

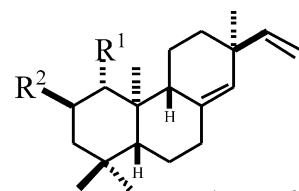
ent-Isopimarane-type diterpenoids from the New Zealand Liverwort *Trichocolea mollissima*

Fumihito Nagashima, Moyoko Murakami, Shigeru Takaoka, Yoshinori Asakawa

Faculty of Pharmaceutical Sciences, Tokushima Bunri University; Yamashiro-cho, Tokushima 770-8514, Japan

Two *ent*-isopimarane-type diterpenoids were isolated from the New Zealand liverwort *Trichocolea mollissima*, together with a known *ent*-isopimarane-type diterpenoid. Their absolute structures were elucidated by modified Mosher's method, X-ray crystallography and CD spectrum.

Phytochemistry, 2003, **64**, 1319



- 1 R¹=OH, R²=H
- 2 R¹=R²=OH
- 3 R¹=H, R²=OH

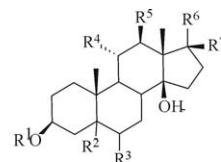
Pregnanes and pregnane glycosides from *Marsdenia roylei*

Vijay S. Gupta, Alok Kumar, Desh Deepak, Anakshi Khare, Naveen K. Khare

Department of Chemistry, Lucknow University, Lucknow-226 007, India

Two pregnanes, namely desacylkondurangenin C and deniagenin (new), and two new pregnane glycosides designated as denin and marsin have been isolated from chloroform soluble extract of dried stem of *Marsdenia roylei*. Chemical and spectroscopic evidences are consistent with the structures of deniagenin, denin and marsin as 3 β , 11 α , 12 β , 14 β , 17 β , 20-hexahydroxy pregn-5-ene; desacylkondurangenin C-3-*O*- α -D-glucopyranosyl-(1 \rightarrow 4)-*O*- α -L-fucopyranoside and ketocalogenin-3-*O*- α -L-fucopyranoside, respectively.

Phytochemistry, 2003, **64**, 1327



- 3, R¹=H, R²=R³= $\Delta^{5,6}$, R⁴=R⁵=R⁷=OH, R⁶=CH(OH)CH₃
- 5, R¹=D-Glcp-L-Fucp-, R²=R³=R⁷=H, R⁶=CH(OH)CH₃
- 12, R¹=L-Fucp-, R²=R³= $\Delta^{5,6}$, R⁴=R⁵=R⁷=H, R⁶=COCH₃

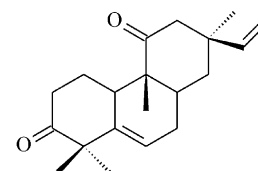
Secondary metabolites from the liverwort *Tylimanthus renifolius*

Hildegard Feld, Josef Zapp, Hans Becker

FR 8.7, Pharmakognosie und Analytische Phytochemie der Universität des Saarlandes, D-66041 Saarbrücken, Germany

Two new herbertanes, a new aromadendrane, a new rosane, a new phytane along with ring B unsubstituted flavonoids have been isolated from the liverwort *Tylimanthus renifolius*. Their structures were elucidated by NMR spectroscopy.

Phytochemistry, 2003, **64**, 1335



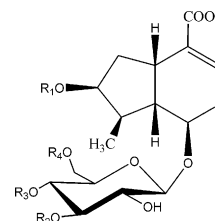
Iridoid glucosides from *Strychnos nux-vomica*

Xiaozhe Zhang, Qing Xu, Hongbin Xiao, Xinmiao Liang

Dalian Institute of Chemical Physics, Chinese Academy of Sciences, 161 Zhongshan Road, Dalian 116011, PR China

From the seeds of *Strychnos nux-vomica* three iridoids and two known iridoid glucosides were isolated. The molecular structures of the compounds were established by ESI-MS and NMR studies.

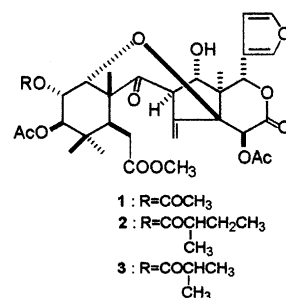
Phytochemistry, 2003, **64**, 1341



Modified limonoids from the leaves of *Sandoricum koetjape*

Intan S. Ismail, Hideyuki Ito, Tsutomu Hatano, Shoko Taniguchi, Takashi Yoshida
Faculty of Pharmaceutical Sciences, Okayama University, Tsushima, Okayama 700-8530, Japan

From the leaves of *Sandoricum koetjape* (Meliaceae), three trijugin-type limonoids, sandrapins A–C have been isolated and their structures were elucidated by means of 1D and 2D NMR analyses.



Phytochemistry, 2003, **64**, 1345

Lanosterol and tetranorlanosterol glycosides from the bulbs of *Muscari paradoxum*

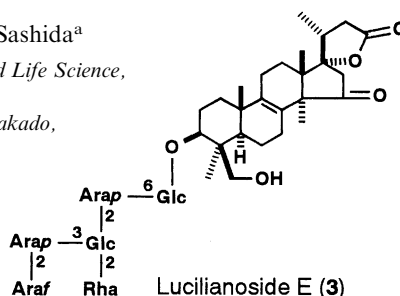
Kazutomo Ori^a, Minpei Koroda^a, Yoshihiro Mimaki^a, Hiroshi Sakagami^b, Yutaka Sashida^a

^aLaboratory of Medicinal Plant Science, School of Pharmacy, Tokyo University of Pharmacy and Life Science, 1432-1, Horinouchi, Hachioji, Tokyo 192-0392, Japan

^bDepartment of Dental Pharmacology, Meikai University School of Dentistry, 1-1, Keyaki-dai, Sakado, Saitama 350-0283, Japan

Lucilianosides C–E (1–3), three tetranorlanostane glycosides, and scillasaponins E–G (4–6), three lanostane glycosides, were isolated from the bulbs of *Muscari paradoxum*.

Phytochemistry, 2003, **64**, 1351



Steroidal glycosides from the fruits of *Solanum abutiloides*

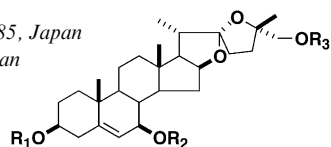
Hitoshi Yoshimitsu^a, Makiko Nishida^a, Toshihiro Nohara^b

^aFaculty of Engineering, Kyushu Kyoritsu University, 1-8 Jiyugaoka Yahata-nishi-ku, Kitakyushu 807-8585, Japan

^bFaculty of Pharmaceutical Sciences, Kumamoto University, 5-1 Oe-honmachi, Kumamoto 862-0973, Japan

Four steroidal glycosides, named abutilosides L, M, N and O, were isolated from the fresh fruits of *Solanum abutiloides*.

Phytochemistry, 2003, **64**, 1361



abutiloside L: R₁=β-Chacotriose, R₂=H, R₃=glc
abutiloside M: R₁=β-Chacotriose, R₂=Me, R₃=glc
abutiloside N: R₁=β-Solatriose, R₂=H, R₃=glc

Anthocyanins with 4'-glucosidation from red onion, *Allium cepa*

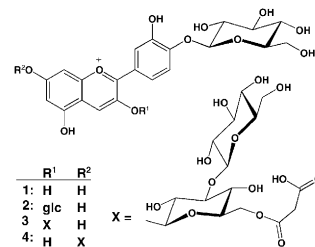
Torgils Fossen^a, Rune Slimestad^b, Øyvind M. Andersen^a

^aDepartment of Chemistry, University of Bergen, Allégt. 41, N-5007 Bergen, Norway

^bPolyphenols Laboratories AS, Hanaveien 4-6, N-4327 Sandnes, Norway

Four novel cyanidin 4'-O-β-glucopyranosides (1–4), peonidin 3-O-(6"-O-malonyl-β-glucopyranoside)-5-O-β-glucopyranoside and peonidin 3-O-(6"-O-malonyl-β-glucopyranoside) have been isolated from pigmented scales of red onion, *Allium cepa*.

Phytochemistry, 2003, **64**, 1367



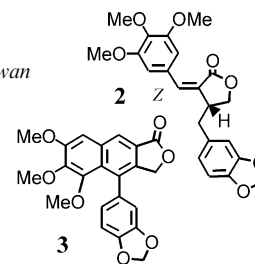
Immunosuppressive flavones and lignans from *Bupleurum scorzonerifolium*

Wen-Liang Chang^a, Li-Wen Chiu^a, Jenn-Haung Lai^b, Hang-Ching Lin^a

^aSchool of Pharmacy, National Defense Medical Center, Taipei 114, Taiwan

^bRheumatology/Immunology and Allergy, Department of Medicine, Tri-Service General Hospital, Taipei 114, Taiwan

Two lignans, isochaihulactone and chaihunaphthone, together with 11 known compounds were isolated from the root of *Bupleurum scorzonerifolium*. Their structures were established on the basis of spectral evidence. In biological test, eugenin and saikochromone potentially inhibited CD28-costimulated activation of human peripheral T cells.



Phytochemistry, 2003, **64**, 1375

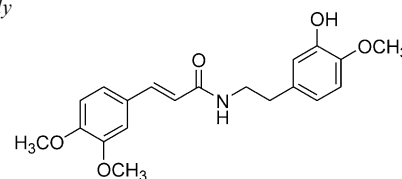
Cinnamic acid amides from *Chenopodium album*: effects on seeds germination and plant growth

Francesca Cutillo^a, Brigida D'Abrosca^b, Marina DellaGreca^a, Cinzia Di Marino^a, Annunziata Golino^b, Lucio Previtera^a, Armando Zarrelli^a

^aDipartimento di Chimica Organica e Biochimica, Università Federico II, Complesso Universitario Monte Sant'Angelo, Via Cinthia 4, I-80126, Naples, Italy

^bDipartimento di Scienze della Vita, II Università di Napoli, Via Vivaldi 43, I-81100, Caserta, Italy

Seven cinnamic acid amides have been isolated from *Chenopodium album*. The structures have been attributed by means of their spectral data. One of them, *N-trans-4-O-methylferuloyl 4'-O-methyldopamine*, is described for the first time. Their effects of germination and growth of dicotyledons *Lactuca sativa* L. (lettuce) and *Lycopersicon esculentum* L. (tomato) and of monocotyledon *Allium cepa* L. (onion) as standard target species have been studied.



Phytochemistry, 2003, **64**, 1381

Prenylated flavonoids from *Moghania philippinensis*

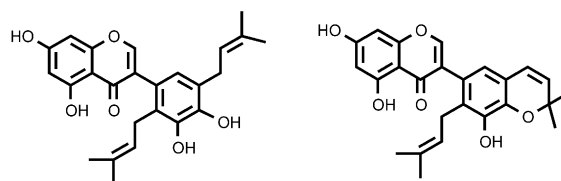
Eun-Mi Ahn^a, Norio Nakamura^a, Teruaki Akao^b, Katsuko Komatsu^a, Ming-Hua Qui^c, Massao Hattori^a

^aInstitute of Natural Medicine, Toyama Medical and Pharmaceutical University, 2630 Sugitani, Toyama 930-0194, Japan

^bFaculty of Pharmaceutical Sciences, Toyama Medical and Pharmaceutical University, 2630 Sugitani, Toyama 930-0194, Japan

^cKunming Institute of Botany, The Chinese Academy of Sciences, Kunming 650204, People's Republic of China

Five prenylated flavonoids were isolated from the roots of *Moghania philippinensis* (Fabaceae). The structures of these compounds were elucidated on the basis of spectroscopic and chemical means.



Phytochemistry, 2003, **64**, 1389

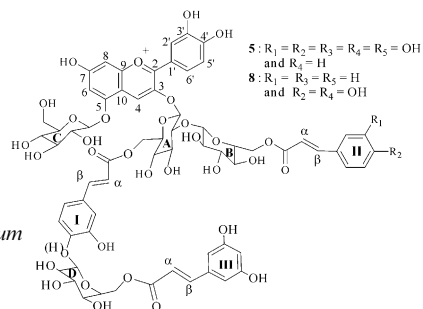
Two triacylated and tetraglucosylated anthocyanins from *Ipomoea asarifolia* flowers.

Eloi Pale^a, Marie Kouda-Bonafos^a, Mouhoussine Nacro^a, Maurice Vanhaelen^b, Renée Vanhaelen-Fastré^b

^aLaboratoire de Chimie Organique Appliquée, Département de Chimie, Unité de Formation et de Recherche en Sciences Exactes et Appliquées, Université de Ouagadougou 03 B.P. 7021, Ouagadougou, Burkina Faso

^bLaboratoire de Pharmacognosie et de Bromatologie, Institut de Pharmacie, Université Libre de Bruxelles, Campus Plaine CP 205-4, Bld Triomphe, B-1050 Bruxelles, Belgium

The identification of the anthocyanin of the flowers of *Ipomoea asarifolia* was completed by the structure elucidation of two additional anthocyanins **5** and **8**.



Phytochemistry, 2003, **64**, 1395

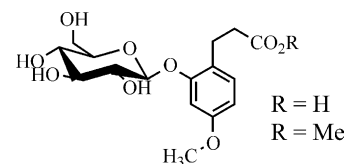
Phenylpropanoid glycosides of *Gnidia polycephala*

Phytochemistry, 2002, **64**, 1401

Namboole Moses Munkombwe, Pelotshweu Galebotswe, Kabelo Modibesane, Nametso Morebodi

Chemistry Department, University of Botswana, Private Bag 0022, Gaborone, Botswana

Two phenylpropanoid glucosides, an acid and its methyl ester, were isolated from the stem and roots of *Gnidia polycephala* and characterized using spectroscopic data.

Furoquinoline alkaloids from *Teclea nobilis*

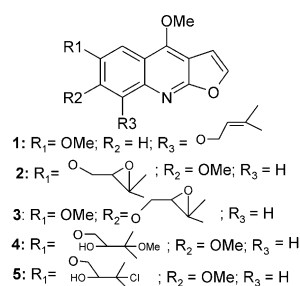
Phytochemistry, 2003, **64**, 1405

Adnan J. Al-Rehaily^a, Mohammad S. Ahmad^a, Ilias Muhammad^b, Assad A. Al-Thukair^c, Herman P. Perzanowski^c

^aDepartment of Pharmacognosy, College of Pharmacy, King Saud University, Riyadh 11451, Saudi Arabia

^bNational Center for Natural Products Research, Research Institute of Pharmaceutical Sciences, School of Pharmacy, University of Mississippi, University, MS 38677, USA

^cDepartment of Chemistry, College of Sciences, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia



Five new furoquinoline alkaloids (**1–5**), along with seven known furoquinolines, one acridone alkaloid and one known flavanone were isolated from *Teclea nobilis* Delile. Their structures were established by spectral analysis, including 2D NMR data.

Benzoxazinoids and iridoid glucosides from four *Lamium* species

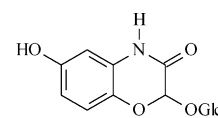
Phytochemistry, 2003, **64**, 1413

Kalina I. Alipieva^a, Rilka M. Taskova^b, Ljubka N. Evstatieva^b, Nedjalka V. Handjieva^a, Simeon S. Popov^a

^a*Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria*

^b*Institute of Botany, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria*

Benzoxazinoids, a new class of compounds for the Lamiaceae family, were found in *Lamium galeobdolon*. The structure of one new benzoxazinoid was established. The phytochemical data of *Lamium galeobdolon*, *L. amplexicaule*, *L. purpureum* and *L. garganicum* are discussed from a systematic and evolutionary point of view.



6-Hydroxy-blepharin