

## Graphical abstracts

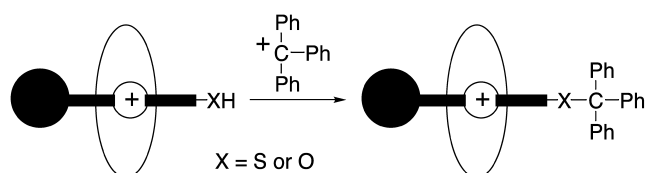
### Synthesis of [2]rotaxanes by tritylative endcapping of in situ formed pseudorotaxanes having thiol or hydroxyl functionality on the axle termini

*Tetrahedron 58 (2002) 6609*

Yoshio Furusho, G. Abraham Rajkumar, Tomoya Oku and Toshikazu Takata\*

Department of Applied Chemistry, Graduate School of Engineering, Osaka Prefecture University, 1-1 Gakuen-cho, Sakai, Osaka 599-8531, Japan

Tritylation of pseudorotaxane having a thiol or hydroxyl functionality at the axle end afforded the corresponding [2]rotaxane in high yield.

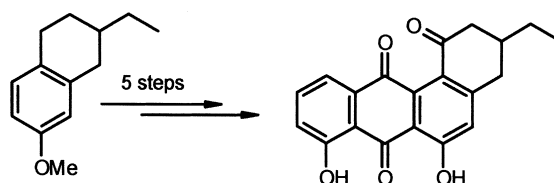


### Total synthesis of (±)-brasiliquinone B

*Tetrahedron 58 (2002) 6615*

Mahesh L. Patil, Hanumant B. Borate, Datta E. Ponde and Vishnu H. Deshpande\*

National Chemical Laboratory, Dr Homi Bhabha Road, Pune 411 008, India



**(±)-Brasiliquinone B**

### Synthesis and biological evaluation of 7-azaindolocarbazoles

*Tetrahedron 58 (2002) 6621*

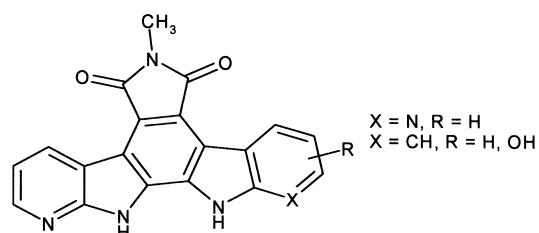
Sylvain Routier,<sup>a,\*</sup> Nathalie Ayerbe,<sup>a</sup> Jean-Yves M  rou, <sup>a</sup> G  rard Coudert,<sup>a</sup> Christian Bailly,<sup>b</sup> Alain Pierr  ,<sup>c</sup> Bruno Pfeiffer,<sup>d</sup> Daniel-Henri Caignard<sup>d</sup> and Pierre Renard<sup>d</sup>

<sup>a</sup>Institut de Chimie Organique et Analytique, Associ   au CNRS, Universit   d'Orl  ans, B.P. 6759, 45067 Orleans Cedex 2, France

<sup>b</sup>INSERM U-524, IRCL, Place de Verdun, 59045 Lille, France

<sup>c</sup>Institut de Recherches SERVIER, 11 rue des moulineaux, 92415 Courbevoie, France

<sup>d</sup>Les Laboratoires Servier, 1 rue Carle Hebert, 92415 Courbevoie Cedex, France



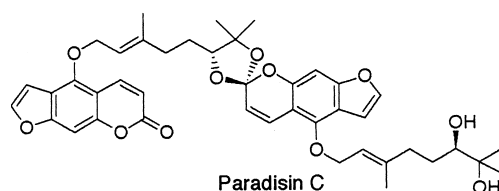
### Paradisins C: a new CYP3A4 inhibitor from grapefruit juice

*Tetrahedron 58 (2002) 6631*

Tomihisa Ohta,<sup>a,\*</sup> Takuro Maruyama,<sup>a</sup> Minoru Nagahashi,<sup>a</sup> Yasuyo Miyamoto,<sup>a</sup> Shinzo Hosoi,<sup>a</sup> Fumiyuki Kiuchi,<sup>a</sup> Yasushi Yamazoe<sup>b</sup> and Sachiko Tsukamoto<sup>a</sup>

<sup>a</sup>Faculty of Pharmaceutical Sciences, Kanazawa University, 13-1 Takara-machi, Kanazawa 920-0934, Japan

<sup>b</sup>Graduate School of Pharmaceutical Sciences, Tohoku University, Aoba Aramaki, Aoba-ku, Sendai 980-8578, Japan

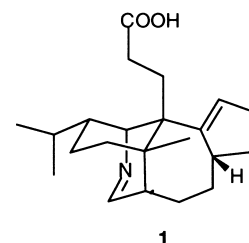


## Daphnezomines L, M, N, and O, new alkaloids from *Daphniphyllum humile*

Hiroshi Morita and Jun'ichi Kobayashi\*

Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan

Four new alkaloids, daphnezomines L–O (1–4), have been isolated from the stems of *Daphniphyllum humile*, and the structures and the relative stereochemistry were elucidated on the basis of spectroscopic data. The structure of daphnezomine L (1) was close to that of a biogenetic intermediate from secodaphnane to daphnane skeletons proposed previously.

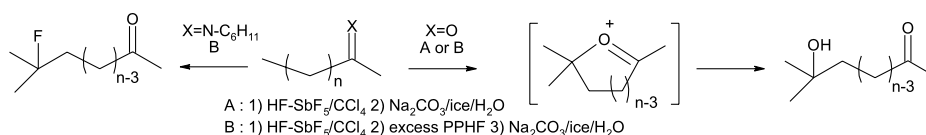


*Tetrahedron* 58 (2002) 6637

## Functionalization of non-activated C–H bonds in ketones and imines with HF/SbF<sub>5</sub>/CCl<sub>4</sub>

Sébastien Thibaudeau, Agnès Martin-Mingot Marie-Paule Jouannetaud\* and J. C. Jacquesy

Laboratoire 'Synthèse et Réactivité des Substances Naturelles', UMR 6514, 40, Avenue du Recteur Pineau, F-86022 Poitiers Cedex, France



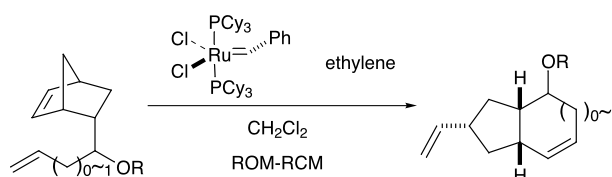
*Tetrahedron* 58 (2002) 6643

## Domino ring opening–ring closing metathesis (ROM–RCM) strategy toward bicyclo[*n*.3.0]cycloalkenes

Hisahiro Hagiwara,<sup>a,\*</sup> Tomoko Katsumi,<sup>a</sup> Satoru Endou,<sup>a</sup> Takashi Hoshi<sup>b</sup> and Toshio Suzuki<sup>b</sup>

<sup>a</sup>Graduate School of Science and Technology, Niigata University, 8050, 2-nocho, Ikarashi, Niigata 950-2181, Japan

<sup>b</sup>Faculty of Engineering, Niigata University, 8050, 2-nocho, Ikarashi, Niigata 950-2181, Japan



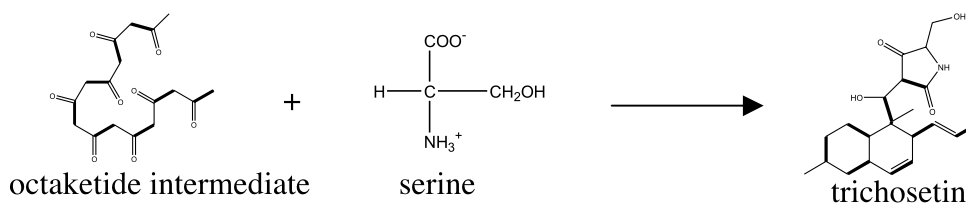
*Tetrahedron* 58 (2002) 6651

## Biosynthetic studies of the tetramic acid antibiotic trichosetin

Eufrocino C. Marfori, Takeshi Bamba, Shin 'ichiro Kajiyama, Ei-ichiro Fukusaki and Akio Kobayashi\*

Department of Biotechnology, Graduate School of Engineering, Osaka University, 2-1 Yamadaoka, Suita-shi, Osaka 565-0871, Japan

Incorporation of <sup>13</sup>C labeled precursors revealed that trichosetin originated from an octaketide intermediate and serine.



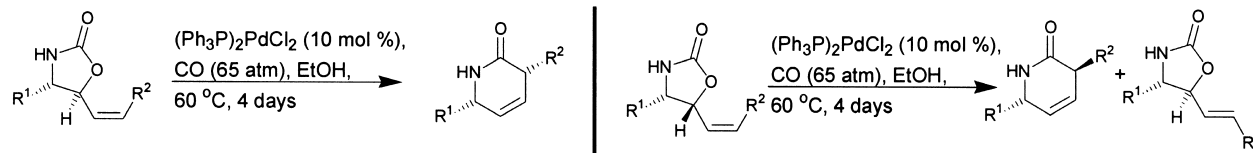
*Tetrahedron* 58 (2002) 6655

## Diastereospecific carbonylation of $\pi$ -allylpalladium complexes to give 3,6-disubstituted 3,6-dihydro-1H-pyridin-2-ones

Julian G. Knight\* and Kirill Tchabanenko

Department of Chemistry, Bedson Building, Newcastle University, Newcastle upon Tyne NE1 7RU, UK

Tetrahedron 58 (2002) 6659



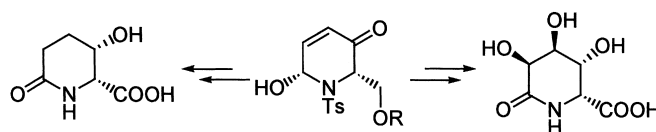
## Asymmetric synthesis of (2R,3S)-3-hydroxypipelic acid $\delta$ -lactam derivatives

Sofia D. Koulocheri,<sup>a</sup> Prokopios Magiatis,<sup>b</sup> Alexios-Leandros Skaltsounis<sup>b</sup> and Serkos A. Haroutounian<sup>a,\*</sup>

<sup>a</sup>Chemistry Laboratory, Agricultural University of Athens, Iera odos 75, Athens 11855, Greece

<sup>b</sup>Department of Pharmacy, University of Athens, Panepistimiopolis Zografou, Athens 15771, Greece

Tetrahedron 58 (2002) 6665



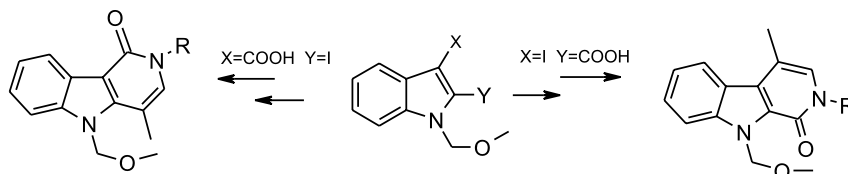
## Intramolecular Heck reaction of 2- and 3-iodoindole derivatives for the synthesis of $\beta$ - and $\gamma$ -carbolinones

Egle M. Beccalli,<sup>a,\*</sup> Gianluigi Brogini,<sup>b</sup> Alessandro Marchesini<sup>a</sup> and Elisabetta Rossi<sup>a</sup>

<sup>a</sup>Istituto di Chimica Organica, Facoltà di Farmacia, Università degli Studi di Milano, via Venezian 21, 20133 Milano, Italy

<sup>b</sup>Dipartimento di Scienze Chimiche, Fisiche e Matematiche dell'Università dell'Insubria, via Lucini 3, 22100 Como, Italy

Tetrahedron 58 (2002) 6673

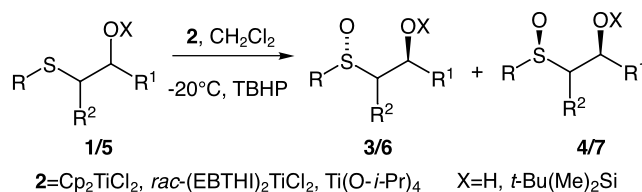


## Diastereoselective oxidation of $\beta$ -hydroxysulfides with TBHP: a comparative study of titanocenes and Ti(O*i*-Pr) $_4$ as catalysts

Giorgio Della Sala, Stefania Labano, Alessandra Lattanzi\* and Arrigo Scettri\*

Dipartimento di Chimica, Università degli Studi di Salerno, 84081 Baronissi, Salerno, Italy

Tetrahedron 58 (2002) 6679

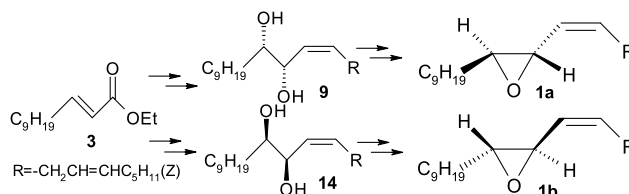


## Asymmetric dihydroxylation and one-pot epoxidation routes to (+)- and (-)-posticlure: a novel *trans*-epoxide as a sex pheromone component of *Orgyia postica* (Walker)

Rodney A. Fernandes and Pradeep Kumar\*

Division of Organic Chemistry: Technology, National Chemical Laboratory, Pune 411008, India

*Tetrahedron* 58 (2002) 6685

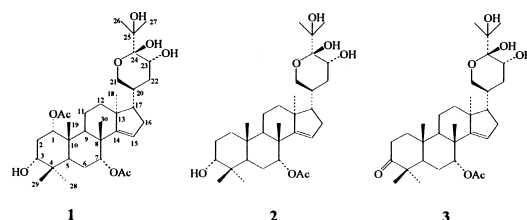


## Three new apo-tirucallols with six-membered hemiacetal from Meliaceae

Xiao-Dong Luo,\* Shao-Hua Wu, Da-Gang Wu Yun-Bao Ma and Shu-Hua Qi

State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, The Chinese Academy of Sciences, 650204 Kunming, Yunnan, People's Republic of China

*Tetrahedron* 58 (2002) 6691



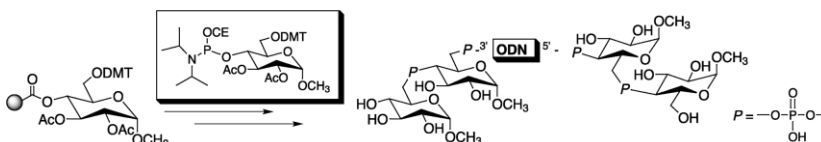
## Solid phase synthesis of oligonucleotides tethered to oligo-glucose phosphate tails

Matteo Adinolfi,<sup>a</sup> Lorenzo De Napoli,<sup>a,\*</sup> Giovanni Di Fabio,<sup>a</sup> Alfonso Iadonisi,<sup>a</sup> Daniela Montesarchio<sup>a</sup> and Gennaro Piccialli<sup>b</sup>

<sup>a</sup>Dipartimento di Chimica Organica e Biochimica, Università degli Studi di Napoli 'Federico II', via Cynthia 4, 80126 Napoli, Italy

<sup>b</sup>Dipartimento di Chimica delle Sostanze Naturali, Università degli Studi di Napoli 'Federico II', via D. Montesano 49, 80131 Napoli, Italy

Oligonucleotides conjugated at both the 3' and 5'-ends with glucose residues, 4,6-linked through a phosphodiester bridge, have been synthesized by sequential addition of a 6-DMT-glucose-4-phosphoramidite building block following a standard automated ODN assembly procedure. Two 3',5'-bis-glycoconjugated 18-mers, designed for antisense experiments, have been prepared and their hybridization properties with a complementary DNA fragment evaluated by UV thermal analysis.



*Tetrahedron* 58 (2002) 6697

## Isolation and stereochemistry of two new alkaloids from *Stemona tuberosa*

Ren-Wang Jiang,<sup>a</sup> Po-Ming Hon,<sup>b</sup> Paul Pui-Hay But,<sup>b</sup> Hoi-Sing Chung,<sup>c</sup> Ge Lin,<sup>c</sup> Wen-Cai Ye<sup>d</sup> and Thomas C. W. Mak<sup>a,\*</sup>

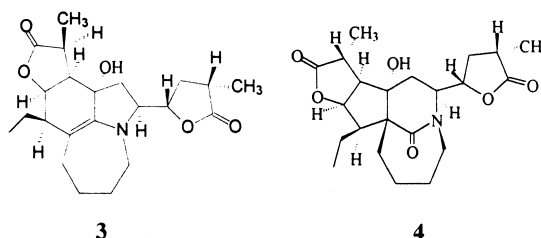
<sup>a</sup>Department of Chemistry, The Chinese University of Hong Kong, Hong Kong SAR, People's Republic of China

<sup>b</sup>Department of Biology and Institute of Chinese Medicine, The Chinese University of Hong Kong, Hong Kong SAR, People's Republic of China

<sup>c</sup>Department of Pharmacology, The Chinese University of Hong Kong, Hong Kong SAR, People's Republic of China

<sup>d</sup>Department of Phytochemistry, China Pharmaceutical University, Nanjing 210009, People's Republic of China

Two new stenine-type alkaloids, neotuberostemonol (3) and neotuberostemoninol (4), along with the known compound neotuberostemonine (2), were isolated from *Stemona tuberosa* Lour.



*Tetrahedron* 58 (2002) 6705

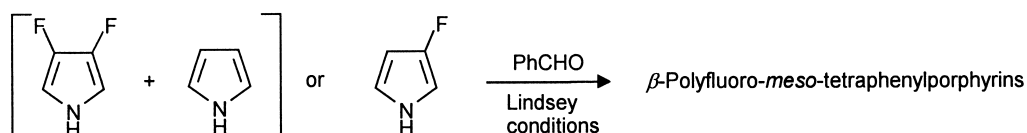
## Synthesis and characterization of partially $\beta$ -fluorinated 5,10,15,20-tetraphenylporphyrins and some derivatives

*Tetrahedron 58 (2002) 6713*

Jacques Leroy,<sup>a,\*</sup> Emmanuel Porhiel<sup>b</sup> and Arnaud Bondon<sup>b</sup>

<sup>a</sup>*Ecole Normale Supérieure, Département de Chimie, UMR CNRS 8640, 24 rue Lhomond, 75231 Paris Cedex 05, France*

<sup>b</sup>*Laboratoire de Chimie Organométallique et Biologique, UMR CNRS 6509, Université de Rennes 1, 35042 Rennes Cedex, France*

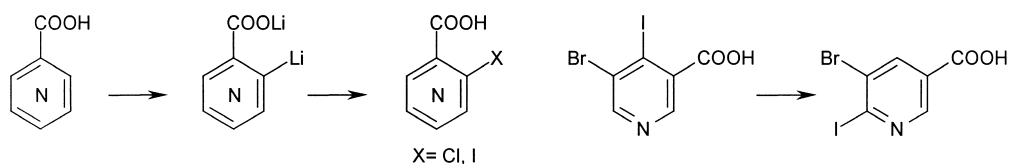


## Directed lithiation of unprotected pyridinecarboxylic acids: syntheses of halo derivatives

*Tetrahedron 58 (2002) 6723*

Jalal Lazaar, Anne-Sophie Rebstock, Florence Mongin,<sup>\*</sup> Alain Godard, François Trécourt Francis Marsais and Guy Quéguiner

*Laboratoire de Chimie Organique Fine et Hétérocyclique, UMR 6014, IRCOF, Place E. Blondel, BP 08, 76131 Mont Saint Aignan Cédex, France*

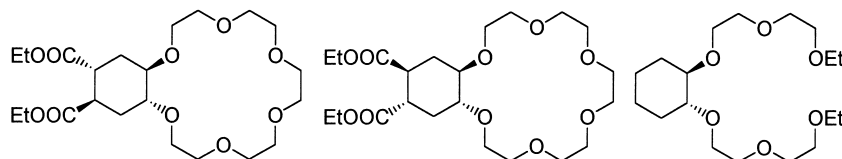


## Crown ethers derived from cyclohexane. Influence of their stereochemistry in complexation and transport

*Tetrahedron 58 (2002) 6729*

Ana M. Costero,<sup>\*</sup> J. Pablo Villarroja, Salvador Gil M. José Aurell and M. Carmen Ramirez de Arellano

*Departamento de Química Orgánica, Universidad de Valencia, Doctor Moliner 50, Vicente Andrés Estellés s/n, 46100-Burjassot, Valencia, Spain*



## Lucilanosides A and B, two novel tetranor-lanostane hexaglycosides from the bulbs of *Chionodoxa luciliae*

*Tetrahedron 58 (2002) 6735*

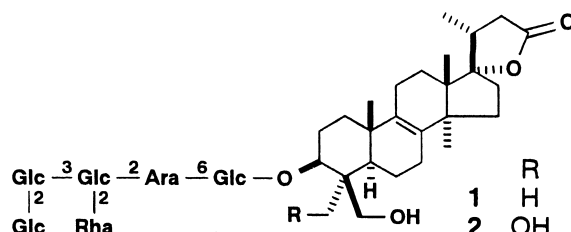
Minpei Kuroda,<sup>a</sup> Yoshihiro Mimaki,<sup>a,\*</sup> Kazutomo Ori,<sup>a</sup> Hiroyuki Koshino,<sup>b</sup> Tomoo Nukada,<sup>b</sup> Hiroshi Sakagami<sup>c</sup> and Yutaka Sashida<sup>a</sup>

<sup>a</sup>*School of Pharmacy, Tokyo University of Pharmacy and Life Science, 1432-1 Horinouchi, Hachioji, Tokyo 192-0392, Japan*

<sup>b</sup>*RIKEN (The Institute of Physical and Chemical Research), 2-1 Hirosawa, Wako, Saitama 351-0198, Japan*

<sup>c</sup>*Department of Dental Pharmacology, Meikai University School of Dentistry, 1-1 Keyaki-dai, Sakado, Saitama 350-0283, Japan*

Two novel hexaglycosides based upon the pentacyclic tetranor-lanostane skeleton with a  $\gamma$ -lactone system, designated as lucilanoside A (**1**) and B (**2**), were isolated from the bulbs of *Chionodoxa luciliae*.

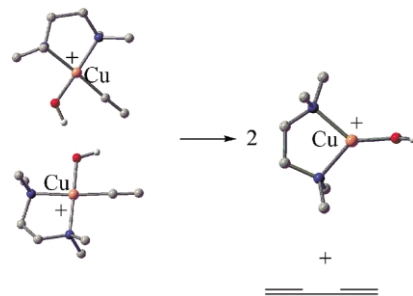


### The Glaser reaction mechanism. A DFT study

Lioudmila Fomina, Blanca Vazquez, Ekaterina Tkatchouk and Serguei Fomine\*

*Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México, Apartado Postal 70-360 CU, Coyoacán, Mexico DF 04510, Mexico*

*Tetrahedron 58 (2002) 6741*



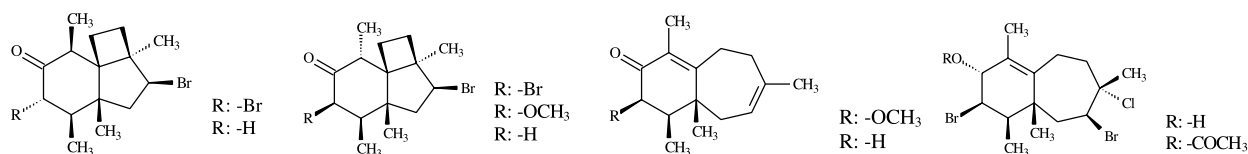
### Halogenated sesquiterpenes from the red alga *Laurencia obtusa*

Dimitra Iliopoulou,<sup>a</sup> Vassilios Roussis,<sup>a</sup> Christophe Pannecouque,<sup>b</sup> Erik De Clercq<sup>b</sup> and Constantinos Vagias<sup>a,\*</sup>

<sup>a</sup>*Department of Pharmacy, Division of Pharmacognosy and Chemistry of Natural Products, University of Athens, Panepistimioupolis Zografou, Athens 15771, Greece*

<sup>b</sup>*Rega Instituut, Katholieke Universiteit Leuven, Minderbroedersstraat 10, B-3000 Leuven, Belgium*

*Tetrahedron 58 (2002) 6749*



### Generation of chiral *N*-acylpyridinium ions by means of silyl triflates and their diastereoselective trapping reactions:

#### formation of *N*-acyldihydropyridines and *N*-acyldihydropyridones

Cornelia E. Hoesl, Markus Maurus, Jörg Pabel, Kurt Polborn and Klaus Th. Wanner\*

*Department Pharmazie, Zentrum für Pharmaforschung, LMU München, Butenandtstr. 5-13, D-81377 München, Germany*

*Tetrahedron 58 (2002) 6757*

