Henrik Franzyk - DTU Orbit (06/07/2017)

Henrik Franzyk

Organisations

Research Associate Professor, Department of Organic Chemistry
04/07/2003 → 03/09/2013 Former
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VIP

Publications:

Chemotaxonomy of the Oleaceae: iridoids as taxonomic markers

General information
State: Published
Organisations: Department of Chemistry, University of Gothenburg
Authors: Jensen, S. R. (Intern), Franzyk, H. (Intern), Wallander, E. (Ekstern)
Pages: 213-231
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: PHYTOCHEMISTRY
Volume: 60
Issue number: 3
ISSN (Print): 0031-9422
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.101 SNIP 1.372 CiteScore 3.18
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.897 SNIP 1.392 CiteScore 3
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.127 SNIP 1.56 CiteScore 3.07
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.088 SNIP 1.679 CiteScore 3.63
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.164 SNIP 1.785 CiteScore 3.52
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.024 SNIP 1.642 CiteScore 3.37
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.132 SNIP 1.66
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.055 SNIP 1.539
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.052 SNIP 1.473
Iridoid Glucosides from Myxopyrum smilacifolium

General information
State: Published
Organisations: Department of Chemistry
Authors: Franzyk, H. (Intern), Jensen, S. R. (Intern), Olsen, C. E. (Ekstern)
Pages: 632-633
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Natural Products
Volume: 64
Issue number: 5
ISSN (Print): 0163-3864
Ratings:
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): SJR 1.22 SNIP 1.408 CiteScore 3.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.395 SNIP 1.758 CiteScore 4.14
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.333 SNIP 1.827 CiteScore 3.68
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.516 SNIP 1.716 CiteScore 3.75
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.428 SNIP 1.538 CiteScore 3.23
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
A 9-hydroxyiridoid isolated from Junellia seriphioides (Verbenaceae)

An unusual iridoid glucoside, namely 9-hydroxy-8-epihastatoside (1), was isolated from Junellia seriphioides (Verbenaceae), together with the known compounds auroside (2), pulchelloside I (3), and 8-epihastatoside (4) as well as verbascoside.

General information
State: Published
Organisations: Department of Organic Chemistry, Royal Veterinary and Agricultural University, Centro Nacional Patagónico
Pages: 699-700
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: Organic Letters
Volume: 2
Issue number: 5
ISSN (Print): 1523-7060
Ratings:
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): SJR 2.964 SNIP 1.218 CiteScore 6.32
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Chemotaxonomy of Plantago. Iridoid glucosides and caffeoyl phenylethanoid glycosides

Data for 34 species of Plantago (Plantaginaceae), including subgen. Littorella (=Littorella uniflora), have been collected with regard to their content of iridoid glucosides and caffeoyl phenylethanoid glycosides (CPGs). In the present work, 21 species were investigated for the first time and many known compounds were found together with three new iridoid glucosides. Of these, arborescoside and arborescidosidic acid, both of the uncommon type with an 8,9-double bond, were present in several species, while 6-deoxymelittoside was found only in P. subulata. The known compounds deoxyloganic acid, caryoptoside and rehmannioside D were isolated from the genus for the first time. The earlier reported occurrence of sorbitol in the family was confirmed, and this compound was shown by NMR spectroscopy to be the main sugar in the three species investigated for this. The combined data show that CPGs are present in all species investigated. With regard to the iridoids, the distribution patterns showed a good correlation with the classification of Rahn. Thus, aucubin is typical for the whole genus, while bartsioside and catalpol as well as 5-substituted iridoids are each characteristic for a subgenus
in the family. Finally, the close relationship between Plantago and Veronica suggested by chloroplast DNA sequence analysis, could be corroborated by the common occurrence of the rare 8,9-unsaturated iridoids in these two genera. (C) 2000 Elsevier Science Ltd. All rights reserved.

**General information**
State: Published
Organisations: Department of Organic Chemistry
Pages: 337-348
Publication date: 2000
Main Research Area: Technical/natural sciences

**Publication information**
Journal: Phytochemistry
Volume: 55
Issue number: 4
ISSN (Print): 0031-9422
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.101 SNIP 1.372 CiteScore 3.18
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.897 SNIP 1.392 CiteScore 3
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.127 SNIP 1.56 CiteScore 3.07
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.088 SNIP 1.679 CiteScore 3.63
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.164 SNIP 1.785 CiteScore 3.52
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.024 SNIP 1.642 CiteScore 3.37
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.132 SNIP 1.66
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.055 SNIP 1.539
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.052 SNIP 1.473
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 0.885 SNIP 1.408
Scopus rating (2006): SJR 1.076 SNIP 1.616
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 1.126 SNIP 1.617
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.809 SNIP 1.434
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 0.878 SNIP 1.499
Web of Science (2003): Indexed yes
Conversion of the Iridoid Glucoside Antirrhinoside into 3-Azabicyclo[3.3.0]-octane Building Blocks

General information
State: Published
Organisations: Department of Organic Chemistry
Authors: Franzyk, H. (Intern), Frederiksen, S. M. (Intern), Jensen, S. R. (Intern)
Pages: 592-595
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Natural Products
Volume: 63
Issue number: 5
ISSN (Print): 0163-3864
Ratings:
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): SJR 1.22 SNIP 1.408 CiteScore 3.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.395 SNIP 1.758 CiteScore 4.14
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.333 SNIP 1.827 CiteScore 3.68
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.516 SNIP 1.716 CiteScore 3.75
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.428 SNIP 1.538 CiteScore 3.23
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.39 SNIP 1.508 CiteScore 3.11
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 1.368 SNIP 1.601
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 1.461 SNIP 1.5
Web of Science (2009): Indexed yes
Iridoid Glucosides from *Phlomis tuberosa* L. and *Phlomis herba-ventis* L.

**General information**
- State: Published
- Organisations: Department of Organic Chemistry, Bulgarian Academy of Sciences
- Authors: Alipieva, K. A. (Ekstern), Jensen, S. R. (Intern), Franzyk, H. (Intern), Handziejeva, N. V. (Ekstern), Evstatieva, L. N. (Ekstern), Popov, S. (Ekstern)
- Pages: 137-140
- Publication date: 2000
- Main Research Area: Technical/natural sciences

**Publication information**
- Journal: Zeitschrift für Naturforchung
- Volume: 54c
- Issue number: 3-4
- Original language: English
- Source: orbit
- Source-ID: 175860
- Publication: Research - peer-review › Journal article – Annual report year: 2000

Halohydrins of antirrhinoside - the correct structures of muralioside and epimuralioside.

**General information**
- State: Published
- Organisations: Department of Organic Chemistry, Technical University of Denmark, Royal Veterinary and Agricultural University
- Pages: 275-278
- Publication date: 1999
- Main Research Area: Technical/natural sciences

**Publication information**
- Journal: Journal of Natural Products
- Volume: 62
- Issue number: 2
- ISSN (Print): 0163-3864
- Ratings:
  - BFI (2017): BFI-level 2
Stereoselective Hydrogenation and Ozonolysis of Iridoids. Conversion into Carbocyclic Nucleoside Analogues

General information
State: Published
Organisations: Department of Organic Chemistry, Colorado State University
Authors: Franzyk, H. (Intern), Stermitz, F. R. (Ekstern)
A caffeoyl phenylethanoid glycoside from Plantago myosurus.

From Plantago myosurus, the iridoid glucoside, aucubin was isolated, together with the caffeoyl phenylethanoid glycosides, plantalloside and verbascoside. Plantalloside is a new verbascoside analogue with a beta-allopyranosyl moiety. The structure was elucidated by NMR spectroscopy. (C) 1998 Elsevier Science Ltd. All rights reserved.
Iridoid glucosides from Penstemon secundiflorus and P. grandiflorus: Revised structure of 10-hydroxy-8-epihastatoside

Thorough large scale investigations of Penstemon secundiflorus ssp. lavendulus and of P. grandiflorus resulted in the isolation of the new iridoid glucosides 5, 6 beta-dihydroxyadoxoside. The structure of 10-hydroxyepihastatoside has been revised to 10-hydroxyhastatoside: using a chemical correlation. Also, the known iridoids (5 alpha H)-6-epidihydrocornin, cornin, hastatoside, 8-epihastatoside, beta-dihydrohastatoside, penstemoside, (5 alpha H)-10-hydroxy-6-epidihydrocornin, 10-hydroxycornin and catalpol were isolated. (C) 1998 Elsevier Science Ltd. All rights reserved.
Iridoid glycoside biosynthesis in Penstemon secundiflorus. Another H-5, H-9 trans iridoid glycoside. Isolation and characterization of the new iridoid 10-hydroxy-(5 alpha H)-6-epidihydrocornin from Penstemon secundiflorus (Scrophulariaceae) is described. In biosynthetic experiments, deoxyloganic acid was incorporated into the transfused iridoid glycosides (5 alpha H)-6-epidihydrocornin and 10-hydroxy-(5 alpha H)-6-epidihydrocornin in P. secundiflorus. Formation of the trans-fused compounds is therefore a late event in the biosynthesis and does not occur during iridoid formation by cyclization of the open chain monoterpenic precursor. In the same plant, 8-epideoxyloganic acid was not incorporated into the trans-iridoids. Deoxyloganic acid was also incorporated into 10-hydroxyhastatoside (which bears an 8 beta-methyl group), while 8-epideoxyloganic acid was incorporated into penstemoside (with an 8 alpha-methyl group). Thus, iridoid biosynthetic pathways leading from both deoxyloganic acid and 8-epideoxyloganic acid were found in the same plant. (C) 1998 Elsevier Science Ltd. All rights reserved.
Ozonolysis of Protected Iridoid Glucosides

General information
State: Published
Organisations: Department of Organic Chemistry
Authors: Franzyk, H. (Intern), Rasmussen, J. H. (Intern), Jensen, S. R. (Intern)
Pages: 365-370
Publication date: 1998
Main Research Area: Technical/natural sciences

Publication information
ISSN (Print): 1434-193X
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.133 SNIP 0.653 CiteScore 2.74
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.198 SNIP 0.758 CiteScore 2.88
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.181 SNIP 0.767 CiteScore 2.96
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.292 SNIP 0.796 CiteScore 2.96
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.471 SNIP 0.811 CiteScore 2.93
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.536 SNIP 0.857 CiteScore 3.2
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.572 SNIP 0.785
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.497 SNIP 0.778
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 1.652 SNIP 0.759
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.711 SNIP 0.84
Synthesis of antirrhinolide, a new lactone from Antirrhinum majus

General information
State: Published
Organisations: Department of Organic Chemistry
Authors: Franzyk, H. (Intern), Frederiksen, S. M. (Intern), Jensen, S. R. (Intern)
Pages: 1665-1667
Publication date: 1998
Main Research Area: Technical/natural sciences

Publication information
ISSN (Print): 1434-193X
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.133 SNIP 0.653 CiteScore 2.74
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.198 SNIP 0.758 CiteScore 2.88
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.181 SNIP 0.767 CiteScore 2.96
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.292 SNIP 0.796 CiteScore 2.96
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.471 SNIP 0.811 CiteScore 2.93
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.536 SNIP 0.857 CiteScore 3.2
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Synthesis of carbocyclic homo-N-nucleosides from iridoids

General information
State: Published
Organisations: Department of Organic Chemistry, Technical University of Denmark
Pages: 2931-2935
Publication date: 1998
Main Research Area: Technical/natural sciences

Publication information
Issue number: 12
ISSN (Print): 1434-193X
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.133 SNIP 0.653 CiteScore 2.74
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.198 SNIP 0.758 CiteScore 2.88
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.181 SNIP 0.767 CiteScore 2.96
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.292 SNIP 0.796 CiteScore 2.96
ISI indexed (2013): ISI indexed yes
Constrained glycopeptide ligands for MPRs. Limitations of unprotected phosphorylated building blocks

General information
State: Published
Organisations: Carlsberg Laboratory, M&E A/S
Authors: Franzyk, H. (Intern), Christensen, M. K. (Ekstern), Jørgensen, R. M. (Ekstern), Meldal, M. (Ekstern), Hvass, H. C. (Intern), Mourit-sen, S. (Ekstern), Bock, K. (Ekstern)
Pages: 21-40
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: Bioorganic & Medicinal Chemistry
Volume: 5
Issue number: 1
ISSN (Print): 0968-0896
Ratings:
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Iridoid Glucosides from Picconia excelsa

An investigation of the iridoids of Picconia excelsa from Tenerife provided 17 iridoid glucosides together with verbascoside. Major constituents (> 0.5%) were loganin, ketologanin, oleoacteoside and the new picconioside I-a bisiridoid consisting of loganin esterified with deoxyloganin. Minor constituents were secologanin, 8-epi-kingside, 8-epi-kingsidic, oleoside 11-methyl ester, excelsioside, ligstroside and loganic acid together with the new compounds ketologanic acid, 6 beta-hydroxy-7-epi-loganin and picconiosides II-V, the latter four being esters of loganin and menthiafolic, foliamenthic, 6-(Z)-foliamenthic or 6,7-dihydrofoliamenthic acid. The structures were mainly elucidated by NMR spectroscopy. (C) 1997 Elsevier Science Ltd.
Recent Techniques in Glycopeptide Synthesis and Biology: The Glycopeptide Templates

General information
State: Published
Organisations: Department of Organic Chemistry
Pages: 263-268
Publication date: 1997

Host publication information
Title of host publication: Innovations and Perspectives in Solid Phase Synthesis & Combinatorial Libraries
Place of publication: Kingswinford
Publisher: Mayflower Scientific
Main Research Area: Technical/natural sciences
Conference: Solid Phase Synthesis & Combinatorial Libraries, 01/01/1996
Source: orbit
Source-ID: 167421
Publication: Research - peer-review › Book chapter – Annual report year: 1997

Synthesis of monoterpene piperidines from the iridoid glucoside antirrhinoside.

General information
State: Published
Organisations: Department of Organic Chemistry
Authors: Franzyk, H. (Intern), Frederiksen, S. M. (Intern), Jensen, S. R. (Intern)
Pages: 1012-1016
Publication date: 1997

Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Natural Products
Volume: 60
ISSN (Print): 0163-3864
Ratings:
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): SJR 1.22 SNIP 1.408 CiteScore 3.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.395 SNIP 1.758 CiteScore 4.14
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.333 SNIP 1.827 CiteScore 3.68
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.516 SNIP 1.716 CiteScore 3.75
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Projects:

Antimicrobial peptides and peptide analogues as novel antiinfective agents

Department of Systems Biology
Period: 01/12/2013 → 30/11/2016
Number of participants: 6
Phd Student: Citterio, Linda (Intern)
Supervisor: Franzyk, Henrik (Intern)
Main Supervisor: Gram, Lone (Intern)
Examiner: Jelsbak, Lars (Intern)
Thomsen, Line Elnif (Intern)
Tossi, Alessandro (Ekstern)

Financing sources
Source: Internal funding (public)
Name of research programme: Institut stipendie (DTU)
Design, Synthesis and Characterization of Novel Bioimetric Oligomers

Department of Chemistry
Period: 15/10/2010 → 07/05/2014
Number of participants: 5
Phd Student:
Laursen, Jonas Striegler (Intern)
Main Supervisor:
Olsen, Christian Adam (Intern)
Examiner:
Clausen, Mads Hartvig (Intern)
Albericio, Fernando (Ekstern)
Franzyk, Henrik (Intern)

Financing sources
Source: Internal funding (public)
Name of research programme: Institut stipendie (DTU)
Project: PhD

Iridoidglucosides as substrates for the synthesis of biologically active cyclopentanderivatives

Department of Chemistry
Period: 01/08/1995 → …
Number of participants: 5
Phd Student:
Rasmussen, Jon Holbech (Intern)
Supervisor:
Franzyk, Henrik (Intern)
Main Supervisor:
Jensen, Søren Rosendal (Intern)
Examiner:
Tanner, David Ackland (Intern)
Wengel, Jesper (Ekstern)

Financing sources
Source: Internal funding (public)
Name of research programme: DTU-Su Stipendium, Eksperiment
Project: PhD

Iridoidglucosides as substrates for the synthesis of biologically active cyclopentanderivatives

Department of Chemistry
Period: 01/08/1995 → …
Number of participants: 5
Phd Student:
Frederiksen, Signe Maria (Intern)
Supervisor:
Franzyk, Henrik (Intern)
Main Supervisor:
Jensen, Søren Rosendal (Intern)
Examiner:
Begtrup, Mikael (Ekstern)
Damtoft, Søren (Ekstern)

Financing sources
Source: Internal funding (public)
Name of research programme: Forskningsrådsstip.-SU, Eksp
Project: PhD
Fine chemicals and drugs from plants.
Compounds isolated from plants can often be isolated in notable amounts and may then be interesting as synthons for pharmacologically interesting compounds. Antirrhinoside and catalpol are such compounds; they are the main constituents in snapdragon (Antirrhinum major) and scullcap (Scutellaria albida), respectively. These plants can be grown as alternative crops on fields laid bracken. The advantage when using such compounds as starting materials in synthesis is the inherent stereochemical integrity which controls the stereochemistry in the further synthetic steps leading to biologically active compounds such as analogues of prostaglandines, jasmonic acid as well as carbocyclic nucleosides.

Department of Organic Chemistry
Department of Chemistry
Royal Danish School of Pharmacy
Statens Planteavlslæg
Period: 01/07/1995 → 30/06/2000
Number of participants: 7
Project participant:
Franzyk, Henrik (Intern)
Frederiksen, Signe Maria (Intern)
Rasmussen, Jon Holbech (Intern)
Hector, Anne Elisabeth (Intern)
Steen, Per (Ekstern)
Project Manager, organisational:
Jensen, Søren Rosendal (Intern)
Mølgaard, Per (Ekstern)

Financing sources
Source: Unknown
Name of research programme: Unknown
Amount: 4,250,000.00 Danish Kroner

Plant glycosides: distribution and biosynthesis.
Plant glycosides are isolated, primarily from taxonomically interesting plants. The compounds are characterized mainly by high resolution NMR spectroscopy, but also by chemical modification. In conjunction with literature sources, the distribution of the compounds in the Plant Kingdom is mapped and the results are compared with traditional botanical characters in order to reveal relationships not discovered by traditional methods. The biosynthesis of iridoid glucosides is also investigated, using precursors with stable isotopes (deuterium and C-13). These are fed to intact plants, and the resulting metabolites are isolated and the isotopic labelling is measured by NMR.

Department of Organic Chemistry
Period: 01/01/1972 → …
Number of participants: 5
Project participant:
Franzyk, Henrik (Intern)
Hector, Anne Elisabeth (Intern)
Rodriguez-Lopez, Veronica (Intern)
Schripsema, Jan (Intern)
Project Manager, organisational:
Jensen, Søren Rosendal (Intern)