



NEWSLETTER

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Gesellschaft für Arzneipflanzenforschung · Society for Medicinal Plant Research

<http://www.ga-online.org>

Message from the President

Dear members,
after having our last annual meeting in Kiel, Germany, the coming 52nd annual congress of GA will be held as a joint meeting with the American Society of Pharmacognosy (ASP), the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie (AFERP) and the Phytochemical Society of Europe (PSE) in Phoenix, Arizona, from July 31 to August 4, 2004. It has been organized by the American Society of Pharmacognosy, namely by Prof. David Slatkin and Prof. Pedro Chavez and I want to thank them already very much for all their efforts and enthusiasm. I am convinced that it will become a global summit of medicinal plant research, and I am looking forward to meeting colleagues there from all parts of the world.

For our European members it will be a longer and more expensive trip as usual, but you have to consider that it is as costly for our African, American, Asian and Australian colleagues to attend the regular conferences in Europe.

The tradition to organize joint meetings with the American Society of Pharmacognosy started in 1970 in Vienna, Austria, and was initiated by Prof. Jentzsch and by Prof. V.E. Tyler. Therefore it is a nice coincidence that the Herbal Symposium on Monday, August 2, during the Phoenix meeting, has been dedicated to our late honorary member Varro (Tip) Tyler. In 1980, Prof. Anton organized the first big joint meeting of all four Societies dedicated to medicinal plant research in Strasbourg, France. Since then these joint meetings are organized every five years. Due to the international importance of medicinal plant research, such global networking is extremely necessary and fruitful. I am convinced that the meeting in Phoenix will be another milestone in the history of our Societies and that it will become the "hottest" annual meeting GA ever had.

So I am looking forward to seeing many of you in Phoenix, where we will also organise our next member's meeting.

Cordially,

GA President

Call for help: General information for members

In order to save time and money, as well as to get relevant information faster and more effectively delivered to all GA members, we would like to intensify communication by e-mail. For that purpose it is essential to complete our e-mail database. Again we call all members to notify our secretary by a short message on their actual **e-mail address**.

Thank you very much in advance! Please send mailings to the GA-Secretary:

Dr. Renate Seitz,
Emmeringer Strasse 11
D-82775 Emmering, Germany
Fax: +49 8141 613749
e-mail: ga-secretary@ga-online.org

Please note that the newsletter will be delivered in future electronically by mail.

Call for help: Members with unknown addresses

The following members are asked to get in contact with the GA-Secretary. If any other member has an idea on the actual address or e-mail, please do not hesitate to contact the secretary office (ga-secretary@ga-online.org, Fax. +49 8141 613749).

Bödeker Peter Dr., Germany; *Boje Kerstin*, Dr., Germany; *Harms Reiner*, Germany; *Hiba Ali A.* Bonn, Germany; *Krug Irmela* Dr., Butan; *Löhning Anke* Dr., Germany; *Müller Dieter*, Germany; *Orjala Jimmy* Dr., USA; *Portsteffen Andreas* Dr.; Germany; *Retief Tharina*, South Africa; *Schiller Hartmut*, Germany; *Söderholm Päivi*, Finland; *Summanen Jari M.* Dr., Finland; *Volken Carmen*, Switzerland; *Walle Alex*, Prof.Dr., USA; *Winkelmann Karin*, Switzerland; *Wirnitzer Uta*, Germany; *Zhao Yu*, Prof. Dr., China.

Planta Medica: Change of the editor and online submission

The official scientific organ of the society "Planta Medica" will go through several changes within the next months. The editor-in-chief, Prof. Dr. A. Nahrstedt, will give over the editorship to Prof. Hamburger, University of Basel, who will start this job at October 1st 2004. All manuscripts have to be directed to his hands after this date. Secondly, with Oct. 1st 2004 all manuscripts are subjected exclusively to online submission in order to speed up evaluation and printing time. No paper copies are to be submitted after October 1st any more. Detailed information on the procedure can then be obtained from the GA-homepage (www.ga-online.org) from where you are automatically directed to the online-submission panel.

GA Members' Meeting 2004

During the 52th Annual meeting of our Society that will take place as a joint meeting with the American Society of Pharmacognosy (ASP), the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie (AFERP) and the Phytochemical Society of Europe (PSE) in Phoenix, Arizona, USA, from July 31 – August 4, 2004, a regular Members' Meeting will be held. That meeting will take place on **Wednesday, 4 Aug. 2004**, at 2.15 – 3.15 p.m.

Location: Powell Room at Westin Kierland Hotel, the congress venue (www.kierlandresort.com)

This announcement in our Newsletter must be considered the official invitation to the Members' Meeting (in accordance with the GA bylaws), as this Newsletter is sent to all members of our Society.

Preliminary Agenda

1. Passing of the Agenda
2. Approval of the minutes of the Members' Meeting held in Kiel on 1 Sept. 2003 (published in the GA Newsletter 2003 – 2, Jan 2004)

3. Annual reports
 - 3.1 Report of the President
 - 3.2 Report(s) of the Vice-President(s)
 - 3.3 Report of the Secretary
 - 3.4 Report of the Treasurer, report of the auditor(s)
 - 3.5 Discharge of the Treasurer
4. Report of the Editor-in-Chief of *Planta Medica*
5. Reports of the Permanent Committees
6. Future congresses, symposia and workshops
7. Discussion of the GA questionnaire
8. Miscellaneous

On behalf of the Executive Council
Prof. Dr. Rudolf Bauer, GA President

Future GA Meetings

52nd Annual Congress in Phoenix, Arizona, USA, 2004

The 52nd Annual meeting will be held as a joint meeting together with the American Society of Pharmacognosy (ASP), the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie (AFERP) and the Phytochemical Society of Europe (PSE) from July 31 to August 4, 2004 in Phoenix, Arizona. More information: www.phcog.org/AnnualMtg/Phoenix.html
Conference events: Classical Pharmacognosy Satellite Symposium, Biotechnology Symposium, Herbal Symposium dedicated to Varro (Tip) Tyler, Sea and Sand Symposium, Award Presentations.

53rd Annual Congress in Florence, Italy, August 2005

In 2005 the 53rd Annual Congress of the Society for Medicinal Plant Research will take place in Florence, Italy, and will be organized as a joint meeting together with the Italian Society of Phytochemistry. All researchers in the field of medicinal plants and bioactive natural products are cordially invited to participate in this international meeting. In contrast to the "tradition", the Annual Congress 2005 will not take place in the first week of September, but it will be held from 21 August (registration and get-together party) till 25 August (botanical excursion). The first announcement will circulate at the end of July 2004 and all the information concerning the 53rd Annual Congress in Florence are also available on a special homepage: <http://www.farmacia.unifi.it/gacongress2005.html>

Other Meetings

GA Methodological Workshops

Vienna (Austria), September 30–October 1, 2004: HPLC-MS for quality control of herbal medicinal products.

This workshop is addressed to (future) users of mass spectrometry with API-techniques (atmospheric pressure ionisation), LC-MS (coupling of high performance liquid chromatography and mass spectrometry), resp. MS-MS (tandem mass spectrometry) at the university and industry. The knowledge of potentialities and limits of these techniques should be imparted in theory and practice. After lectures, the different subject areas will be improved by practical experience and the participants should be familiarised with the mass spectrometers (API single quadrupole MS und API QTOF MS-MS). Adequate samples from participants may be analysed. Fees: € 250,- (GA member), € 300,- (non-member); Registration by e-mail to (gottfried.reznicek@univie.ac.at) till July 31st, 2004, University of Vienna, Institute of Pharmacognosy, University of Vienna

Vienna (Austria), September 23–24, 2004: Visual methods in the proof of crude drugs and related fields.

The workshop is addressed to persons who (will) use or (will) teach the use of visual methods in the proof of drugs. In addition to basic functions of the light microscope also more sophisticated

techniques will be presented in theory and practice (e.g. dark field illumination, fluorescence microscopy, phase contrast, scanning electron microscopy ESEM-mode). Fees: € 250,- (GA member), € 300,- (non-member). Registration until 31. August 2004 to reinhard.laenger@univie.ac.at, University of Vienna, Institute of Pharmacognosy, University of Vienna

Jena (Germany), September 7–9, 2004

Fachtagung Arznei- und Gewürzpflanzen 2004 – Chancen und Herausforderungen einer zeitgemäßen Arznei- und Gewürzpflanzenproduktion. Friedrich-Schiller Universität Jena; www.ga.online.org; c.ormerod@dornburg.tll.de

Vienna, Austria, July 18–23, 2005

International Botanical Congress. Nomenclature section: July 13–16, 2005. The IBC 2005 deals not only on basic aspects of botanical science, but also on applied topics of general interest (population biology, plant-/ecophysiology, basic and applied phytochemistry, etc.), <http://www.ibc2005.ac.at>; office@ibc2005.ac.at

Notes from the Society

Honorary Doctor h. c. for Prof. Dr. A. Nahrstedt

In May 2004 Professor Dr. Adolf Nahrstedt was venerated by Ovidius-University of Constanta (Romania) with the promotion to the *Doctor honoris causa* in appreciation of his merits to medicinal plant research and successful academic teaching. The GA congratulates Prof. Nahrstedt very much!

Obituary

At the age of 68 years, Prof. Dr. Martin Luckner died in Halle on May, 20th.

The Martin-Luther-University and the Pharmaceutical Biology lost a very productive scientist, an engaged lecturer and an active organizer.

Martin Luckner was born in 1935 in Plauen in a joiner's family. After finishing high school in 1953, his start in plant sciences was as a laboratory assistant in the lab of Prof. Kurt Mothes at the Institute of Genetics and Crop Plant Research in Gatersleben. The close contact to this outstanding scientist developed into a main determinant of his scientific career. He studied Pharmacy at the Martin Luther University in Halle, followed by doctoral research under the guidance of Prof. Mothes. The topic of his PhD thesis (1963) was the successful structure elucidation of the benzodiazepine alkaloid cyclopentine. In his postdoctoral period, he continued with studies of the biosynthesis of quinoline alkaloids, mainly of the cyclopentine/viridicatin group.

Following his habilitation at the Martin Luther University in 1966, Martin Luckner launched a long term experimental strategy aimed at unravelling the enzymology and regulation of benzodiazepine biosynthesis in *Penicillium cyclopium*. The control of enzyme formation by means of differential gene expression and its coordination with the morphological organization of the fungal cell were the main aspects of experimental work carried out by a large number of motivated PhD students and collaborators. The outstanding results, step by step, established a model system that greatly facilitated our understanding how secondary metabolism integrates into the programs of eukaryotic cell specialization.

Based on this mental equipment, in the mid 1970's, Martin Luckner entered a new and more complex area of research: the formation of cardenolides in *Digitalis lanata*.

As a central strategy, the expression of enzymes of cardenolide biosynthesis was studied during the *in vitro* embryogenesis of cell cultures. Many of the experimental strategies that were developed at this time have remained attractive until now, e.g. the enzymology of cardenolide metabolism and its evolutionary relationships and the characterization of the embryogenic program

via expression of stage-specific mRNAs and proteins, including heat-shock proteins and other chaperones.

The scientific lifework of Martin Luckner has had an important impact on the development of Pharmaceutical Biology from a descriptive Pharmacognosy to a biochemical and molecular genetic branch of modern biosciences. To understand secondary metabolism as an elementary expression of the chemical variety of living beings was central to his scientific credo and imprints his well-known textbook "Secondary Metabolism in Microorganisms, Plants and Animals" (three editions since 1969) as well as his latest monograph "Digitalis" (edited with M. Wichtl; 2000).

In 1970, Martin Luckner became Professor and Head of Pharmaceutical Biology at the Martin Luther University. At this time, his personal integrity combined with organisational skills and pragmatic decision-making helped keep this institute in touch with the main developments of the biological and pharmaceutical sciences in the world. After the downfall of the GDR system, he was strongly involved in founding the first Sonderforschungsbereich of the Martin Luther University entitled "Molecular cell biology of plant systems" and acted as its speaker from 1992-96. In 1992, he was elected as a Prorektor of the university and in this position created a significant input to enhance transparency and efficiency within academic management. He was a decided advocate and organizer of a bioscience center at this university and in 1996 became the first head of the new Biozentrum. His work there aimed at a productive relationship between basic research and commercial applications.

His powerful, both far-sighted and pragmatic way of thinking, based on a unique sense for essentials and innovation, was a steady source of challenge and encouragement for his colleagues and students. In memory of Martin Luckner, we should try to set forth his high standard of scientific performance and quality.

Prof. Dr. Werner Roos
Institute of Pharmaceutical Biology and Pharmacology
Martin Luther University of Halle

New Books and Journals

Ameenah Gurib-Fakim, Thomas Brendler: Medicinal and Aromatic Plants of Indian Ocean Islands; medpharm Scientific Publishers, Stuttgart, 2004, 192 colour photographs, 588 b/w figures, 11 maps. Euro 228.-; sFr 364.80

The book is a remarkable and important work, an output of a successful collaboration of two experts: Prof. Dr. A. Gurib-Fakim, a highly acknowledged phytochemist with deep dedication to medicinal plants of his domain, and Thomas Brendler, an ambitious and engaged consultant in the field of herbal medicines. The result is a richly illustrated book which presents the data of about 350 plant species used in traditional medicine on the Indian Ocean Islands, packaged into clearly designed monographs in alphabetical order. Each monograph informs the reader on the etymology of the species name, on the botany, the ecology and on the conservation status as well as on drug specification, phytochemistry, pharmacology and their use in traditional medicine. The figures are in a good black-and-white drawing style and cover most of the plant species and the structural formula of the main chemical substances. The plant figures are completed by 192 small but qualitatively good photographs. Quotations refer to a list of more than 700 references which help the reader to get access to the basal and further informations. The introduction of the book deals with the general information on the geography and flora of the Indian Ocean Islands and offers insights into the geomorphology, climate and vegetation of the Comoros, of Madagascar, Mauritius, Rodrigues, Réunion and the Seychelles. These chapters discuss also the impact of humans on the vegetation. In their

foreword the authors describe their work with "a western, first world approach incorporating the desire and means to preserve both knowledge and environment, without simply consuming and in the process destroying – both". It is an authoritative and fascinating work which captures the interest in traditional medicine as well as the potential for the development of new drugs. The book and the ideas serve high attention and good success.

Prof. Dr. Stahl-Biskup

Fundamentals of Pharmacognosy and Phytotherapy
M. Heinrich, J. Barnes, S. Gibbons, E.M. Williamson (Eds.), Churchill Livingstone, Edinburgh, 2004, 309 pages, ISBN 0-443-07132-2.

A book that combines compounds and plants found in traditional standard pharmacognosy textbooks with the "new phytopharmaceuticals" which were established in Western culture over the last 20 years.

Recent thesis on medicinal plant research (notices of Ph.D- and diploma thesis to the editor are welcome any time!)

Habilitation, 2004, *Achillea Millefolium L. – Sesquiterpene und pharmazeutische Qualität.* Dr. Sabine Glasl, University of Vienna (Austria), Institute of Pharmacognosy.

PhD thesis, 2004, *Isolierung und Charakterisierung bioaktiver Polysaccharide und Extrakte aus Okra (Abelmoschi esculenti fructus) und deren Einsatz in physiologischen Testsystemen mit Relevanz für den Gastrointestinaltrakt.* By Dipl. Biol. Christian Lengsfeld, promotor: Prof. Dr. A. Hensel, University of Düsseldorf (Germany), Institut of Pharmaceutical Biology.

PhD thesis, 2004, *Characterisation of apoptosis signal transduction induced by the marine compound cephalostatin 1 in leukemic cells.* By Dipl. Biol. Irina Melanie Müller, promotor: Prof. Dr. Angelika M. Vollmar, University of Munich (Germany), Department of Pharmacy, Pharmaceutical Biology.

PhD thesis, 2004, *Phytochemische Untersuchungen und Prüfung auf estrogenen Aktivität von phenolischen Inhaltsstoffen aus Cimicifuga racemosa (= Actaea racemosa).* Stefan Stromeier, promotor: Prof. Dr. A. Nahrstedt, University of Münster (Germany), Institut für Pharmazeutische Biologie und Phytochemie.

PhD thesis, 2004, *Untersuchungen zum Wirkspektrum von Extrakten und Fraktionen aus Lycopodium europaeum und deren phytochemische Charakterisierung.* Christian Vönhoff, promotors: Prof. Dr. A. Nahrstedt, Institut für Pharmazeutische Biologie und Phytochemie; Prof. Dr. H. Winterhoff, Institut für Pharmakologie und Toxikologie, University of Münster (Germany).

PhD thesis, 2004, *Isolation of some active constituents of Zingiber officinale and characterization of their effect on 5-HT₃ receptors.* Hebba Abdel-Aziz, promoters: Prof. Dr. E. Verspohl, Abt. Pharmakologie des Instituts für Pharmazeutische und Medizinische Chemie; Prof. Dr. A. Nahrstedt, Institut für Pharmazeutische Biologie und Phytochemie, University of Münster (Germany).

PhD thesis, 2004, *New Bioactivities of Salvia miltiorrhiza Bunge (Lamiaceae) – Activity Profiling, Method Development and Characterisation of isolated Compounds.* Kathrin Dittmann, promotor: Prof. Dr. M. Hamburger, University of Jena (Germany), Institute of Pharmacy.

PhD thesis, 2004, *Indolic Secondary Metabolites in Isatis tinctoria L. – Cutaneous Penetration of Tryptanthrin, and Seasonal and Post-harvest Changes in Metabolite Profiles.* Christine Oberthür, promotor: Prof. Dr. M. Hamburger, University of Jena (Germany), Institute of Pharmacy.

PhD thesis, 2004, Analytik der Sesquiterpene zur Prüfung der pharmazeutischen Qualität von Schafgarbe. Katharina Rothwangl-Wiltschnigg, promotor: Prof. Dr. G. Reznicek, University of Vienna (Austria), Institute of Pharmacognosy.

PhD thesis, 2004, Phytochemische und biologische Untersuchungen ausgewählter Makroalgen unter besonderer Berücksichtigung ihrer Wirksamkeit gegen die Erreger bakterieller Fischkrankheiten. Anne Bansemir, promotor: Prof. Dr. U. Lindequist, University of Greifswald (Germany), Institute of Pharmacy

Diplom thesis, 2004, Untersuchungen zur antiviralen Aktivität von Pflanzen des arabischen Raumes. Christiane Reiß, promotor: Prof. Dr. R. Mentel and Prof. Dr. U. Lindequist, University of Greifswald, Institute of Medical Microbiology and Institute of Pharmacy

Diplom thesis, 2004, Phytochemische Untersuchungen von *Amanita muscaria* unterschiedlicher Standorte. Christoph Wahl, promotor: Prof. Dr. U. Lindequist, University of Greifswald (Germany), Institute of Pharmacy

Diplom thesis, 2004, Phytochemische Charakterisierung ausgewählter Makroalgen. Susanne Holldorf, promotor: Prof. Dr. U. Lindequist, University of Greifswald (Germany), Institute of Pharmacy

Diploma thesis, 2004, Identifizierung und Charakterisierung der chinesischen Arzneidroge Flos Magnoliae und Cortex Magnoliae officinalis. By Jeannette Skarbina, promotor: Prof. Dr. R. Bauer, Pharmaceutical Biology, University of Graz (Austria).

Diploma thesis, 2004, Asthmalindernde Pflanzen der einheimischen Volksmedizin. By Cornelia Neubauer; promotor: Prof. Dr. R. Bauer, Pharmaceutical Biology, University of Graz (Austria).

Diploma thesis, 2004, Versuche zur transgenen Expression einer *N*-Methylputrescin Transferase aus *Solanum tuberosum*. By Angelika Gils; promotor: Prof. Dr. B. Dräger, Pharmaceutical Biology, University of Halle (Germany).

Diploma thesis, 2004, Effect of the Neuritogenic Natural Product Militarinone A on the Activity of MAPK Erk1/2 in PC12 Cells. Elke Vera Ziegler, promotor: Prof. Dr. M. Hamburger, University of Jena, Institute of Pharmacy.

Diploma thesis, 2004, Quantitative Analysis of Caffeoyl Triterpenes in Evening Primrose Oils. Roland Knorr, promotor: Prof. Dr. M. Hamburger, University of Jena, Institute of Pharmacy.

Diploma thesis, 2004, Biochemische Untersuchung der heterolog exprimierten Tyrosin Aminotransferase aus *Coleus blumei* BENTH. By Stefan Biastoff; promotor: Prof. Dr. B. Dräger, Pharmaceutical Biology, University of Halle (Germany).

Diploma thesis, 2004, Tropanalkaloidbiosynthese in *TRII-sense* transformierten *Atropa belladonna* L. Wurzelkulturen. By Anne-Katrin Fabian, promotor: Prof. Dr. B. Dräger, Pharmaceutical Biology, University of Halle (Germany).

Diploma thesis, 2004, Überarbeitung und Dokumentation mikroskopischer Beschreibungen ausgewählter Arzneipflanzen. By Böswart, Daniela, promotor: Prof. Dr. R. Länger, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Ausarbeitung mikroskopischer Beschreibungen ausgewählter Arzneidroge für die American Herbal Pharmacopoeia. By Gelhart, Martina, promotor: Prof. Dr. R. Länger, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Chemische Analyse phenolischer Inhaltsstoffe in *Drosera*-Extrakten. By Karall, Elisabeth, promotor: Prof. Dr. L. Krenn, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Temporäre Immersionsysteme in der pflanzlichen Gewebekultur. By Lötsch, Veronika, promotor: Prof. Dr. B. Kopp, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Volksmedizinische Anwendung von Arzneipflanzen im Ötztal. By Lombardini, Werner, promotor: Prof. Dr. J.Saukel, University of Vienna, (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Etablierung von *in-vitro*-Kulturen verschiedener *Dioscorea*-Arten. By Pratscher, Sandra, promotor: Prof. Dr. B. Kopp, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Versuche zur Etablierung steriler Kulturen von *Crataegus monogyna* und Modifizierung von Kulturparametern. By Wiesi, Nicole, promotor: Prof. Dr. B. Kopp, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Pflanzliche Medikation zur Behandlung des Hand-Fuß-Syndroms als Folge einer Zytostatikabehandlung mit Capecitabin. By Kern, Elisabeth, promotor: Prof. Dr. B. Kopp, University of Vienna (Austria), Institute of Pharmacognosy.

Diploma thesis, 2004, Untersuchung phenolischer Inhaltsstoffe in Herba Millefolii. Wimmer, Barbara, promotor: Prof. Dr. B. Kopp, University of Vienna (Austria), Institute of Pharmacognosy.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to November 30th 2004. Please send all contributions by e-mail or disk to: Prof. Dr. A. Hensel, Universität Düsseldorf, Institut für Pharmazeutische Biologie, Universitätsstrasse 1, Geb. 26.23, D-40225 Düsseldorf, Germany. Phone: ++49 211 8114180; Fax: ++ 49 211 8111745; andreas.hensel@uni-duesseldorf.de