

Message from the President



Dear Members,
the next and 58th annual meeting of GA is coming closer. Organized by Professor Dr. Matthias F. Melzig and Professor Dr. Herbert Kolodziej it will be held from August 29th to September 2nd in Berlin, Germany. The Society's Annual Meeting is always our focal point for the year and requires a tremendous effort by a dedicated group of members. According to the submitted abstracts and the number of preregistrations we can expect a big and exciting congress, and it will be my pleasure to welcome again many colleagues from all over the world. The major themes of the conference represent current hot topics of medicinal plant research, such as traditional uses and scientific evidence for medicinal plants, plant molecular systematics, sustainable drugs and global health care, genomic mining, infectious diseases, antimicrobial activity and herbal medicines and many more. Special sessions like "Opportunities and challenges in the exploitation of biodiversity – complying with the principles of the convention on biological diversity", the young researchers workshops "Cellular and molecular mechanisms of action of natural products and medicinal plants" and "Lead finding from nature – pitfalls and challenges of classical, computational and hyphenated approaches" and the well known and established workshops "Regulatory affairs of HMPs", "Biological and pharmacological activities of natural products", "Manufacturing and quality control of herbal remedies" and "Breeding and cultivation of medicinal plants" are some of the highlights of the meeting as well. We are expecting an intensive exchange of information and an inspiring program. More information of the meeting 2010 is available in this newsletter and on the homepage. 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.

In Berlin the GA will award the Egon-Stahl-Award in bronze which is dedicated to promote young scientists working in the field of pharmacognosy and analytical phytochemistry, and the "Willmar Schwabe Award of the Society for Medicinal Plant and Natural Product Research" which has been do-

nated by Willmar Schwabe Arzneimittel AG to promote excellent pharmacological and clinical studies with herbal medicinal products. For the first time the new Dr. Willmar Schwabe Research Scholarship for Young Scientists will be announced, too.

Besides our annual congress, GA is again co-organizing several other symposia on medicinal plant research during this year, and I hope that you will have the chance to attend some of these meetings as well. You can find the corresponding information in this Newsletter or on our web site. All our previous events clearly showed that there is a continuously high interest in medicinal plant research.

GA has done very well over the years, in large part due to a group of dedicated members who have volunteered their time and expertise to ensure that our business is done. I want to express my sincere appreciation to all of those who have served (and continue to serve) GA in many capacities. If you are not currently involved, we always have room for others to join us. In this regard, I would like to thank all colleagues who recently put a lot of effort into updating our homepage. The GA website has undergone a dynamic change recently and you might have noticed that the first page has received a new layout with basic information of GA in meanwhile 19 different languages (www.ga-online.org). The website is one of the first interactions many people have with our Society, and upgrading this resource is great for both members and nonmembers alike. But we have much more to be proud of in GA. Our membership numbers have held almost steady and we even have attracted a broad range of new members from a multitude of organizations and countries who I personally would like to welcome to the GA family. I really look forward to meeting you and learning more about you and your work at the next GA meeting. We currently have more than 1400 members from more than 80 nations and I am very pleased that GA has truly developed to a globally leading society in the field of medicinal plant and natural product research. This positive development is nicely reflected in our flagship journal, *Planta Medica*, which under the able guidance of Prof. Dr. Luc Pieters and his associate editors, has reported another record year of submissions, and continues to improve in quality. In order to further advance this fabulous trend I therefore would like to encourage you to publish your relevant articles in our journal which clearly serves as an excellent platform for exchange of knowledge and ideas between scientists worldwide.


I am looking forward to our 58th annual meeting and I hope to see many of you in Berlin, one of Europe's most exciting capitals, where we will also organise our next member's meeting. I am cordially inviting all members, especially our new and young members, to attend the member's meeting.

Cordially,

Brigitte Kopp, GA president


NEWSLETTER

Notes to all GA members

**Note to all GA members**

The GA-homepage (www.ga-online.org) contains a special members area for which an access code is needed:


username "gamember",
password "morphine".

**Editorial remark**

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to November 25th 2010.

Please send all contributions by e-mail to:
Prof. Dr. A. Hensel
University of Münster, Institute for
Pharmaceutical Biology and
Phytochemistry, Hittorfstrasse 56,
D-48149 Münster, Germany
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**Deceased members**

(to our knowledge)

Dr. Gudrun Lendrath
9.1.1956 to 10.12.2009

Prof. Dr. Hilke Winterhoff
30.6.1941 to 9.5.2010

The Society will keep commemoration and offers its sincere condolence.

Notes from the Society

In memoriam Prof. Dr. rer nat. Hilke Winterhoff (1941– 2010)

The GA community was saddened to learn of the death of long-time GA member Prof. Dr. Hilke Winterhoff, University of Muenster, Germany who passed away at age 68 at the Muenster University Hospital, Sunday, May 9, 2010 after battling chronic myeloid leukemia for several years.

Professor Winterhoff was born on July 30th, 1941, in Heidelberg, Germany. In 1959 she started studying Biology and Chemistry at the Universities of Hamburg and Muenster and received her PhD in Biology in 1966 from the Heinrich Heine-Universitaet, Duesseldorf. In 1969 she joined the research group of Prof. Dr. Dr. h.c. mult. F.H. Kemper at the Institute of Pharmacology and Toxicology of the Westfaelische Wilhelms-Universitaet Muenster as a research assistant. Her "habilitation" in Pharmacology and Toxicology with the topic "Pharmacological characterization of herbal medicines and natural products with endocrine activities" followed in 1988. In 1993 she was appointed with an extraordinary Professorship of the Muenster University.

Since 1975, Professor Winterhoff's research focus was on phytotherapy; she dedicated her scientific career to the pharmacological profiling of herbal extracts including refined fractions and active ingredients. Prof. Winterhoff was a scientist always eager to close the gap between pure scien-

tific research and therapeutical applications, which resulted in creative approaches in the development of phytotherapeutics over the past years documented in a series of publications in national and international journals.

Professor Winterhoff was always a passionate advocate of phytotherapy which resulted in manifold professional activities; she was a member of the German Commission E, member of GA since 1984, member of the Advisory Board of GA from 2000 to 2001, Vice President of the German Society of Phytotherapy since 2005, Editor of the German "Zeitschrift fuer Phytotherapie", and chair of the working group "Efficacy and Safety" of the Kooperation Phytopharmaka, Bonn, Germany. From 1996 to 2007 she also served as Chair of the permanent committee "Biological and Pharmacological Activities of Natural Products" of GA.

Professor Winterhoff trained more than 60 graduate students from various disciplines including medicine and I consider it as a great honor that I had the privilege of being one of her students. Professor Winterhoff trained us to think independently, she expected us to be solidly grounded in all aspects of pharmacology which enabled us to link phytotherapy with other disciplines. This was an excellent training for entry into



academic or pharmaceutical research and her students are extremely grateful not only for her outstanding scientific but also for her exceptional personal support. Having her by my side for many years as a teacher, mentor and devoted friend truly meant a lot to me. Professor Winterhoff will be deeply missed in the scientific community not only as a great colleague, but also as a true friend.

Prof. Dr. Veronika Butterweck

Heinz Schilcher: 80 Years!

Is he really that old?

Yes, he is, looking on the long list of academic titles such as Professor, Dr. rer. nat., Dr. h.c. mult. and others, which document a long and most honourable list of distinctions and academic rewards. His contributions to pharmaceutical sciences in general and pharmacognosy in special in the form of publications and handbooks are numerous. During the last weeks many publications occurred to honour of Heinz Schilcher at the occasion of his 80th birthday. In all these publications details about his academic and industrial career with all the multiple steps and manifold contributions to phytochemistry and phytotherapy are highlighted. But besides all these professional distinctions, we should not forget the human being:

Heinz Schilcher, a-so-called Urbayer, known by almost everybody when sitting at the occasion of a symposium or scientific congress, always in the first range carefully listening to all the contributions and, believe it or not, being the first to open a discussion having the background of the longest experience in pharmacognosy.

Thus, Heinz Schilcher still is the megastar of many meetings, attracting young scientists from all over the world. The scientific community and mainly the Gesellschaft owes a great lot to him. Let us hope that the always youthful and sporting Heinz Schilcher will be active for many years to come!

Prof. Dr. Gerhard Franz



Some Data from the Membership Data Base

New GA members since December 2009

The Society can announce 115 new members since December 2009. The Society welcomes you all warmly and wishes that GA may get a platform for many scientific and personal contacts. We are looking forward to your active participation in many GA events! All the best for you all!

Appler, Reinhold T., Germany; **Assimpoulou**, Andreana, Greece; **Awobajo**, Funmileyi, Nigeria; **Bardakci**, Hilal, Turkey; **Bazylak**, Gzrzegorz, Poland; **Bisio**, Angela, Italy; **Borsodi Szokol**, Lilla, Hungary; **Buchwald-Werner**, Sybille, Germany; **Chao Jung**, Taiwan; **Chen**, Cheng-Lung, Taiwan; **Chudapongse**, Nuannoi, Thailand; **Crockett**, Sara, Austria; **Ebeling**, Sandra, Germany; **Ebrahim**, Weaam, Germany; **El-Readi**, Mahmoud Z., Germany; **El-Toumy**, Sayed, Egypt; **El Amrani**, Mustapha, Germany; **Elegami**, Awatif Abed Elbagi, Sudan; **Emerald**, Mila, Canada; **Ertelt**, Johannes, Germany; **Farzaneh**, Samiee, Iran; **Flamm**, Daniela, Germany; **Franciskovic**, Marina, Serbia; **Frette**, Xavier, Denmark; **Garo**, Eliane, Switzerland; **Gotsbacher**, Michael, Australia;

Gregorio, Elsa, Italy; **Gunawan-Puteri**, Maria, Japan; **Haberl**, Florian, Germany; **Hague**, Theresa, United Kingdom; **Hata Uribe**, Yoshie-Adriana, Switzerland; **Häusler**, Franz, Austria; **Heiss**, Elke, Austria; **Hoffmann**, Marei, Germany; **Huleihel**, Mahmoud, Israel; **Hussein**, Refaei, Egypt; **Jafari**, Samineh, Iran; **Jauregui**, Anboni, Spain; **Jegede**, Adeola, Nigeria; **Julianti**, Tasqiah, Switzerland; **Juvekar**, Parkshit, India; **Koch**, Egon, Germany; **Konkin**, David, Canada; **Krautscheid**, Yvonne, Germany; **Kretschmar**, Josef A., Switzerland; **Lesjak**, Marija, Serbia; **Lin**, Ming-Kuem, Taiwan; **Lin**, Shen Yan, Taiwan; **Maas**, Mareike, Germany; **Malahi**, Farrokh, Iran; **Malakshahi**, Farzaneh, Iran; **Matloub**, Azza, Egypt; **Mbaoji**, Camillus, Nigeria; **Milosevic**, Tanja, Serbia; **Nantapong**, Nawarat, Thailand; **Natesan**, Lavanya, Germany; **Naumann**, Katrin, Germany; **Neumann**, Christiane, Switzerland; **Nieber**, Karen, Germany; **Nnamani**, Petra Obioma, Nigeria; **O'Neill-Johnson**, Mark, USA; **Ogbonnia**, Steve, Nigeria; **Okoli**, Charles, Nigeria; **Omar A.**, Enayat, Egypt; **Orcic**, Dejan, Serbia; **Pham**, Anh Thu, Norway; **Piri**, Khosro, Iran; **Pop**, Anca

Lucia, Romania; **Radmehr**, Behrad, Iran; **Rieder**, Arno, Brazil; **Romero Cerecero**, Ofelia, Mexico; **Rozema**, Evelien, Austria; **Rueda**, Diana, Switzerland; **Sakat**, Sachin, India; **Sakunphueak**, Athip, Thailand; **Schmidt**, Cleber Alberto, Germany; **Schmidt**, Sebastian, Germany; **Schomburg**, Caroline, Germany; **Shaukat**, Irfan, Sweden; **Shih**, Tung Yuan, Taiwan; **Shittu**, Abiodun, Nigeria; **Simonnet**, Xavier, Switzerland; **Sireeratawong**, Seewaboon, Thailand; **Stankovic**, Milan, Serbia; **Stauss-Grabo**, Manuela, Germany; **Suralkar**, Anupama, India; **Tshiala**, Lay, Switzerland; **Tshiala**, Ngieka, South Africa; **Tsoukalas**, Michail, Greece; **Tupe**, Preeti, India; **Utermöhlen**, Jon, Germany; **Vattern**, Dhiraj, USA; **Villar**, Agustin, Spain; **Vougogiannopoulos**, Konstantina, Greece; **Walkenhorst**, Michael, Switzerland; **Weigelt**, Maria, Germany; **Wellmann**, Andrea, Germany; **Wölfle**, Ute, Germany; **Wolfram-Schilling**, Evelyn, Switzerland; **Wube**, Abraham, Austria; **Yalcin**, Nuray, Turkey; **Yanti**, India; **Yazdanyar**, Farid, Iran; **Yosef-Friedjung**, Avital, Israel; **Zimmermann**, Stefanie, Switzerland; **Zumdick**, Stefanie, Germany.

Invitation to the 2010 Members Meeting

During the 58th Annual Meeting of our Society, which will take place in **Berlin, Germany**, from 29. August to 2. September 2010, a regular Members' Meeting will be held. It is scheduled for **Tuesday, 31 August 2010**, 6.30 p.m. – 8.00 p.m.

Location: Lecture Hall A at the congress venue, FU Berlin, Henry-Ford-Bau, Garystr. 35, 14195 Berlin-Dahlem

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

Preliminary Agenda

1. Approval of the agenda
2. Approval of the minutes of the Members' Meeting held in Geneva on 18 Aug. 2009 (published in GA Newsletter 2-2009)
3. Annual reports
 - 3.1 Report of the President
 - 3.2 Reports of the Vice-Presidents
 - 3.3 Report of the Secretary
 - 3.4 Report of the Treasurer and the Auditors
 - 3.5 Discharge of the Treasurer and the Executive Council
4. Report of the Editor-in-Chief of *Planta Medica*

5. Reports of the Permanent Committees
6. Future congresses, symposia and workshops
7. Miscellaneous

On behalf of the Executive Council
Prof. Dr. Brigitte Kopp, GA President

Looking into the next GA future: GA foundation "Plants for Health" in preparation and to be launched in 2011

GA is proud to house the foundation in honor of Egon Stahl. However, to establish another independent foundation in order to promote ambitious aims of young scientists other than determined in the Egon-Stahl-Award regulations, GA currently plans to create and establish an additional foundation based on donations of the GA members. From its assets, scientific cooperation

and networks should be initiated and innovative projects and junior research groups should be encouraged with seed money. A working group of A. Hensel, M. Heinrich, A. Nahrstedt and B. Roether worked out by-laws and regulations, which were presented to GA Board of Directors during the last meeting in February. At the moment the regulations have to be checked by a

GA foundation Plants for Health

professional lawyer and the final version will be ready for the members meeting in Berlin. At the moment, GA hopes that the members will make the projected foundation as successful as is and was the Egon-Stahl-Award.

A. Hensel and A. Nahrstedt

A really great success story: 25 years of Egon Stahl Award

In 1985, the Egon Stahl Award of the GA was bestowed for the first time as a silver medal. On the occasion of his 60th birthday Professor Dr. Dr. h.c. mult. Egon Stahl had donated this award as an incentive for young scientists working in the field of Pharmacognosy/Pharmaceutical Biology, and/or of Analytical Phytochemistry. The bronze or silver medal including a certain amount of money should acknowledge a young scientist with an excellent thesis resp. an outstanding postdoctoral work.

When Professor Stahl donated the award, he was already a world famous scientist due to his pioneering and epoch-making development and theoretical explanation of thin layer chromatography (TLC) – along many others – embodied in the world wide scientific "bestseller" of that time "Thin Layer Chromatography" that was translated into many languages.

Professor Stahl had always been an active member of GA. Beginning with the 2nd annual meeting of GA (then still a German society) in Karlsruhe, he lectured at many GA congresses demonstrating not only his methodological achievements but also his research on medicinal plants. He was elected member of the Advisory Board in

1983 up to his early death in 1986, and Honorary Member in 1984. Due to this lively relation to the Society and to the surely enthusiastic reaction of his GA board colleagues he dedicated a remarkable sum out of his profits into the "Egon Stahl foundation". Of the foundation's interests the annual Egon Stahl award should and always could be covered.

Most members of GA have heard of this highly esteemed and desirable award, but who – at least of our young scientists – knows much about Egon Stahl?

Born 1924 in Eberbach, Germany, he studied pharmacy and got his PhD at the Technical University of Karlsruhe (D) in 1952. After various positions at the universities of Karlsruhe and Mainz, where he accomplished his habilitation in Pharmacy in 1956, he became Professor of Pharmacognosy and in 1962 head of the Department of Pharmacy at the University of Saarbrücken, where he also became emeritus in 1984.

His work was dedicated to secondary plant metabolites, from biogenesis to accumulations in drugs and their content in herbal medicinal products with a focus on standardization and quality. This resulted in the



development of a series of instruments and analytical methods among them a microdistillation apparatus for essential oils, the so called "TAS oven" (TAS = Thermo Micro Separation and Application Apparatus). Worldwide known and used was and is his masterpiece, the development of Thin Layer Chromatography under standardized conditions, basis for many new developments, which brought much appreciation also for Pharmacognosy. He published more than 200 papers and several books beside the above mentioned 600 pager handbook "Thin layer Chromatography". He also worked as chairman in the German and European Pharmacopoeia and other

scientific commissions. Beside numerous distinctions and highly esteemed awards from all over the world he received honorary doctorates from the universities of Leuven (B), Berlin (D) and Graz (A).

To honour the name of Egon Stahl additionally, in 1997 the Egon-Stahl-Award in Gold

was installed by GA and bestowed for the first time in 1999. It is the highest scientific honour of the Society for Medicinal Plant and Natural Product Research (GA). The Egon-Stahl-Award in Gold will be rewarded every 3 years and acknowledges the outstanding scientific lifetime work of a research scientist who has been closely

attached to Pharmaceutical Biology (Pharmacognosy, Chemistry of Natural Products), in its whole range, through his scientific work.

The list of award winners is to be found under www.ga-online.org/egonstahl_list_en.html

Dr. Renate Seitz

Next Annual GA Meeting

58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research

Gesellschaft für Arzneipflanzen und Naturstoff-Forschung e. V. | 7th Tannin Conference (Presymposium)



Berlin (Germany) | 29 August – 2 September 2010



The 58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research as well as the 7th Tannin Conference offered as presymposium will be held in Berlin, Germany, 29th Aug to 2nd Sept, 2010. The specific objectives of the 58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research will be to promote dialogue and the exchange of medical practices and resources of modern and traditional nations.

Alexander von Humboldt – born in Berlin and the foremost natural scientist of the early 19th century – was one of the pioneers of international scientific exchange. In 1828, he organised the first international scientific conference in Berlin, Germany, attended by about 600 participants from all over the world. This unique meeting was a

model for many similar reunions in various countries in the following years. The focus was on the scientific exchange across borders – also addressed in the 58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research. We cordially invite all colleagues to come to Berlin, an attractive venue with international atmosphere and culture, to experience the opportunities and challenges of globalisation. The topics of our conference include recent developments in natural product research (new analytical and phytochemical methods), the issue on biopiracy and bioprospecting as well as current knowledge of traditional medicine and evidence based herbal medicine. The objective of the 7th Tannin Conference (presymposium) is to promote further collaborations between chemists, biologists and human health related disciplines

and to focus on expanded possibilities of polyphenols for their application in human health, nutrition, and the food industry.

We have invited a number of internationally recognized speakers from different countries (Belgium, USA, Panama, South Afrika, Jordan, Great Britain, France, Japan, and Germany) and have organised some interesting cultural events to experience Berlin as exciting capital in the centre of Europe.

For more information, please visit our website www.ga2010.de.

Professor Dr. Herbert Kolodziej and
Professor Dr. Matthias F. Melzig
Presidents of the Organising Committee

The organizers:



Prof. M. F. Melzig



Prof. H. Kolodziej



What's on top of European Medicines Agency EMA concerning Herbal Medicinal Products?



Herbal Medicinal Products – New Regulatory Developments in Europe

Dr. Barbara Steinhoff; German Medicines Manufacturers Association (BAH); Co-chairperson of the ESCOP Scientific Committee; Ubierstr. 71–73; D-53173 Bonn, Germany, steinhoff@bah-bonn.de

Herbal medicinal products have to prove their quality, efficacy and safety prior to gaining access to the market. Insofar there is no difference between herbal and chemical medicinal products. However, due to their specific character as complex mixtures of natural origin, herbal medicinal products have some particularities which deserve special attention with regard to the assessment of their quality, efficacy and safety. As they contain well-known substances in most cases, either the option of „well-established medicinal use“ with a marketing authorization based on bibliographic references or the option of „traditional use“ with a registration based on tradition and experience applies, both in accordance with EC legislation. It depends on the interpretation of these requirements by the authorities in EU Member States on how intensively these procedures are used. Technical guidance addressed to applicants and health authorities is provided by a large number of documents elaborated by the Committee on Herbal Medicinal Products (HMPC) and published by the European Medicines Agency (EMA) during the past few years. A brief update on these regulatory activities as well as on new developments in the work of ESCOP, the European Scientific Cooperative on Phytotherapy, will be given in the following.

The Committee on Herbal Medicinal Products

The Committee on Herbal Medicinal Products (HMPC) was founded in 2004 at the

EMA and has met 6 times each year under the chairmanship of Dr. Konstantin Keller, Germany. Vice-chairperson as well as chairperson of the Working Party on Community Monographs and Community List (MLWP) is Professor Ioanna Chinou, Greece, since January 2009, and vice-chair of this working group Dr. Werner Knöss, Germany. The task of the HMPC is the preparation of Community herbal monographs in the area of the “well-established medicinal use” and for traditional herbal medicinal preparations as well as the preparation of a list of herbal substances, preparations and combinations thereof, which are eligible for a simplified registration procedure. Furthermore, the HMPC has been working on numerous guidelines for the assessment of quality, efficacy and safety of herbal and traditional herbal medicinal products.

Community herbal monographs and list entries

After preparation and discussion in the MLWP and adoption by the HMPC, a large number of monographs and list entries were published either as final version or as draft for comments by interested parties. Some important new documents, which might be of particular interest from the scientific point of view, will be discussed in the following. All these documents can be found on the EMA website (www.ema.europa.eu).



In July 2009 the monograph on *Aesculus hippocastanum* was finally published. It includes a “well-established medicinal use” with the indication “herbal medicinal product for treatment of chronic venous insufficiency, which is characterised by swollen legs, varicose veins, a feeling of heaviness, pain, tiredness, itching, tension and cramps in the calves” for specified extracts. A traditional use has also been accepted, but only for certain preparations which are used externally.



In the final version of *Hypericum perforatum*, herba, “mild to moderate depressive episodes” have been finally adopted as an indication for certain extracts with a well-established medicinal use. A separate monograph was established for traditionally used products with the indication “for the relief of temporary mental exhaustion”. Additionally, for some preparations an external or a gastrointestinal indication, respectively, was included. With regard to risk information on St. John's wort products, it was acknowledged that the risk of interactions is dose-dependent which is of particular importance for low-dose, traditionally used products.



The monograph on Valerian and Hops is the first combination monograph prepared

by the HMPC. It includes both well-established and traditional uses. Comments submitted on this draft mainly referred to some further preparations which might be eligible for the well-established use, to the wording of the “traditional” indications as well as to the restriction of use to persons from 18 years on.



The draft monograph on *Cimicifuga racemosa*, rhizoma, describes a well-established medicinal use “for the relief of minor neurovegetative menopausal complaints (such as hot flushes and sweating)”. Comments from interested parties focussed on the wording of indications and of special warnings, particularly addressing a restriction of use in tumour diseases and the suspect of liver disorders postulated by the HMPC.

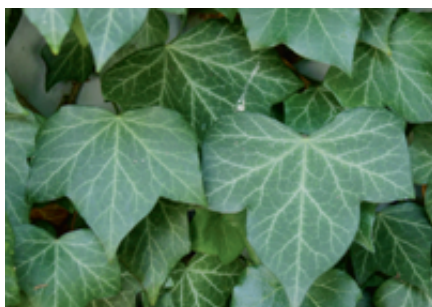


The draft monograph on *Vitex agnus castus*, fructus, only accepts a traditional use “for the relief of minor symptoms in the days before menstruation (premenstrual syndrome)” for preparations of this herbal drug. Some of the comments submitted tried to justify a well-established medicinal use of certain preparations based on clinical

data as well as the option to use these products also in adolescents in case of complaints related to pre-menstrual syndrome.



The final monograph on *Salvia officinalis*, folium, which was published recently contains a limit for thujone of 5 mg per day (instead of 3 mg as stated in the draft) and thus follows the comments submitted on this issue. However, the daily dose of the herbal drug has been limited by the HMPC due to the toxicity of thujone. In case of *Salvia officinalis* L., aetheroleum, the HMPC had considered that it cannot establish a monograph due to safety concerns because of the high levels of thujone present in the essential oil. A draft public statement has been made available for consultation together with the draft assessment report and the list of references.



The draft monograph on *Hedera helix* L., folium, describes the well-established medicinal use as an expectorant in case of productive cough for defined preparations as well as the traditional use in common cold for further preparations. However, the exclusion of children under 4 years of age and under 12 years of age, respectively, seems contradictory and is not in line with data from clinical studies in younger children.

Two further public statements have been drafted recently: The assessment of *Echinacea angustifolia*, radix, did not result in the establishment of a monograph because of insufficient data as regards the period of

traditional use, and the assessment of *Euphrasia officinalis* and *Euphrasia rostkoviana*, herba, concludes that adequate data on the safe use and plausibility of pharmacological effects is lacking for preparations for ocular and nasal use.



Already some time ago, a further important draft public statement had been published on the assessment of *Urtica dioica* L.; *Urtica urens* L., radix (Nettle root) which came to the conclusion that neither the requirements for the acceptance of the well-established use nor for a traditional use were fulfilled. Comments were submitted by various organisations who put special emphasis on the justification of the well-established medicinal use based on clinical data. In case this was not acceptable for the HMPC in spite of the explained arguments, the traditional use should be accepted since, according to the comments, the treatment of BPH symptoms is a condition which – after initial diagnosis by a doctor – is suitable for self-medication. For the time being, the MLWP has put the assessment work of *Urticae radix* on hold until a class review for plants used in BPH (e.g. *Serenoae repentis fructus*, *Cucurbitae semen*) has been performed.

On a regular basis, several accompanying documents prepared in the MLWP are published together with the final version of the respective monographs, or sometimes even already when the draft is available, e.g. in case of the draft Assessment Report for *Hypericum* or *Cimicifuga*. These documents provide further background information on the content of the published monographs and comprise HMPC Opinions, Assessment Reports, lists of bibliographic references and overviews of comments received during the consultation period. Prior to preparation of monographs, the HMPC publishes Calls for Scientific Data. They are addressed to interested parties who might compile literature data according to a specific guidance document, normally after performing a literature search. Recently such Calls have been published e.g. for *Serenoae repentis fructus* (*Sabalus serrulatae fructus*) and *Silybi mariani fructus*.

Current overviews of the status of the HMPC assessment work can be found on the EMEA website, indicating for which projects a rapporteur has been assigned, a draft is under discussion or published, the assessment is close to finalisation or a final opinion has been adopted. It should be mentioned in this context that interested parties, e.g. scientific organisations from all over Europe, should take the opportunity to comment on the drafts monographs in case they do not agree with their content, e.g. with regard to indications, dosage recommendations or risk information.

Guidance documents on quality

The "Reflection paper on stability testing of herbal medicinal products and traditional herbal medicinal products" was adopted in the March 2010 meeting of the HMPC. Furthermore, a "Glossary on instructions for the preparations of herbal teas" was adopted. It is regarded as a result of the initiative launched in September 2008 to evaluate standard tea preparation methods and agree on definitions and instructions, to support a standardisation of the terminology used in Community herbal monographs/ list entries and related documents. The glossary was prepared instead of a guideline following discussions with interested parties who did not see a necessity for the preparation of a guideline, because many issues were already regulated in the European Pharmacopoeia, and an additional standardisation of herbal teas did not seem appropriate. Thus the alternative approach is considered a good solution which explains the definitions and terms commonly used for the preparation of herbal teas.

Guidance documents on safety

Based on a respective Concept Paper, the "Guideline on Selection of Test Materials for Genotoxicity Testing for Traditional Herbal Medicinal Products/Herbal Medicinal Products" was finally adopted and published. In addition to the "Guideline on the

assessment of genotoxic constituents in herbal substances/preparations" it contains further guidance for genotoxicity testing explaining the "Bracketing & Matrixing" with several examples. Thus it represents a pragmatic approach for testing selected extracts that are able to serve as representative samples for a broader range of preparations of the same plant. Such a concept has already been applied in practice by the German Kooperation Phytopharmaka who has co-ordinated Ames tests for a large number of herbal preparations.

The HMPC adopted the "Reflection paper on ethanol content in herbal medicinal products and traditional herbal medicinal products used in children". It is intended to reflect the need for safety limits for ethanol exposure by herbal medicinal products for oral use. In their comments various scientific and industrial organisations had stated that the ethanol-related risk of herbal medicinal products is negligible when they are used in the recommended dose, in particular when compared to ethanol-containing beverages and food such as bananas and apple juice. However, the document has been published now in its final version without taking these comments into account.

All respective draft guidance documents released for public consultation as well as the finalised documents can be found on the EMEA website (<http://www.ema.europa.eu/htms/human/hmpc/hmpcguide.htm>).

ESCOP – The European Scientific Cooperative on Phytotherapy

ESCOP, the European Scientific Cooperative on Phytotherapy, was founded in 1989 as a European umbrella organisation of national associations of phytotherapy. The main objectives of ESCOP are to establish harmonised criteria for the assessment of herbal medicinal products, to give support to scientific research and to contribute to the acceptance of phytotherapy on a European level. In order to contribute to the scientific harmonisation process ESCOP has

been working on more than 100 monographs on efficacy and safety of a medicinal plant and its preparations. After publication of the 2nd Edition with 80 monographs in 2003, a Supplement containing 35 revised and new monographs was published in 2009. It can be ordered from the book trade or from the ESCOP Secretariat in Exeter/UK (www.escop.com).

For future publications, ESCOP is seeking new options to utilise modern communication media. Online publications of ESCOP monographs are under discussion which might facilitate an early availability of revised and new monographs as well as a fast and easy download from a website. The monograph on *Cimicifugae rhizoma* which has been updated and expanded recently might serve as a pilot project followed by other results of ESCOP's work.

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A further hint:

The EMA HMPC has published for comments the draft community herbal monograph on the following herbal materials. The respective monographs can be found as follows:

Arctium lappa L., radix (Burdock root):
www.ema.europa.eu/pdfs/human/hmpc/arctii_radix/24676309endraft.pdf

Quercus robur L., *Quercus petraea* (Matt.) Liebl., *Quercus pubescens* Willd., cortex (Oak bark):
www.ema.europa.eu/pdfs/human/hmpc/quercus/320309endraft.pdf

New Books

Handbook of Pharmaceutical Natural Products

In a classical alphabetical format, this two-volume reference covers more than 1000 painstakingly screened natural product structures. For each compound or compound class, a basic chemical characterization is given, followed by a description of the biological



source and a discussion of their pharmaceutical potential as lead molecules for new drugs. The latter takes into account the documented uses of many of these compounds in Asian traditional medicine. By way of its clearly structured, single-page articles, and with the aid of classification tables in the appendix, this dictionary is easy to use and provides quick and reliable information to researchers as well as for scholars and students. More details: <http://www.wiley-vch.de/publish/dt/books/bySubjectCH00/ISBN3-527-32148-9/>



Goutam Brahmachari, *Handbook of Pharmaceutical Natural Products*, ISBN 978-3-527-32148-9, 2 Volumes, 926 pages, English language, Wiley-VCH, 349,- €.

and their Institutes of Pharmacognosy: International, Interesting and Cooperative

We introduce and present major research groups working in the field of medicinal plants and natural products with their special characteristics. In this Newsletter: **Brazil**.

Until now GA has only 14 regular members from this huge country, but much more high ranking scientists are working in Brazil on natural products.

Three representative working groups have prepared a short presentation of the group and the respective activities.



Universidade Estadual de Maringá

Professors: Prof. Dr. Joao Carlos Palazzo de Melo
Prof. Dr. Celso Vataru Nakamura
Profa Dra. Tânia Ueda-Nakamura

Contact: Adress: Avenida Colombo, 5790, Maringá, PR, Brazil, BR-87020-900.
Emails:
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Homepage: www.pcf.uem.br

Head of institution: Prof. Dr. Décio Sperandio

Working areas: **Neglected diseases:** *Leishmania*, *Trypanosoma cruzi*; Antibacterial testing (bacteria, fungi, virus); **Phytochemistry:** macromolecules, polyphenols (tannins); **Phytomedicines** in combination with nanotechnology

Publications, representing the institution: Onozato T, Nakamura CF, Cortez DAG, Dias Filho BP, Nakamura TU (2009) *Tanacetum vulgare*: Antiherpes virus activity of crude extract and the purified compound parthenolide. *Phytotherapy Research*, 23, p.791–96.

Santos AO, Nakamura AO, Nakamura TU, Dias Filho BP Nakamura CV (2008) Effect of Brazilian copaiba oils on *Leishmania amazonensis*. *Journal of Ethnopharmacology*, 120, 204–08.


Rocha JCB, Pedrochi F, Hernandez L, Mello JCP, Baesso ML (2007) Ex vivo evaluation of the percutaneous penetration of proanthocyanidin extracts from *Guazuma ulmifolia* using photoacoustic spectroscopy. *Analytica Chimica Acta*, 587, 132–36.

Ishida K, Mello JCP, Cortez DAG, Nakamura TU, Dias Filho BP, Nakamura CV (2006) Influence of tannins from *Stryphnodendron adstringens* on growth and virulence factors of *Candida albicans*. *Journal of Antimicrobial Chemotherapy*, 58, 942–49

Coworkers: PhD: Celso Vataru Nakamura, João Carlos Palazzo de Mello, Tânia Ueda-Nakamura



Sao Paulo State University

Professors: Contact:	Prof. Dr. Vanderlan Bolzani Sao Paulo State University; Institute of Chemistry. Nucleus of Bioassays, Biosynthesis and Ecophysiology of Natural Products (NuBBE). IQ-UNESP. R. Francisco Degni, s/n, Quitandinha, CEP 14800-900. Araraquara – SP, Brazil. Email: bolzaniv@iq.unesp.br	
Homepage:	www.nubbe.iq.unesp.br	
Head of institution:	Vanderlan da Silva Bolzani	
Working area (max. 3 sentences):	Medicinal plants, natural products, metabolomics and dereplication, biological activities.	
2 publications, representing the institution group research:	Biol. Pharm. Bull. 2007, 30, 375-378. J. Nat. Prod. 2007, 70, 48-3.	
Coworkers:	Postdocs (5) Alberto J. Cavalheiro, Ângela R. Araújo, Dulce H. Silva, Maysa Furlan, Márcia Nasser, Ian C. Gamboa PhD students: 11	
The “speciality” or the unique selling proposition of institution:	Very close cooperation with the organic chemistry department.	
Running projects with industrial partners?	Together with national pharmaceutical companies; Technical cooperation for the development of an anxiolytic herbal medicine from <i>Erythrina mulungu</i> (Fabaceae) from Brazilian Cerrado; Validation of standardized extracts as a topic antimicrobial formulation to be used as herbal medicine; Pre-clinical studies of semi-synthetic piperidine derivative alkaloids: pharmaceutical preparations to be used for Alzheimer’s disease.	

University of São Paulo (USP)

Contact:	São Paulo University Faculty of Pharmaceutical Sciences, Av. Prof. Lineu Prestes 580 05508-900 São Paulo SP, Brazil Email: fcf@usp.br, elfriede@usp.br
Homepage:	www.fcf.usp.br
Head of institution:	Prof.Dr.Jorge Mancini Filho
Working areas:	The main research areas at the Faculty of Pharmaceutical Sciences are extraction and synthesis of active substances, quality control and pharmaceutical technology. Hospital Pharmacy, Clinical Biochemistry and Nutrition are also significant areas. Pharmacognosy is an area at the Pharmacy Department. There are 4 Departments at Faculty of Pharmaceutical Sciences: 1) Pharmacy, 2) Clinical and Toxicological Analysis, 3) Food and Nutrition, 4)Technology. The main areas at Pharmacognosy are pharmacognostic characterization, isolation and structure determination of flavonoids and alkaloids, antiulcer and cicatrizant activity of Brazilian medicinal plants. Antiparasitic activity of Annonaceae alkaloids is also a research area.
2 publications, representing the Pharmacognosy Research Group:	Konan NA, Bacchi EM (2007) Antiulcerogenic effect and acute toxicity of a hydroethanolic extract from the cashew (<i>Anacardium occidentale</i> L.) leaves. Journal of Ethnopharmacology, 112, 237–42. Ishikawa T, Donatini R, Diaz I, Yoshida M, Bacchi E, Kato E (2008) Evaluation of gastroprotective activity of <i>Plinia edulis</i> (Vell.) Sobral (Myrtaceae) leaves in rats. Journal of Ethnopharmacology, 118, 527–29.
Coworkers in Pharmacognosy Research Group:	PhD students: 4 Postdocs: 1
The “speciality” or the unique selling proposition of institution:	Pharmacobotanical description of Brazilian plant drugs; antiulcer activity of Passiflora species and structure determination of active natural products.



(Notices of Ph.D. and diploma theses to the editor are welcome any time!)

Ph.D. thesis (2010) Adhesion of *Porphyrromonas gingivalis* – antiadhesive and cytoprotective effects of proanthocyanidin-enriched plant extracts (*Myrothamnus flabellifolia*, *Rhododendron ferrugineum*, *Rumex acetosa*). By: Gesine Löhr; Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2010) Antiviral activity of plant extracts against Herpes-simplex-Virus Typ 1: Inhibition of viral adsorption by polyphenolic compounds. By: Kirsten Gescher; Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2010) Phytochemical characterisation and functional investigations on *Rhododendron ferrugineum* L. By: Andrea Louis; Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2010) Metabolic Changes in *Arabidopsis thaliana* plants overexpressing chalcone synthase. By: Dao Thi Thanh Hien; Promotor: Prof. Dr. Rob Verpoorte, IBL, Leiden University, The Netherlands.

Ph.D. thesis (2010) NMR-based metabolomic characterization of *Vanilla planifolia*. By: T.L. Palama; Promotor: Prof. Dr. Rob Verpoorte, IBL, Leiden University, The Netherlands.

Ph.D. thesis (2010) Stress response and health affecting compounds in Brassicaceae. By: M. Jahangir; Promotor: Prof. Dr. Rob Verpoorte, IBL, Leiden University, The Netherlands.

Ph.D. thesis (2010) Evaluation of a medicinal plant: *Phyllanthus amarus* and its improvement at the genetic level. By: Anindita Banerjee; Promotor: Dr. Sharmila Chattopadhyay, Drug Development/Diagnostics & Biotechnology Division, Indian Institute of Chemical Biology, 4, Raja S.C. Mullick Road, Kolkata, India.

Ph.D. thesis (2010) Pectic polysaccharides with immunomodulating activities from Malian medicinal plants. By: Tom Erik Grønhaug; Promotor: Prof. Berit Smestad Paulsen, Pharmacognosy, University of Oslo, Norway.

Ph.D. thesis (2009) Das TPA-induzierte Mausohrödem-Modell: Testung von Matrixcaria-Extrakten, -Inhaltsstoffen, deren Derivate sowie weiteren Naturstoffen. By: Christiane Öhler; Promotor: Prof. Dr. Peter Imming, Institut für Pharmazie, Martin-Luther-Universität Halle-Wittenberg, Germany.

Ph.D. thesis (2009) Investigations on putative diamine oxidases for pyrrolizidine alkaloid biosynthesis in *Senecio vernalis*. (in German) By: Dagmar Enss; Promotor: Prof. Dr. Dietrich Ober, Botanical Institute, University of Kiel, Germany.

Ph.D. thesis (2009) Untersuchungen zur strukturellen Verwandtschaft von Putrescin N-methyltransferase und Spermidinsynthase 1 aus *Datura stramonium* L.. By: Stefan Biastoff; Promotor: Prof. Dr. Birgit Dräger, Martin-Luther-Universität Halle-Wittenberg, Germany.

Ph.D. thesis (2010) Lignane und lignanhaltige Asteraceenextrakte – estrogene und antioxidative Eigenschaften und stereochemische Aspekte der Biosynthese. By: Ulrike Müller; Promotor: Prof. Dr. Birgit Dräger, Martin-Luther-Universität Halle-Wittenberg, Germany.

Ph.D. thesis (2009) Antifungal activity by Telemagrandin II isolated from *Ocotea odorifera* and by semi-synthetic derivatives of Thiosemicarbazones. By: Mirian Ueda Yamaguchi; Promotor: Prof. Celso Vataru Nakamura and Benedito Prado Dias Filho, Universidade Estadual de Maringá.

Ph.D. thesis (2009) Chemical research, development of analytical methodology and evaluation of stability of extracts from *Guzuma ulmifolia* Lam. (Sterculiaceae). By: Gisely Cristiny Lopes; Promotor: João Carlos Palazzo de Mello, Universidade Estadual de Maringá.

Ph.D. thesis (2009). Evaluation of anti-leishmania activity of derivatives of (–) mamea A / BB and validation method for the analysis of coumarin (–) mamea A / BB in Cambess extracts of *Calophyllum brasiliense* Cambess (Clusiaceae) by HPLC. By: Mislaine Adriana Brenzan; Promotor: Diógenes Aparício Garcia Cortez and Prof. Celso Vataru Nakamura, Universidade Estadual de Maringá.

Ph.D. thesis (2009) Evaluation of the Pharmacological and Toxicological actions of *Byrsocarpus coccineus* Schum. and Thonn. (Connaraceae). By: Abidemi James Akindele; Promotor: Prof. O.O. Adeyemi; Prof. O.A. Odukoya; University of Lagos, Lagos, Nigeria.

Ph.D. thesis (2009) Metabolomic changes of *Brassica rapa* under biotic stress. By: I.B. Abdel-Farid Ali; Promotor: Prof. Dr. Rob Verpoorte, IBL, Leiden University; The Netherlands.

Diploma thesis (2010) Mikrovermehrung von *Dioscorea*-Arten über Nodienkultur und Mikroknollen. By: Dina Elsayed-Ali; Promo-

tor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Abschlussarbeit (2010) *Kapillarelektrophoretische Bestimmung von N-Phenylpropionyl-L-Aminosäureamiden in Kakao und Kakaoverzeunissen*. By: Katrin Studt; Promotor: Dr. M. Lechtenberg, Prof. A. Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Diploma thesis (2010) Phytochemical analysis of *Ranunculus* species with possible involvement in Equine Grass Sickness. By: Johanna Michl. Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria; Prof. M. Heinrich, School of Pharmacy, University of London, U.K.

Diploma thesis (2010) Untersuchungen zu GABAA Modulatoren aus *Juncus effusus* L. By: Susanne Nussbaumer; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010) Testung einer TCM-Zubereitung auf die Modulation von Histondeacetylasen. By: Katrin Leutgeb; Promotor: Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010: Effects of STW 5 and its components on viability of Caco-2 cells. By: Michael Schwalbe; Promotor: Prof. Dr. Karin Nieber, University of Leipzig, Germany.

Diploma thesis (2010): STW 5 and STW 6 normalized voltage-dependent ion currents in LPS-stimulated of human macrophages. By: Juliane König; Promotor: Prof. Dr. Karin Nieber, University of Leipzig, Germany.

Diploma thesis (2010): Ex vivo absorption of STW 5 and some of its components using a new HPLC method. By: Stefanie Hoser; Promotor: Prof. Dr. Karin Nieber, University of Leipzig, Germany.

Diploma thesis (2010): Effect of St. John's wort (*Hypericum perforatum* L.) on gene expression in stressed rat brain using microarray analysis. By: Peggy Jungke; Promotor: Prof. Dr. Karin Nieber, University of Leipzig, Germany, and Prof. Dr. Veronika Butterweck, University of Florida, U.S.A.

Diploma thesis (2010): Effect of Indirubin-3'-monoxime on c-src kinase activity in PDGF-activated vascular smooth muscle cells. By: Christoph Grojer; Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010): Untersuchung der Resveratrol-vermittelten Hemmung von

Angiotensin II- und EGF-induzierten Signalwegen in glatten Gefäßmuskelzellen mittels Resveratrol-Derivaten. By: Julia Gesslbauer; Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010): Effect of Indirubin-3'-monoxime on PDGF-induced VSMC migration. By: Christa Czaloun; Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010): Influence of Indirubin-3'-monoxime on redox systems in PDGF-activated vascular smooth muscle cells. By: Alexander Heinrich; Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Beiträge zur Phytochemie von *Dianthus versicolor* FISCH. (Caryophyllaceae) einer Heilpflanze der traditionellen mongolischen Medizin. By: Zita Swoboda; Promotor: Ao. Univ.-Prof. S.

Glasl-Tazreiter, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Chemische Untersuchung eines Passionsblumenextraktes. By: Nina Mayer; Promotor: Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Chemotaxonomische Untersuchungen an österreichischen Farnen. By: Andreas Wendelin Rauch; Promotor: Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Pharmacokinetics and Metabolism of the C-glycosyl-flavone Vitexin. By: Barbara Schorr; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria; Prof. H. Derendorf, University of Florida, US.

Diploma-thesis (2009) Calysteginisolierung aus *Solanum tuberosum* L.: Isolierung von Calystegin B₂ und photometrischer Test durch β -Glucosidase-Hemmung. By: Mari-

ela Christina Mielke; Promotor: Prof. Dr. Birgit Dräger, Martin-Luther-University Halle-Wittenberg, Germany.

Diploma-thesis (2009) Kristallisation verkürzter Putrescin N-methyltransferase aus *Datura stramonium* & Löslichkeit einer mutierten Spermidinsynthase 1 aus *Datura stramonium*. By: Kathrin Klimpel; Promotor: Prof. Dr. Birgit Dräger, Martin-Luther-University Halle-Wittenberg, Germany.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to November 25th 2010. Please send all contributions to: Prof. Dr. A. Hensel, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrasse 56, D-48149 Münster, Germany; ahensel@uni-muenster.de