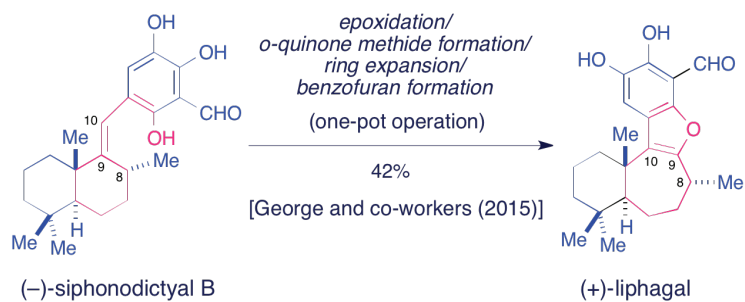


■ ANNOUNCEMENT

- 1 **Heterocycles Award**
HETEROCYCLES Announcement*

■ REVIEW

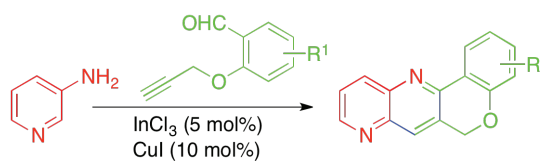
- 3 **Total Syntheses of Liphagal: A Potent and Selective Phosphoinositide 3-Kinase α (PI3K α) Inhibitor from the Marine Sponge *Aka coralliphaga***
Koichi Narita and Tadashi Katoh*



Natural Product Total Synthesis Enzyme Inhibitor Liphagal

■ PAPERS

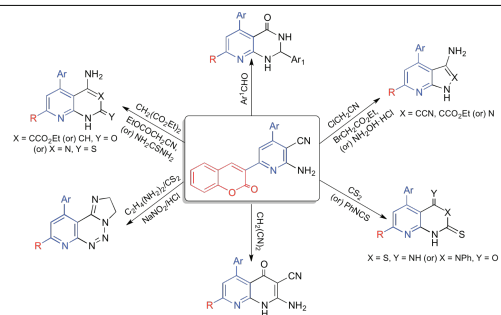
- 43 **Efficient One Pot Synthesis of Chromenonaphthyridine Derivatives by CuI/InCl₃ Catalyzed Aza Diels-Alder Reaction**
Pradip Kumar Maji* and Ayan Mahalanobish



Chromenonaphthyridine Domino Reaction Aminopyridine InCl₃/CuI Aza Diels-Alder Reaction

50 A Facile Synthesis of Novel Heterocyclic Compounds with Anticipated Antibacterial Activities Based on Coumarin Moiety

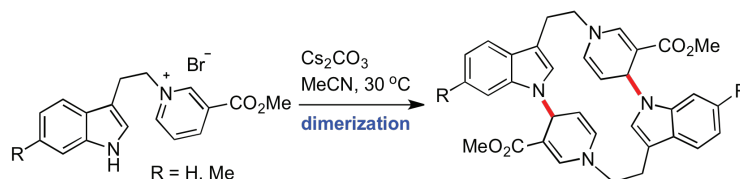
Asmaa Kamal Mourad,* Fathia Korany Mohamed, and Ahmed Yousef Soliman



Coumarin 2-Aminonicotinonitrile 3-Pyridylcoumarin Antibacterial Activity

67 A Convenient Synthesis of Indole and 1,4-Dihydropyridine Hybrid Macromolecules by Dimerization of [2-(1*H*-Indol-3-yl)ethyl]pyridinium Salts

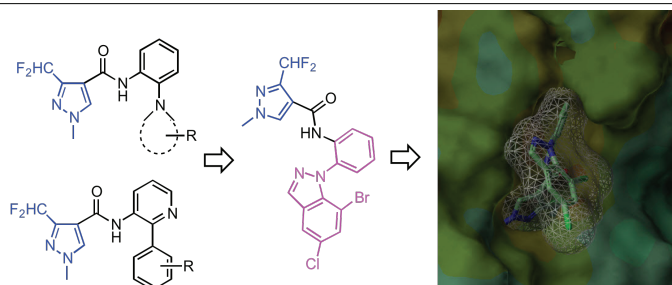
Gang Ling, Jing Zhang, Rong-Zheng Zhang, and Fu-She Han*



Indole Heterocycle Macrocyclic Compound

74 Synthesis, Antifungal Activity and QSAR of Novel Pyrazole Amides as Succinate Dehydrogenase Inhibitors

Shijie Du, Zhonghao Li, Zaimin Tian, and Lu Xu*

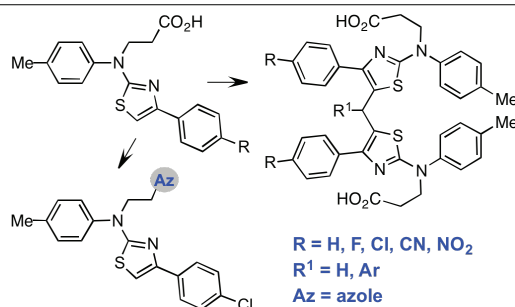


design and synthesis a series of new SDHIs with high antifungal activity

Fungicide Succinate Dehydrogenase Inhibitor (SDHI) Molecular Docking

86 Synthesis, Transformation of 3-[(4-Arylthiazol-2-yl)-(p-tolyl)amino]propanoic Acids, Bis(thiazol-5-yl)phenyl-, Bis(thiazol-5-yl)methane Derivatives, and Their Antimicrobial Activity

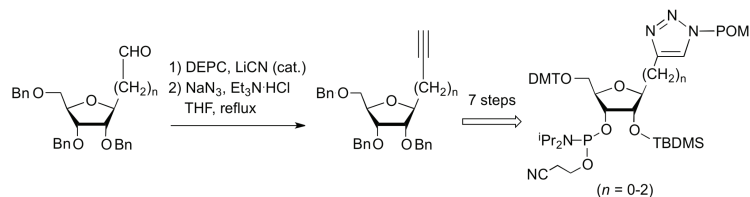
Birutė Grybaitė, Rita Vaickelionienė, Maryna Stasevych, Olena Komarovska-Porokhnyavets, Volodymyr Novikov, and Vytautas Mickevičius*



Thiazole Bis(thiazol-5-yl)methane Bis(thiazol-5-yl)phenylmethane Antimicrobial Activity

106 Synthesis of Triazol *C*_n-Ribonucleoside Phosphoramidites Using β-Ribofuranosyl-*C*_n-acetylenes for RNA Catalysis Probing

Hiroki Yoneyama, Fumiko Hikasa, Daiki Fujisue, Yoshihide Usami, Zheng-yun Zhao, and Shinya Harusawa*

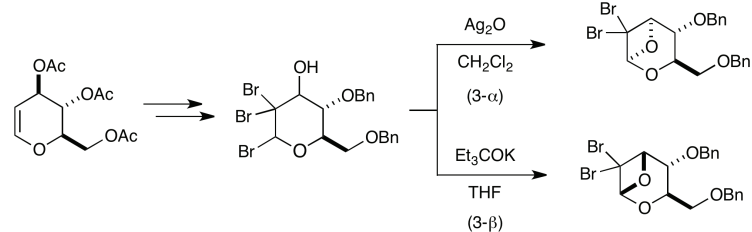


Triazole C-Nucleoside Phosphoramidite Ribozyme Tetrazole-Fragmentation

■ SHORT PAPERS

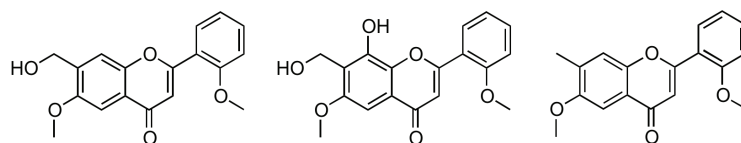
127 Synthesis of Dibromo Compounds Containing 2,6-Dioxabicyclo[3.1.1]heptane Similar to Core Moiety of Thromboxane A₂

Yoshihiko Nokura, Atsuo Nakazaki, and Toshio Nishikawa*

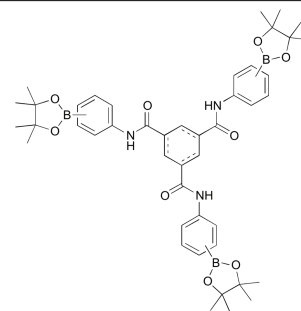

 Thromboxane A₂ Strained Oxetane Acetal D-Glucal Intramolecular Williamson Ether Synthesis Koenigs-Knorr Synthesis

137 Flavones from the Fruits of *Vernicia fordii* and Their Anti-Tobacco Mosaic Virus Activity

Min Zhou, Rui-Qi Zhang, Yan-Jun Chen, Ling-Min Liao, Yan-Qi Sun, Zu-Hong Ma, Qiao-Fen Yang, Ping Li, Wei-Guang Wang,* and Qiu-Fen Hu*

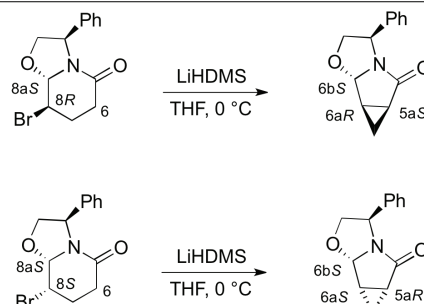

 Flavone *Vernicia fordii*
144 Novel Trivalent C₃-Symmetrical Phenylboronic Acid Pinacol Esters and Their Biological Evaluation

Makoto Furutachi, Saho Fuchigami, Kenta Ako, Saho Goto, Toshiaki Gondo, Mai Takuse, Moeko Yoshida, Kazumi Yokomizo, Jian-Rong Zhou, Aya Matsunaga, Nozomi Hiraga, Nobuhiro Kashige, Fumio Mlake, and Kunihiro Sumoto*


 Phenylboronic Acid Pinacol Ester C₃-Symmetry Anti-HSV-1 Activity Antibacterial Activity Cytotoxic Activity

152 Diastereospecific Intramolecular Cyclopropanation of Enantiopure 8-Bromo-3-phenylhexahydrooxazolo-[3,2-a]pyridin-5-ones

Anna Vargas, María L. Orea,* Dino Gnecco,* David M. Aparicio, Jorge R. Juárez, and Joel L. Terán



Diastereospecific Reaction Intramolecular Reaction Cyclopropanation Reaction Hexahydrooxazolo[3,2-a]pyridin-5-one Enantiopure Product

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 159 Polyketides
 - 162 Aromatics
 - 166 Terpenes
 - 169 Alkaloids
 - 178 Miscellaneous
-

■ BRUSH UP YOUR HETEROCYCLES

- 179 Brush Up Your Heterocycles
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Contributors To This Issue

- | | | | |
|-----|---------------------------------|-----|-------------------|
| 144 | Ako, Kenta | 67 | Zhang, Jing |
| 152 | Aparicio, David M. | 67 | Zhang, Rong-Zheng |
| 137 | Chen, Yan-Jun | 137 | Zhang, Rui-Qi |
| 74 | Du, Shijie | 106 | Zhao, Zheng-yun |
| 144 | Fuchigami, Saho | 144 | Zhou, Jian-Rong |
| 106 | Fujisue, Daiki | 137 | Zhou, Min |
| 144 | Furutachi, Makoto | | |
| 152 | Gnecco, Dino | | |
| 144 | Gondo, Toshiaki | | |
| 144 | Goto, Saho | | |
| 86 | Grybaitė, Birutė | | |
| 67 | Han, Fu-She | | |
| 106 | Harusawa, Shinya | | |
| 106 | Hikasa, Fumiko | | |
| 144 | Hiraga, Nozomi | | |
| 137 | Hu, Qiu-Fen | | |
| 152 | Juárez, Jorge R. | | |
| 144 | Kashige, Nobuhiro | | |
| 3 | Katoh, Tadashi | | |
| 86 | Komarovska-Porokhnyavets, Olena | | |
| 137 | Li, Ping | | |
| 74 | Li, Zhonghao | | |
| 137 | Liao, Ling-Min | | |
| 67 | Ling, Gang | | |
| 137 | Ma, Zu-Hong | | |
| 43 | Mahalanobish, Ayan | | |
| 43 | Maji, Pradip Kumar | | |
| 144 | Matsunaga, Aya | | |
| 144 | Miake, Fumio | | |
| 86 | Mickevičius, Vytautas | | |
| 50 | Mohamed, Fathia Korany | | |
| 50 | Mourad, Asmaa Kamal | | |
| 127 | Nakazaki, Atsuo | | |
| 3 | Narita, Koichi | | |
| 127 | Nishikawa, Toshio | | |
| 127 | Nokura, Yoshihiko | | |
| 86 | Novikov, Volodymyr | | |
| 152 | Orea, María L. | | |
| 50 | Soliman, Ahmed Yousef | | |
| 86 | Stasevych, Maryna | | |
| 144 | Sumoto, Kunihiko | | |
| 137 | Sun, Yan-Qi | | |
| 144 | Takuse, Mai | | |
| 152 | Terán, Joel L. | | |
| 74 | Tian, Zaimin | | |
| 106 | Usami, Yoshihide | | |
| 86 | Vaickelionienė, Rita | | |
| 152 | Vargas, Anna | | |
| 137 | Wang, Wei-Guang | | |
| 74 | Xu, Lu | | |
| 137 | Yang, Qiao-Fen | | |
| 144 | Yokomizo, Kazumi | | |
| 106 | Yoneyama, Hiroki | | |
| 144 | Yoshida, Moeko | | |