Tetrahedron, 1993, 49, 1337

Cissampentin: A New Bisbenzylisoquinoline Alkaloid from Cissampelos fasciculata

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A new bisbenzylisoquinoline alkaloid, containing a rare methyleneoxy bridge, has been isolated from the aerial parts of *Cissampelos fasciculata*. Preparation of the diethyl phosphate derivative allowed assignment of the 7'-11 ether linkage. Bioassays indicate significant activity as a repellent to the leafcutter ant *Acromyrmex octospinosus*, and limited antifungal activity.

CHEMICAL SYNTHESIS OF A "GSA-PYRROLE" AND ITS REACTION WITH EHRLICH'S REAGENT P.A Liddell, T P Forsyth, M O Senge and K M Smith,* Department of Chemistry, University of California, Davis, CA 95616

A chemical synthesis of the so-called "GSA-pyrrole" (5) is described GSA-pyrrole is produced by reaction of glutamate-1-semialdehyde (GSA) with acetyl acetone, and its subsequent reaction with Ehrlich's reagent is used for biochemical quantitation of GSA. Rates of reaction of (5) with Ehrlich's reagent are studied and compared with "ALA-pyrroles" [e.g. (3)] obtained by similar procedures from δ-aminolevulinic acid (ALA).

Tetrahedron, 1993, 49, 1343

CO₂H

Tetrahedron, 1993, 49, 1351

Effects of Remote N-(tert-Butoxycarbonyi) Groups on Heteroatom Directed Lithiation at Benzylic Positions:

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Institute of Organic Chemistry, Syntex Research, Palo Alto, CA 94304

The N-t-Boc directed lithlation of benzylic methyl and methylene groups were studied.

Tetrahedron, 1993, 49, 1357

OXIDATION OF BENZOIN TO BENZIL AND OF P-SUBSTITUTED BENZYL ALCOHOL TO THE CORRESPONDING BENZALDEHYDE CATALYZED BY IRON(II) THIOLATE COMPLEXES. A PROPOSED REACTION MECHANISM

Wei-Yin Sun, Norikazu Ueyama and Akira Nakamura*
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Catalytic mechanism for the oxidation of benzoin and benzyl alcohol in the presence of Fe(II) thiolate complexes is provided.

Ph
$$OH$$
 Ph OH Ph OH Ph OH Ph OH OF O

Tetrahedron, 1993, 49, 1371

URACIL AND ADENINE NUCLEOSIDES HAVING A 2',3'-BROMOVINYL STRUCTURE: HIGHLY VERSATILE SYNTHONS FOR THE SYNTHESIS OF 2'-C- AND 3'-C-BRANCHED 2',3'-UNSATURATED DERIVATIVES

Kazuhiro Haraguchi, Yoshiharu Itoh, Hiromichi Tanaka,* Mitsuhiro Akita, and Tadashi Miyasaka School of Pharmaceutical Sciences, Showa University, 1-5-8 Hatanodai, Shinagawa-ku, Tokyo 142, Japan

Preparation of nucleosides having a 2',3'-bromovinyl structure has been accomplished starting from naturally occurring nucleosides and their usefulness has been shown through the synthesis of 2'-C- and 3'-C-branched 2',3'-unsaturated derivatives by palladium-catalyzed cross-coupling or halogen-lithium exchange reaction

 R^1 = H, R^2 = Br \longrightarrow R^1 = H, R^2 = a carbon substituent R^1 = Br, R^2 = H \longrightarrow R^1 = a carbon substituent, R^2 = H

Tetrahedron, 1993, 49, 1391

NOVEL SYNTHESIS OF SUBSTITUTED C-PHENYLPIPERAZINES BY ADDITION OF BENZYLAMINE OR METHYLAMINE TO 8-NITROSTYRENE

M Mouhtaram, J F Stambach* and L Jung, Laboratoire de Chimie Thérapeutique, U F R des Sciences Pharmaceutiques, 74 route du Rhin, B P 24, 67401 lilkirch- France

Addition of strong amine bases to β-nitrostyrene has been achieved to afford 1-phenylethylene-1,2-diamines 11,12 followed by cyclization to substituted 6-phenylpiperazines 13-18

SYNTHESIS AND STEREOCHEMICAL STUDIES OF CHIRAL RUTHENIUM PORPHYRINS.

Paul Le Maux*, Hassan Bahri and Gérard Simonneaux*, Laboratoire de Chimie Organométallique et Biologique, URA CNRS 415, Université de Rennes I, 35042 Rennes Cedex, France

Stereochemistry of chiral picket-fence porphyrins and regiochemistry of axial ligation after ruthenium insertion are described.

Tetrahedron, 1993, 49, 1409

CYCLOPROPENE TO ENAMINE CYCLOADDITION: TOTAL SYNTHESIS OF 2.3-DIHYDRO ILLUDINE M

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Tetrahedron, 1993, 49, 1421

CONVENIENT SYNTHESIS OF 5-SUBSTITUTED-6-METHOXY OR 6-HYDROXY-2,3-DIHYDRO-1,4-BENZODIOXINS VIA LITHIATED INTERMEDIATES

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Laboratoire de Chimie Bioorganique et Analytique associé au CNRS,
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Lithiation of 6-methoxy and 6-tetrahydropyranyloxy-2,3-dihydro-1,4-benzodioxins was performed and easily allowed the synthesis of 5-substituted-6-methoxy and 6-hydroxy-2,3-dihydro-1,4-benzodioxins

A CONVENIENT SYNTHETIC ROUTE TO 2-DIPHENYLPHOSPHINOYL-3-HYDROXY, AMINO AND ALKYL INDOLE DEPIVATIVES

Axel Couture, * Eric Deniau, Yves Gimbert and Pierre Grandclaudon Laboratoire de Chimie Organique Physique, URA CNRS 351, Université des Sciences et Technologies de Lille I, 59655 Villeneuve d'Ascq Cédex, France

A = CONEt2; CN; COR2

 $\textcircled{B} = OH; NH_2; R^2$

A NOVEL AND VERSATILE ACCESS TO FLUORINATED CARBO- AND HETEROCYCLIC COMPOUNDS

Tetrahedron, 1993, 49, 1445

EMPLOYING ELECTRON-RICH FLUORODIENES AS CYCLOADDITION COMPONENTS

Guo-quang SHI and Manfred SCHLOSSER *
Institut de Chimie organique, Université de Lausanne, Switzerland

PALLADIUM-CATALYZED ALLYLATION OF PYRIMIDINE-2,4-DIONES (URACILS) AND OF 6-MEMBERED HETEROCYCLIC AMBIDENT SULFUR NUCLEOPHILES

Tetrahedron, 1993, 49, 1457

M Moreno-Mañas, R Pleixats, M Villarroya

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Preferred allylations
(PhCH=CH-CH₂-OCOOEt/Pd(0))

Tetrahedron, 1993, 49, 1465

PALLADIUM-CATALYZED ALLYLATION OF 5-MEMBERED HETEROCYCLIC AMBIDENT SULFUR NUCLEOPHILES

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Preferred allylations
PhCH=CHCH₂-OCOOEt/Pd(0)

SYNTHESIS OF N,N'-DIMETHYL DIAZA-CORONANDS VIA DOUBLE-QUATERNIZATION REACTION

Tetrahedron, 1993, 49, 1471

Janusz Jurczak,* Ryszard Ostaszewski, Piotr Sałański, and Tomasz Stankiewicz Institute of Organic Chemistry, Polish Academy of Sciences, 01-224 Warszawa, Poland

A NEW METHOD FOR THE SYNTHESIS OF DIAZA-CORONANDS *VIA* DOUBLE-AMIDATION REACTION

Tetrahedron, 1993, 49, 1478

Janusz Jurczak,* Tomasz Stankiewicz, Piotr Sałański, Stanisław Kasprzyk, and Piotr Lipkowski Institute of Organic Chemistry, Polish Academy of Sciences, 01-224 Warszawa, Poland

THE CHEMICAL BASIS OF HOT-TASTING AND YELLOWING OF THE L MUSHROOMS LACTARIUS CHRYSORRHEUS AND L SCROBICULATUS

Maria De Bernardi, Luigi Garlaschelli, Lucio Toma, Giovanni Vidari, and Paola Vita-Finzi Dipartimento di Chinjica Organica dell'Università, Via Taramelli 10, 27100 Pavia, Italy

NMR data and molecular mechanics calculations afforded the structure of new sesquiterpenes 1, 2, and 3, involved in the hot-tasting and vellowing of the title mushrooms

Tetrahedron, 1993, 49, 1505

ETHOXYCARBONYLMETHYLENETRIPHENYLPHOSPHORANE IN CARBOHYDRATE CHEMISTRY, PART II : A SHORT AND EFFICIENT SYNTHESIS OF (+)-GONIOFUFURONE

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Synthesis of (+)-Goniofufurone is reported starting from the readily available dialdo-xylose. The key step in our approach is the unusual spontaneous bis-cyclisation (lactonisation leading to Michael ring-closure) accompanying the Wittig reaction on furanose-lactol having a free hydroxyl at C_2 to obtain the deoxyanhydrohexonolactone skeleton characteristic of the natural product.