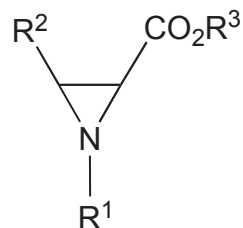


■ REVIEWS

2837 **Aziridine-2-carboxylates: Preparation, Nucleophilic Ring Opening, and Ring Expansion**

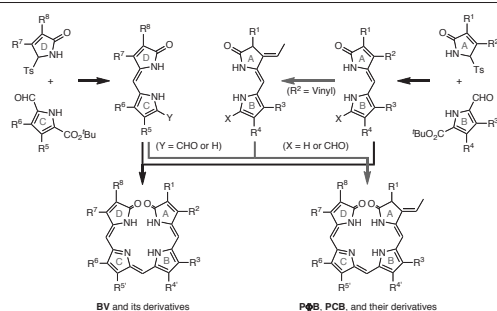
Tsutomu Ishikawa*



Aziridine-2-carboxylate Preparation Ring Opening Ring Expansion

2879 **Syntheses of Bilin Chromophores Toward the Investigation of Structure and Function of Phytochromes**

Katsuhiko Inomata*

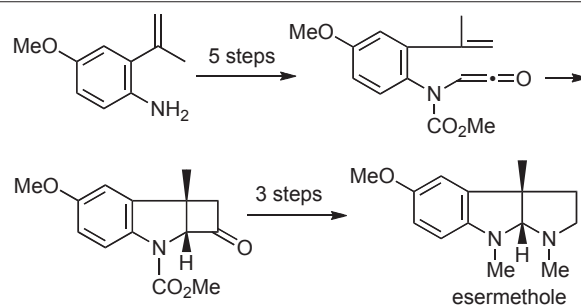


Phytochrome Photoreceptor Linear Tetrapyrrole (Bilin) Chromophore Locked Bilin Chromophore Assembly with Apoprotein

■ COMMUNICATION

2927 **Synthesis of (±)-Esermethole via an Intramolecular Carbamoylketene-Alkene [2+2] Cycloaddition**

Tsukasa Ozawa, Makoto Kanematsu, Hiromasa Yokoe, Masahiro Yoshida, and Kozo Shishido*

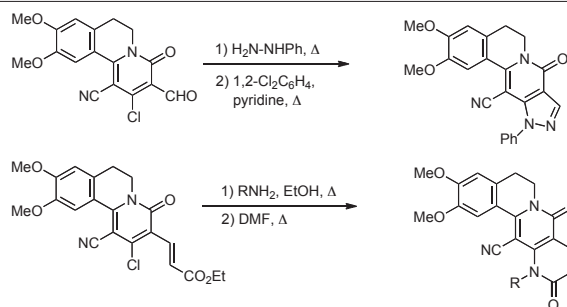


Esermethole [2+2] Cycloaddition Reaction Carbamoylketene Palladium-Catalyzed Coupling Reaction Nitrene

■ PAPERS

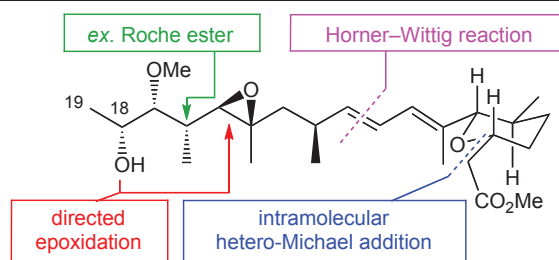
2933 Synthesis and Reactivity of 2-Chloro-3-formylpyrido[2,1-*a*]isoquinoline Derivative. A Novel Routes to Pyrazolo[3',4':4,5]pyrido[2,1-*a*]isoquinoline and Isoquinolino[2,1-*g*][1,6]naphthyridines

Hamdi M. Hassaneen,* Wagnat W. Wardkhan, and Yasmin Sh. Mohammed


 1-Cyanomethylisoquinoline Pyrido[2,1-*a*]isoquinoline Pyrazolopyridoisoquinoline Isoquinolinonaphthyridine

2949 A Total Synthesis of Herboxidiene Methyl Ester

Rajaratnam Premraj, Malcolm D. McLeod, Gregory W. Simpson, and Martin G. Banwell*



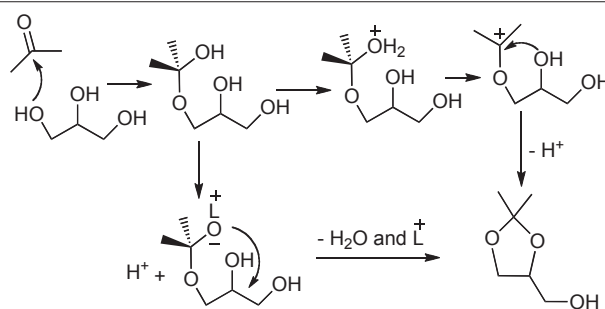
herboxidiene methyl ester

Natural Product Nucleophilic Addition Olefination Sigmatropic Rearrangement Reaction Total Synthesis

■ SHORT PAPERS

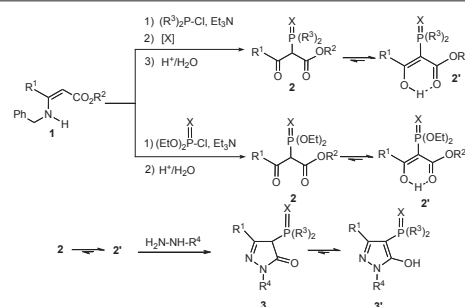
2977 Ketalization of Glycerol with Acetone to *O*-Heterocyclic Compounds over ZrO₂-SiO₂ Solid Acid Catalysts

Chunni Fan, Chenghua Xu,* Chuanqi Liu, Zunyu Huang, Jianying Liu, and Zhixiang Ye


 Glycerol Biodiesel Byproduct Ketalization *O*-Heterocyclic Ring Ketal

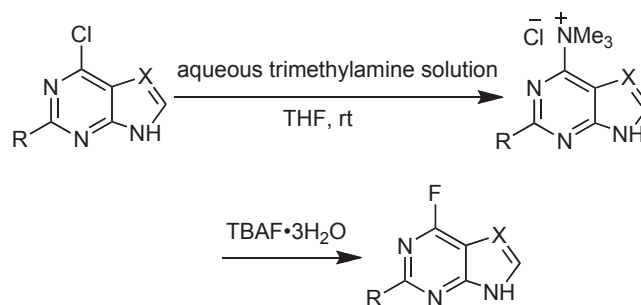
2987 Preparation of β -Keto- β -alkanoyloxyphosphonates, Phosphine Oxides and Sulfides and Their Application to the Synthesis of Novel Phosphoryl- and Thiophosphorylpyrazoles

Hosni Slimani and Soufiane Touil*


 Pyrazole Phosphopyrazole Dicarbonylphosphonate Thiophosphonate β -Enaminoester

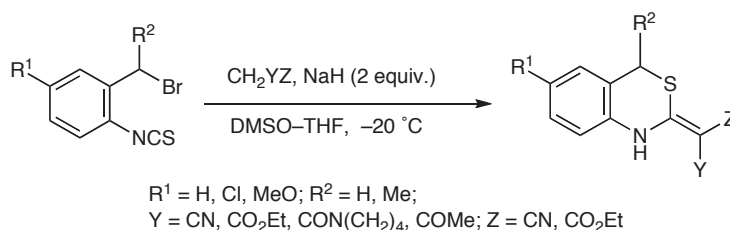
2999 The New Convenient Synthesis of 6-Fluoropurine and Its 7-/9-Unsubstituted Analogues

Mei Deng, Ningyu Wang, Guangming Xiang, and Luoting Yu*


 6-Fluoropurine Synthesis Trimethylammonio Group TBAF·3H₂O

3007 One-Pot Synthesis of 2-(1,4-Dihydro-2H-3,1-benzothiazin-2-ylidene)propanedioic Acid Derivatives by the Reaction of 2-(1-Bromoalkyl)phenyl Isothiocyanates with Propanedioic Acid Derivatives Using Sodium Hydride

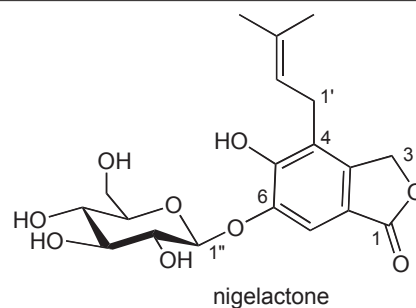
Kazuhiro Kobayashi* and Kosuke Ezaki



2-(1,4-Dihydro-3,1-benzothiazin-2-ylidene)propanedioic Acid 2-(Bromomethyl)phenyl Isothiocyanate Sodium Hydride Propanedioic Acid Derivative

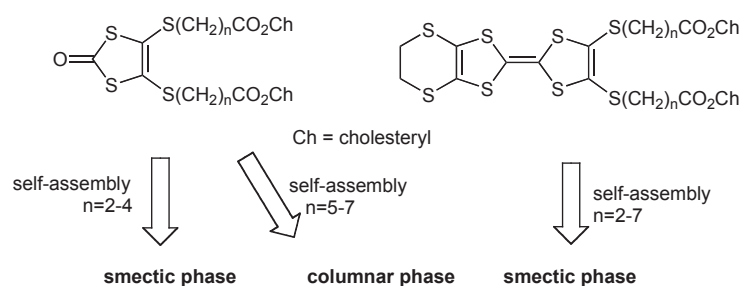
3015 Nigellactone, New Phthalide Glucoside from the Seeds *Nigella glandulifera*

Yu Feng, Yu-Ming Liu,* Qing-Hua Liu, and Ying-Jie Lei


Nigella glandulifera Phthalide Nigellactone

3021 Synthesis and Mesomorphism of the Bipedal Liquid Crystals with a Tetrathiafulvalene/dithiole and Two Cholesterol Moieties

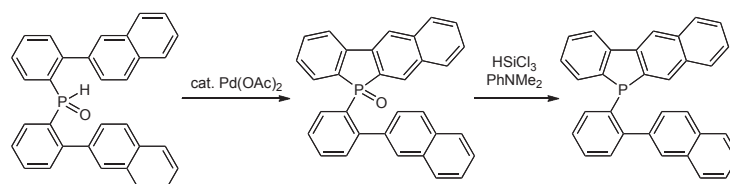
Shan Jiang, Han Wang, Ruibin Hou, Keli Zhong,* and Bingzhu Yin*



Tetrathiafulvalene Cholesterol Dithiole Smectic Phase Oblique Columnar Phase

3029 Palladium-Catalyzed Synthesis of a Phosphine Oxide with a Chiral Phosphorus Center via C-H Phosphination

Yoichiro Kuninobu,* Kazuki Origuchi, and Kazuhiko Takai*

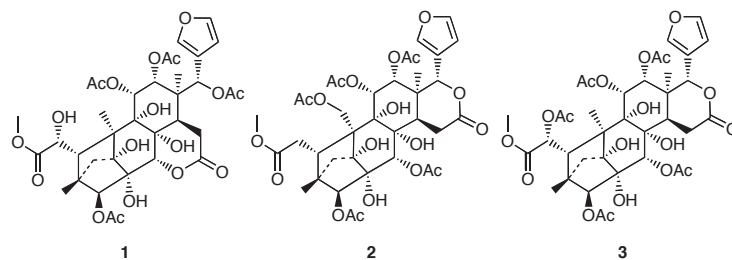


Construction of a Chiral Phosphorus Center

C-H Activation Chiral Phosphorus Center Palladium Phosphination Phosphine Oxide

3035 Three New D-Lactone Ring Isomeric Phragmalin-Type Limonoids from *Chukrasia tabularis* var. *velutina*

Yi Li, Jun Luo, Qiang Wang,* and Ling-Yi Kong*



Tetranortriterpenoid Phragmalin-Type Limonoid *Chukrasia tabularis* var. *velutina*

■ NEW HETEROCYCLIC NATURAL PRODUCTS

- 3043 Polyketides
- 3045 Aromatics
- 3061 Terpenes
- 3081 Steroids
- 3084 Alkaloids
- 3097 Miscellaneous

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 3101 Polyketides
- 3105 Aromatics
- 3107 Terpenes
- 3109 Alkaloids

■ INDEXES

- 3121 Author Index
3143 Subject Index
-
-

**Contributors
To This Issue**

2949 Banwell, Martin G.
2999 Deng, Mei
3007 Ezaki, Kosuke
2977 Fan, Chunni
3015 Feng, Yu
2933 Hassaneen, Hamdi M.
3021 Hou, Ruibin
2977 Huang, Zunyu
2879 Inomata, Katsuhiko
2837 Ishikawa, Tsutomu
3021 Jiang, Shan
2927 Kanematsu, Makoto
3007 Kobayashi, Kazuhiro
3035 Kong, Ling-Yi
3029 Kuninobu, Yoichiro
3015 Lei, Ying-Jie
3035 Li, Yi
2977 Liu, Chuanqi
2977 Liu, Jianying
3015 Liu, Qing-Hua
3015 Liu, Yu-Ming
3035 Luo, Jun
2949 McLeod, Malcolm D.
2933 Mohammed, Yasmin Sh.
3029 Origuchi, Kazuki
2927 Ozawa, Tsukasa
2949 Premraj, Rajaratnam
2927 Shishido, Kozo
2949 Simpson, Gregory W.
2987 Slimani, Hosni
3029 Takai, Kazuhiko
2987 Touil, Soufiane
3021 Wang, Han
2999 Wang, Ningyu
3035 Wang, Qiang
2933 Wardkhan, Wagnat W.
2999 Xiang, Guangming
2977 Xu, Chenghua
2977 Ye, Zhixiang
3021 Yin, Bingzhu
2927 Yokoe, Hiromasa
2927 Yoshida, Masahiro
2999 Yu, Luoting
3021 Zhong, Keli