Gesellschaft für Arzneipflanzenforschung · Society for Medicinal Plant Research

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Message from the President

Dear members,

the two years of presidency passed very quickly. Two very nice annual meetings, several workshops and symposia felt within this time, and the celebrations of our 50th anniversary. All events showed that there is continuously high interest in medicinal plant research. Since last year, also a high number of colleagues have joined our Society, which I want to welcome as new and active members of the GA family.

The last annual congress in Kiel was again very well attended and successful. You will find a special report in this Newsletter. We could attract especially many young scientists from all parts of the world. So the GA meeting became again a platform for an exchange of knowledge and ideas between scientists from different regions. We will try to intensify this exchange even more in future meetings.

On behalf of GA, I want to thank the organizers of the congress in Kiel, Prof. Wolfgang Blaschek and Prof. Susanne Alban, for all their work and engagement. They did an excellent job and we will keep the Kiel meeting in best remembrance.

During the member’s meeting in Kiel, the BoD has been newly elected. The present ExC has been approved and so we will continue for another two years in the existing team. I want to take the chance to thank you for your confidence and also to thank my colleagues in the ExC and BoD for the good team work and for all the time they spent for GA. Especially I want to thank Prof. Raimo Hiltunen, who did not candidate for the Advisory Board anymore, for serving in the BoD for 15 years! He always has been a reliable and knowledgeable participant of our board meetings and we will certainly miss him and his contributions. Moreover, I want to thank Dr. Bruno Frank, for all his activities as GA Secretary (1994–2001) and recently as a BoD member. He spent a tremendous amount of time and efforts to support GA, and I hope that he will be active in GA committees also. As new members of the Advisory Board I want to welcome Prof. Canigueral and Prof. Hamburger.

I am looking forward to the next BoD period and hope that we can serve and develop our Society in an optimum way.

From the questionnaire which was sent out last year, we know at least from a part of our members what the wishes and needs are. The outcome of the questionnaire is published on the GA homepage, so that you can get this information as well. Everybody is invited to send further comments or suggestions to me so that we can plan the future of GA according to your needs.

In the BoD we have already decided to focus also on the areas of biotechnology, gene technology and metabolomics in coming workshops and to offer methodological seminars for young scientists dealing with different aspects of medicinal plant research. So we hope to meet your demands and make GA even more attractive.

GA has been and will be also active in regulatory issues. We have published a critical statement on the ban of Kava Kava (published as an Editorial in Planta Medica) and have issued the “Kiel Resolution” dealing with the reimbursement of herbal medicinal products (HMPS) in Germany. Moreover we are regularly invited by the EMEA to send comments on drafts of regulatory guidelines for HMPS in Europe.

As you know, the next annual congress of GA will be held from July 31 to August 4, 2004 in Phoenix, Arizona, as a joint meeting with the American Society of Pharmacognosy (ASP), the Association Française pour l‘Enseignement et la Recherche en Pharmacognosie (AFERP) and the Phytochemical Society of Europe (PSE). It will be organized by Prof. David Slatkin. We will have also our next member’s meeting in Phoenix. Please regularly contact the GA homepage for updated information on this congress.

Finally I want to wish you all a healthy, lucky and successful year 2004 and I am looking forward to seeing you in Phoenix.

Sincerely yours,

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. We call all members to notify our secretary by a short message on their actual e-mail address with the attached flyer.

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

The GA-homepage (www.ga-online.org) contains a special members area for which a special password is needed. For those who lost it: username “gameren”, password “morphine”.

All new members of the society are greeted cordially and we hope that GA will be for you a platform for intense communication and scientific exchange. Especially the younger members sometimes communicate that dialogue with older GA-people may be not so easy. Therefore the call to the new and younger members: never hesitate just to speak to the older ones; the annual conferences may offer unique opportunities to meet the “pharmacognostic establishment” and especially the more informal excursions, dinners etc. may be good changes to get in direct communication. The same to all other members: it will be great if you step up to the younger members and get them more easily integrated into our community. The GA is living from all members and beside high quality of scientific work we should work also on a deeper understanding and knowledge of personality of each member.

A. Hensel
Egon-Stahl-Award in Bronze / Silver

On the occasion of his 60th birthday, Professor Dr. Dr. h.c. mult. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of Pharmacognosy (Pharmaceutical Biology) and Analytical Phytochemistry.

As a rule, the silver medal and an award of € 3,000 shall be awarded to scientists up to the age of about forty who have published outstanding scientific work during the years after their graduation. The bronze medal and an award of € 2,000 will be given to young scholars up to the age of about thirty whose thesis was of outstanding quality.

The prize 2004 will be awarded during the Joint Meeting in Phoenix, Arizona.

Members of the Society for Medicinal Plant Research are invited to submit nominations for candidates, together with supporting data, to the President of GA, Prof. Dr. R. Bauer, Graz.

It is encouraged to nominate especially candidates for the bronze medal (with excellent PhD thesis), since we had a deficiency of nominations in this category in the previous years.

A nomination for the prize has to include a curriculum vitae incorporating the most important data on the candidate’s scientific career, an index on his/her publications, and reprints of several of his/her more recent publications. All publications can be taken be into consideration, including already published papers of the last six years.

All documents have to be submitted in triplicate.

Deadline for submissions is March 15, 2004.

R. Bauer

51st Annual meeting of the Society for Medicinal Plant Research in Kiel, 2003
Minutes of the Members’ Meeting 2003 in Kiel

The annual Member’s Meeting was held on 1 Sept 2003 in Kiel. 137 members attended the meeting. The president, Prof. Bauer, gave a welcome address.

Passing of the agenda

The agenda was approved after adding of topic 3.6: elections of auditors

Approval of the minutes of the annual Members’ Meeting 2002 in Barcelona

The minutes of the Members’ Meeting in Barcelona 2002 were published in the GA-NL 2/Dec 2002. They were accepted from the assembly unanimously with no remarks.

Annual reports

Report of the President Prof. R. Bauer

- During the past year the Executive Council (ExC) met four times: On 30. Nov. 2002 in Bad Camberg mainly for the preparation of the 50 years symposium, on 6. April 2003 also in Bad Camberg, on 2. July 2003 in Regensburg, and on 30. Aug. 2003 in Kiel.
- The Board of Directors (BoD) met on 5. April 2003 in Bad Camberg and on 31. Aug. 2003 in Kiel.
- The last member’s meeting was held during the congress in Barcelona; Prof. Bauer thanked Profs. Canigueral and Vilari for the organization of this successful 50th annual congress of GA.
- He also thanked the organizers of the actual congress in Kiel, Prof. Alban and Prof. Blaschek.
- End of 2002 many reminder letters for payment of the membership fee were sent out, 57 non paying members had to be excluded.
- A new membership list was distributed for the first time as CD-ROM together with the newsletter; the president thanked Dr. R. Seitz and Prof. W. Kreis for the preparation of the CD-ROM.

- GA Newsletter: NL 2002/2 and NL 2003/1 appeared in due time (Jan, Jul), the cooperation with Thieme Verlag is very good, the president thanked the editor, Prof. Hensel.
- The GA Home Page has been operated very well by Dr. Wroesch; in January 2003 a new members area was established (username: member, password: morphine).
- The organisation of the Anniversary Symposium of GA on 8 April in Bad Camberg was one of the major activities of the year 2003 (see report in NL 2003/1; programme, abstracts and photographs can be found on the GA homepage). 108 members and friends of GA participated, the presidents or representatives of ASP, FIP, PSE, ISE, AFERP, ESCOP, DPhG, OGPhyt attended and had sent congratulations. Prof. Bauer thanked the company members, whose generous sponsoring covered all expenses of the symposium, also the organizing team and the city of Bad Camberg.
- During the symposium in Bad Camberg the jubilee book “50 Years of GA” was presented to all participants and later sent to all members as a gift of GA. President Bauer thanked all colleagues who contributed and helped to prepare this book, especially the editors, Prof. Sprecher and Dr. Caesar, and the publisher Deutscher Apotheker-Verlag.
- During the opening ceremony of the Annual Congress in Kiel Prof. R. Hänsel, Munich, one of the participants of the founding conference and former GA vice president, was rewarded with honorary membership.
- Prof. Bauer attended the farewell symposium of the former GA president, Prof. Franz, in Regensburg and conveyed the best wishes of GA.
- GA received an invitation to the Annual Hearing of the HMWP of EMEA on 4 Nov 02 in London and was represented by Dr. Abel and Dr. Röther, Bionorica, who delivered a statement.
- GA received EMEA drafts on core-data (9.12.02 and 28.3.03) and WHO drafts (20.12.02) and was asked for statements.
- GA was invited to present a statement at the European-Pacific Kava Stakeholder Meeting in Brussels, Belgium, 25th / 26th Aug 2003 (published in Planta Med and GA homepage).
- As a representative of GA, Prof. Bauer participated in the symposium and the business meeting of the working group “Bioavailability of herbal medicinal products” on 9 Oct 02 in Berlin and discussed the topic “Biopharmaceutical characterisation of Herbal Medicinal Products (HMPs)”.
- Prof. Kreis was nominated as a representative of GA in a newly formed Biotechnology Commission in Germany (together with APV, EAPB, BfArM a.o.)
- Symposiums and workshops supported or co-organized by GA: Joint meeting with Deutsche Ges. f. Phytotherapie und Ges. Clin. Pharmacol. Ther., 10–12 Oct 2002 in Berlin, organized by Prof. Schulz and Prof. Roots; GA was represented by Prof. Kopp; Symposium ”Bioactive Secondary Plant Products in Veterinary Medicine”, 4 / 5 Oct 2002 in Vienna, organized by Prof. Chlodwig Franz as GA workshop (DAZ 44, 2002); GA was represented by Prof. Kopp; WOCMAF conference, 3.–7. Febr 2003 in Chiang Mai; Prof. Bauer participated as a representative of GA and gave a plenary lecture: LOF Symposium, 28 Febr 2003 in Antwerp, organized by Prof. Vlietinck: Infectious Diseases (GA represented by Dr Seitz, DAZ 11, 2003).

Reports of the Vice-Presidents


Prof. Kreis participated at the Biotechnology meeting of APhB in Mainz and was elected for chairman in this working group; he attended the 2nd workshop on Metabolomics in Potsdam and prepared the presentation templates for the candidates of the GA elections.
Report of the secretary Dr. Seitz:

  Total Members: 1061 (1023) from 74 countries; Honorary Members: 12 (11); New Members: 123 (108); Cancellations: 43 (38);
  Deceased members: 2 (3); Exclusions: 57 (2) of members who have not paid for 3 or more years; Companies: 37 (40); Members from countries with reduced fees: 117 (86); Members with unknown address: 23 (47).
- The call for email addresses in the last NL was not very successful, still we have e-mail addresses of only half of our members.

Report of the treasurer Dr. Abel:

Dr. Abel presented the “Annual Cash Report 2002”, the “Budget Draft 2003” and the Annual Statement 2002/ Egon Stahl-Awards. The budget was accepted unanimously.

The main aspects of the budget 2002 were support of young members by travel grants and support of GA workshops, of the year 2003 the organisation of the “Birthday symposium”, that came out with 145 Euro plus.

Report of the auditors Prof. Harnischfeger and Schlücher

The cash auditors thanked the treasurer and her helpers for having done everything perfectly and transparently. They discharged the ExC. Prof. Harnischfeger and Prof. Schlücher were approved to proceed as auditors for another year.

Report of the Editor-in-Chief of Planta Medica: Prof. Nahrstedt

In 2002, 298 manuscripts were published, which is an increase of 70 manuscripts compared to 2001. The increase is preferentially due to the higher number of issues of the journal which was 12 for the first time in 2002. Submissions in 2002 came from 60 countries; half of the contributions were from Asian countries (China, Korea, Japan, Taiwan), whereas Germany contributed only about 8% (position 4) of all published manuscripts, followed by USA, Brasil, Spain, Italy (France). The impact factor of Planta Medica further increased to 2.289 for 2002. Publisher and editor took care for an adequate cover page of the 50th anniversary issue in June 2003 with an editorial on the last 50 years of Planta Medica.

Prof. Hamburger, Jena, was introduced as Prof. Nahrstedt’s successor in the position of Editor-in-Chief.

Reports of the Permanent Committees

- Biological and Pharmacological Activities of Natural Products (Report Prof. Winterhoff)
  The workshop in Barcelona was skipped due to “Pharmacology” as a general topic of that congress. Workshop topic in Kiel: “Tests of activity on urinary tract”, presented by Dr. Koch (Schwabe) talking about BPH, Prof. Jarry, Goettingen, about phytoestrogens, Prof. Butterweck, Muenster, about systems for efficacy on gout.
- Breeding and Cultivation of Medicinal Plants (Report Prof. Ch. Franz)
  Due to the increasing use of HMPs and Nutraceuticals the topic of the Kiel workshop was: “Production of starting materials for HMPs – a survey of the actual situation”, that wanted to give a survey on the running actions of raw materials; speakers were Dr. Schubert for the EU situation, K. Duerbeck for other countries, for candidate countries Prof. Franz instead of the announced Ms. Nemeth. Franz was invited as a consultant for the guidelines of Good Agricultural Praxis and Wild Crafting Praxis, that were revised to an acceptable form for developing countries. (The outcome of his workshop will be published on the homepage of the Institute for Applied Botany, Vet.-med. University of Vienna: www.vu-wien.ac.at/104 home/) Next year’s workshop is postponed to the Jena meeting on 7–9 Sept 04 (s.b.).
- Manufacturing and Quality Control of Herbal Medicinal Products (Report Prof. Meier)
  The Barcelona workshop was relatively successful. The topic of the Kiel workshop was: The potential of NIR as a non-invasive method in the quality control of Herbal Drugs, Herbal Drug Preparations and HMPs. Speakers: Dr. Diller (BFAARM), Dr. G. Roos (University of Tuebingen), Dr. H. Schulz (BAFZ, Quedlinburg) and Dr. G. Schulzki (PhytoLAB). (A synopsis will be published in the GA homepage)

No workshop is planned in Phoenix.

- Regulatory Affairs on Herbal Medicinal Products (Report Prof. Vlietinck)
  The topic of the Kiel workshop was “Recent EU-regulatory issues and legislative initiatives on HMPs”. Invited panelists were Dr. Keller (HMPWP, London), Dr. Petrini (AESGP, Brussels), Mr. Hanson (EHPM, UK), who discussed the current status and prospects of herbal preparations as medicinal products via well established use or traditional use and compared them to the regulations required to the marketing of herbal preparations as nutraceuticals or food supplements.

Prof. Vlietinck is collecting comments on EMEA proposals from GA members that are later used for the preparation of a GA statement.

Future congresses, symposia and workshops

- 2004: 52nd annual congress will be a joint meeting with the American Society of Pharmacognosy (ASP), the Association Française 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, organized by Prof. David Saltkin from ASP. GA will organize the “Herb Symposium” (An announcement is added to this NL and will be regularly updated in the GA website)
- 2005: 53rd annual congress in Florence, organized by Prof. Vincieri

Workshops and symposia (all announced in the GA web pages):

- 2003: 20–22. Nov: Nonnweiler, Germany: 3. Mistletoe-Symposium (Dr. Scheer), similarly planned to the previous meetings (every 4 years), 6 societies involved, Prof. Bauer invited as GA-representative along with GPhyt, DPhG, Carstens Foundation, ZAN, Ass. Anthroposophic medicine.

GA is supporting this conference by funding a plenary speaker
- end of 2004 (in planning): Workshop on Metabolomics in Medicinal Plant Research
- Methodological workshops (“HPLC-MS for quality control of herbal medicinal products – HPLC and Kopling mit MS – Einsatz in der Qualitätskontrolle” organized by Prof. Dr. G. Reznicek, Inst.of Pharmacognosy, Vienna in the first half of 2004: and “Visual methods in the proof of crude drugs” organized by Prof. Dr. R. Laenger, Inst. of Pharmacognosy, Vienna, in the second half of 2004) as well as training workshops are in preparation.
Electon of the Board of Directors

Prof. Dr. E. Stahl-Biskup and Prof. Dr. H. Schilcher were accepted as returning officers.

President

Prof. Dr. R. Bauer (votes: 130 yes, 0 no, 4 abstentions)

Vice-Presidents

Prof. Dr. B. Kopp (votes: 120 yes, 2 no, 12 abstentions)

Prof. Dr. W. Kreis (votes: 119 yes, 4 no, 11 abstentions)

Treasurer

Dr. G. Abel (votes: 130 yes, 0 no, 4 abstentions)

Secretary

Dr Renate Seitz (votes: 129 yes, 0 no, 4 abstentions)

The Advisory Board

The following candidates were elected, all candidates accepted:

Prof. Dr Susanne Albin, Kiel – Germany (votes: 72)

Prof. Dr Wolfgang Blaschek, Kiel – Germany (84)

Prof. Dr Salvador Canigueral, Barcelona – Spain (91)

Prof. Dr Chlodwig Franz, Vienna – Austria (67)

Prof. Dr Matthias Hamburger, Jena – Germany (69)

Prof. Dr Peter Houghton, London – UK (68)

Prof. Dr Beat. Meier, Romanshorn – Switzerland (70)

Prof. Dr A. Nahrstedt, Muenster – Germany (83)

Prof. Dr J.J.C. Scheffer, Leiden – The Netherlands (66)

Prof. Dr A. J. Vlietinck, Antwerp – Belgium (84)

Discussion of the outcome of the GA questionnaire

Was postponed.

Miscellaneous

The assembly discussed the place of the next members meeting.

Honorary Membership for Prof. Dr. Rudolf Hänsel

According to the Standing Rules of the Society for Medicinal Plant Research, the Board of Directors has the option to award the Honorary Membership to individuals who have rendered special service either to medicinal plant research or to our Society.

Based on an unanimous decision of the Board of Directors of GA the honorary membership was awarded this year to Prof. Dr. Rudolf Hänsel, emeritus professor of the Free University of Berlin.

The awarding ceremony took place on September 1st, 2003 during the opening ceremony of the 51st Annual Meeting of our Society held in Kiel. President Prof. Bauer emphasized in his introduction that Prof. Hänsel fulfilled both criteria: he is an outstanding scientist in medicinal plant research and he has served GA in several ways.

Rudolf Hänsel was born in Zinnwald (today Czech Republic) on January 5, 1920. Shortly after his humanistic high school graduation (Matura) in the then called Sudetenland, he was recruited by the German army. As a member of a medical student brigade he could finally start his pharmaceutical studies in Vienna in 1943. With various interruptions, one as an American prisoner of war, he came to Munich to accomplish his studies at the University of Munich, Germany, where he graduated as a pharmacist in 1947. He obtained his Ph.D. and later his habilitation in Munich under the supervision of Prof. Dr. Ludwig Hörhammer in 1949 and 1954, respectively. His Ph.D. thesis was a contribution to stability problems (“About the influence of external factors on plant peroxides”). His habilitation was more chemotaxonomically oriented: “Distribution of flavonol glycosides in the Betulaceae and Polygoneae families”.

In 1954 he was appointed assistant professor and lecturer at the Institute of Pharmacognosy in Munich and at the same time he was invited as guest lecturer for Pharmacognosy at the University of Berlin. This was the starting point of 32 years of strong and fruitful connection to the Free University of Berlin. In 1956 he got the position as an associated professor and 1963 he became full professor and director of the newly established Institute of Pharmacognosy of the Free University of West-Berlin. This position he held up to his retirement in 1987.

It was his merit, that finally in 1972 all pharmacognosy research groups could be combined in a new institute building close to the Berlin Botanical Garden. The new institute was named – according to Prof. Hänself’s suggestion – Institute for “Pharmacognosy and Phytochemistry”, reflecting the increasing importance of phytochemistry in medicinal plant research and his major research areas: From the beginning, his scientific interests were focused on the isolation, structure elucidation and analysis of natural products. Among others he investigated iridoids, chalcones, aurones, lignans and lactones. Extraordinary important were his studies in elucidating the structure of the active constituents of Silybum marianum. In particular the long lasting investigations on the constitution and stereochemistry of silybin have to be emphasized (which he undertook together with Prof. Andrew Peiter). Great impact had also his studies on the kava lactones from Piper methysticum, on agnuside from Vitex agnus-castus, the distinction of Curcumina varieties via xanthorhizol, and on the lead compounds of Taraxacum officinale and Hamulus lupulus, just to mention some of his important findings. Many of them, as for example the isolation of valerenic acid from Valeriana officinalis, later became the basis of monographs in the German and European Pharmacopoea. He has published the results of his scientific activities in ca. 140 papers and more than 50 review articles in high ranked national and international journals.

Prof. Hänsel was also an enthusiastic and innovative teacher, who diligently prepared his lectures. He supervised more than 60 doctoral students, and 5 of his scientific coworkers succeeded with the habilitation and became professors themselves.

But besides all his extraordinary scientific work, Prof. Hänsel is known as an author and co-author of many books, especially of famous text books like the phytochemically oriented “Lehrbuch der allgemeinen Pharmakognosie”, which is now in the 7th edition. The first 3 editions of it were in collaboration with Prof. Ernst Steinegger, the 6th and 7th in recent years under the new title “Pharmakognosie – Phytopharmazie” with Prof. Otto Sticher. The 2nd edition of this book has even been translated into Japanese. He always kept up with modern scientific developments, well documented in his various editions of the textbook on Pharmaceutical Biology, the latest edition with Prof. Dingermann and Dr. Zündorf. One of his major concerns was to combine phytochemical knowledge with the practical aspects of phytotherapy and to maintain a good relationship to physicians. His book “Rational Therapy – A Pharmacognosist’s Guide to Herbal Medicine” – the 5th edition with V. Schulz, became also a bestseller. The English translation he has published together with our late honorary member Varro Tyler. But the book was translated also into Italian, Portuguese and Spanish. Because of his broad and deep knowledge in medicinal plants he was invited to act as co-editor of 5 volumes of Hager’s Handbuch der Pharmazeutischen Praxis dealing with medicinal plants and of the Springer series “Adverse Effects of Herbal Drugs”. In total, 120,000 copies of his books have been printed. He not only theoretically tried to bridge the gap between medicine and pharmacy, he also lectured at postgraduate seminars for physicians in Freudenstadt and worked for many years in the Commission E of the German Federal Health Office (BGA).

Due to his many activities and achievements, he has received the Aulus Cornelius Celsius-Medal of the Zentralverband der Ärzte für Naturheilverfahren. Prof. Hänsel already participated in the Founding Meeting of GA in 1953 in Bad Camberg. He organized the 25th Annual Congress of GA in Berlin in 1964, and he acted as Vice President of our society in the years 1963 to 1968. So he undoubtedly deserves to receive the honorary membership of our Society.

After presenting the laudatio, Prof. Bauer handed over the document belonging to the honorary membership of GA which reads as follows: “The Society for Medicinal Plant Research (Gesellschaft für Arzneipflanzenforschung) is awarding the Honorary Membership to Prof. Dr. Rudolf Hänsel in recognition of his extraordinary
contributions to medicinal plant research, his highly valuable text books, and his 50 years lasting connection and intense personal service to our Society”.  

R. Bauer

**Egon Stahl-Award 2003 with a silver medal**

On the occasion of his 60th birthday, our honorary member, late Professor Dr. Dr. h.c. mult. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of pharmacognosy, pharmaceutical biology and analytical phytochemistry. The Egon Stahl Award with a silver medal should be awarded to scientists who have published outstanding scientific work in the years after their graduation.

After a careful evaluation of the nominations by the panel of judges it was unanimously decided that the Egon Stahl Award 2003 with a silver medal should be given to Dr. Jörg Heilmann, Institute of Pharmaceutical Sciences, ETH Zürich, Switzerland. The awarding ceremony was performed by GA president Prof. Bauer on September 1st, 2003 during the opening ceremony of the 51st Annual Meeting in Kiel, where he outlined the young and successful career of Dr. Heilmann.

Dr. Heilmann was born in Mülheim an der Ruhr, Germany, in 1966. He studied pharmacy at the University of Düsseldorf from 1985–1990 and was approved as a pharmacist after the final examination and a practical year in a pharmacy in Mülheim in 1991. In 1992 he joined the group of Prof. Irmgard Merfort at the Institute of Pharmaceutical Biology at the University of Düsseldorf and worked for his PhD thesis entitled “Phytochemical investigations of Buphthalmum salicifolium as well as studies on the anti-inflammatory activity and penetration of flavonoids and their metabolites”. He obtained his PhD degree in 1997 with magna cum laude. After a short period as a post doc under Prof. Bauer at the Institute of Pharmaceutical Biology at the University of Düsseldorf, in which he continued with bioavailability studies of herbal medicinal products and also started to perform pharmaceutical assays, like the 5-LOX and antioxidant assays, he joined the group of Prof. Otto Sticher at the Department of Applied Biosciences at ETH Zürich in 1998, where he became senior assistant and lecturer. After the retirement of Prof. Sticher he substituted the chair of pharmacognosy/phytochemistry from April 2002 till June 2003. His investigations in Zürich were dealing with the search for bioactive constituents from traditionally used medicinal plants from Brasil, Mexico, Venezuela, Marocco, Turkey, and Papua New Guinea, as well as from certain cyanobacteria. He has established pharmacological screening assays and has undertaken drug delivery and pharmacokinetic studies with natural products. This finally led to his habilitation in 2002 with a thesis on “Biological and chemical investigations on the cytotoxicity and antioxidant activity of natural products”.

The main topics of his habilitation thesis are: a) The activity guided isolation and structural elucidation of constituents from *Dysosyllum variabile*, *Wariona saharae* and *Amonum aculeatum* with cytotoxic effects against several tumour cell lines. The compounds belonged to the classes of triterpenes and sesquiterpene lactones as well as a new type of natural product with dioxa-spiroketal skeleton. b) Investigations on in vitro toxicity and biological reaction mechanisms of sesquiterpene lactones in different cell systems and under various conditions, e.g. the influence on gene transcription in tumour cells. And c) The antioxidant and radical scavenging activity of natural products, in particular phymethyleneoxides, phloroglucinols and lignans in cellular and non-cellular assays.

The list of Dr. Heilmann’s publications shows more than 40 papers, published in high ranked journals, often in Planta Medica. He has presented lectures and posters at numerous congresses, also of our Society. He has also been active in the organisation of the 49th Annual congress of GA in Zürich in 2001 and of a GA Symposium in 2002.

The jury for the Egon Stahl Award found, that the studies of Dr. Heilmann are an excellent example of modern multidisciplinary medicinal plant research. He applies chemical, biochemical, cellular and molecular biological methods, and analytical phytochemistry is also a major aspect of his investigations. Therefore he fully reflects the spirit of the award.

Prof. Bauer congratulated Dr. Heilmann and presented the silver medal, the document and the monetary prize. The document reads as follows: “The Society for Medicinal Plant Research (Gesellschaft für Arzneipflanzenforschung) presents the Egon Stahl Award 2003 with the silver medal to PD Dr. Jörg Heilmann in recognition of his valuable contributions to pharmacognosy (pharmaceutical biology) and analytical phytochemistry, in particular by his outstanding studies in the fields of structure elucidation, development of new bioassays on a cellular level, as well as on pharmacokinetic and drug delivery studies.”

After the opening ceremony Dr. Heilmann gave a lecture on his scientific work.

R. Bauer

**Farewell symposium for Prof. Dr. G. Franz in honour of his retirement, 3rd of July 2003, Regensburg, Germany**

Within a scientific symposium “Pharmacy at University of Regensburg: 1977–2003, Tradition and Future” Prof. Dr. Gerhard Franz had invited colleagues, scientists and representatives of governmental pharmacy in order to celebrate a highly successful quarter of a century of pharmaceutical education and research at the University of Regensburg. In the center of the event was the ceremony on the occasion of the retirement of Prof. Franz who shaped the development of modern Pharmaceutical Biology from a traditionally, mainly descriptive science towards a field dealing with modern, pharmacologically and phytochemically characterised phytopharmaceuticals to ensure maximum efficacy and security for the patient. For that reason the symposium was not only a presentation of actual pharmaceutical status, but also a walk on a road showing the extraordinary changes Pharmaceutical Biology has taken over the last 25 years. Special focus was taken on the future of pharmacognosy on this road of continuous development in order to outline also the difficulties and potential dangers that modern Pharmaceutical Biology may lose impact for the practical pharmaceutical experience and as a major field for drug discovery using plant-derived biomolecules. During numerous presentations at the symposium it was outlined that Prof. Franz had always tried to keep Pharmaceutical Biology on the way towards a modern science, serving the various needs of fundamental research, pharmaceutical industry and governmental regulation in order to offer optimal phytomedicine to the patient.

Prof. Franz was born in 1937 in Dresden, finalized his pharmacy study 1962 in Karlsruhe and his PhD 1965 at University of Fribourg, Switzerland. As postdoctoral fellow he worked at the University of California, Berkeley and at University of Fribourg, where he obtained in 1970 the habilitation. After 3 years as guest professor at Basel, he took over the chair for Pharmaceutical Biology within the new established pharmacy group at University of Regensburg. His research areas focused mainly on glycoconjunctive aspects and the pharmacological use of highly glycosylated plant-derived compounds for antitumor treatment, as immunomodulators and as anti-inflammatory entities. Beside that a variety of studies were performed on analytical methods for a better standardisation of phytopharmaceuticals. Throughout his academic career he was extremely hard and effective working; especially the various administrative tasks at nearly all academic levels and the work in manifold pharmaceutical organisations (German Pharmaceutical Society, GA, expert in the national Pharmacopoedia Commission of Germany as well as of the European Community and many others)
has to be pointed out. Prof. Franz served from 1988 to 1993 within the executive council of GA and from 1994 to 1997 as president of the society. During this time he was able to lead the GA towards many new and promising features: contacts to industry were intensified, the Egon-Stahl-Award in gold was installed and a significant internationalisation of GA took place without that the “Ge- sellschaft” lost its typical German origin. This extraordinary work was honoured many times with the Egon-Stahl-medal (1985), the Japan Cancer Society Cancer Medal (1988), the “Verdienstkreuz am Bande” of Germany (1998) and 2003 the Thoms Medal for extensive work on phytotherapy, donated by the German Pharmaceutical Society.

During his farewell-lecture, Prof. Franz pinpointed some aspects being crucial points for Pharmaceutical Biology:

- first, that phytopharmaceuticals must be accepted as medical-drug-systems with a high quality level, registered by governmental procedures in order to achieve a clear borderline to uncharacterised plant-containing “nutraceuticals” or other forms of “green pseudomedicine”.
- Secondly the approval of phytopharmaceuticals as rational documented drug-systems with clinical efficacy to distinguish clearly to other “alternative therapies”.
- and third: the fortification of the scientific phytotherapy leading to internationally accepted phytopharmaceuticals.
- and last: the classical disciplines, as phytochemistry, analytical techniques, plant extraction procedures etc. should be taught during pharmaceutical education and worked on in daily science equal to biotechnology and molecular biology.

The Society of Medicinal Plant Research, represented by the president Prof. Dr. R. Bauer, thanked Prof. Franz for his enormous efforts for Pharmaceutical Biology and for the welfare of the GA. The “Gesellschaft” wishes him all the best, health, vigour in the coming years, fruitful activities in plant research and in his work in the ELI-committees and a lot of time for his family and his private hobbies.

A. Hensel

http://users.unimi.it/ftp/psymp

Prof. Dr. F. Tomè, Dipartimento di Biologia, via Celoria 26, 20133 Milano, Italy, Tel +39 02 50314773, Fax +39 02 50314764; E-Mail: franca.tom@unimi.it


Chinese Herbal Medicine

Jodrell Laboratory Royal Botanic Gardens Kew

Overview of Chinese medicinal plants and their impact in the West: Authentication of Chinese herbs; Toxicological aspects of TCM; Chemical and biological activity studies on Chinese plants; Clinical aspects of TCM.

Peter.Houghton@kcl.ac.uk


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.cornerod@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

Meeting Reports of Selected Symposia in the Year 2001

51st Annual Congress of the Society of Medicinal Plant Research

About 450 scientists, graduate students, industrial experts, phar- macists and medical doctors from all over the world met at the 51st annual congress of the GA which was held in Kiel, Germany, from August 31 st to September 4 th, 2003. The congress was entitled “Medicinal Plant Research: Fascination-Facts-Future” and gave reason to a motivated exchange of scientific information between all the participants.

Prof. W. Blasschek and Prof. S. Alban, Department of Pharmaceutical Biology, Christian-Albrechts-University of Kiel, welcomed the participants from 45 different countries. The two hosts were assisted by a highly motivated GA-organisation team, mainly by Dr. B. Classen and Dr. R.-B. Volk. At the opening ceremony, the GA-President Prof. R. Bauer thanked the organisers for their engagement.

The latest findings in botany and systematics, breeding and cultivation of plants, cell culture, new natural products, bioactive herbal ingredients, analytical methods, new production techniques, pharmacological and clinical results, biotechnology and quality, effectiveness and safety of phytotherapeutics and national and international licence determinations were referred in six plenary and 47 short lectures, seven workshops and more than 300 posters.

Plenary lectures

In the plenary lectures, a special attention was given to the main topics of the congress: bioactive carbohydrates, antioxidants and biotechnology. Prof Mike Clifford, Surrey, UK, discussed the content of phenolic antioxidants like flavonoids, tannins, polyphenols in food, their intestinal absorption, biotransformation and their biological effects in human plasma and tissues. Prof. Werner Richter, Windach, Germany, compared the beneficial effects of herbal and animal unsaturated fatty acids on cardiovascular dis-
eases and adipositas. Dr. Dieter Glebe, Gießen, Germany, referred about edible vaccines. Transgenic carrots showed to produce specific surface proteins of the hepatitis-B-virus. Eating of such uncooked carrots may protect against the hepatitis B-virus infection. The plenary lecture of Dr. Stefan Schillberg, Aachen, Germany, focused on the production of recombinant antibodies in plant cell cultures and the regeneration of plants from these cultures. He pointed out the advantages of this "molecular farming" like inexpensive production of large quantities of antibodies. First antibodies are going to be examined in clinical studies. The topics of two other plenary lectures were bioactive carbohydrate structures. Prof. Antony Bacic, Melbourne, Australia, explained the sources, structures and biological functions of plant arabinogalactan-proteins. AGPs may be important for communication between cells, as markers for tissues or in embryogenesis. Further, he speculated on their immunostimulating activity. PD Dr. Arndt Buesing, Herdecke, Germany, discussed the complementary tumor therapy with mistletoe. Mistletoe lectins were shown to bind to carbohydrate structures on the surface of animal and human cells initiating signal transduction cascades. This may result in release of interleukins or apoptosis.

Workshops

Four of the seven workshops were organised by the four permanent committees of the GA. Under the chair of Prof. Chlodwig Franz, Wien, Austria, experts compared and evaluated the actual practice of cultivation and wild grafting of plants for the production of HMP in different countries. In the workshop organized by Prof. Beat Meier, Romanshorn, Switzerland, the potential of near infrared spectroscopy (NIR) as a new rapid method for quality control of herbal material, drug preparations and HPM was presented. In the workshop of Prof. Hilke Winterhoff, Münster, Germany, different in-vitro and in-vivo methods for the examination of the efficacy of HMP in diseases of the urinary tract were discussed. Prof. Arnold Vlie tinck, Antwerpen, Belgium, and invited experts presented recent European guidelines and proposals for the definition of different classes of herbal preparations. Increasing interest in food supplements and nutraceuticals requests for the official differentiation between these products and HMP. Three additional workshops dealt with further interesting topics. PD Dr. Gudrun Abel, Neumarkt, Germany, had invited scientists, who presented results about the involvement of endogenous antimicrobial peptides in defence mechanisms in respiratory diseases. A second workshop organized by B. Meier discussed the present attempts to international harmonization of thin layer chromatography. Finally, Prof. Fritz-H. Kemper, Münster, Germany, President of the Society for Phytotherapy, picked up the actual German health policy as a national "hot topic". As a result of intensive discussions, the GA members designed a "Kiel-Resolution" (see GA-homepage), which was immediately sent to German authorities.

Poster presentations

The more than 300 posters were displayed during the whole congress and could be discussed in three poster sessions. At the end of the congress, the posters of Ich-Sheng Chen, Kaohsiung, Taiwan; Ursula Sulmmer, Erlangen and Christian Vonhoff, Münster, were awarded.

Awards

The Egon-Stahl-award in silver was given to PD Dr. Jörg Heilmann, Zürich, Switzerland for remarkable research on structure elucidation of ingredients of traditionally used African and South American plants and development of new bioassays and screening methods. He presented a lecture entitled "The transdisciplinarity of Molecular Pharmacognosy". Prof. Rudolf Hänsel was awarded with the honorary membership for his active work (also as vice president) since the foundation of the GA in Bad Camberg. For 30 years, he was head of the Institute of Pharmacognosie and Phytochemistry in Berlin. He is well-known as engaged scientist, as author of many monographs of the German and European Pharmacopoeia, scientific publications and textbooks.

Workshop of the Permanent GA-committee of Manufacturing and Quality Control of Herbal Medicinal Products: The potential of Near Infrared Spectroscopy as a non-invasive method in the quality control of Herbal Substances, Herbal Preparations and Herbal Medicinal Products

The goal of the workshop, held on occasion of the annual GA-meeting in Kiel was to demonstrate and to discuss the potential of NIRS in the analyses of herbs. The first speaker, Gudrun Roos (Tübingen) presented a short introduction into the method because nearly no NIRS research has been shown on GA manifestations up to now. In contrast to sharp absorption peaks occurring in the NIR region, NIR spectra show very broad bands with a weak intensity. Usually, an assignment of peaks to individual vibrations is therefore not possible. The main advantage of NIRS is high speed, which means that a lot of results can be accumulated within a short period of time. Liquids, powders and even high-visibility substances can be measured without sample preparation. Furthermore, NIR spectra shows characteristic "fingerprints" for individual extracts and cover all organic compounds. A herbal preparation can therefore be characterised in its completeness. Qualitative classifications and quantitative analyses are principally possible.

The practical part of the workshop focused on the problem of analysing a high number of samples to get satisfying research results. Hartwig Schulz (Quedlinburg) showed a good correlation between the results of NIRS after establishing a calibration model in comparison to HPLC-results for the analyses of echinacoside in roots of Echinacea species. Within a short time it is possible to select echinacoside-rich samples, which is of particular importance for in-cultivation programmes. Schulz proposed to use powdered samples to get optimal results. The calibration has to be done with a relatively high number of representative samples. Problems may occur with the prediction of minor components (content < 1%), that do not present strong specific (NIR) absorptions. Similar results were presented by Grit Schulzki (Vestenbergsgreuth) for essential oils. NIRS is already well established in the food industry. Validated methods have been developed for the determination of essential oil in fine cut peppermint, fennel and camomile. Applying NIRS, time-consuming steam distillation of herbs could be reduced to every tenth batch, in order to validate the method and to update the calibration function. Additionally, steam distillation is rarely necessary and may only be required in case of unexpected values and to approve QOS-results. NIRS can also be useful to find adulterations: Schulz could discriminate between samples of Harpagophytum zeyheri and samples of Harpagophy tus procumbens. Quantitative analyses of harpagoside and 8-O-p-coumaroyl-harpagoids were successful as well. Extract characterisation was another subject of discussion: The fingerprints of NIRS can not be directly compared to fingerprints of chromatographic methods, because the characteristic of a specific compound can not be assigned to single peaks. However Roos showed chemometric assignments in two dimensional graphs for different extracts of Hypericum perforatum. The samples of three extracts (50% ethanol, 60% ethanol and 80% methanol) could be discriminated of each other with a 2-D-PCA-Plot of 1100-2500 nm, while with TLC they showed only marginal differences. Preliminary experiments indicate the potential of NIRS as a remarkable tool for validation. However, as in cultivation programmes previously stated, a high number of samples is normally necessary for the validation of processes like powder mixing and tabletting. Roos created a model to quantify a specific St. John’s wort extract (Ze117) in the tablet matrix mixture. The prediction of further mixtures showed quantitative results, which were at least as precise as results obtained with HPLC can be! Calibration of a tablet mixture is not as difficult as for a specific compound in herbal substances and could be carried out within a short time. On the
base of these results even more samples could be analysed to validate the quality of a mixing process with NIRS instead of using time and solvent consuming HPLC. NIRS is meanwhile accepted as a method by the 4th edition of the European Pharmacopoeia.

Martin Diller from the German Federal Institute of Drugs and Medical Devices (BfArM) commented the new “Note for Guidance on the Use of Near Infrared Spectroscopy by the Pharmaceutical Industry and the Data Requirements for new Submissions and Variations CPMP/QWP/330/01, Aug 2003”. Up to now, no NIRS-method has been implemented in a dossier-application of a herbal medicinal product in Germany. However, there is no reason for not accepting an NIRS-method if it is justified and validated according to the rules. The discussion showed that the practical experience with NIRS is very different from company to company. In many companies the technique is used to approve identity of inactive ingredients, but not to control quality or processes. New efforts should be focused on making NIRS a reliable tool especially for expensive validation procedures – costs could probably be reduced remarkably. Furthermore, NIRS has a high potential in routine analyses as well, especially in analysing essential oils and water in extracts or herbal drugs. Water analyses have not been discussed and could be a topic for a future workshop. All presentations also at: www.ga-online.org

Beat Meier, Chair of the permanent committee

3rd Mistletoe Symposium in Nonnweiler-Otzenhausen, 20–22 November 2003

Mistletoe therapy: basic research and clinical practice

From 20–22 November 2003, approximately 100 clinicians from various therapeutic fields and scientists from virtually every branch of medicine and pharmacies met in Nonnweiler (Germany) to present and discuss the current state of basic research and the clinical use of mistletoe products in tumour therapy. Such a conference was only possible because it was sponsored and arranged by the Karl and Veronica Carstens Foundation and the Society of Anthroposophical Physicians in Germany (GAÄD), together with the Society for Medicinal Plant Research (GA), the Phytotherapy Society (GPhy), the German Pharmaceutical Society (DPPhG) and the Central Association of Physicians of Nature Medicine and Regulative Medicine (ZÄN). As in the two previous conferences, Dr. Rainer Scheer, of the Carl Gustav Carus Institute in Nieder-Öschelbronn, was responsible for the organisation. Further members of the scientific organizing committee were Professors Bauer (Graz), Becker (Saarbrücken), Fintelmann (Hamburg), Kemper (Münster) and Schilcher (Munich).

This interdisciplinary symposium saw the continuation of a number of mistletoe symposia which have taken place every for years since 1995. They aim was to provide a meeting point and discussion forum for scientists and physicians from various therapeutic fields and scientific disciplines, allowing them regularly to take stock of currently available studies and data. Practitioners can thus form an objective picture of the potential uses and limits of mistletoe and take fresh impetus from the symposium, in order to undertake new research. This, in turn, will provide convincing data for an improved and more objective dialogue between the physicians of traditional medicine and their colleagues from other specialised areas (anthroposophy, homeopathy and phytotherapy). During the three days of the symposium, the current state of knowledge was presented in nine review papers, 32 short papers and 13 posters. The packed and balanced programme allowed for lively and constructive discussion and included contributions to relevant topics ranging from biology, pharmacy, the effects of various ingredients and their interactions with one another, immunology and clinical aspects, to clinical studies and proof of efficacy. Of particular interest was the participation of a number of young researchers, whose refreshing contributions helped to establish new perspectives. For some time now, the use of mistletoe in tumour therapy has not been restricted only to anthroposophical therapy. Many reports confirm more than 80 years of medical experience and the therapeutic benefit of mistletoe therapy, which also brings a quantifiable and statistically significant benefit in terms of the hard endpoints of cancer therapy, i.e., survival time and quality of life. The clinical studies, however, do not comply with the current requirements of Good Clinical Practice (GCP). Randomisation is seen as a problem when conducting such studies. Nevertheless, the safety of mistletoe is generally considered to be established. Numerous experimental studies have allayed the suspicion that mistletoe induces progression in some types of tumour. The experiments of a Munich working group could not be reproduced and on closer inspection, it became apparent that these early findings were mainly due to the fluctuations inherent in such biological tests. Large-scale, long-term studies in the therapy of patients with various tumour types (breast cancer, melanoma, malignant lymphomas) showed no tumour enhancement associated with mistletoe products.

All abstracts can be found at www.mistelsymposium.de. The contributions are set to appear at the end of 2004 in the form of a book published by KVC Verlag, Essen. You are cordially invited to the 4th Mistletoe Symposium, which is planned for November 2006, i.e., in only three years time.

In conclusion, the approximately 100 scientists from virtually every branch of medicine and pharmacies issued the Nonnweiler Declaration, in which they announced that, from the scientific and ethical point of view, it is vitally important that the statutory health insurance funds continue to refund the costs of all parenterally administered mistletoe products, both allopathic and anthroposophical. In the declaration, they demanded that the newly formed Federal Joint Committee should include mistletoe products used in tumour therapy in the so-called Exclusion List and they referred to the available scientific data. The following gives the exact wording of the Nonnweiler Declaration:

Ref.: § 34 (SGB VII), in association with GMG**;
Directive §92 paragraph 1 – clause 2 – no. 6

NONWEILER DECLARATION

The participants in the 3rd International Symposium “Mistletoe in tumour therapy – basic research and clinical practice” (20–22 November 2003, Nonnweiler) declare that, on the basis of the available results of scientific research and the new results announced and discussed in Nonnweiler, the parenteral administration of allopathic and anthroposophical mistletoe products fulfils the requirements of Directive §92 paragraph 1 – clause 2 – no. 6. The assembled representatives from the fields of medicine and pharmacies, bearing in mind the ethical responsibility they bear to their patients who seek advice from them, demand the inclusion of mistletoe products in the so-called EXCLUSION LIST.

Signed in the name of the symposium participants by Prof. Dr. Rudolf Bauer, Society for Medicinal Plant Research (GA), Prof. Dr. Hans Becker, University of Saarland, Prof. Dr. Volker Fintelmann, Carl Gustav Carus Academy, Hamburg, Prof. Dr. Dr. h.c. mult. Fritz Kemper, Phytotherapy Society (GPhy), Prof. Dr. Dr. h.c. Heinz Schilcher, Central Association of Physicians of Nature Medicine and Regulative Medicine (ZÄN), Dr. Henning Albrecht, Karl and Veronica Carstens Foundation, Dr. Matthias Girke, Society of Anthroposophical Physicians in Germany (GAÄD)

* Social security code
** Health System Modernisation Act

Dr. Rainer Scheer, Carl Gustav Carus Institute, Freiburg im-Breisgau
New Books and Journals

A systematic review of more than 60 medicinal spice plants.

Pharmacodynamic Basis of Herbal Medicine; Manuchair Ebadi; CRC Press, ISBN 0-8493-0743-0, $ 140
Includes medications with plants whose pharmacodynamic parameters have been delineated at molecular levels; provides clinical material, pharmacological concepts and likes to be a bridge between eastern and western medicine

A review on current scientific information of major ayurvedic therapies, including critical evaluation of published clinical and biological studies in this field.

In Europe and worldwide herbal medicinal products (HMPs) play an important role both in self-medication and in medical practice. European legislation requires HMPs to meet strict standards of quality, safety and efficacy. This book provides basic definitions and correct labelling, the main principles of manufacture and quality control according to GMP, and an overview of current scientific and legal requirements for marketing authorisation in the European Union. Moreover it offers a firm basis for informed scientific discussions and contributes to transparency in the market. We meet an up-to-the-minute guide and reference book for professionals in all sectors concerned with HMPs, including pharmaceutical companies, universities and health authorities. It is also an invaluable handbook for the instruction of pharmaceutical and medicinal personnel and for quality assessment of individual products in medicinal practices, pharmacies and other retail outlets.

Prof. E. Stahl-Biskup

Jobs online

The “Verband Deutscher Biologen –VDBiol / Society of German Biologists” has created an online job exchange (http://www.biobu-rufe.de). Jobs for PhD- and diploma thesis, practical courses etc. can be placed online and free of charge.

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


PhD thesis, 2003: Regulation and Manipulation of the Tropanalkaloidbiosynthese in Atropa belladonna. By G. Rothe; promoter: Prof. Dr. B. Dräger; Universität Halle, Pharmazeutische Biologie

PhD thesis, 2003: Untersuchungen der Kollagensynthese der Haut unter topischem Estriol und Versuche zur Vermindeung des dermalen Androgeneffekts. By Mag. pharm. Doris Haidler; promoter: Prof. Dr. G. Bichlmayer and Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

PhD thesis, 2003: In vitro mass propagation of Charybdis sp. By Kongbangkerd, Anupan; promoter: Prof. Dr. B. Kopp and Prof. Dr. M. Popp; Institute for Pharmakognosie, University of Vienna, Austria

PhD thesis, 2003: Phenolische Inhaltsstoffe in Cretaegus-Arten – Analytik und Einfluss von Prohexadion-Ca auf Flavonoid- und Procyanid-Gehalt. By Mag. pharm. A. Ringl; promoter: Prof. Dr. B. Kopp and Prof. Dr. M. Popp; Institute for Pharmakognosie, University of Vienna, Austria


PhD Thesis, 2003: Untersuchungen zur Inkulturnahme von Vitex agnus-castus L. Herkunftsvergleiche, Standweitenversuch, Stecklingsvermehrungsversuch. By A. Gunpl; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria

PhD Thesis, 2003: Der Einsatz von pflanzlichen Arzneimitteln in der Kleintier-und Pfermedizin in der Steiermark. By VLR. Munoz; promoter: Dr. Ph. C. Franz; Institute for Applied Botany, University of Vienna, Austria

Habilitation, 2003: Experimentelle Studien zur Entwicklung von Arznei-, Futter- und Lebensmitteln mit funktionellen Pflanzeninhaltstoffen By K. Zitterl-Egleser; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria

Habilitation, 2003: Improving Raw Material Quality of Plants Producing Secondary Metabolites. By J. Novak; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria

Diploma thesis, 2003: Entwicklung eines Studienplanes zur Evaluierung der Beeinflussung der Herbfrequenz, des Blutdrucks und der Verkürzungsfaktor bei der Zufallsauswahl der ISACS-Klassen 1a und 1b bis Klasse 2 in Folge einer Mitralissendokardose beim Hund durch Cretaegus-Extrakt. By P. Kosztolich; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria

Diploma thesis, 2003: Ätherische Öle und phenolische Verbindungen bei verschiedenen Oregano-Herkünften. By G. Steine; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria

Diploma thesis, 2003: Einfluss von Anbautechnik und Saatstätte aus Bestandes- und Ertragsbildungen der Wintermohnsorthe "Zeno". By S. Wiesinger; promoter: Prof. Dr. R. Gretzmacher Franz; Institute for Applied Botany, University of Vienna, Austria

Diploma thesis, 2003: Cadmium-Zink Interaktion bei der Spurenelementaufnahme der Kamille (Matricaria recutita L.). By U. Mitteregger; promoter: Prof. Dr. C. Franz; Institute for Applied Botany, University of Vienna, Austria


Diploma thesis, 2003: The Role of the Precursor Substitution Pattern in the Biosynthetic Pathway of Podophyllotoxin in Linum al-
Diploma thesis, 2003: Isolierung und Strukturaufklärung von Inhaltsstoffen aus *Rheum emodi* WALL. By B. Bahr; promoter: Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Anti-inflammatory Activity of *Bupleurum fruticosum* using Nuclear Factor kappa B as a Molecular Target. By H. Birmayer; promoter: Prof. Dr. B. Kopp, Prof. Dr. M. Heimrich; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Bulgariške Schafgarben unterschiedlicher ökologischer Nischen, ihre Charakterisierung und ihr Hybridisierungsverhalten. By G. Brunner; promoter: Prof. Dr. J. Saukel; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Mikrobielle Flora in Gewebeukulturen von *Crateagus monogyna*. By S. Kafedzi; promoter: Prof. Dr. B. Kopp, Prof. Dr. W. Kneifl; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Flavonoide in Drosera-Arten. By M. Kremser; promoter: Prof. Dr. L. Krenn; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: HPLC-Analytik von Thymiantrockenextrakten. By P. Gabler; promoter: Prof. Dr. G. Reznicek; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Arzneipflanzenforschung in Dokumentensammlung Himmelbaur. By M. Mader; promoter: Prof. Dr. W. Kubelka, Prof. Dr. C. Kletter; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Versuche zur in vitro-Vermehrung und Kultivierung von *Crateagus monogyna* JACQ. emend. LINDM. By G. Marchart; promoter: Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Untersuchungen zur Mikrovermehrung von zwei Klonen der Arzneipflanze *Picrorhiza kurroa* ROYLE EX. BENTH. By A. Mirlach; promoter: Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Methoden zur Auf trennung und Analytik der Flavonoide und phenolischen Carbonsäuren in Vertretern des *Achillea millefolium* Aggr. By A. Nemetz; promoter: Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Trennung von Naturstoffgemischen mittels Centrifugal Partition Chromatography. By B. Rebsamen; promoter: Prof. Dr. L. Krenn; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Etablierung steriler Kulturen von *Dioscorea bulbifera*-Varietäten. By G. Parre; promoter: Prof. Dr. B. Kopp; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Vorläuferstoffe zur illegalen Herstellung von Suchtmitteln unter besonderer Berücksichtigung ihres Vorkommens in Pflanzen und Pilzen. By S. Sinz; promoter: Prof. Dr. W. Kubelka; Institute for Pharmakognosie, University of Vienna, Austria

Diploma thesis, 2003: Makroskopische und mikroskopische Beschreibung der Herbadroge ’Ol-Mo-Se und der beiden Wurzeldrogen *Sinia-Lo* und *Li-Ga-Dur*. By P. Szambor; promoter: Prof. Dr. W. Kubelka; Institute for Pharmakognosie, University of Vienna, Austria

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to Mai 30th 2004. Please send all contributions by e-mail or disk to:
Prof. Dr. A. Hensel, University of Applied Sciences, Pharmaceutical Biotechnology, Grueental, CH-8820 Wädenswil, Switzerland; Phone: ++41 1789 9670; Fax: ++ 41 1789 9950; a.hensel@hiswzh.ch