

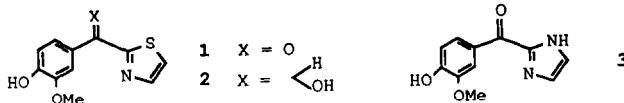
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 29, 1099 (1988)

Thiazole and Imidazole Metabolites from the Ascidian *Aplydium pliciferum*.

Lily Arabshahi and Francis J. Schmitz*
Department of Chemistry, University of Oklahoma, Norman, Oklahoma 73019

Compounds **1-3** were isolated from the Australian ascidian *Aplydium pliciferum*. Structures were established from spectral data. **1** and **2** were synthesized.

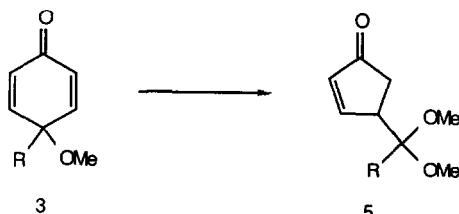


Tetrahedron Lett. 29, 1103 (1988)

PHOTOREARRANGEMENT OF 4-ALKYL-4-ALKOXY-2,5-CYCLOHEXA-DIENONES: SYNTHESIS OF 4-(ALKYLDIMETHOXYMETHYL)-CYCLOPENT-2-EN-1-ONES¹

Arthur G. Taveras, Jr.
Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590

The photorearrangements of **3** afford **5**.

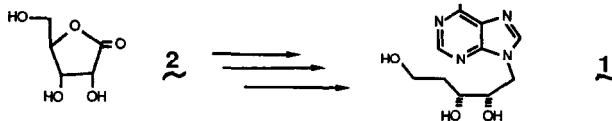


Tetrahedron Lett. 29, 1107 (1988)

SYNTHESIS OF 2'(S), 3'(R),5'-TRIHYDROXYPENTYLADENINE

Chia-Lin J. Wang*, Simon H. Stam, and Joseph M. Salvino
E. I. DuPont de Nemours and Company, Inc., Medical Products Department
Pharmaceutical Research and Development Division, Experimental Station
Wilmington, DE 19898

A synthesis of 2'(S), 3'(R),5'-trihydroxypentyladenine (**1**) from D-ribonic acid γ -lactone (**2**) is described.



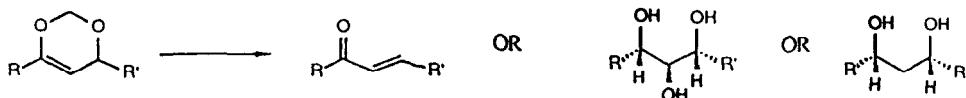
Tetrahedron Lett. 29, 1111 (1988)

SYNTHESIS OF 4,6-DIALKYL-1,3-DIOXINS.

VERSATILE INTERMEDIATES FOR THE PREPARATION OF (E)-ALKENONES, *anti,anti*-1,2,3-TRIOOLS AND *syn*-1,3-DIOLS.

R. L. Funk* and G. L. Bolton, Dept. of Chemistry, University of Nebraska, Lincoln, NE 68588

The dialkyl dioxins are thermally labile (providing enones) and undergo stereoselective hydroboration or hydrogenation reactions to provide *anti,anti*-1,2,3-triools and *syn*-1,3 diols.



COPPER CATALYSED PHENYLATION OF INDOLES BY TRIPHENYL-BISMUTH BIS-TRIFLUOROACETATE

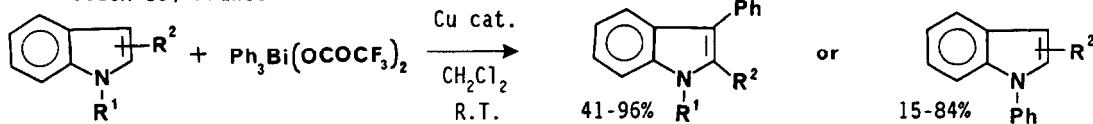
Tetrahedron Lett. 29, 1115 (1988)

Derek H.R. Barton^{a,b}, Jean-Pierre Finet^{a,c}, and Jamal Khamsi^{a,b}

a. Institut de Chimie des Substances Naturelles, C.N.R.S., 91198 Gif-sur-Yvette, France

b. Department of Chemistry, Texas A&M University, College Station, Texas 77843, U.S.A.

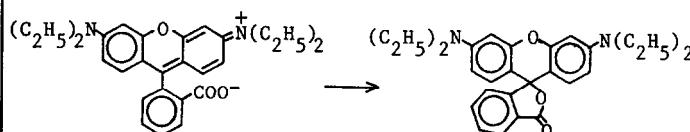
c. Laboratoire de Chimie Organique B, Faculté des Sciences, St. Jérôme, 13397 Marseille Cedex 13, France



ERYTHROMYCIN AS A SUPRAMOLECULAR RECEPTOR

Mónica Barra and Rita H. de Rossi*

Instituto de Investigaciones en Físico-Química Orgánica de Córdoba (INFIQC), Dpto. de Química Orgánica, Facultad de Cs. Químicas, U.N.C., Suc. 16, (5016) - Córdoba - ARGENTINA -



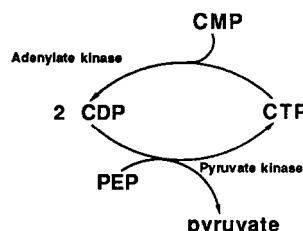
The lactonization reaction in chloroform, dioxane or DMSO is catalyzed by erythromycin.

GENERATION OF CYTIDINE 5'-TRIPHOSPHATE USING ADENYLYLATE KINASE

Ethan S. Simon, Mark D. Bednarski, and George M. Whitesides*
Department of Chemistry, Harvard University, Cambridge, MA 02138 USA

A membrane-enclosed enzyme reactor converts cytidine 5'-mono-phosphate (CMP) and phosphoenolpyruvate (PEP) to cytidine 5'-triphosphate (CTP) and pyruvate on a gram scale.

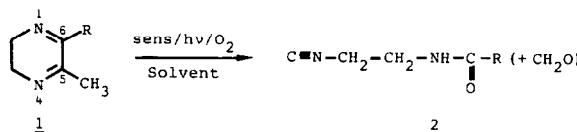
Tetrahedron Lett. 29, 1123 (1988)



PHOTOSENSITIZED OXYGENATION OF 2,3-DIHYDROPYRAZINES:
UNEXPECTED SYNTHESSES OF ISONITRILES

Klaus Gollnick* and S. Koegler, Institut für Organische Chemie der Universität, Karlstrasse 23, D-8000 München 2, Germany

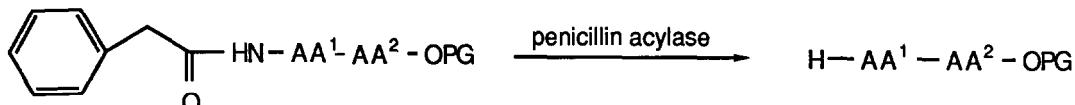
5-Methyl substituted 2,3-dihydropyrazines 1 react with singlet oxygen to isonitriles 2.



**THE USE OF PENICILLIN ACYLASE FOR SELECTIVE
N-TERMINAL DEPROTECTION IN PEPTIDE SYNTHESIS**

Herbert Waldmann

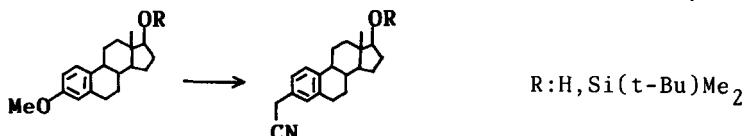
Joh. Gutenberg Univ. Mainz, Institut für Organische Chemie, Becherweg 18-20, D-6500 Mainz



PG = methyl; benzyl; allyl; tert-butyl.

A NOVEL ROUTE TO 3-ALKYLATED Estra-1,3,5(10)-TRIENES
Hermann Künzer*, Manfred Thiel

Research Laboratories, Schering AG Berlin/Bergkamen,
Müllerstraße 170-178, D-1000 Berlin 65, West Germany



Substitution via the corresponding protected (η^6 -arene) Cr(CO)₃ complexes

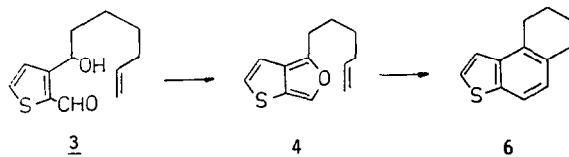
INTRAMOLEKULARE CYCLOADDITIONEN MIT ISOBENZOFURANEN - III.
EIN HYDRIERTES NAPHTHO[2,1-b]THIOPHEN AUS EINEM 1-ALKENYL-

THIENO[2,3-c]FURAN.

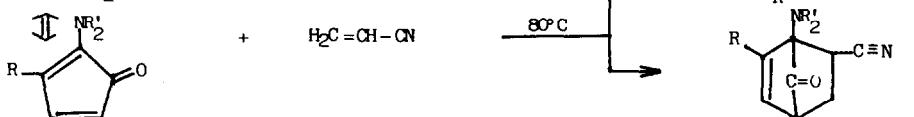
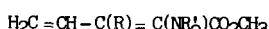
A. Schönig und W. Friedrichsen*

Institut für Organische Chemie der Universität Kiel, Olshausenstraße 40/60, D-2300 Kiel, FRG

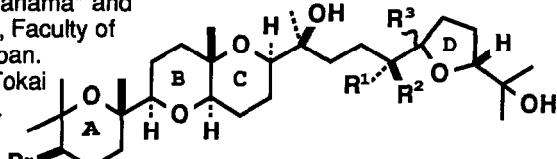
The synthesis of 6 utilizing 4 as an intermediate is described.



CAPTODATIVE DIENES IN CYCLOADDITION CONDITIONS: SYNTHESIS OF NEW BICYCLO (3.2.0)HEPT-3-ENE 2-ONES
M. Bourhis*, R. Golse, E. Adjanioun, M. Goursolle, J.-J. Bosc
Laboratoire de chimie Générale, Université de Bordeaux II, France
P. Picard
Laboratoire de Cristallographie, Université de Bordeaux I, France



TOTAL SYNTHESSES OF (+)-THYRSIFEROL AND (+)-VENUSTATRIOL Masaru Hashimoto, Toshiyuki Kan, Koji Nozaki, Mitsutoshi Yanagiya, Haruhisa Shirahama* and Takeshi Matsumoto†. Department of Chemistry, Faculty of Science, Hokkaido University, Sapporo 060, Japan.
†Department of Chemistry, Faculty of Science, Tokai University, Hiratsuka, Kanagawa 259-12, Japan.

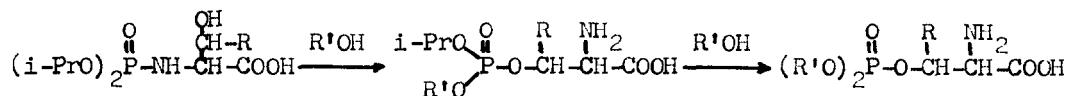


Triterpenoid polyethers (+)-thysiferol (1a) and (+)-venustatriol (1d) were totally synthesized from trivial compounds.

1a $R^1=H$, $R^2=OH$, $R^3=\alpha-CH_3$, 1d $R^1=OH$, $R^2=H$, $R^3=\beta-CH_3$

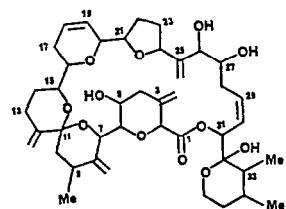
STUDIES ON PHOSPHOSERINE AND PHOSPHOTHREONINE DERIVATIVES: N-DIISOPROPYLOXYPHOSPHORYL-SERINE AND -THREONINE IN ALCOHOLIC MEDIA

Chu-Biao Xue, Ying-Wu Yin, Yu-Fen Zhao*
Institute of Chemistry, Academia Sinica, Beijing, China



GONIODOMIN A, A NOVEL POLYETHER MACROLIDE FROM THE DINOFLAGELLATE GONIODEMA PSEUDOGONIAULAX

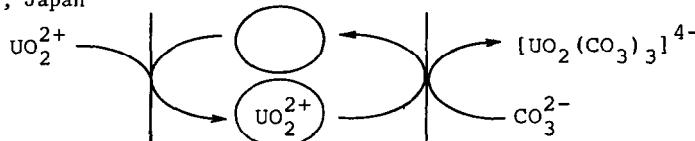
Masahiro Murakami^a, Kentaro Makabe^b, Katsumi Yamaguchi,
Shoji Konosu and Markus R. Wälchli^b



^a Laboratory of Marine Biochemistry, Faculty of Agriculture, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan. ^b Bruker Japan Co., Ltd., Yatabe-machi, Tsukuba-gun, Ibaraki 305, Japan

ACTIVE TRANSPORT OF URANYL ION BY MACROCYCLIC POLYCARBOXYLATE-HYDROPHOBIC AMMONIUM CARRIERS

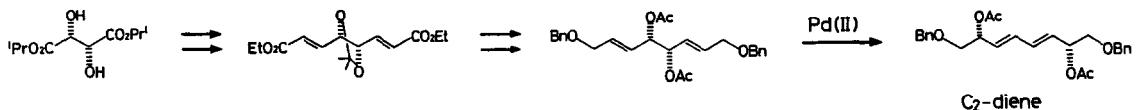
Y. Kobuke*, I. Tabushi and O. Kohki
Department of Synthetic Chemistry, Faculty of Engineering, Kyoto University, Yoshida, Kyoto 606, Japan



Synthesis of Axially Dissymmetric 3,5-Octadiene Framework with C₂ Chirality
via Palladium(II)-catalyzed Twofold [3,3]Sigma tropic Rearrangement

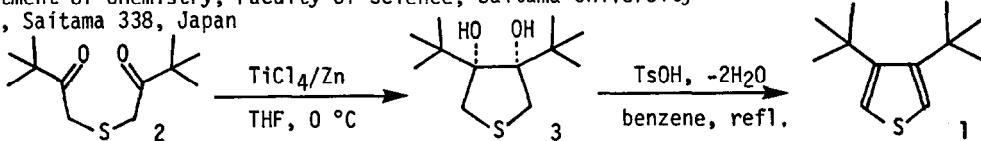
S. Saito, S. Hamano, H. Moriyama, K. Okada, and T. Moriwake

Depart. of Appl. Chem., Facul. of Engin., Okayama Univ., Tsushima, Okayama, Japan 700



SYNTHESIS AND REACTIONS OF 3,4-DI-t-BUTYLTHIOPHENE

Juzo Nakayama, Shoji Yamaoka, and Masamatsu Hoshino
Department of Chemistry, Faculty of Science, Saitama University
Urawa, Saitama 338, Japan



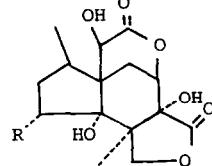
Sterically overcrowded thiophene 1 was easily prepared from readily accessible 2.
Reactions of 1 with a variety of electrophiles were examined.

NEW ANISATIN-LIKE SESQUITERPENE LACTONES FROM

PERICARPS OF ILLICIUM MAJUS

C.-S. Yang, I. Kouno, N. Kawano, and S. Sato
Beijing College of Chinese Traditional Medicine,
People's Republic of China, Faculty of Pharmceut.
Sciences, Nagasaki University, Nagasaki, Japan, and
Analytical and Metabolic Research Lab., Sankyo Co.Ltd.,
Tokyo, Japan

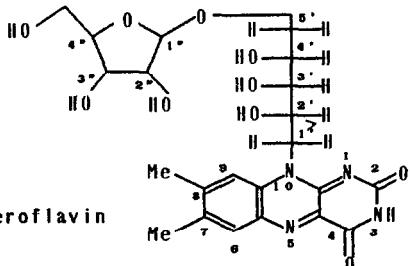
Isolation and structure elucidation of majucin (R=OH) and neomajucin (R=H).



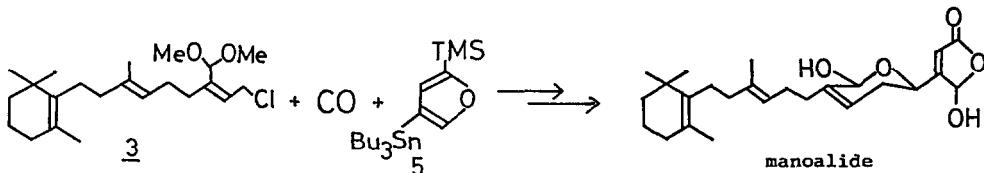
LAMPTEROMYCES BIOLUMINESCENCE (2) LAMPTEROFLAVIN, A LIGHT EMITTER IN THE LUMINOUS MUSHROOM, *L. japonicus*

Minoru Isobe,* Duangchan Uyakul and Toshio Goto
Laboratory of Organic Chemistry, Faculty of Agriculture,
Nagoya University, Chikusa, Nagoya 464, Japan

Lampteroflavin

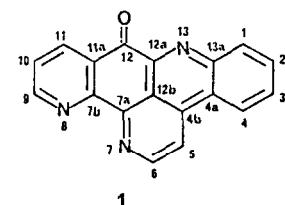


HIGHLY EFFICIENT TOTAL SYNTHESIS OF MANOALIDE AND SECO-MANOALIDE VIA Pd(0) CATALYZED COUPLING OF ALLYLHALIDE WITH CO AND 2-SILYL-4-STANNYLFURAN
 Shigeo Katsumura*, Shinya Fujiwara, and Sachihiko Isoe*, Institute Of Organic Chemistry, Faculty of Science, Osaka City University, Osaka 558, Japan



ASCIDIIDEMIN, A NOVEL PENTACYCLIC AROMATIC ALKALOID WITH POTENT ANTILEUKEMIC ACTIVITY FROM THE OKINAWAN TUNICATE DIDEMNUM SP.

Jun'ichi Kobayashi*, Jie-fei Cheng, Hideshi Nakamura, Yasushi Ohizumi, Yoshimasa Hirata, Takuma Sasaki, Tomohisa Ohta and Shigeo Nozoe
 Mitsubishi-Kasei Institute of Life Sciences, Minamiooya, Machida, Tokyo 194, Japan,
 Faculty of Pharmacy, Meijo University, Nagoya 468, Japan, Cancer Research Institute, Kanazawa University, Kanazawa 920, Japan, Pharmaceutical Institute, Tohoku University, Sendai 980, Japan

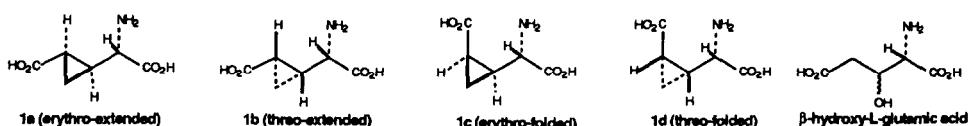


1

SYNTHESSES OF TRANS- AND CIS- α -(CARBOXYCYCLOPROPYL)GLYCINES. NOVEL NEUROINHIBITORY AMINO ACIDS AS L-GLUTAMATE ANALOGUE

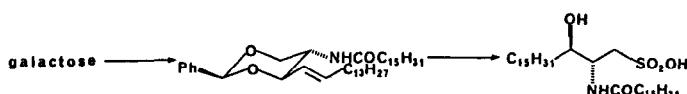
K. Yamanoi, Y. Ohfune*, Suntory Inst. for Bioorganic Research, Shimamoto-cho, Osaka 618, Japan
 K. Watanabe, P. N. Li, H. Takeuchi, School of Medicine, Gifu University, Gifu 500, Japan

Syntheses of four diastereomers of optically active α -(carboxycyclopropyl)glycines and their neuropharmacological studies using β -hydroxy-L-glutamate sensitive neuron are described.



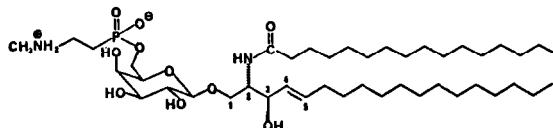
SYNTHESIS OF D-ERYTHRO-1-DEOXYDIHYDRO-CERAMIDE-1-SULFONIC ACID

Kenji Ohashi, Yoshiro Yamagawa, Tadao Kamikawa* and Morris Kates
 Department of Chemistry, Faculty of Science and Technology, Kinki University, Kowakae, Higashi-Osaka, Osaka 577, Japan
 Department of Biochemistry, Faculty of Science and Engineering, University of Ottawa, Ottawa K1N 6N5, Canada



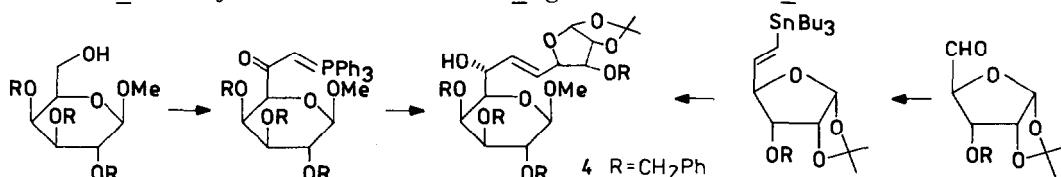
**SYNTHESIS OF PHOSPHONOSPHINGOGLYCOLIPID FOUND
IN MARINE SNAIL TURBO CORNUTUS**

Kinji Ohashi, Sunji Kosai, Mitsuo Arizuka, Takashi Watanabe, Mikio Fukunaga, Koji Monden, Takao Uchikoda, Yoshiro Yamagiwa and Tadao Kamikawa*
Department of Chemistry, Faculty of Science and Technology, Kinki University, Kowakae, Higashi-Osaka, Osaka 577, Japan



**A NEW CONVENIENT APPROACH TO HIGHER
SUGAR ALLYLIC ALCOHOLS**

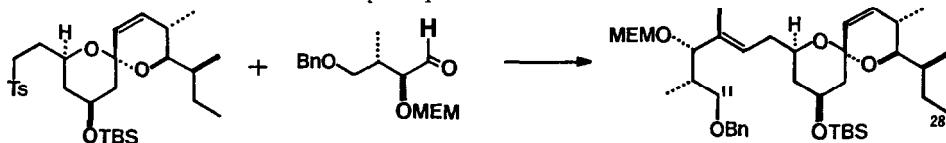
Stanisław Jarosz, Inst. Org. Chem., Polish Acad. Sci., 01-224 Warszawa
Alcohol 4 was synthesized either from D-galactose or from D-ribose derivatives



SYNTHESIS OF THE C11-C28 SUBUNIT OF THE AVERMECTINS

Masahiro Hirama,* Takeshi Nakamine, and Shô Itô
Department of Chemistry, Tohoku University, Sendai 980, Japan

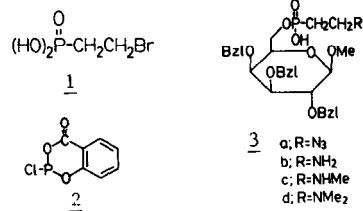
Stereoselective construction of the trisubstituted double bond of C11-C28 subunit of avermectin Ala and Bla via a five-step sequence.



**AN APPROACH TOWARDS THE FORMATION OF AN ESTER BOND
BETWEEN THE PRIMARY HYDROXYL OF A β -D-GALACTOPYRANOSIDE
AND 2-AMINOETHYLPHOSPHONIC ACID AND ITS N-METHYL SUBSTITUTED DERIVATIVES**

C.E. Dreef, A.R.P.M. Valentijn, E. de Vroom, G.A. van der Marel and J.H. van Boom
Gorlaeus Laboratories, P.O. Box 9502, 2300 RA Leiden, The Netherlands

The easily accessible reagents 1 and 2 could be employed successfully for the preparation of the methyl β -D-galactopyranoside phosphonate derivatives 3a-d.

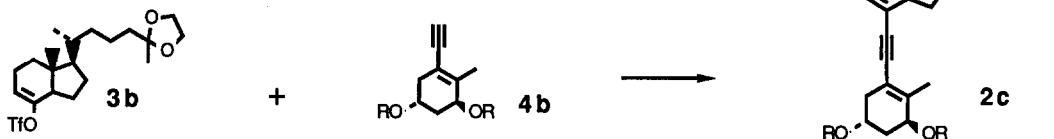


PALLADIUM-CATALYZED SYNTHESIS OF
DIENYNES RELATED TO $1\alpha,25$ -DIHYDROXYVITAMIN D₃

Tetrahedron Lett. 29, 1203 (1988)

L. Castedo, J.L. Mascareñas, A. Mouríño and L.A. Sarandeses
Departamento de Química Orgánica. Facultad de Química y Sección de Alcaloides del C.S.I.C.
Santiago de Compostela. Spain.

The dienyne 2c precursor of the natural hormone $1\alpha,25$ -(OH)₂-D₃ was synthesized
via palladium catalyzed coupling of 3b and 4b.



A CONCISE SYNTHESIS OF (+)-CHOKOL A

David M. Lawler and Nigel S. Simpkins*

Tetrahedron Lett. 29, 1207 (1988)

Department of Chemistry, Queen Mary College, Mile End Road, London, E1 4NS

ABSTRACT: The fungitoxic sesquiterpene chokol A was synthesized via a six step sequence
which used the addition reaction of a functionalised cuprate reagent to cyclopentenone as the key
step.

