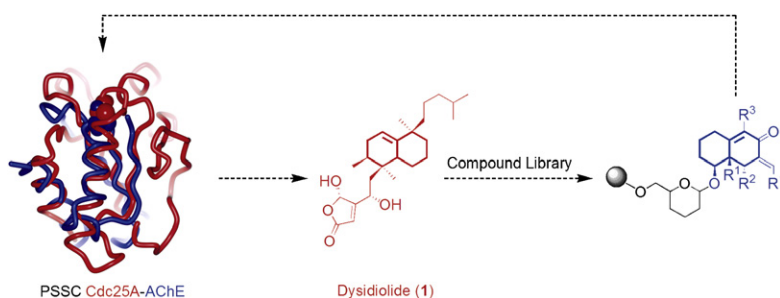
Michael R. Webb, Matthew S. Addie, Catherine M. Crawforth, James W. Dale, Xavier Franci, Mathieu Pizzonero, Craig Donald, Richard J. K. Taylor*

**Synthesis of a dysidiolide-inspired compound library and discovery of acetylcholinesterase inhibitors based on protein structure similarity clustering (PSSC)**

pp 4792–4802

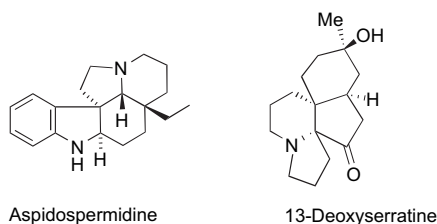
Michael Scheck, Marcus A. Koch, Herbert Waldmann*

Guided by protein structure similarity clustering (PSSC), a 483-member compound library was synthesized based on the decalin core moiety of the naturally occurring Cdc25A (red) inhibitor dysidiolide **1** as 'leitmotif' yielding novel acetylcholinesterase (AChE, blue) inhibitors.

**Amidyls in radical cascades. The total synthesis of (±)-aspidospermidine and (±)-13-deoxyserratine**

pp 4803–4816

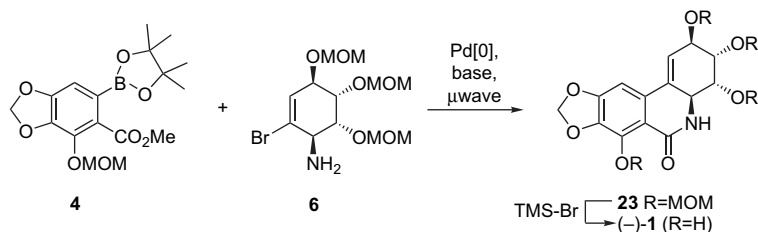
Anne-Claude Callier-Dublanchet, Jérôme Cassayre, Fabien Gagosz, Béatrice Quiclet-Sire, Lisa A. Sharp, Samir Z. Zard*



A chemoenzymatic total synthesis of *ent*-narciclasine

pp 4817–4826

Maria Matveenko, Martin G. Banwell*, Anthony C. Willis

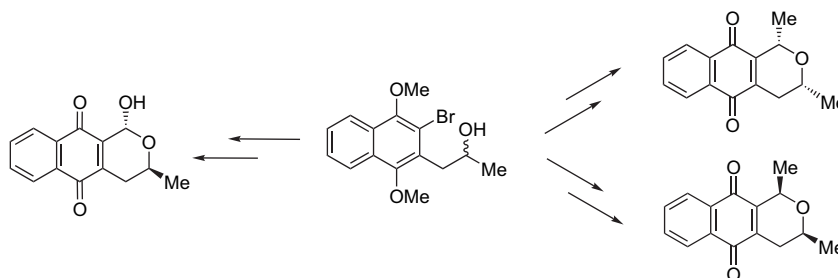


Subjection of compounds **4** and **6** to Suzuki–Miyaura cross-coupling under microwave irradiation conditions affords the phenanthridinone derivative **23** that upon treatment with trimethylsilyl bromide gives *ent*-narciclasine [(-)-**1**].

Chemoenzymatic synthesis of deoxy analogues of the DNA topoisomerase II inhibitor eleutherin and the 3C-protease inhibitor thysanone

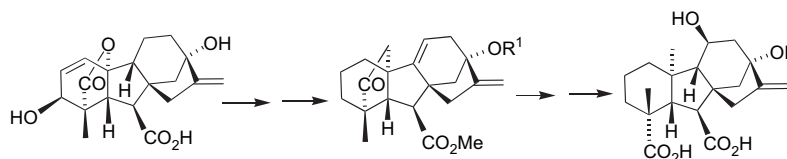
pp 4827–4834

Prabhakar Bachu, Jonathan Sperry, Margaret A. Brimble*

**Confirmation of structure and synthesis of three new 11 β -OH C₂₀ gibberellins from loquat fruit**

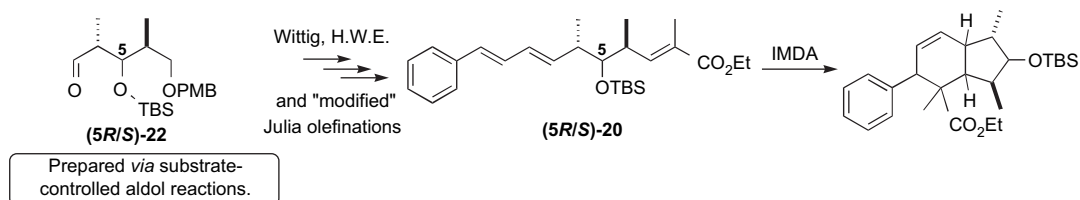
pp 4835–4851

Le Than Phuoc, Lewis N. Mander*, Masaji Koshioka, Naomi Oyama-Okubo, Masayoshi Nakayama, Akiko Ito

**Investigations of the stereoselectivity of the intramolecular Diels–Alder reaction of a spiculoic acid model system**

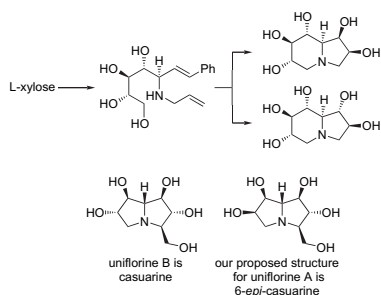
pp 4852–4867

Julia S. Crossman, Michael V. Perkins*

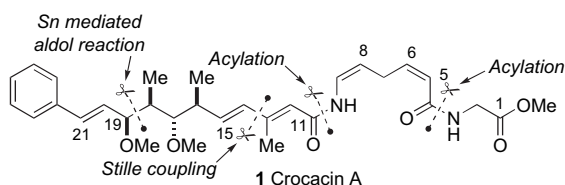


Synthetic and spectroscopic studies on the structures of uniflorines A and B: structural revision to 1,2,6,7-tetrahydroxy-3-hydroxymethylpyrrolizidine alkaloids**pp 4868–4879**

Andrew S. Davis, Thunwadee Ritthiwigrom, Stephen G. Pyne*

**Asymmetric total synthesis of the myxobacteria metabolites crocacin A–D****pp 4880–4895**

John T. Feutrell, Michael J. Lilly, Jonathan M. White, Mark A. Rizzacasa*



*Corresponding author

i+ Supplementary data available via ScienceDirect

COVER

Asymmetric Total Synthesis of the Myxobacteria Metabolites Crocacin A–D. The total syntheses of crocacin A–D are described. The key steps were a syn-aldol reaction followed by anti-reduction to secure the stereotetrad, a Stille cross coupling reaction and acylation of an enecarbamate to form the enamide.

Cover figure designed by Mark Rizzacasa

© 2008 M. A. Rizzacasa. Published by Elsevier Ltd.



Full text of this journal is available, on-line from **ScienceDirect**. Visit www.sciencedirect.com for more information.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts. Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

**ELSEVIER**

ISSN 0040-4020