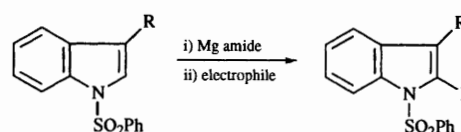


### Communications

**2331 Magnesium of indoles with magnesium amide bases**

Yoshinori Kondo, Akihiro Yoshida and Takao Sakamoto



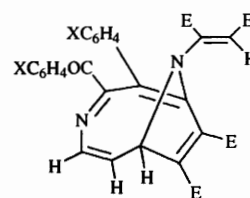
R = H, Me, CO<sub>2</sub>Me, CN

Mg amide = (Pr<sup>i</sup>)<sub>2</sub>NMg, Pr<sup>i</sup><sub>2</sub>NMgBr

electrophile = PhCHO, I<sub>2</sub>, CO<sub>2</sub>-CH<sub>2</sub>N<sub>2</sub>, RX, PhI-Pd(PPh<sub>3</sub>)<sub>4</sub>

**2333 Unusual formation and X-ray crystal structure of stable anti-Bredt compounds by reaction of 3a,6a-diazapentalenes with dimethyl acetylenedicarboxylate**

Kiyoshi Matsumoto, Hirokazu Iida, Hideki Katsura, Takahisa Machiguchi, Hidehiro Uekusa and Yuji Ohashi



E = CO<sub>2</sub>Me

a X = H (65%)

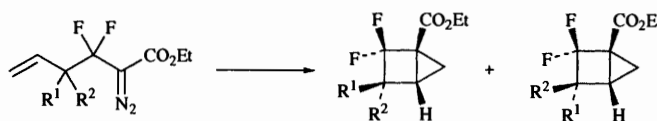
b X = *p*-Cl (54%)

c X = *p*-Br (42%)

d X = *m*-NO<sub>2</sub> (49%)

**2337 Rhodium-catalysed decomposition of  $\delta,\epsilon$ -unsaturated  $\beta,\beta$ -difluoro- $\alpha$ -diazo esters, the direct formation of bicyclo[2.1.0]pentane ring systems *via* intramolecular cyclopropanation**

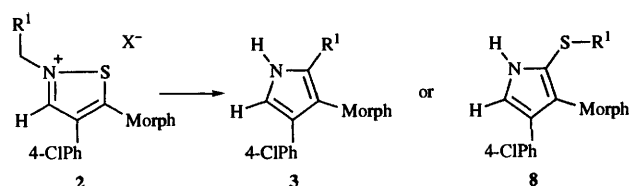
Guo-qiang Shi and Wei-ling Cai



## Articles

2339 Mechanistic aspects of the synthesis of 3-aminopyrroles from substituted 2-methyl-1,2-thiazolium salts or 3-aminothioacrylamides

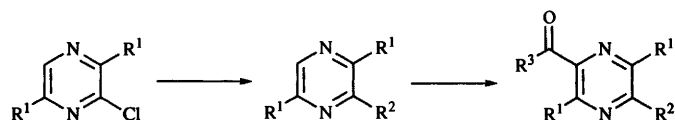
Andreas Rolfs, Peter G. Jones and Jürgen Liebscher



The mechanism of the ring transformation of 1,2-thiazolium salts **2** to pyrroles **3** or **8** is established by the isolation of intermediates

2345 Studies on pyrazines. Part 32. Synthesis of trisubstituted and tetrasubstituted pyrazines as ant pheromones

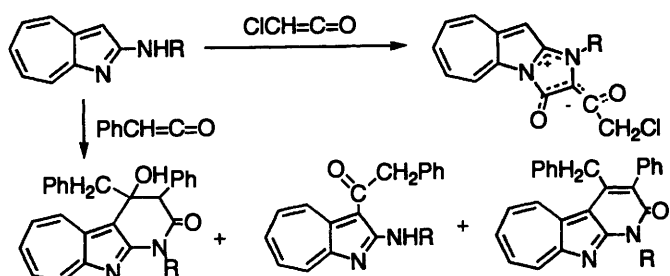
Nobuhiro Sato and Tomoyuki Matsuura



$R^1 = \text{Me, Bu}^i, \text{Pr}^i, \text{Bu}^t, R^2 = \text{Me, Et, isopentyl}, R^3 = \text{Et, Bu}^i$

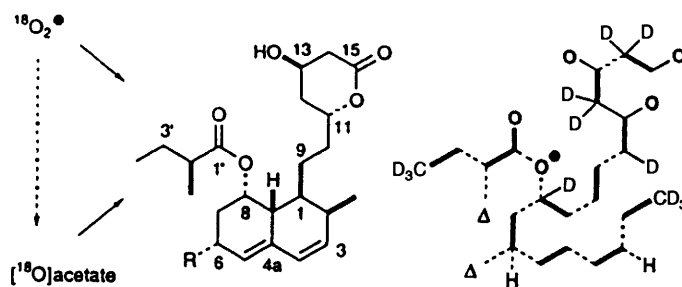
2351 Reaction of 2-amino- and 2-(substituted amino)-1-azaazulenes with chloro-, phenyl- and diphenyl-ketene

Noritaka Abe, Ichiro Osaki, Sawako Kojima, Haruhiko Matsuda, Yoshikazu Sugihara and Akikazu Kakehi



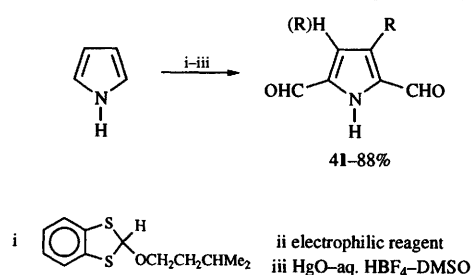
2357 Biosynthesis of ML-236C and the hypocholesterolemic agents compactin by *Penicillium aurantiogriseum* and lovastatin by *Aspergillus terreus*: determination of the origin of carbon, hydrogen and oxygen atoms by  $^{13}\text{C}$  NMR spectrometry and observation of unusual labelling of acetate-derived oxygens by  $^{18}\text{O}_2$

Kurt Wagschal, Yuko Yoshizawa, David J. Witter, Yaoquan Liu and John C. Vederas



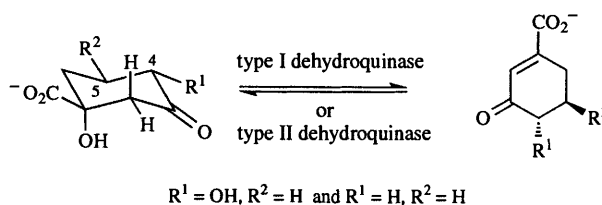
2365 Convenient route for the synthesis of 3-substituted and 3,4-disubstituted pyrrole-2,5-dicarbaldehydes

Silvano Cadamuro, Iacopo Degani, Rita Fochi, Antonella Gatti and Laura Piscopo



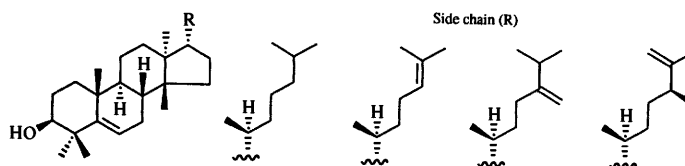
2371 **Comparison of the substrate specificity of type I and type II dehydroquinases with 5-deoxy- and 4,5-dideoxy-dehydroquinic acid**

Joanna M. Harris, William J. Watkins,  
Alastair R. Hawkins, John R. Coggins and  
Chris Abell



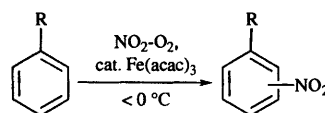
2379 **Tirucalla-5,24-dien-3 $\beta$ -ol [(13 $\alpha$ ,14 $\beta$ ,17 $\alpha$ ,20 $S$ )-lanosta-5,24-dien-3 $\beta$ -ol] and three other  $\Delta^5$ -unsaturated tirucallanes from the roots of *Bryonia dioica* Jacq.: the first naturally occurring C-10 methylated tetracyclic triterpene alcohols with a  $\Delta^5$ -monounsaturated skeleton**

Toshihiro Akihisa, Yumiko Kimura,  
Wilhelmus C. M. C. Kokke, Sei-ichi Takase,  
Ken Yasukawa and Toshitake Tamura



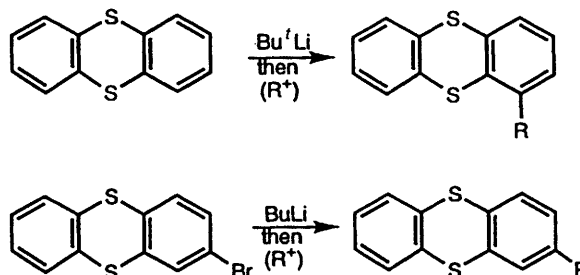
2385 **Iron(III)-catalysed nitration of non-activated and moderately activated arenes with nitrogen dioxide-molecular oxygen under neutral conditions**

Hitomi Suzuki, Shuji Yonezawa, Nobuaki  
Nonoyama and Tadashi Mori



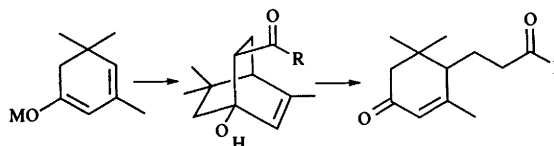
2391 **Synthesis of 1- and 2-substituted thianthrenes**

James M. Lovell and John A. Joule



2397 **Reactions of endocyclic linearly conjugated dienolates with Michael acceptors leading to bicyclo[2.2.2]octane derivatives. Application to the synthesis of C<sub>13</sub> degradation products of carotenoids**

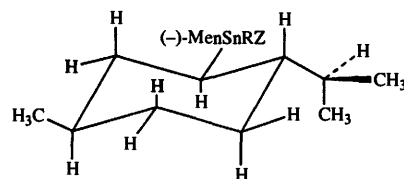
Nobuhiko Ito and Takeaki Etoh



The reaction of endocyclic linearly conjugated dienolates and enol ethers with Michael acceptors and the synthesis of several C<sub>13</sub> degradation products are reported

## 2407 Synthesis and some properties of mixed alkyldi(-)-menthyltin hydrides

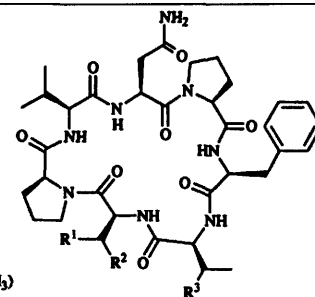
Cristian A. Vitale and Julio C. Podestá



R = methyl, neophyl Z = H, Br, Me

## 2411 Synthesis of the cyclic heptapeptides Axinastatin 2 and Axinastatin 3

George R. Pettit, Jeffrey W. Holman and Gerard M. Boland

2a Axinastatin 1 ( $R^1 = R^2 = R^3 = \text{CH}_3$ )2b Axinastatin 2 ( $R^1 = \text{Pr}^i, R^2 = \text{H}, R^3 = \text{CH}_3$ )2c Axinastatin 3 ( $R^1 = \text{Pr}^i, R^2 = \text{H}, R^3 = \text{CH}_2\text{CH}_3$ )

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NOTE: An asterisk in the heading of each paper indicates the author who is to receive any correspondence.

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Synthesis of chiral tricyclo[3.2.1.0<sup>2,7</sup>]octanes *via* an efficient 3-*exo-trig* radical cyclisation reaction  
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Intramolecular photo[4+2]cycloaddition reaction of an enone with a benzene ring  
**K. Kishikawa, S. Akimoto, S. Kohmoto, M. Yamamoto and K. Yamada**

Synthesis and reactions of reduced flavones  
**P.W. Groundwater, D.E. Hibbs, M.B. Hursthouse and M. Nyerges**

Effective transgalactosylation catalysed by a lipid-coated  $\beta$ -D-galactosidase in organic solvents  
**Y. Okahata and T. Mori**

Approaches to synthetic neolignans  
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Stereoselective benzylic  $\alpha$ -acylamino radical cyclisation: a model study for the tacaman indole alkaloid skeleton  
**R. Clauss and R. Hunter**

Syntheses of 1-substituted furan-fused 3-sulfolenes and their Diels–Alder reactions  
**T. Suzuki, H. Fuchii and H. Takayama**

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