

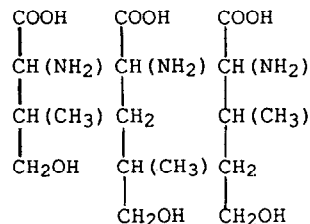
GRAPHICAL ABSTRACTS

Tetrahedron, 45, 6127, (1989)

SYNTHESIS OF ω -HYDROXY ANALOGUES OF VALINE, LEUCINE AND ISOLEUCINE

Sabine Englisch-Peters
Max-Planck-Institut für experimentelle Medizin, Abteilung
Chemie, Hermann-Rein-Str. 3, D-3400 Göttingen, FRG

The isomers of γ -hydroxy-valine were prepared by a modified Erlenmeyer synthesis, the δ -hydroxy analogues each of leucine and isoleucine via 1,4-Michael addition. The diastereomers can be separated chromatographically, the enantiomers by D- or L-amino acid oxidases.

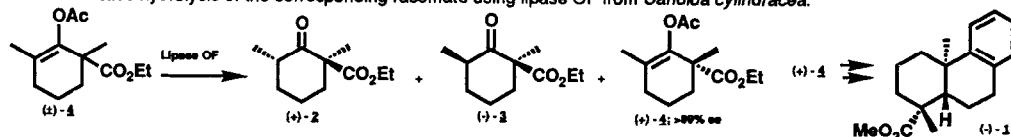


Tetrahedron, 45, 6135, (1989)

A SYNTHESIS OF (-)-DEOXYPODOCARPIC ACID METHYL ESTER VIA AN ENZYMATIC ENANTIOSELECTIVE HYDROLYSIS OF THE KEY INTERMEDIATE ENOL ESTER

TAKESHI SUGAI, HIDEAKI KAKEYA, HIROMICHI OHTA*, MITSUO MOROOKA and SHIGERU OHBA
Department of Chemistry, Keio University, Hiyoshi 3-14-1, Kohoku-ku, Yokohama 223, Japan

(-)-Deoxypodocarpic acid methyl ester **1** was synthesized from (R)-(+)-**4**. The chiral starting material was prepared by the enantioselective hydrolysis of the corresponding racemate using lipase OF from *Candida cylindracea*.

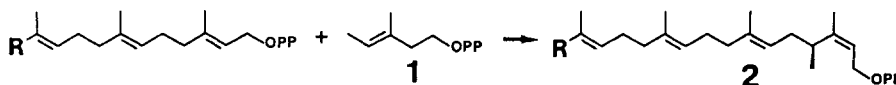


Tetrahedron, 45, 6145, (1989)

UNDECAPRENYL DIPHOSPHATE SYNTHASE REACTION WITH ARTIFICIAL SUBSTRATE HOMOLOGUES ----- NOVEL BEHAVIOR IN THE TERMINATION OF PRENYL CHAIN ELONGATION

Shin-ichi Ohnuma, Michio Ito, Tanetoshi Koyama, and Kyozo Ogura*

Undecaprenyl-PP synthase reaction with the artificial substrate (1) showed a full stop at the stage where a single condensation of the C₆-unit with an allylic diphosphate is completed to form a chiral prenyl diphosphate (2) having an extra methyl group at the 4-position.

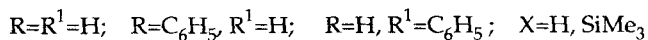
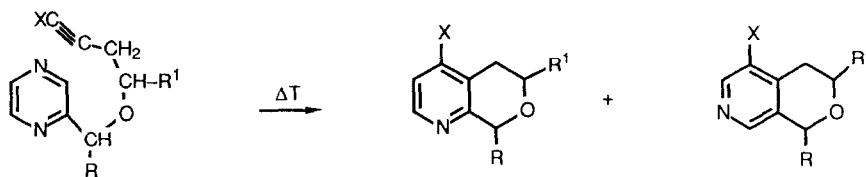


**INTRAMOLECULAR INVERSE ELECTRON DEMAND
DIELS-ALDER REACTIONS OF PYRAZINES**

Marek Biedrzycki, Dick A. de Bie and Henk C. van der Plas*

Laboratory for Organic Chemistry, Agricultural University Wageningen, Dreijenplein 8,
6703 HB Wageningen, The Netherlands

Tetrahedron, 45, 6211, (1989)

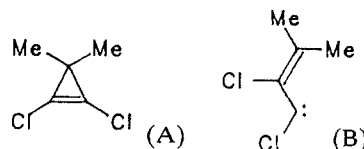


Tetrahedron, 45, 6221, (1989)

**1,2-DICHLORO-3,3-DIMETHYLCYCLOPROPENE AS A SOURCE OF
1,2-DICHLORO-3-METHYLBUT-2-ENYLIDENE AT AMBIENT TEMPERATURE**

by Mark S. Baird* and Helmi H. Hussain, Department of Chemistry,
University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU.

The cyclopropene (A) reacts with electron-rich or electron-poor alkenes this reacts at 20 °C to give cyclopropanes apparently derived by trapping of the carbene (B), which is also trapped by insertion into the C-H bonds adjacent to oxygen in ethers.

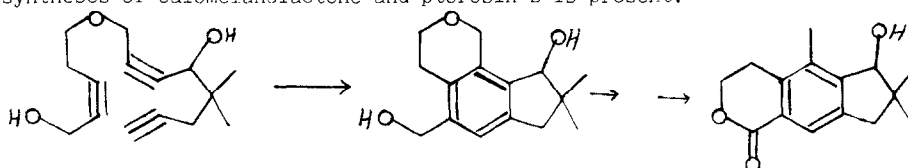


Tetrahedron, 45, 6239, (1989)

RHODIUM CATALYSED SYNTHESIS OF ILLUDALANES

S.J. Neeson and P.J. Stevenson, Department of Chemistry,
The Queen's University of Belfast, BT9 5AG.

A synthesis of calomelanolactone and pterosisin Z is present.

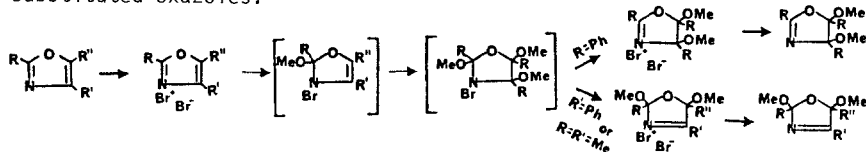


4,5- AND 2,5- ADDITIONS TO OXAZOLES

Alfred Hassner* and Bilha Fischer

Department of Chemistry, Bar-Ilan University, Ramat Gan 52100, Israel

An investigation of the mechanism of electrophilic addition of bromine in MeOH to variously substituted oxazoles.

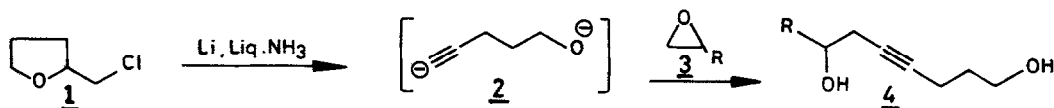


NOVEL SYNTHESIS OF 1,7-DIHYDROHEPT-4-YNE DERIVATIVES : APPLICATION TO THE TOTAL SYNTHESIS OF (+) PATULOLIDE A

J S Yadav*, P Radha Krishna and M K Gurjar

Regional Research Laboratory, Hyderabad 500 007, India

Methodology for the synthesis of 1,7-dihydrohept-4-yne derivatives and their utility is described.

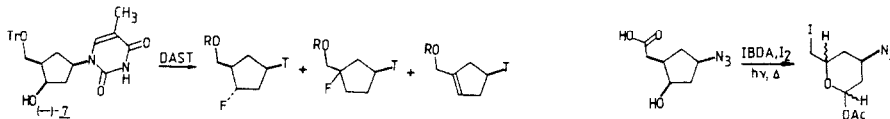


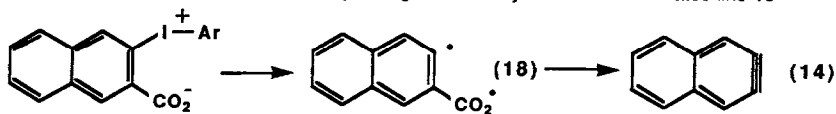
SYNTHETIC STUDIES TOWARDS (-)-CARBA-3'-DEOXY-3'-FLUOROTHYMIDINE.

J. Béres*, Gy. Sági, E. Baitz-Gács, I. Tömösközi, L. Gruber, and L. Ötvös

Central Research Institute of Chemistry, H-1525 Budapest, P.O. Box 17, Hungary

Reaction of (-)-7 with DAST afforded the blocked title compound accompanied by an isomeric fluoro and a dehydrated product. A novel ring transformation is also described.



NON CONCERTED PATHWAYS IN THE GENERATION OF DEHYDROARENES
BY THERMAL DECOMPOSITION OF DIARYLIODONIUM CARBOXYLATESS.V. Luis*; F. Gaviña; P. Ferrer; V.S. Safont; M.C. Torres; M.I. Burguete
Depart. de Química Orgánica, Colegio Universitario de Castellón, Universidad de Valencia, 12080 Castellón, Spain.Decomposition of diaryliodonium 2-,3- and 4-carboxylates generates arynes via intermediates like **18**

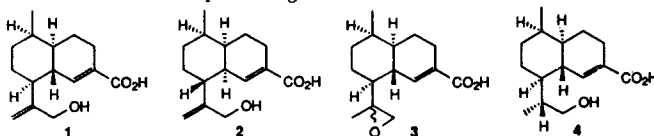
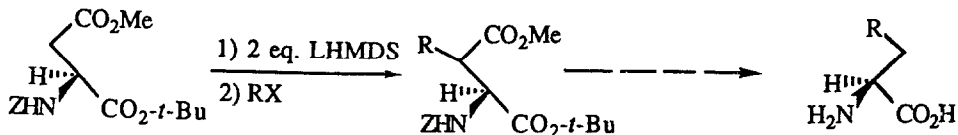
A NEW STEREOCHEMICAL CLASS OF BICYCLIC SESQUITERPENES

FROM *EREMOPHILA VIRGATA* W.V. FITZG. (MYOPORACEAE)

E.L. Ghisalberti*, P.R. Jefferies, B.W. Skelton, A.H. White and R.S.F. Williams.

School of Chemistry, The University of Western Australia, Nedlands, Western Australia, 6009.

Four new sesquiterpene acids (**1-4**) have been isolated from *Eremophila virgata*. Chemical interrelations show that **1**, **3** and **4** belong to the same stereochemical set. The absolute configuration of **1** was determined by single-crystal X-ray diffraction analysis of a derivative. The fourth acid (**2**) is shown to be a diastereoisomer of **1**.

NON-PROTEINOGENIC AMINO ACID SYNTHESIS. THE
β -ANION DERIVED FROM ASPARTIC ACIDJack E. Baldwin, Mark G. Moloney, and Michael North
The Dyson Perrins Laboratory, University of Oxford, South Parks
Road, Oxford. OX1 3QY. U.K.

NON-PROTEINOGENIC AMINO ACID SYNTHESIS: SYNTHESIS OF
 β,γ -UNSATURATED α -AMINO ACIDS.

Jack E. Baldwin, Mark G. Moloney, and Michael North
The Dyson Perrins Laboratory, University of Oxford, South Parks
Road, Oxford. OX1 3QY. U.K.

