

Phytochemistry Vol. 66, No. 7, 2005

Contents

Obituary

pp 745–746

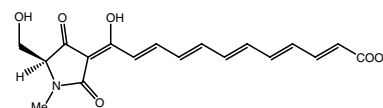
REVIEW

Secondary metabolites of slime molds (myxomycetes)

pp 747–769

Valery M. Dembitsky, Tomáš Řezanka\*, Jaroslav Spížek and Lumír O. Hanuš

The compounds reported from the slime molds (myxomycetes) species are described. Almost 100 natural compounds including their chemical structures and biological activities are described in this review article. Only metabolites with a well-defined structure are included.



FULL PAPERS

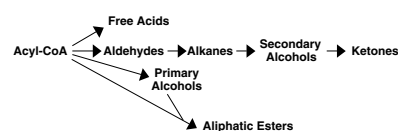
MOLECULAR GENETICS AND GENOMICS

Wax constituents on the inflorescence stems of double *eceriferum* mutants in *Arabidopsis* reveal complex gene interactions

pp 771–780

S. Mark Goodwin, Aaron M. Rashotte, Musrur Rahman, Kenneth A. Feldmann and Matthew A. Jenks\*

Eleven *eceriferum* (*cer*) mutants of *Arabidopsis* were used to create 14 double *cer* mutants, each with two homozygous recessive *cer* loci. Stem wax constituents on these doubles revealed that overlap of genetic operations is a central feature in wax metabolism.



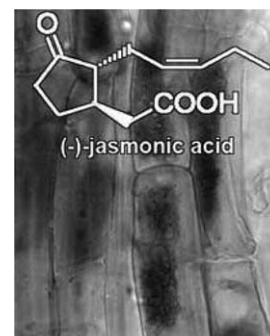
METABOLISM

Lipid metabolism in arbuscular mycorrhizal roots of *Medicago truncatula*

pp 781–791

Michael Stumpe, Jan-Gerrit Carsjens, Irene Stenzel, Cornelia Göbel, Imke Lang, Katharina Pawlowski, Bettina Hause\* and Ivo Feussner

Analyses of fatty acid and lipidperoxide patterns in roots of mycorrhizal roots in comparison to non-mycorrhizal roots of *M. truncatula* revealed elevated levels of fungus-specific esterified fatty acids and of jasmonic acid.

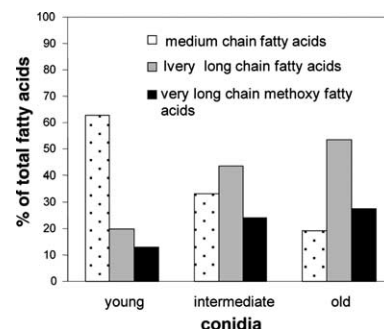


### Methoxylated fatty acids in *Blumeria graminis* conidia

pp 793–796

Jérôme Muchembled, Anissa Lounès-Hadj Sahraoui\*, Frédéric Laruelle, Fabien Palhol, Daniel Couturier, Anne Grandmougin-Ferjani and Michel Sancholle

Two fatty acids were identified as 3-methoxydocosanoic and 3-methoxytetracosanoic acids in *Blumeria graminis* conidia, using deuterated reagent and GC–MS. The total fatty acid composition changed qualitatively and quantitatively with increasing age of conidia.



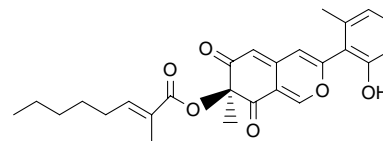
### CHEMOTAXONOMY

#### Cohaerins A and B, azaphilones from the fungus *Hypoxyylon cohaerens*, and comparison of HPLC-based metabolite profiles in *Hypoxyylon* sect. *Annulata*

pp 797–809

Dang Ngoc Quang, Toshihiro Hashimoto, Yoko Nomura, Hartmund Wollweber, Veronika Hellwig, Jacques Fournier, Marc Stadler\* and Yoshinori Asakawa\*

Azaphilones, cohaerins A and B, were isolated from the fungus *Hypoxyylon cohaerens*. Stromatal metabolite profiles of several taxa of *Hypoxyylon* sect. *Annulata* were generated using analytical HPLC–MS and studied for their prevailing metabolites and chemotaxonomical classification.



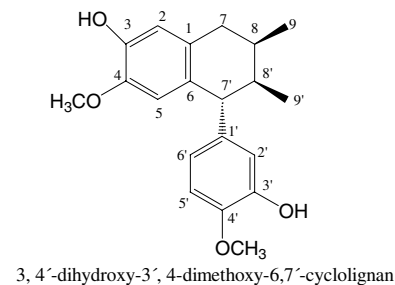
### BIOACTIVE PRODUCTS

#### Cytotoxic lignans from *Larrea tridentata*

pp 811–815

Joshua D. Lambert\*, Shengmin Sang, Ann Dougherty, Colby G. Caldwell, Ross O. Meyers, Robert T. Dorr and Barbara N. Timmermann

Six lignans, including the cyclolignan 3,4'-dihydroxy-3',4'-dimethoxy-6,7'-cyclolignan, were isolated from *Larrea tridentata*. All of the compounds were assessed for their growth inhibitory activity against human breast cancer, human colon cancer and human melanoma cell lines ( $IC_{50}$  = 5–60  $\mu$ M). Linear butane-type lignans were most potent.



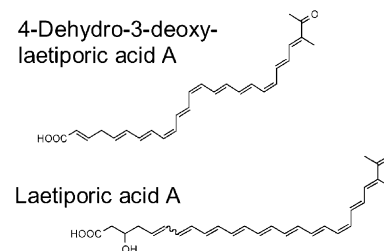
### CHEMISTRY

#### Laetiporic acids, a family of non-carotenoid polyene pigments from fruit-bodies and liquid cultures of *Laetiporus sulphureus* (Polyporales, Fungi)

pp 817–823

Paolo Davoli, Adele Mucci, Luisa Schenetti and Roland W.S. Weber\*

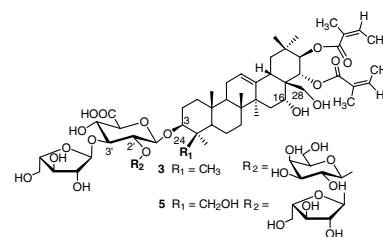
Laetiporic acids A–C and 2-dehydro-3-deoxylaetiporic acid A are the orange pigments of fruit-bodies and liquid-grown mycelium of *Laetiporus sulphureus*.



**Haemolytic acylated triterpenoid saponins from *Harpullia austro-caledonica*****pp 825–835**

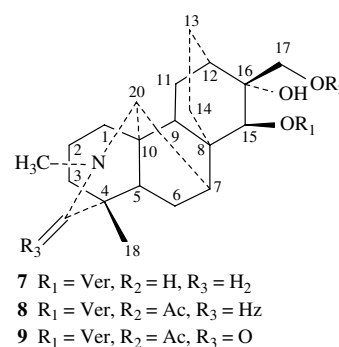
Laurence Voutquenne\*, Pauline Guinot, Clément Froissard, Odile Thoison, Marc Litaudon and Catherine Lavaud

Nine acylated triterpenoid saponins were isolated from the stem bark of *Harpullia austro-caledonica*. Their structures were established by spectroscopic methods. The saponin mixture and major compounds showed high haemolytic activity.

**Norditerpene and diterpene alkaloids from *Aconitum variegatum*****pp 837–846**

Jesús G. Díaz, Juan García Ruiza and Werner Herz\*

Structures were determined of four norditerpene and five diterpene alkaloids from *Aconitum variegatum*.

**OTHER CONTENTS**

**Announcement: The Phytochemical Society of Europe**

**Author Index**

**Guide for Authors**

**pp I–II****p III****pp V–VI**

\* Corresponding author

The Editors encourage the submission of articles online, thus reducing publication times. For further information and to submit your manuscript, please visit the journal homepage at <http://www.elsevier.com/locate/phytochem>



ELSEVIER

ISSN 0031-9422

INDEXED/ABSTRACTED IN: *Current Awareness in Biological Sciences (CABS)*, *Curr Cont ASCA*, *Chem. Abstr.*, *BIOSIS Data*, *PASCAL-CNRS Data*, *CAB Inter*, *Cam Sci Abstr*, *Curr Cont/Agri Bio Env Sci*, *Curr Cont/Life Sci*, *Curr Cont Sci Cit Ind*, *Curr Cont SCISEARCH Data*, *Bio Agri Ind*

Also available on  
**SCIENCE @ DIRECT®**  
[www.sciencedirect.com](http://www.sciencedirect.com)