

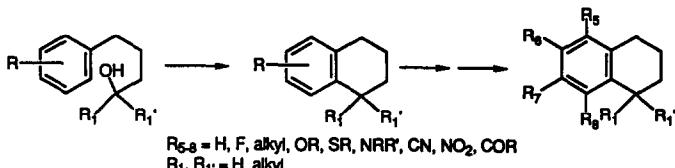
## GRAPHICAL ABSTRACTS

### Syntheses of Tetrahydronaphthalenes. Part II

*Tetrahedron*, 1994, 50, 3297

**John J. Parlow**

Monsanto Company-U3H, The Agricultural Group, 800 N. Lindbergh Blvd., St. Louis Mo. 63167

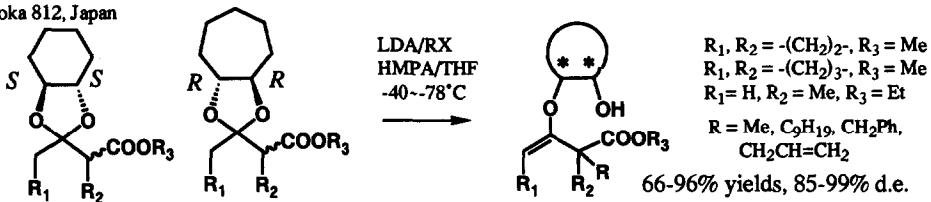


Syntheses utilizing the cyclodehydration method to prepare novel tetrahydronaphthalenes substituted with functional groups at each position of the aromatic ring and various alkyl groups at the 1-position of the non-aromatic ring are described.

### ASYMMETRIC ALKYLATION USING CHIRAL CYCLIC DIOLS TO PREPARE A QUATERNARY CARBON

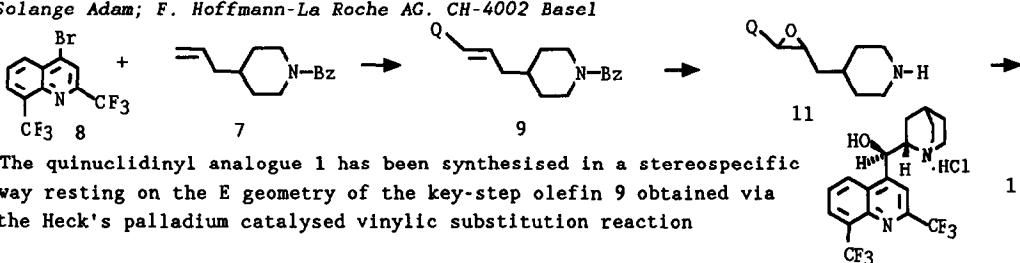
*Tetrahedron*, 1994, 50, 3315

Keisuke Kato, Hiroshi Suemune and Kiyoshi Sakai\*, Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka 812, Japan



### STEREOSPECIFIC SYNTHESIS OF A QUINUCLIDINYL ANALOGUE OF MEFLOQUINE-IV.

Solange Adam; F. Hoffmann-La Roche AG. CH-4002 Basel



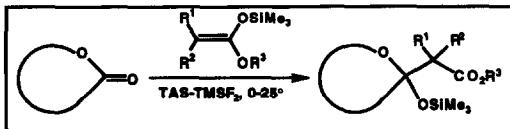
### FLUORIDE-MEDIATED REACTIONS OF LACTONES WITH SILYL KETENE ACETALS

RENÉ CSUK\* and MARTINA SCHAADE

*Tetrahedron*, 1994, 50, 3333

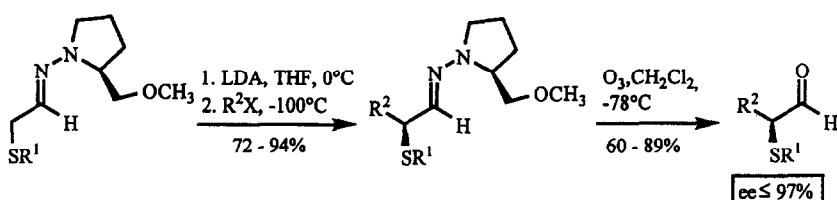
PHARMAZEUТИCH-CHEMISCHES INSTITUT, UNIVERSITÄT HEIDELBERG, Im Neuenheimer Feld 364, D-69120 Heidelberg, Germany.

Aldolisation reactions of silyl ketene acetals with lactone carbonyls can be performed under very mild conditions in good yields in the presence of catalytic amounts of TAS-TMSF<sub>2</sub>.



**ENANTIOSELECTIVE SYNTHESIS OF 2-SULFENYLATED ALDEHYDES:  
ALKYLATION OF SULFENYLATED ACETALDEHYDE SAMP HYDRAZONES**  
D. Enders\*, T. Schäfer, O. Piva, A. Zamponi  
Institut für Organische Chemie der Rheinisch-Westfälischen Technischen Hochschule, Prof.  
D-52074 Aachen, Germany

Tetrahedron, 1994, 50, 3349



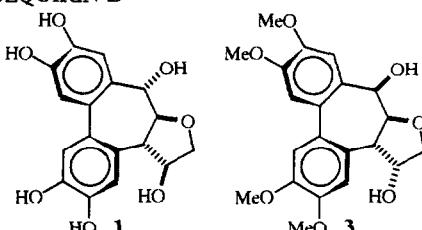
## LIGNANS. 17. RESEARCH PERTAINING TO THE TOTAL SYNTHESIS OF A NORCYCLOCLEOLIGNAN, METASEQUIIRIN-B

*Tetrahedron*, 1994, 50, 3363

Jean-Yves Sancéau, Robert Dhal and Eric Brown

URA-CNRS 482, Faculté des Sciences, avenue Olivier Messiaen, BP 535, 72017 Le Mans Cedex, France

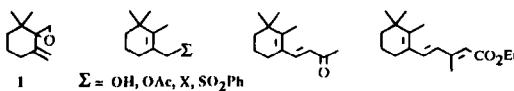
The total synthesis of the tetracyclic compound 3 is described. This compound is the tetra-*Q*-methyl derivative of metasequirin-B 1, a norcycloneolignan of unusual structure.



**Epoxy-pyrone : Synthon to Cyclocitralis, Ionones and precursor of new terpenic compounds**

F. Marc, B. Soulet, D. Serramedan and B. Delmonde  
Laboratoire de Chimie organique et Organométallique URA 35 CNRS  
Institut du Pin, Université Bordeaux I,  
351, cours de la Libération 33405 - Talence Cédex France

Cyclocitralts, ionones and new terpenic compounds were obtained from epoxy-pyronene **1**.

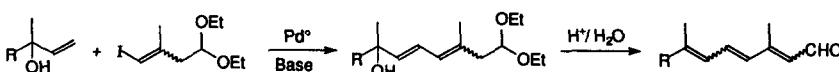


## PALLADIUM-CATALYSED VINYLATION OF TERTIARY ALLYLIC ALCOHOLS : A NEW PROTOCOL FOR THE SYNTHESIS OF ISOPRENOID ALDEHYDES

Tetrahedron, 1994, 50, 3389

Hugues BIENAYMÉ\* and Catherine YEZEGUELIAN  
Rhône-Poulenc, Centre de Recherches des Carrières, BP62, 69192 SAINT-FONS Cedex, France.

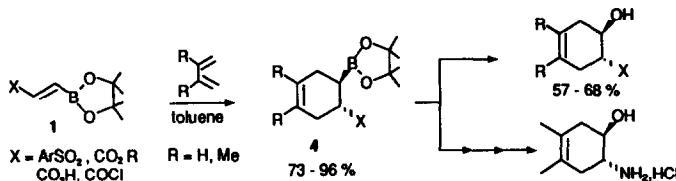
A two step, high yielding protocol for the synthesis of various isoprenoid aldehydes, including retinal, is presented.



DIELS-ALDER CYCLOADDITION OF 3-BORYLPROPENOIC ACID DERIVATIVES.

C. Rasset and M. Vaultier\*

Groupe de Physicochimie Structurale, URA CNRS n° 704, Université de Rennes I, Campus de Beaulieu, Avenue du Général Leclerc, 35042 Rennes Cedex (France).

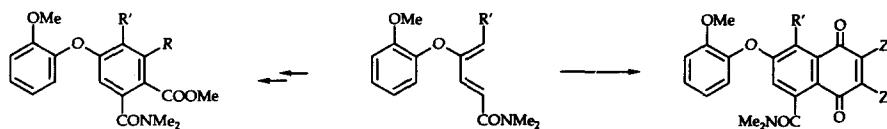


Boronates **1** are reactive dienophiles which may be used as synthetic equivalents of E- $\beta$ -hydroxy acrylic acid or E- $\beta$ -hydroxy vinylamine.

PREPARATION OF DIVERSELY SUBSTITUTED DIARYL ETHERS

Pascale Moreau, Gérald Guillaumet, Gérard Couder\*

Laboratoire de Chimie Bioorganique et Analytique associé au CNRS, Université d'Orléans, BP 6759, F-45067 Orléans Cedex 2  
An efficient synthesis of diversely substituted diaryl ethers via Diels-Alder cycloadditions is described.

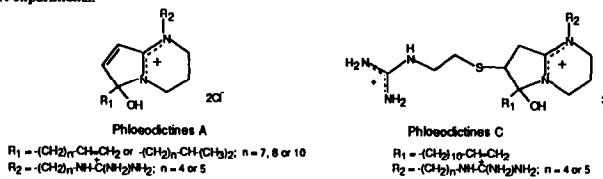


PHILOCODICTINES A1-A7 AND C1-C2, ANTIBIOTIC AND CYTOTOXIC GUANIDINE ALKALOIDS FROM THE NEW CALEDONIAN SPONGE, *PHILOCODICTYON* SP.

Elly Kourany-Lefol<sup>a</sup>, Olivier Laprévote<sup>a</sup>, Thierry Sévenet<sup>a</sup>, Alain Montagnac<sup>a</sup>, Mary Pais<sup>b</sup> and Cécile Debitus<sup>b</sup>

<sup>a</sup>Institut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette, France. <sup>b</sup>Centre Orstom, BP A5, Noumea, New Caledonia.

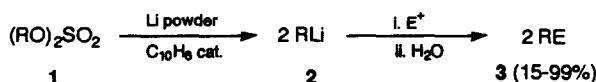
The structures of Phiocodictines A1-A7 and phiocodictines C1-C2 were established essentially by mass spectrometry utilizing B/E linked scanning and by 2D NMR experiments.



DIRECT TRANSFORMATION OF DIALKYL SULFATES INTO ALKYL LITHIUM REAGENTS BY NAPHTHALENE-CATALYSED LITHIATION

D. Guijarro, G. Guillena, B. Manchado and M. Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain

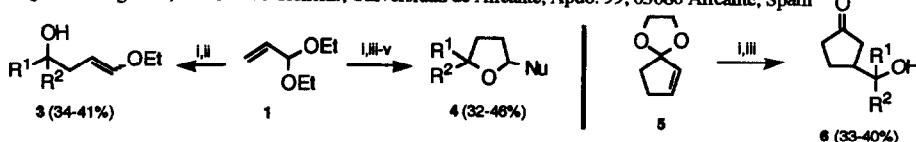


**REDUCTIVE CLEAVAGE OF ALLYLIC KETALS BY AN ARENE-CATALYSED LITHIATION: A SIMPLE AND DIRECT ROUTE TO MASKED LITHIUM HOMOENOLATES**

*Tetrahedron*, 1994, 50, 3437

J. F. Gil, D. J. Ramón and M. Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



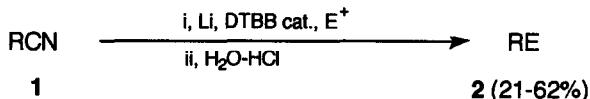
[*Reagents:* i,  $R^1R^2CO$ , Li, DTBB cat.; ii,  $H_2O$ ; iii,  $HCl$ ; iv,  $R_3SiNu$  ( $Nu=allyl, H, CN$ ); v,  $NaHCO_3$ ]

**ORGANOLITHIUM REAGENTS BY REDUCTIVE DECYANATION OF NITRILES WITH LITHIUM POWDER AND A CATALYTIC AMOUNT OF 4,4'-DI-TERT-BUTYLBIPHENYL IN A BARBIER-TYPE REACTION**

*Tetrahedron*, 1994, 50, 3447

D. Guijarro and M. Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain

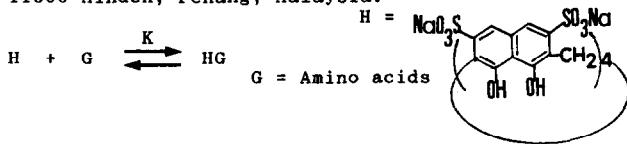


[DTBB=4,4'-di-*tert*-butylbiphenyl;  $E^+=PrCHO, n-C_7H_{15}CHO, Me_2CO, Et_2CO, (CH_2)_5CO, Ph_2CO, Me_3SiCl]$

**COMPLEXATION OF AMINO ACIDS BY CYCLOTETRA(CHROMOTROPYLENE) IN AQUEOUS SOLUTION - IMPORTANCE OF CH- $\pi$  AND  $\pi-\pi$  INTERACTIONS**

*Tetrahedron*, 1994, 50, 3453

Bo-Long Poh\* and Chi Ming Tan  
School of Chemical Sciences, Universiti Sains Malaysia,  
11800 Minden, Penang, Malaysia.

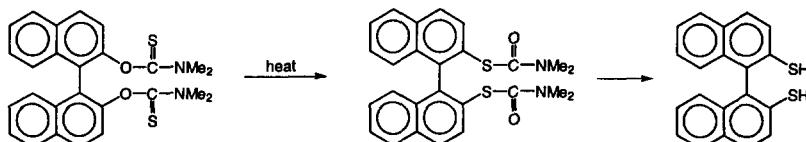


**CONFORMATIONAL POLYMORPHISM AND THERMO-REARRANGEMENT OF 2,2'-BIS-O-(N,N-DIMETHYLTHIOCARBAMATO)-1,1'-BINAPHTHALENE.  
A FACILE SYNTHESIS OF 1,1'-BINAPHTHALENE-2,2'-DITHIOL.**

*Tetrahedron*, 1994, 50, 3463

Upul K. Bandara, Jim Simpson, Robin A.J. Smith and Rex T. Weavers  
Department of Chemistry, University of Otago, Box 56, Dunedin New Zealand.

The title compound displays conformational polymorphism which influences the efficiency of the Newman-Kwart rearrangement.



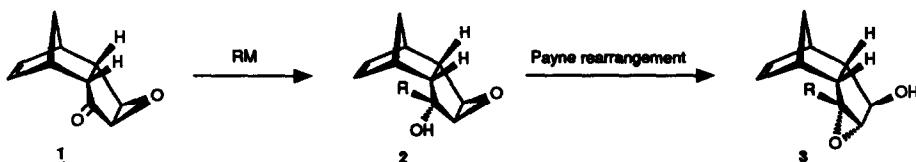
*Tetrahedron*, 1994, 50, 3473

NUCLEOPHILIC ADDITIONS TO TRICYCLODECADIENONE EPOXIDES.

THE PAYNE REARRANGEMENT OF  $\alpha,\beta$ -EPOXYCYCLOPENTANOLS CONTAINED IN A RIGID TRICYCLIC SYSTEM

P.P.M.A. Dols, E.G. Arnouts, J. Rohas, A.J.H. Klunder, B. Zwanenburg\*, Department of Organic Chemistry, NSR Center for Molecular Structure, Design and Synthesis, University of Nijmegen, Toernooiveld, 6525 ED Nijmegen, The Netherlands

Organometallics add regio- and stereoselectively from the convex face to the carbonyl function of tricyclic epoxy ketone **1** to yield a mixture of adducts **2** and **3**. *Endo*-epoxy-*exo*-alcohols **3** are formed by Payne rearrangement of the initially formed *exo*-epoxy-*endo*-alcohols **2**.



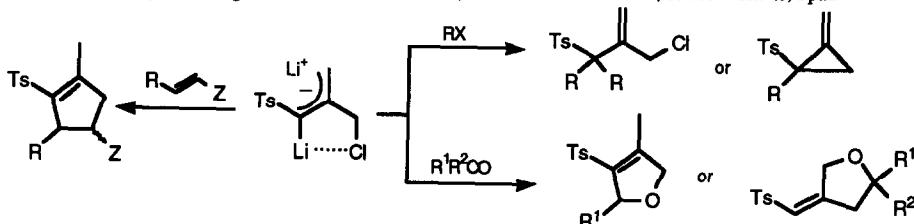
*Tetrahedron*, 1994, 50, 3491

DILITHIATED 2-(CHLOROMETHYL)-3-TOSYLPROPENE:

A NEW  $\gamma$ -CHLORINATED ALLYL SULFONE DIANION IN ORGANIC SYNTHESIS

Carmen Nájera and José M. Sansano

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, 03080 Alicante, Spain



DEVELOPMENT OF METHODS FOR THE SYNTHESIS OF CHIRAL, HIGHLY FUNCTIONALIZED 2-AMINO-4-ARYL-4H-PYRANS

*Tetrahedron*, 1994, 50, 3509

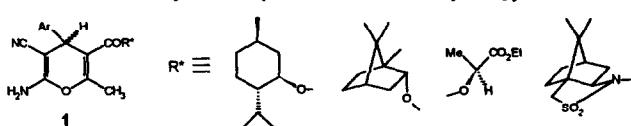
J.L. Marco,\*<sup>a</sup> N. Martín,<sup>\*b</sup> A. Martínez-Grau,<sup>b</sup> C. Seoane,<sup>\*b</sup> A. Albert,<sup>c</sup> F.H. Cano<sup>c</sup>

<sup>a</sup> Instituto de Química Orgánica General (CSIC), Juan de la Cierva 3, 28006-Madrid, Spain.

<sup>b</sup> Departamento de Química Orgánica, Facultad de Química, U. Complutense, 28040-Madrid, Spain.

<sup>c</sup> U.E.I. Cristalográfica, Instituto de Química Física "Rocasolano" (CSIC), Serrano 119, 28006-Madrid, Spain.

Using chiral auxiliaries, the asymmetric synthesis of 2-amino-4-aryl-4*H*-pyrans **1** is described.



A NOVEL APPROACH TO 1*H*-INDAZOLES VIA ARYL AZOSULFIDES

*Tetrahedron*, 1994, 50, 3529

Carlo Dell'Erba, Marino Novi, Giovanni Petrillo and Cinzia Tavani

Istituto di Chimica Organica dell'Università, C.N.R. Centro di Studio per la Chimica dei Composti Cicloalifatici ed Aromatici, Corso Europa, 26, 16132 Genova, Italy

Treatment of variously substituted (*o*-alkylaryl)azosulfides **1** with  $Bu^tOK$  in DMSO at room temperature furnishes 1*H*-indazoles **2** in high yields.

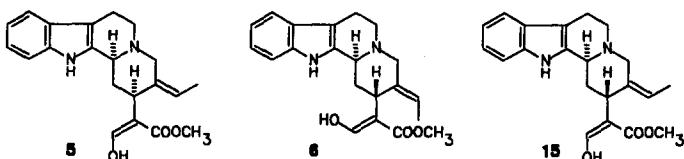


The Claisen Rearrangement in the Preparation  
of Geissoschizine Isomers

Tetrahedron, 1994, 50, 3537

Birgit Tirkkonen, Jari Miettinen, Jaana Salo, Reija Jokela,\* and Mauri Lounasmaa\*

Laboratory for Organic and Bioorganic Chemistry, Technical University of Helsinki, FIN-02150 Espoo,  
Finland

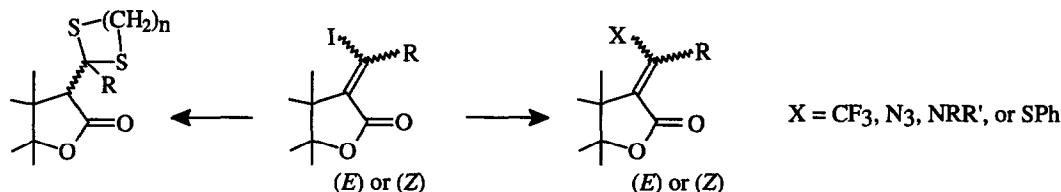


REACTION OF IODOALKYLDENE LACTONES WITH NUCLEOPHILES

Tetrahedron, 1994, 50, 3557

Gerald Haaima, Simon D. Mawson, Anne Routledge and Rex T. Weavers  
Department of Chemistry, University of Otago, Box 56, Dunedin New Zealand.

Nucleophilic replacement of iodide by nucleophiles leads to various substituted alkylidene lactones. Studies on the stereoselectivity are described. Thioacetals may also be formed.

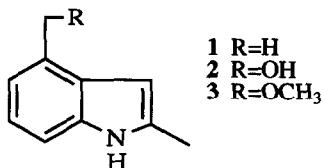


NEW INDOLE DERIVATIVES FROM THE FRUIT BODIES OF  
TRICHOLOMA SCIODES AND *T. VIRGATUM*

Tetrahedron, 1994, 50, 3571

Luigi Garlaschelli, Zijie Pang, Olov Sterner and Giovanni Vidari,  
Universities of Pavia (Italy) and Lund (Sweden).

The indole derivatives 1-3 were isolated from the fruit bodies of *Tricholoma sciodes* and *T. virgatum*, and their structures were determined by spectroscopy. The compounds are new natural products, although 2,4-dimethylindole (1) previously has been prepared synthetically.

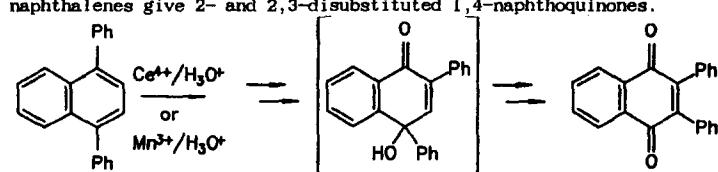


REARRANGEMENTS IN THE CERIUM(IV) AND MANGANESE(III)  
OXIDATIONS OF SUBSTITUTED NAPHTHALENES AND THE  
NIH SHIFT MECHANISM

Tetrahedron, 1994, 50, 3575

M. Vivekananda Bhatt and Mariappan Periasamy  
Department of Organic Chemistry, Indian Institute of Science,  
Bangalore 560012, India

Cerium(IV) and manganese(III) oxidations of certain 1- and 1,4-disubstituted naphthalenes give 2- and 2,3-disubstituted 1,4-naphthoquinones.



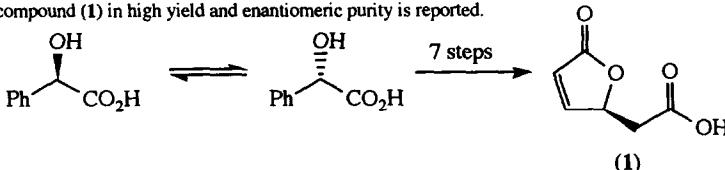
(+)-MUCONOLACTONE FROM ARENE BIOTRANSFORMATION IN

*PSEUDOMONAS PUTIDA*: PRODUCTION, ABSOLUTE CONFIGURATION AND ENANTIOMERIC PURITY.

Douglas W. Ribbons<sup>a,b</sup> and Alan G. Sutherland<sup>a\*</sup> a) Departments of Chemistry and Biological Sciences, University of Exeter, Stocker Road, Exeter EX4 4QD; b) Chiros Ltd., Science Park, Milton Road, Cambridge CB4 4WE.

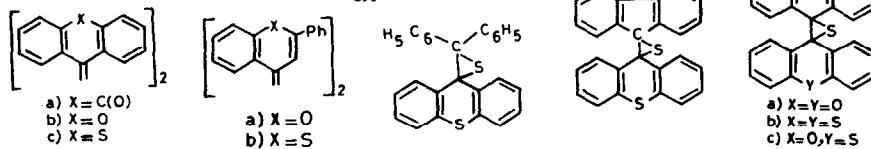
The biotransformation of racemic mandelate by a mutant of *Pseudomonas putida*

to give the title compound (1) in high yield and enantiomeric purity is reported.

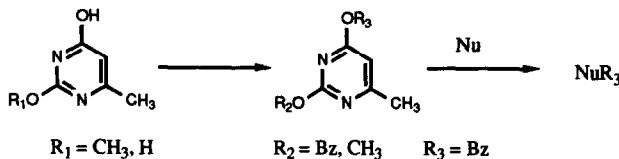


PHOTOCHEMICAL REACTIONS OF BIANTHRONE  
AND RELATED SUBSTANCES

Wafaa M. Abdou, Yehia O. Elkhoshnich and Mahmoud M. Sidky  
National Research Centre, Dokki, Cairo, Egypt.



RESEARCHES ON ANTI VIRAL AGENTS. 4. STUDIES ON THE CHEMISTRY OF 6-METHYL-2-METHOXY-4-O-ACYL AND 6-METHYL-2,4-DI-O-ACYL PYRIMIDINE DERIVATIVES AS NEW ACYLATION REAGENTS. Maurizio Botta, Raffaele Saladino, Gabriella Gentile, Vincenzo Summa, Rosario Nicoletti, Annalisa Verri, Federico Focher, Silvio Spadari. Dipartimento di Chimica, Università degli Studi di Roma "La Sapienza", p.le Aldo Moro 5, 00185 Roma. The synthesis of title compounds and their properties as acylating agents as well as their antiviral activity have been reported.



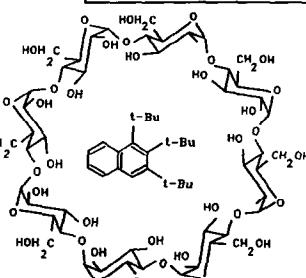
Structure of Cyclodextrins and Their Complexes. Part 4.  
Chromatographic and NMR Study of 1,2,3-Tri-t-butylnaphthalene and Its Complex with  $\gamma$ -Cyclodextrin

H. Dodziuk<sup>a</sup>, D. Sybińska<sup>b</sup>, S. Miki<sup>c</sup>, Z. Yoshida<sup>d</sup>, J. Sitkowski<sup>a</sup>, M. Asztemborska<sup>b</sup>, A. Bielejewska<sup>b</sup>, J. Kowalczyk<sup>b</sup>, K. Duszczyk<sup>b</sup>, L. Stefaniak<sup>a</sup>,

<sup>a</sup>Institute of Organic Chemistry, <sup>b</sup>Institute of Physical Chemistry, Polish Academy of Sciences, 01-224 Warsaw, Kasprzaka 44, Poland.

<sup>c</sup>Department of Chemistry, Kyoto Institute of Technology, Matsugasaki, <sup>d</sup>Department of Synthetic Chemistry, Kyoto University, Yoshida, Sakyo, Kyoto 606, Japan.

In spite of its large volume 1,2,3-tri-t-butylnaphthalene forms unusually strong complexes with  $\gamma$ -cyclodextrin. The stability constant in 75% vol. of ethanol in water solution at 20°C was estimated by chromatographic study to be equal to  $10^4 \text{ M}^{-1}$ . The latter method and NMR spectra indicate a shallow insertion of the guest into the host cavity.



**SYNTHESIS OF 4-ARYL-2-BENZAZEPINE-1,5-DIONES BY  
PHOTOCYCCLIZATION OF *N*-(2-ARYLETHYL)PHTHALIMIDES**

*Tetrahedron*, 1994, 50, 3627

M. Rita Paleo, Domingo Domínguez\* and Luis Castedo\*

Dpto. de Química Orgánica. Facultad de Química y Sección de Alcaloides del C.S.I.C, 15706 Santiago de Compostela, Spain.

4-Aryl-2-benzazepine-1,5-diones were prepared by photocyclization of *N*-(2-arylethyl)phthalimides.

