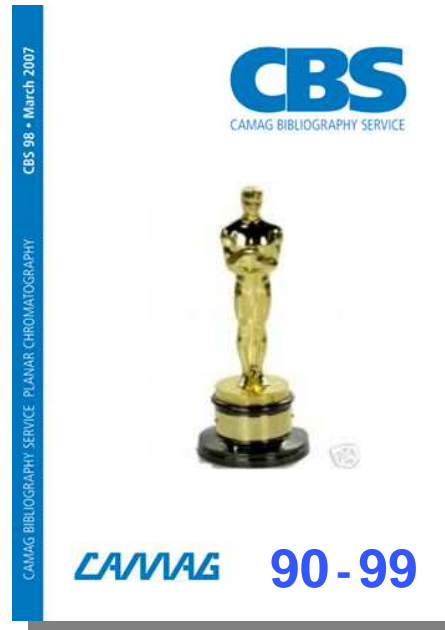


Examples of HPTLC awards: 5 years of CBS contributions - an overview by the editor



- Company brochure
- Published semiannual (15.000 copies each)
- Tradition of about 45 years (1st issue 1963)
- International experts as CBS referees (yellow pages)
- About 8.000 abstracts in the electronic CCBS database
→ free download www.camag.com
(+ hardcopy CCBS ca. 20.000)

Know CAMAG

The Process of Publishing CBS!

The first issue of CBS came out in 1963. Apart from the Journal of Planar Chromatography, this CAMAG publication provides the only forum that is solely devoted to contemporary thin-layer chromatography and is kept current with the latest developments of the technique and its applications. Nothing has changed over the years in its philosophy but significant improvements have been made regarding the quality of its contributions, the size of the issue (presently 15.000 copies) and the more modern way CBS referees communicate with the CBS production people.

How the Yellow Pages (references) are generated

A number of CBS referees, internationally distributed and professionally concerned with modern TLC, send us abstracts of TLC/HPTLC papers from journals assigned to them. These are journals that the referees would read anyway due to professional reasons or their own personal interest. They write short reports according to a protocol we have established, focusing on planar chromatographic parameters. The CBS does not claim to be a complete survey of all TLC/HPTLC papers published world wide. It intends to bring articles to the attention of its readers that contain innovations, new aspects, and new applications of the method.



One of the outstanding and most productive CBS referees is Professor Lin Leming, Dalian, China. He has reported for CBS since 1984 and reviews all relevant Chinese journals. This accounts for the fact that papers published in Chinese build a significant portion of the reports in every CBS issue, thus making Western readers aware of papers that would not be accessible to them otherwise. But Professor Lin also referees a number of Western Journals, among others the Journal of Chromatography.



The CBS referees mail their reports electronically in the form of a data bank file to Ms. Valeria Widmer at CAMAG. She edits all CBS abstracts and establishes the layout of the reference part. Dr. Gerda Morlock, Germany, re-checks the complete reference part and

mails it, together with her "Dear Friends" editorial to our designer in Switzerland.

How the special feature part (white pages) is composed

This part has significantly changed over the years. Introduced in 1967, it was mainly devoted to featuring or essentially advertising CAMAG products. For the last several years it has served primarily for presenting attractive applications of planar chromatography; it also makes customers aware of training possibilities, and only occasionally features new CAMAG products. All applications are contributed by well known specialists. They are selected, edited, and converted to uniform format by Dr. Morlock. In the final state these CBS applications are also peer-reviewed.

In acquiring these contributions Mrs. Morlock is efficiently supported by our German sales team, occasionally also by our international distributors. A certain number of applications are directly contributed from the CAMAG laboratory. Of course you are most welcome to submit an interesting application directly to Gerda.Morlock@camag.com.

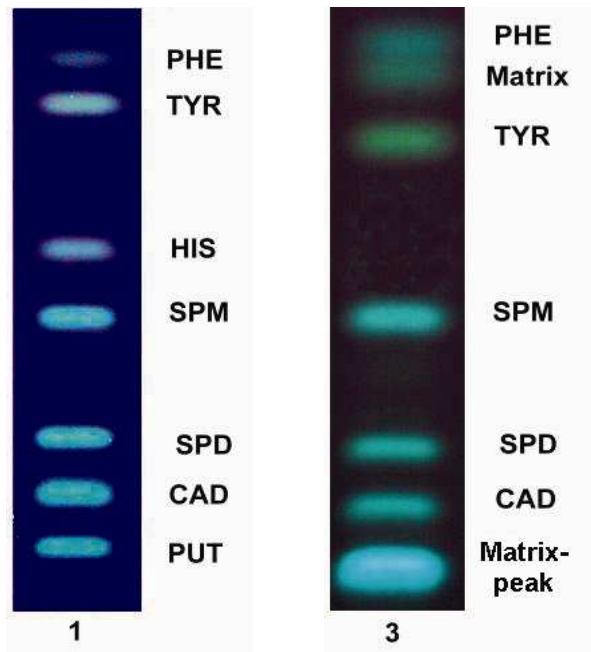


Dr. Klaus Zieloff, Sales Manager of CAMAG Germany till 2003, partially retired since, but is still active as a scientific consultant and in customer training courses:

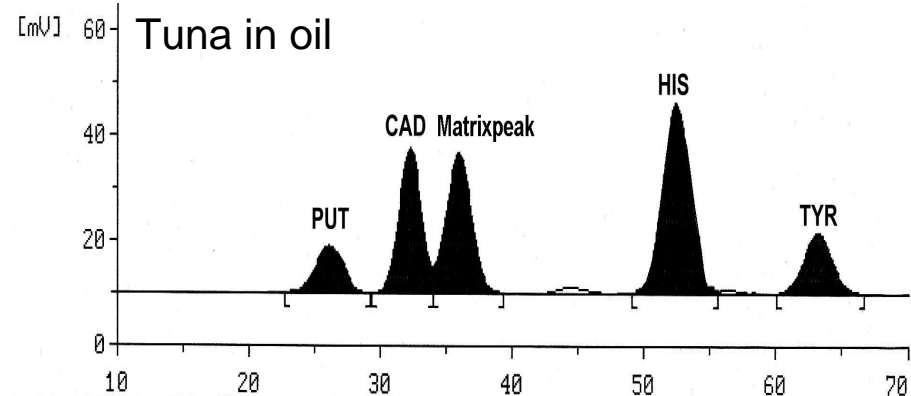
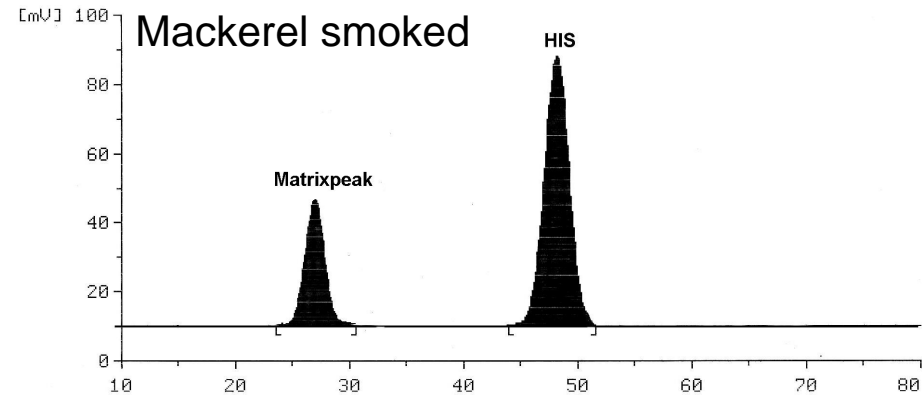
"The largest portion of the German CBS issue we mail from CAMAG Berlin to addressees in Germany; presently more than 3.500 copies. We consider the CBS an indispensable link to our customers and friends. Quite often the state-of-the-art applications have generated instrument sales, occasionally even the re-introduction of modern TLC/HPTLC to laboratories. Our CBS mail list is continually updated. Inquiries within our CBS readers have revealed that most of them prefer the printed form, although the complete CBS content can also be accessed through the internet."

Biogenic amines in fish and fish products

K. Speer et al. CBS 95 (2005) 2-4



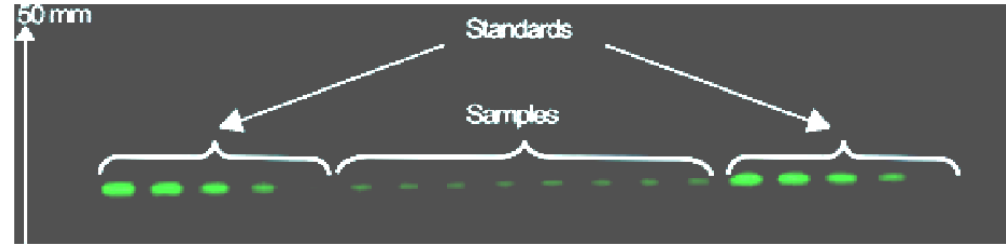
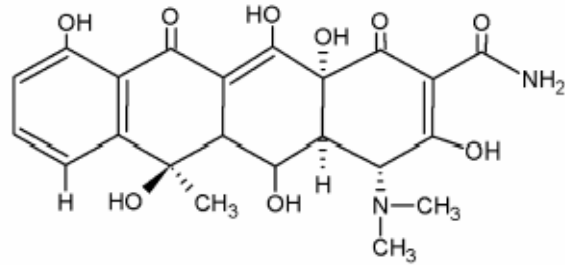
Linearity	50–250 mg/kg
LOD _{DIN 32645}	17,5 mg/kg
LOQ _{DIN 32645}	56 mg/kg
Recovery (200 mg/kg)	108 %
Confidence interval	± 9,9 mg



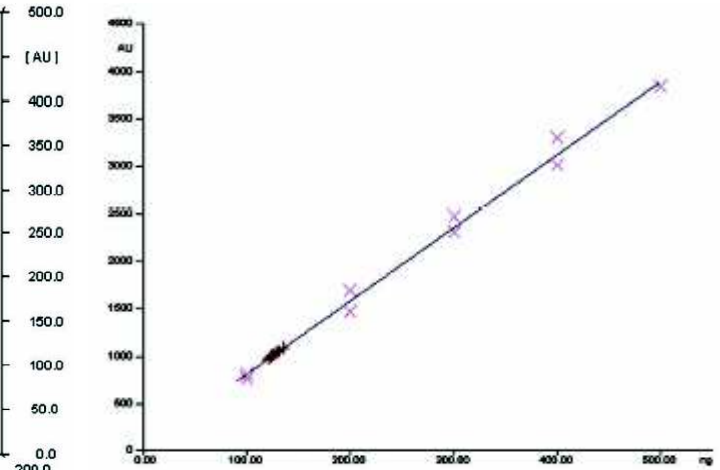
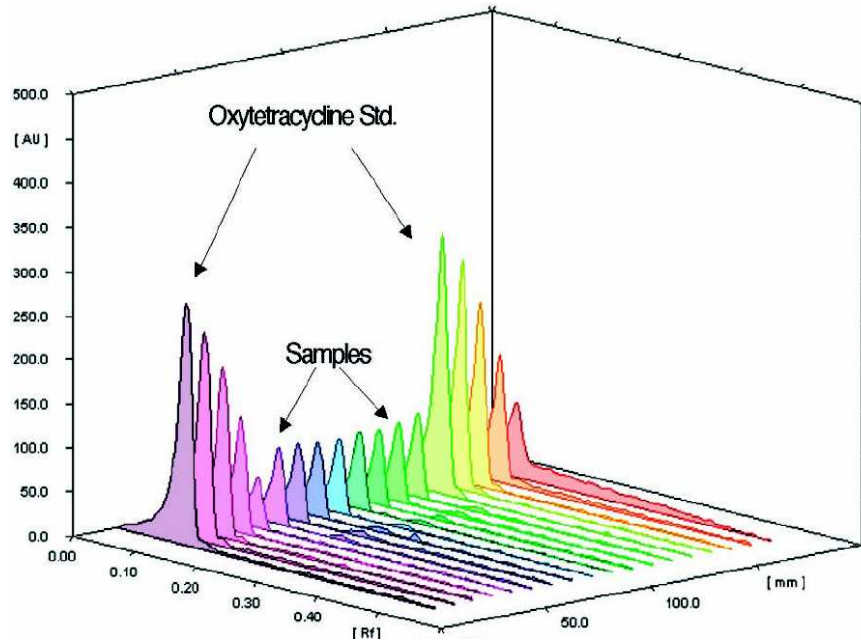
- allows monitoring the histamine limit
- comparable results to HPLC, ELISA or fluorometry with less analytical work

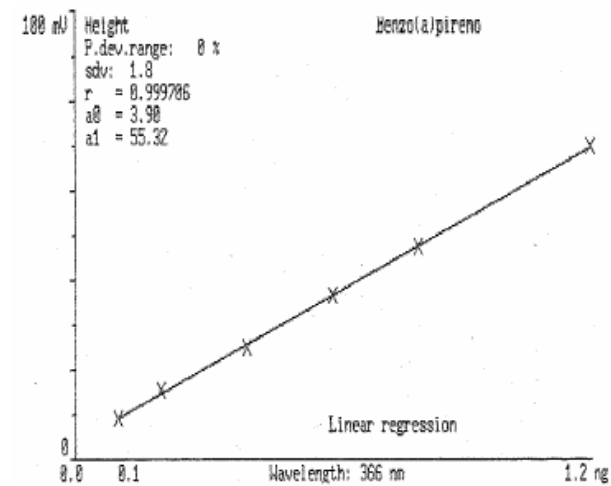
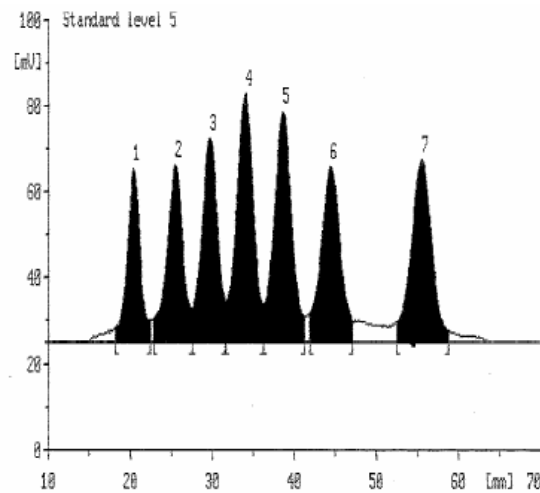
Oxytetracycline in medicated salmon feed

M. Vega et al. CBS 96 (2006) 6-7



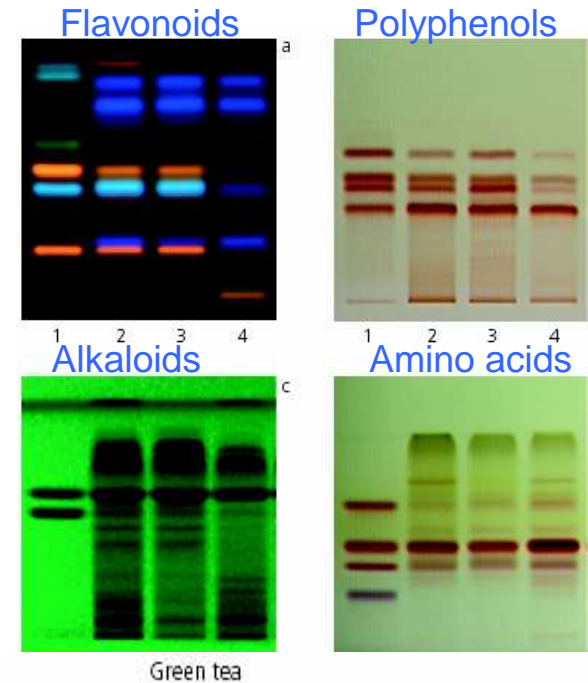
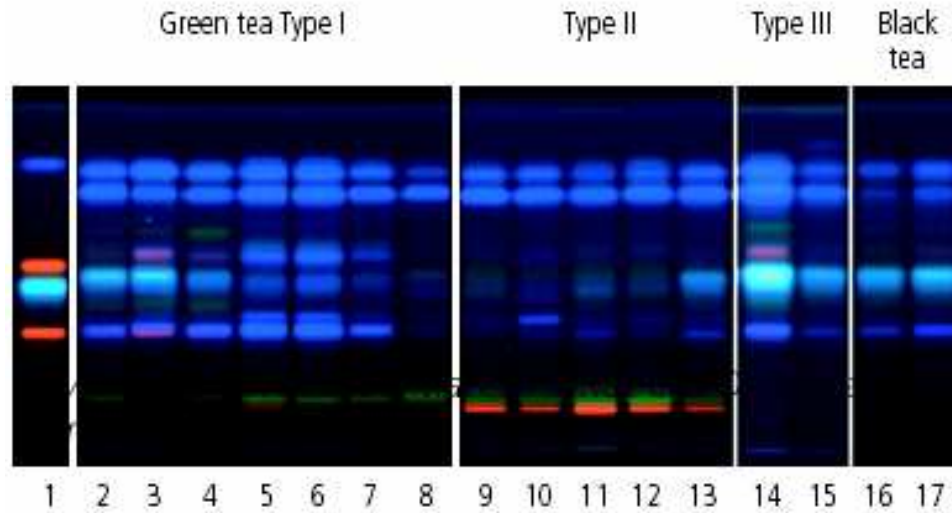
- Simple extraction process without any need for SPE or defatting
- Reliable, low cost and high-throughput method



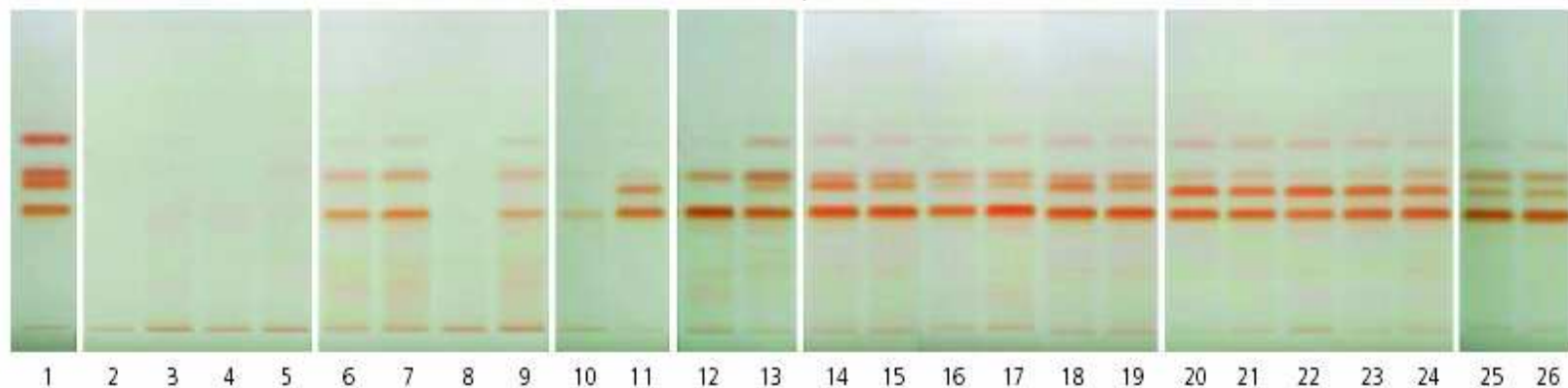


Fingerprint of green tea

R. Jorns et al. CBS 97 (2006) 12-15

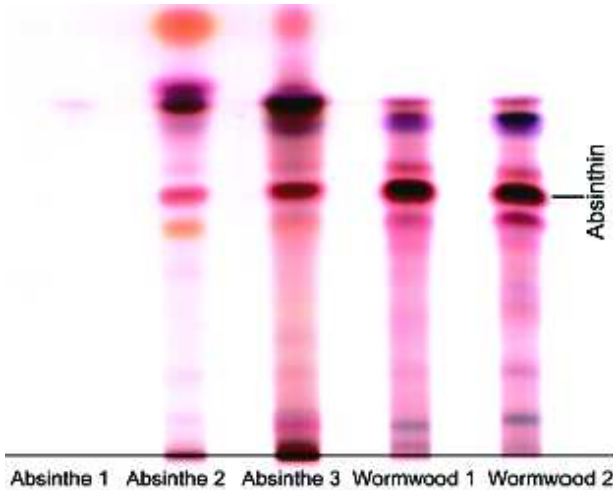
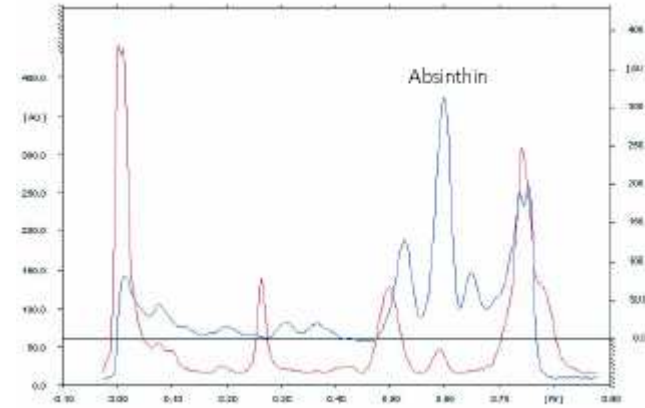
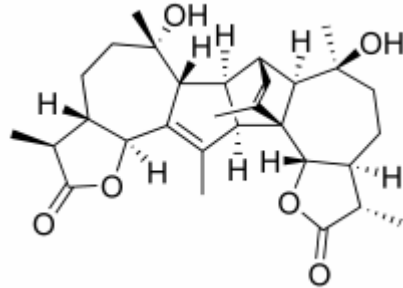


- comprehensive approach
- describes the overall quality of a product



Authenticity of absinthe

D. Lachenmeier et al. CBS 97 (2006) 6-7



- only useful method to determine the wormwood proportion in absinthe
- low costs, high sample throughput, minimal requirements for sample cleanup, sensitive, selective, and reproducible
- meet the requirements of official food control

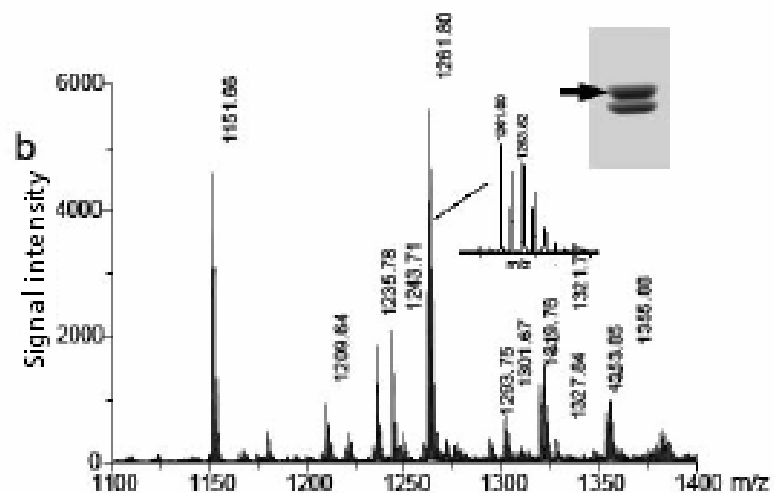
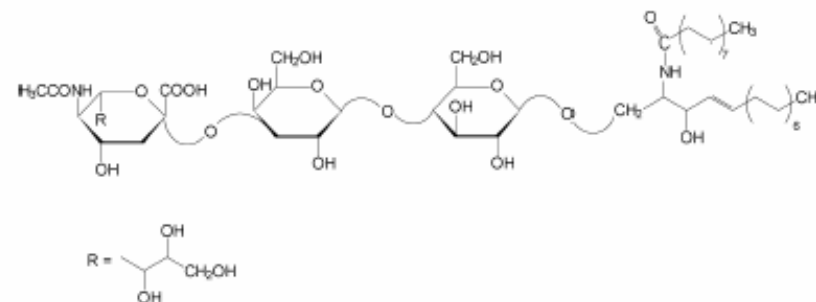
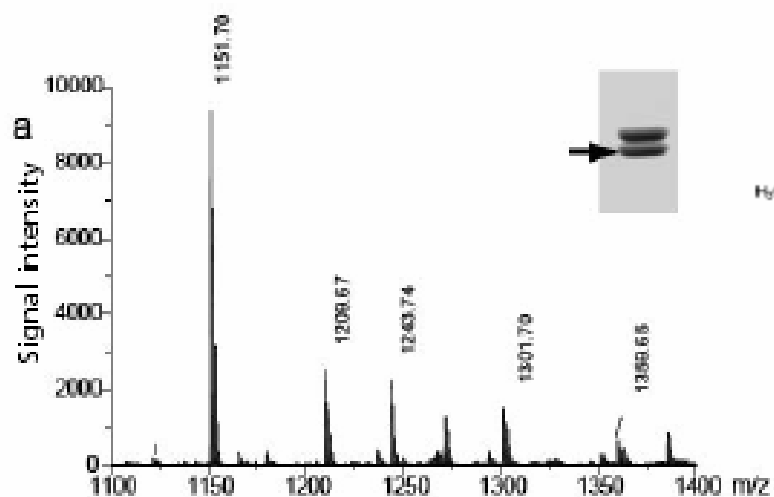
CHROMart: The insect

E. Hahn-Deinstrop

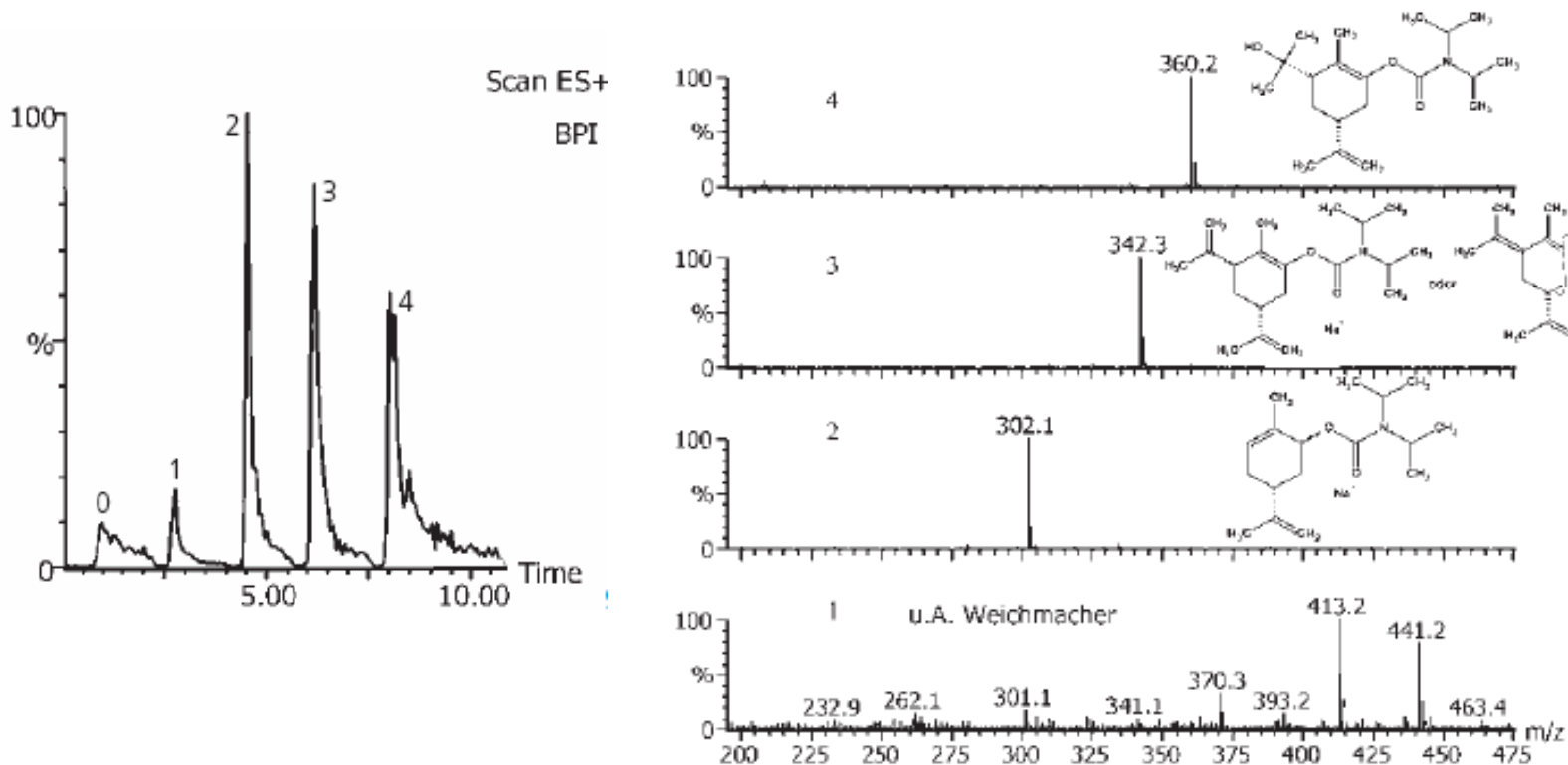


Gangliosides by HPTLC/IR-MALDI-o-TOF

J. Müthing et al. CBS 97 (2006) 2-5



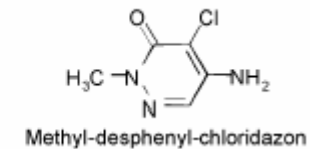
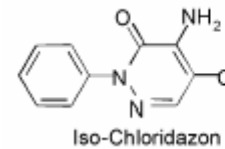
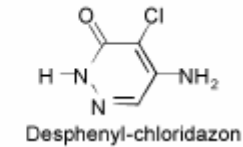
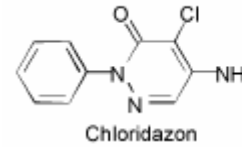
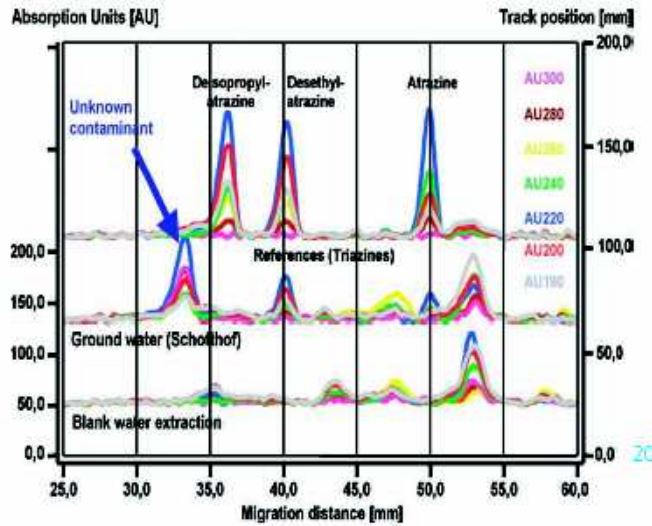
- very sensitive method
- structure elucidation



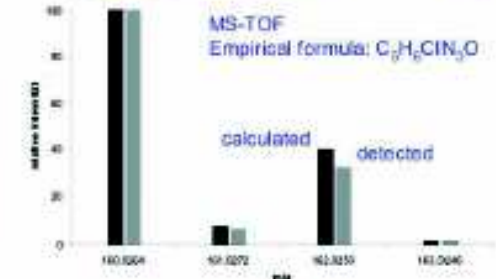
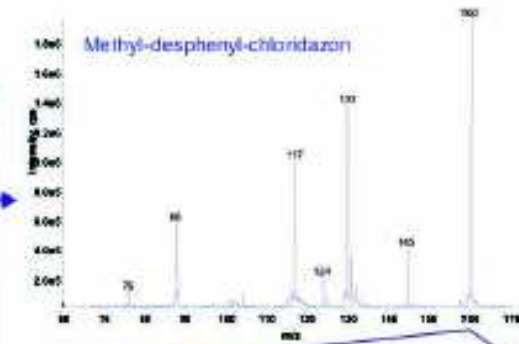
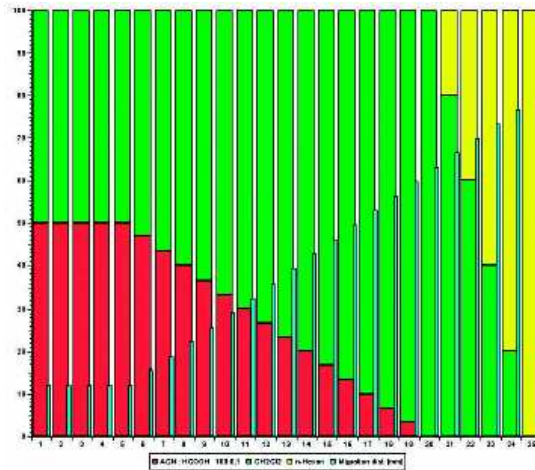
- easy method to optimize reactions
- coupled with ESI-MS to get information about products formed

(Methyl-)desphenyl-chloridazon in water

W. Weber et al. CBS 98 (2007) 11-13



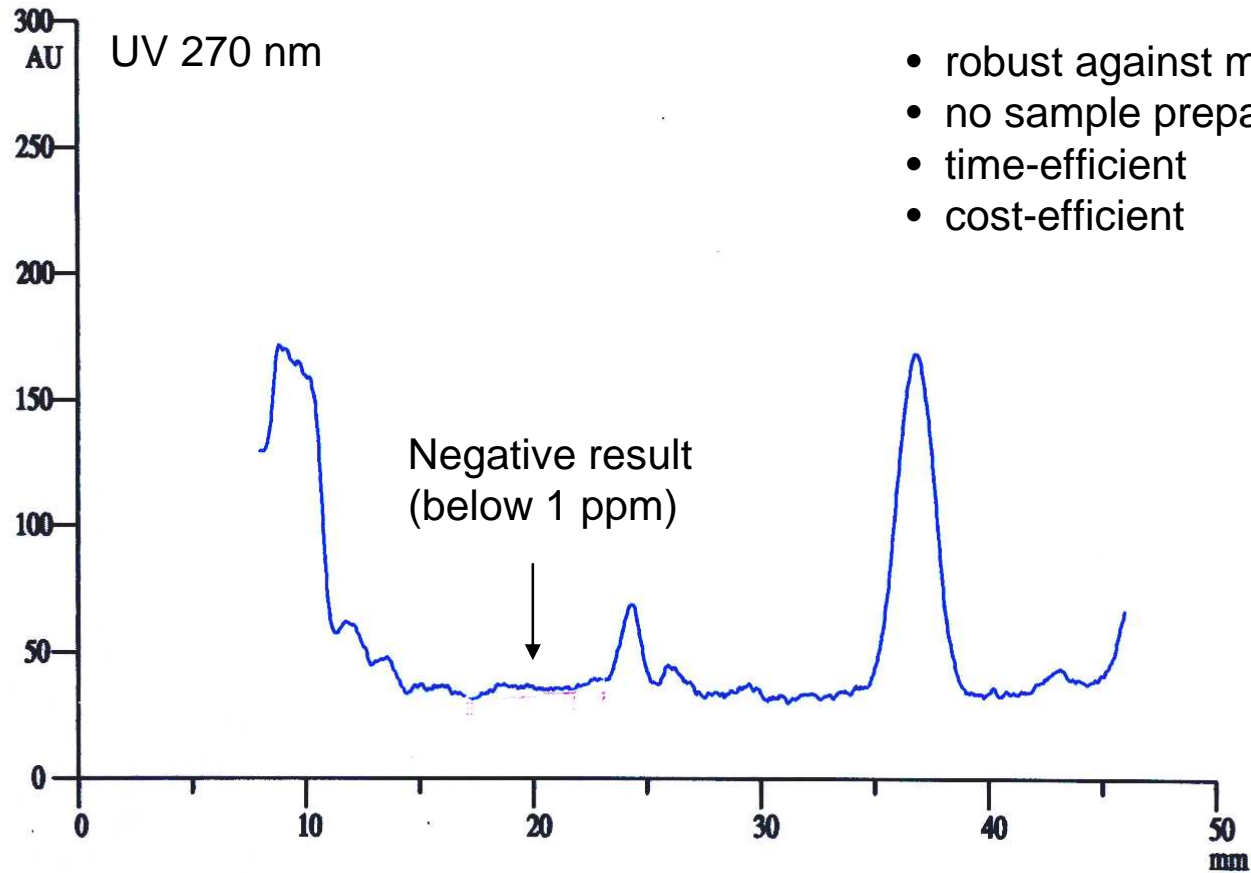
- Essential tool for identification of toxic unknowns



CHROMart: The wind

E. Hahn-Deinstrop

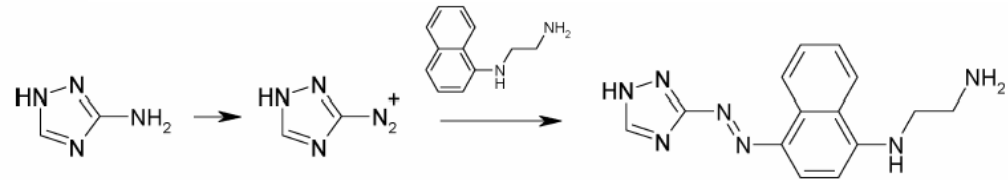
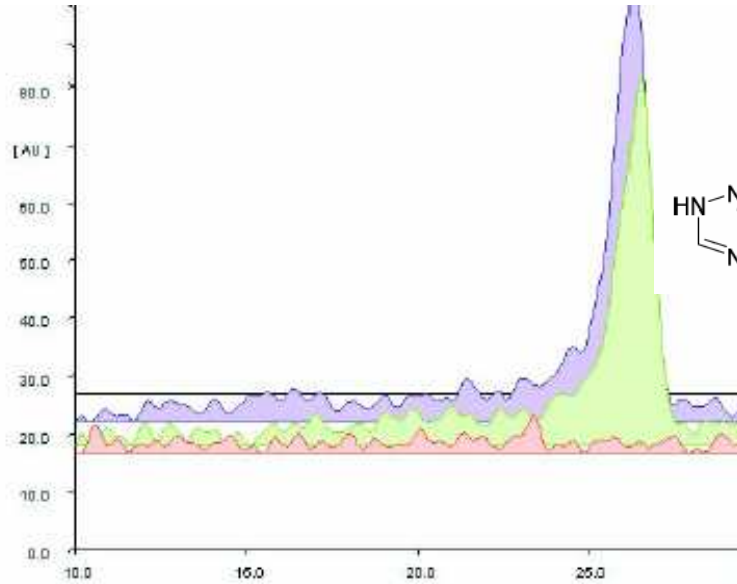




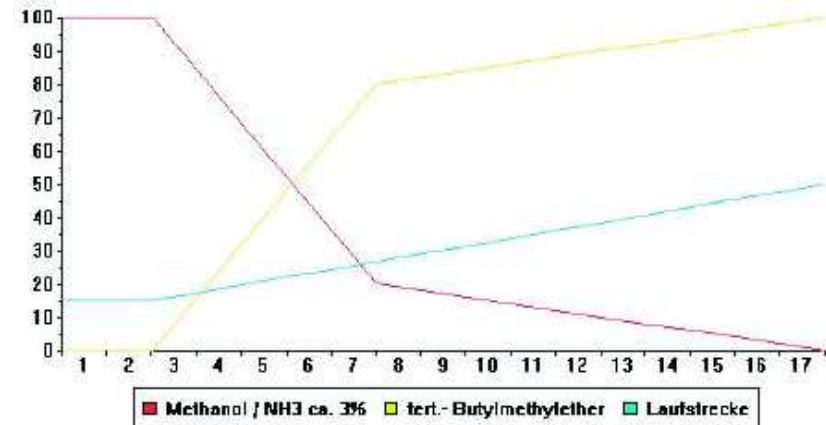
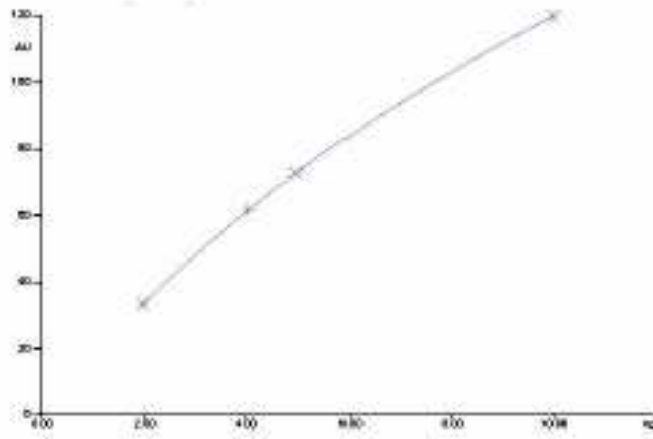
- robust against matrix
- no sample preparation
- time-efficient
- cost-efficient

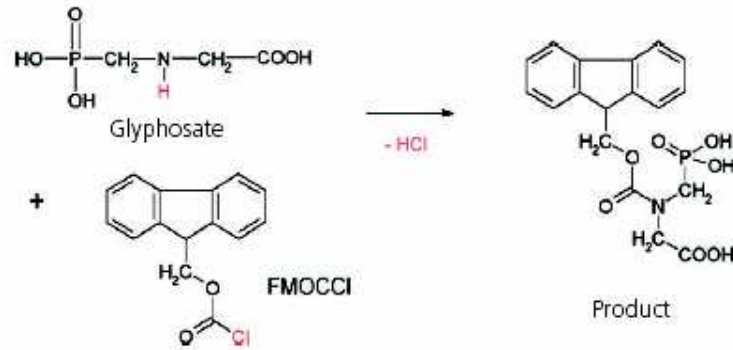
Amitrol in water

E. Plaß et al. CBS 96 (2006) 2-5

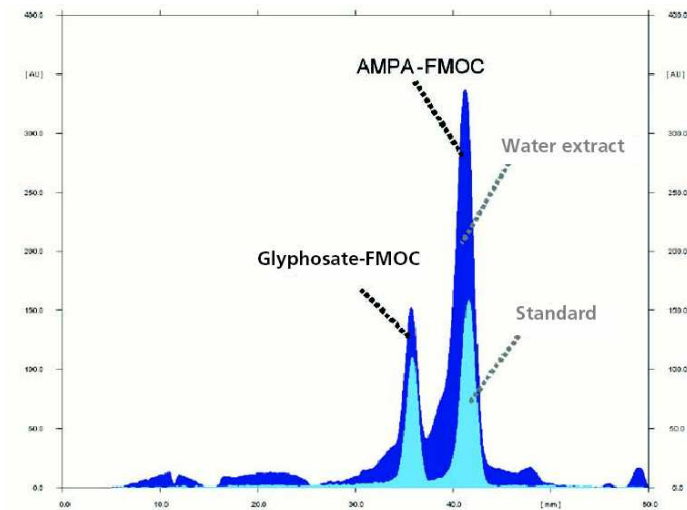
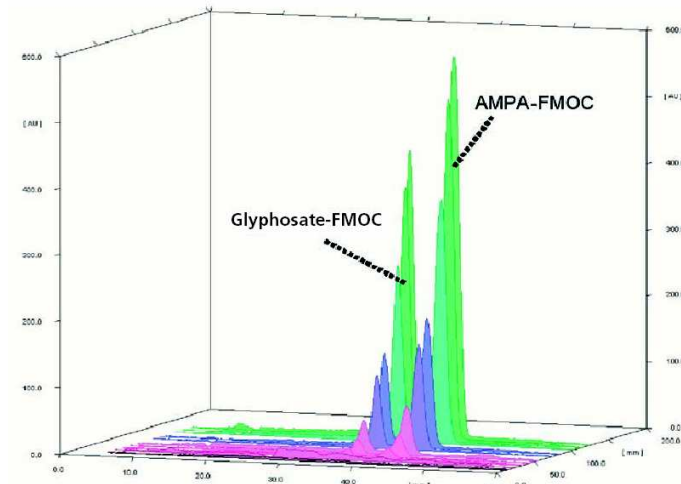
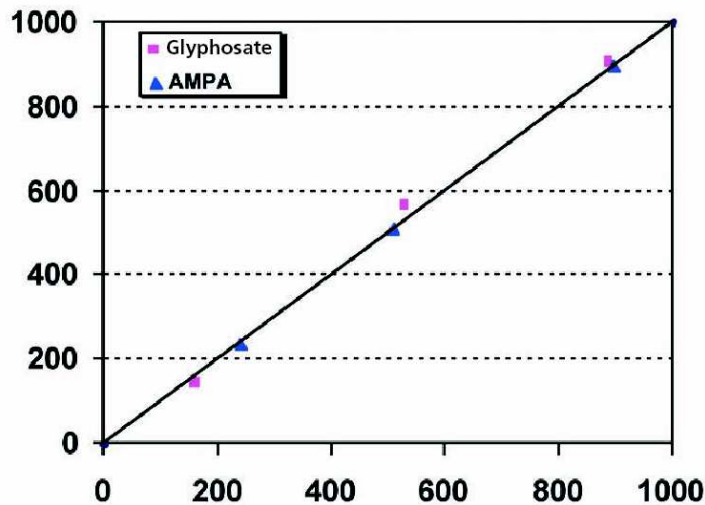


- 10 min analysis time per sample
- selective post-chromatographic detection with Bratton-Marshall reagent
- substitutes HPLC-MS(-MS)





- Ionic character of the substances
→ difficult to analyze → derivatization



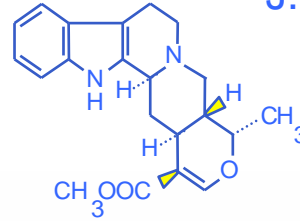
CHROMart: Joseph, Maria and the baby

E. Hahn-Deinstrop

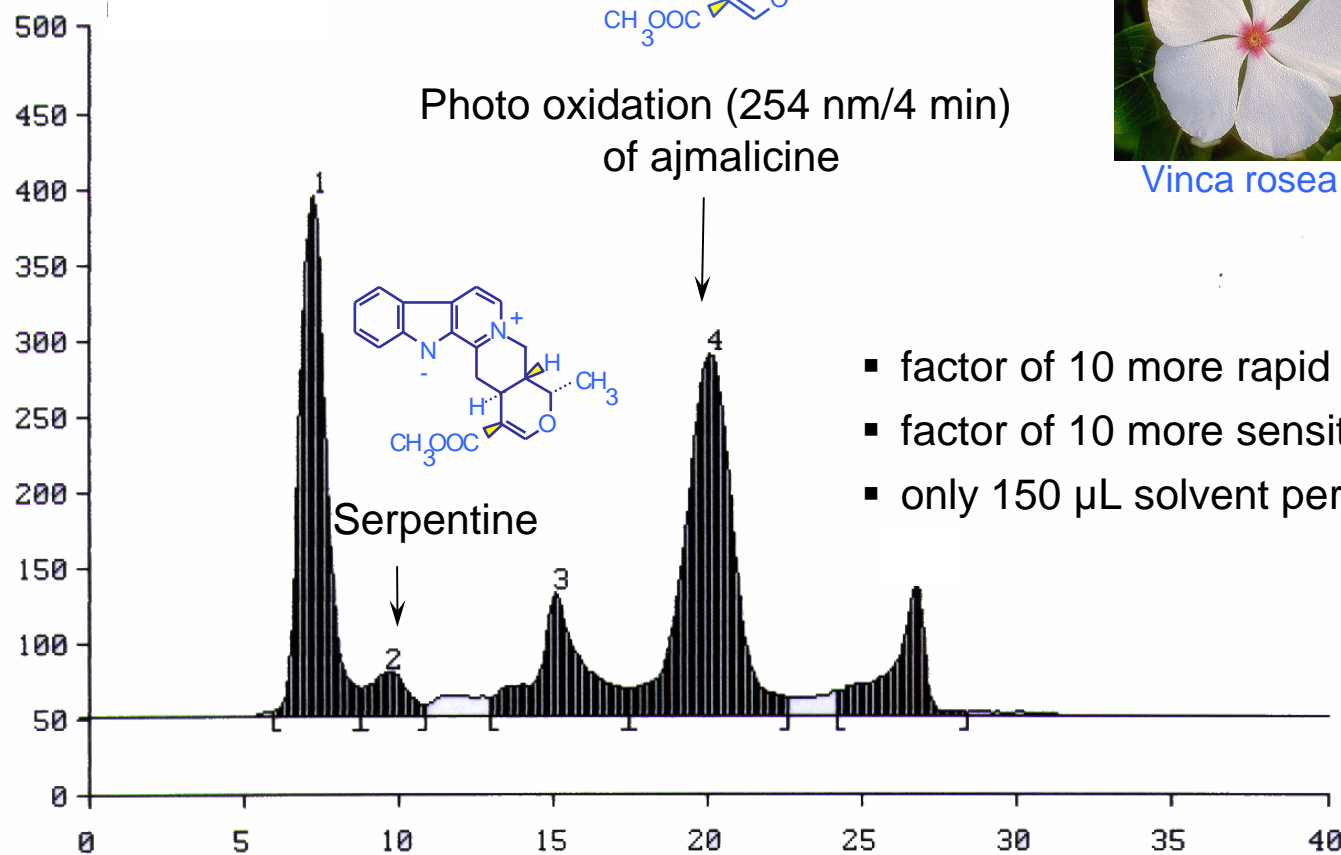


Indol alkaloids in tissue cultures

J. Creche et al. CBS 90 (2003) 10-11

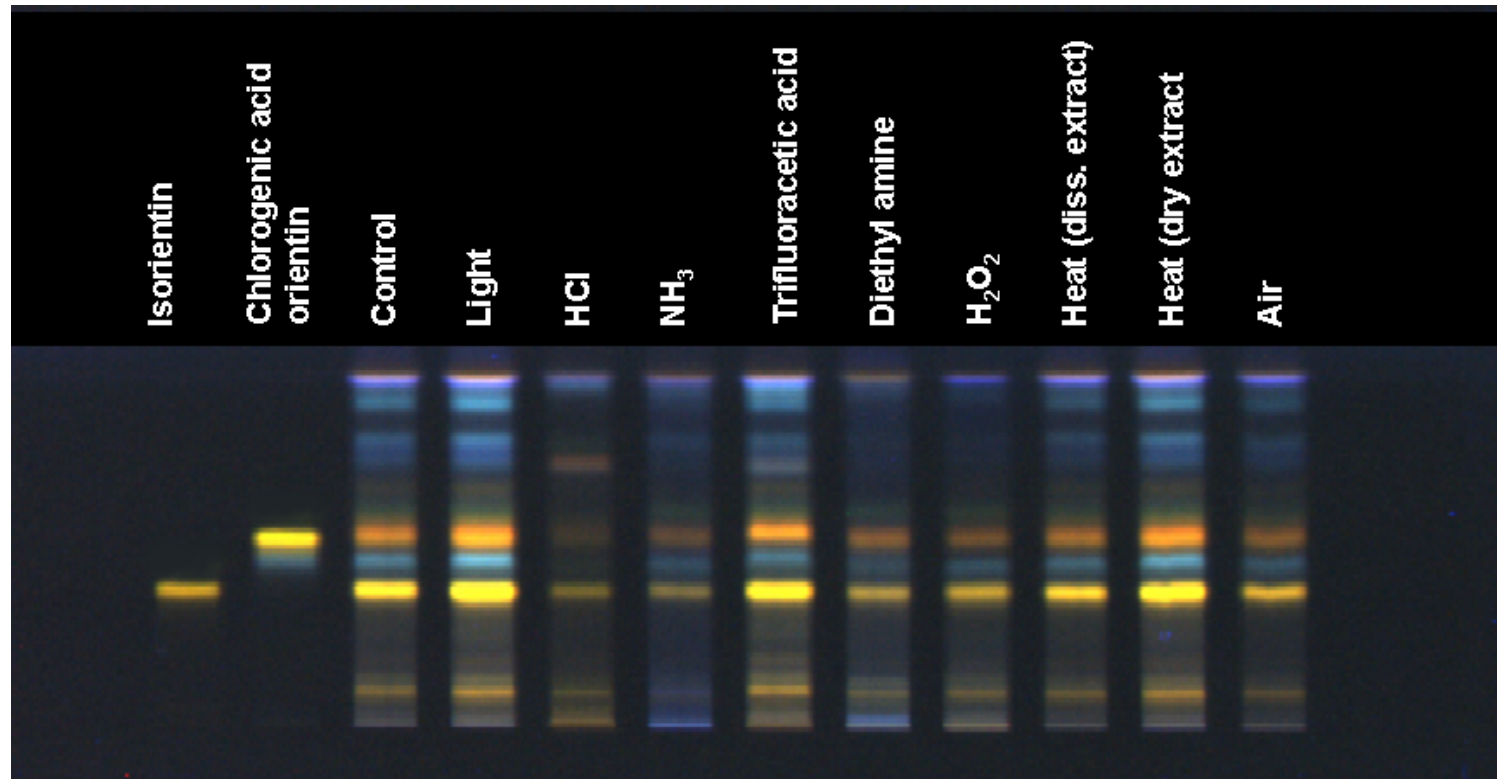


Vinca rosea



Stress test of Chaste tree extracts

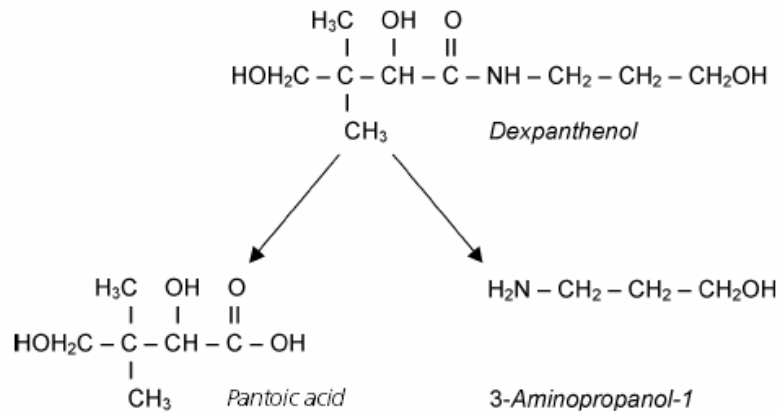
F. Wahli et al. CBS 91 (2002) 12-13



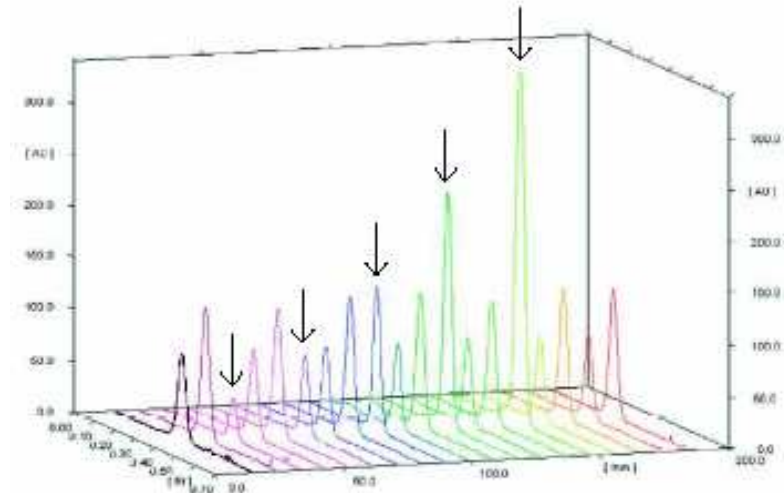
- reliable evaluation of stability of plant extracts
- aids decisions about shelf life and storage conditions for the product

Aminopropanol in dermatological products

C. Petitti, CBS 98 (2007) 2-4

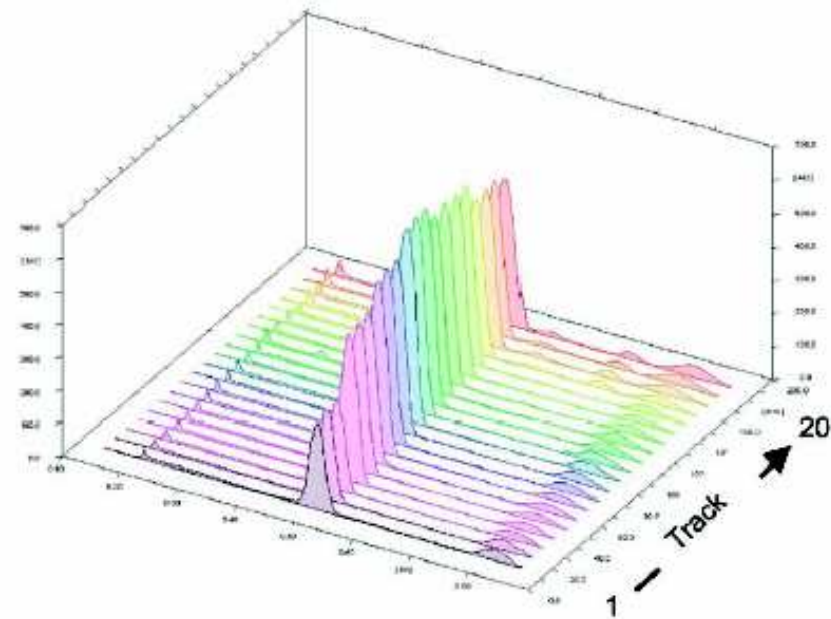
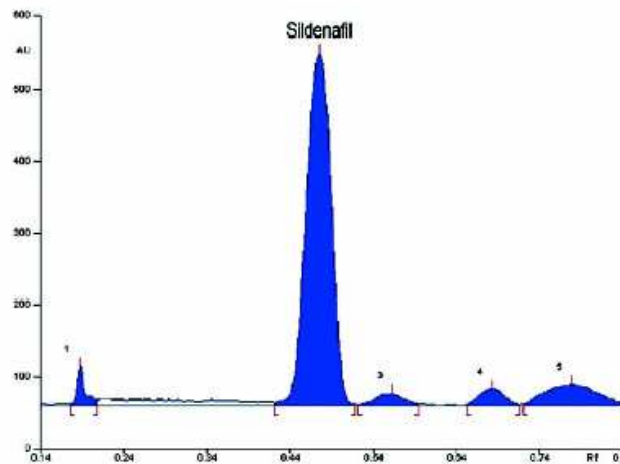
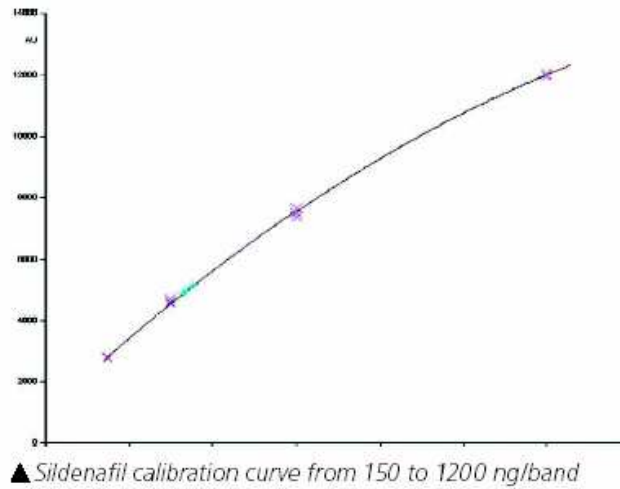


- factor of 3 faster than HPLC
- ease of derivatization



Validation parameter	Results
LOD	4.5 µg/mL
LOQ	15 µg/mL
<i>(both related to the applied volume 2 µL)</i>	
Linearity <i>(coefficient of correlation)</i>	0.9979
Mean recovery	102 %
Mean repeatability <i>(RSD)</i>	±4.9 %
<i>(performed at 5 concentration levels with n= 3 for each calibration level)</i>	
Intermediate precision <i>(RSD, n= 9)</i>	±5.7 %

E. Abdourashed, CBS 99 (2007) 6-7



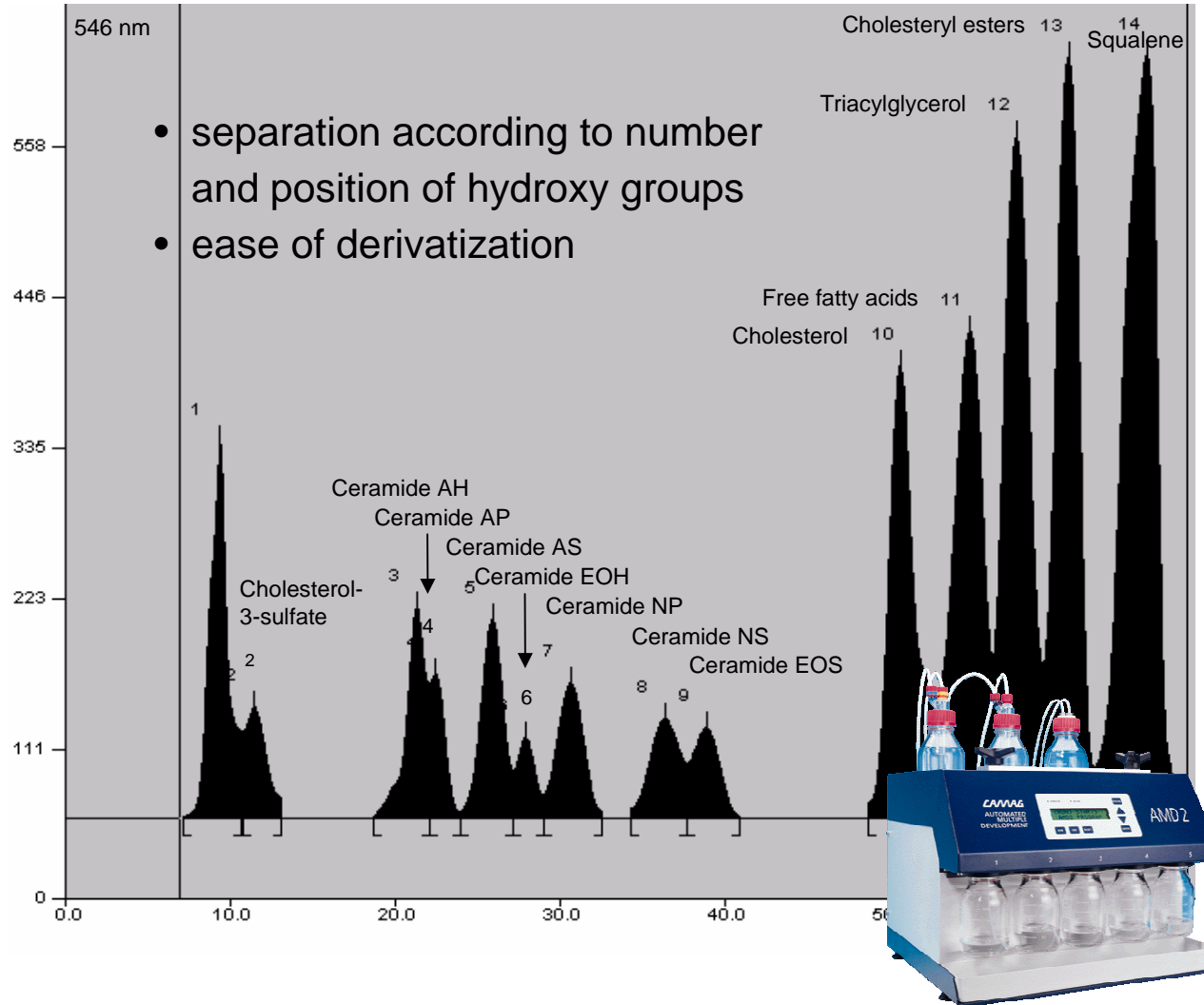
- used as illegal ingredient in herbal products
- fingerprints, simplicity, accuracy/precision, high speed, cost effectiveness...
- has all the properties required to perform reliable pharmaceutical analyses!

Ceramide classes in skin extract

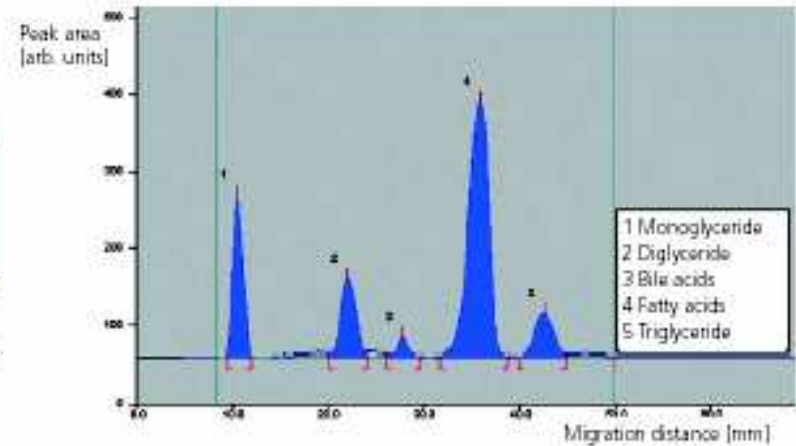
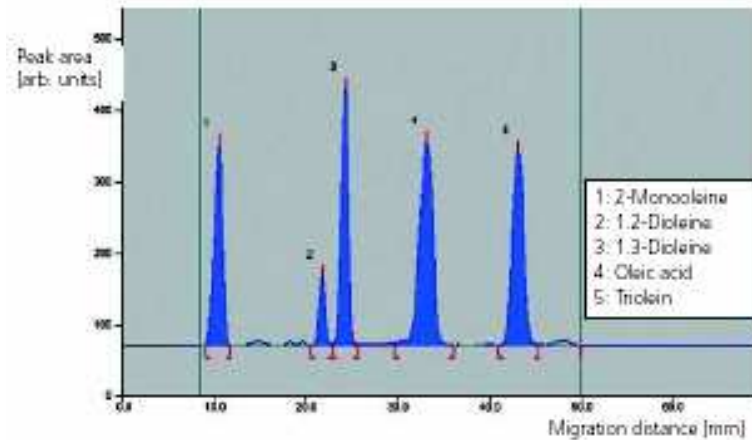
K. Raith et al. CBS 90 (2003) 2-4

G. Morlock

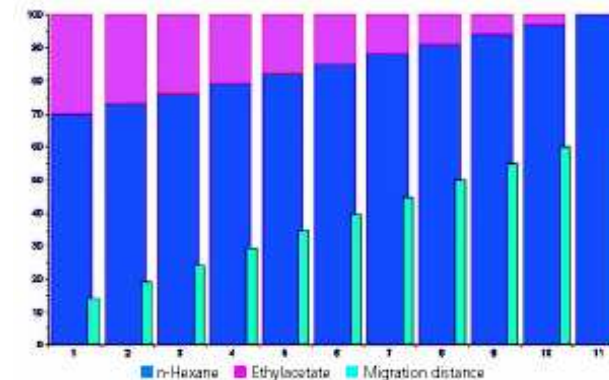
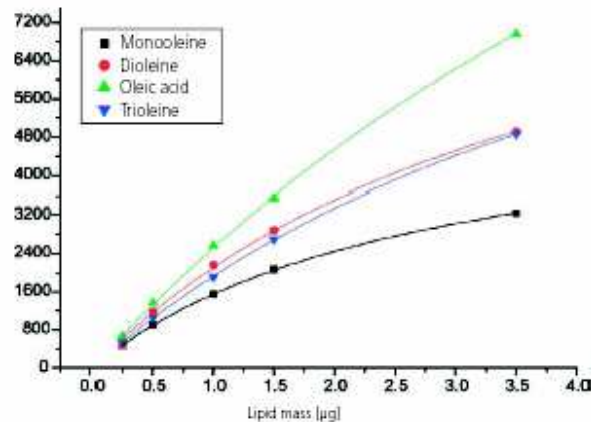
cbs@camag.com

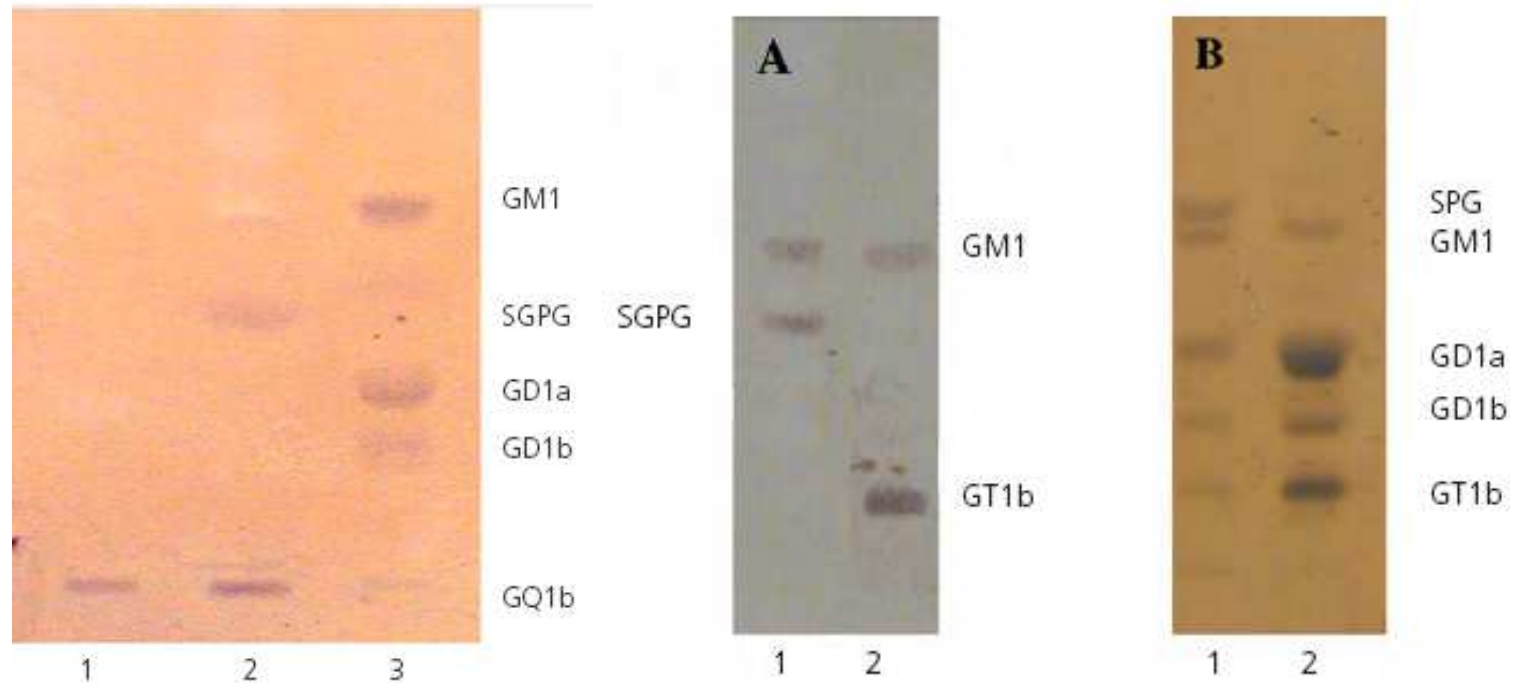


- separation according to number and position of hydroxy groups
- ease of derivatization



- individual lipid classes can be quantified → better understanding of the digestion behavior of colloidal lipid carriers
- easy detection by derivatization with copper sulfate reagent





- detection by selective immuno-detection and by derivatization with copper sulfate reagent

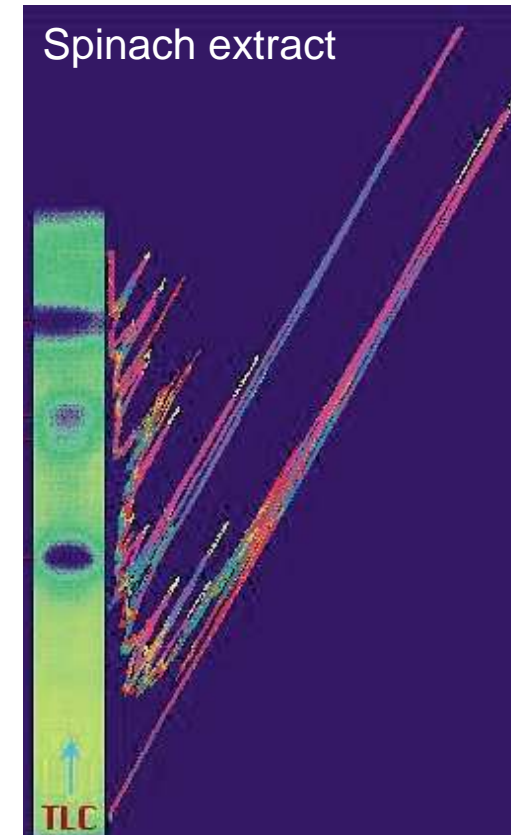
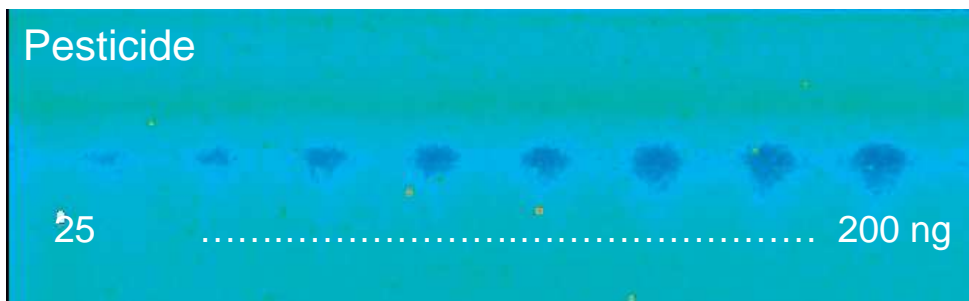
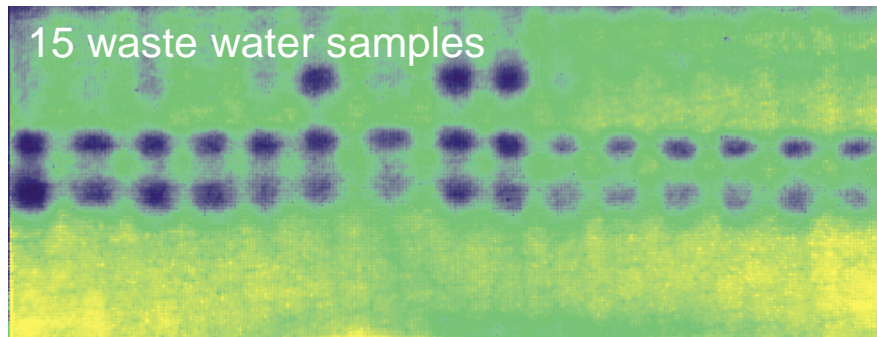
CHROMart: Christiane's legs

E. Hahn-Deinstrop



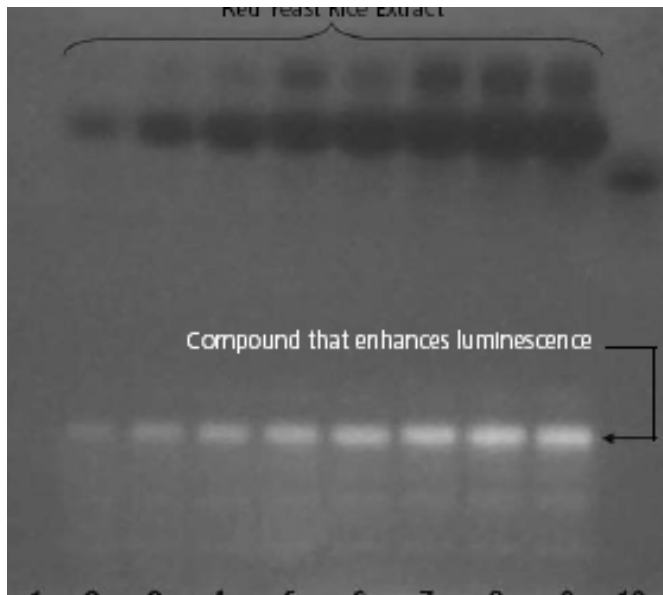
W. Kreiss et al. CBS 88 (2002) 12-13

W. Weber et al. CBS 94 (2005) 2-4

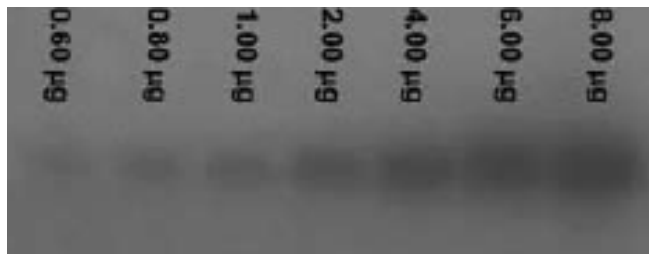


- effect-directed analysis
- effective method for water control laboratories → toxic substances

S. Verbitsky et al. CBS 99 (2007) 11-13

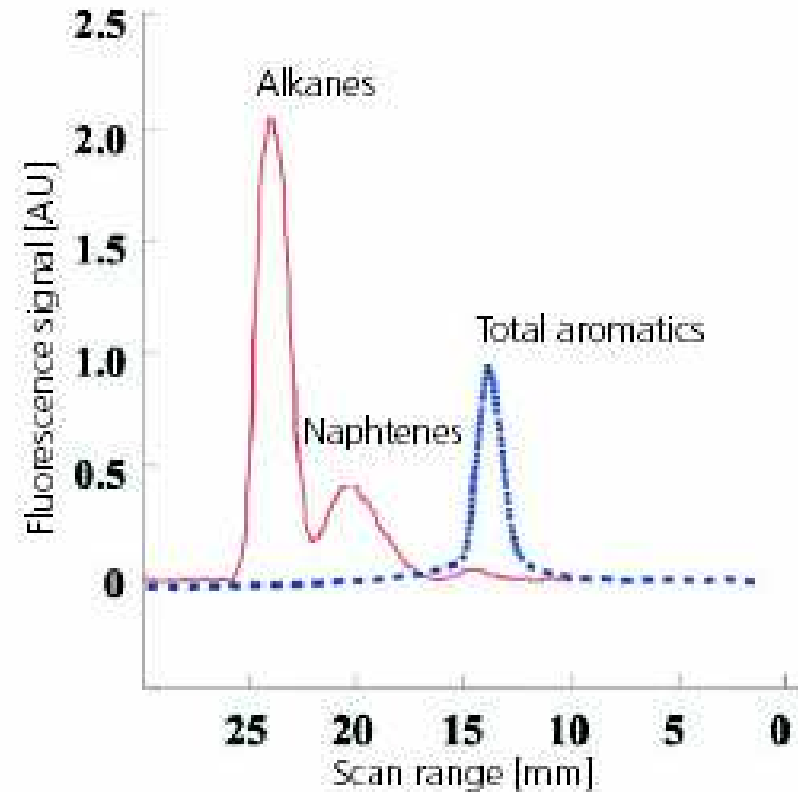
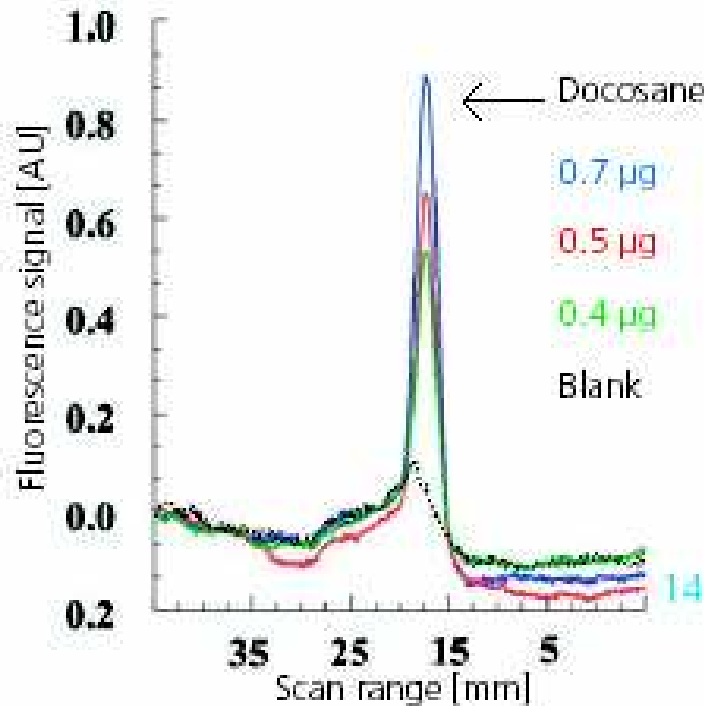
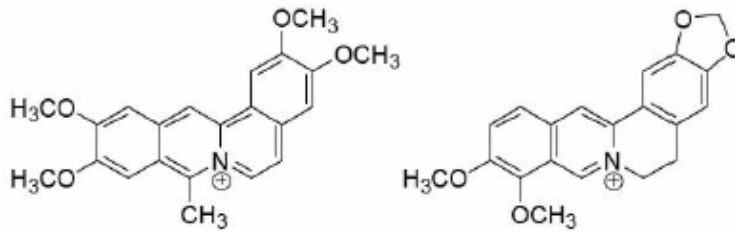


Red yeast rice extract



Melamine as illicit bulking agent

- simple dipping procedure
- identifying compounds with potential biological activity
- avoids extensive isolation of potential toxic substances

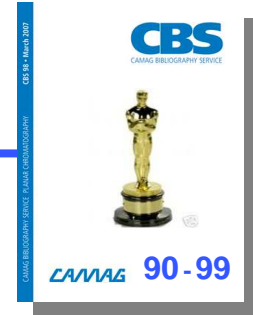


- not destructive method
- detection of hydrocarbons etc.



Contributions

- About 10 countries
- Topics:
 1. Applications
 - cosmetics
 - biomedicine
 - food and contaminants
 - water and residues
 - traditional medicine and herbals
 2. Methodology
 3. Books and symposia
 4. Information on newest instrumentation





The Oscar goes to...

...all the contributors!

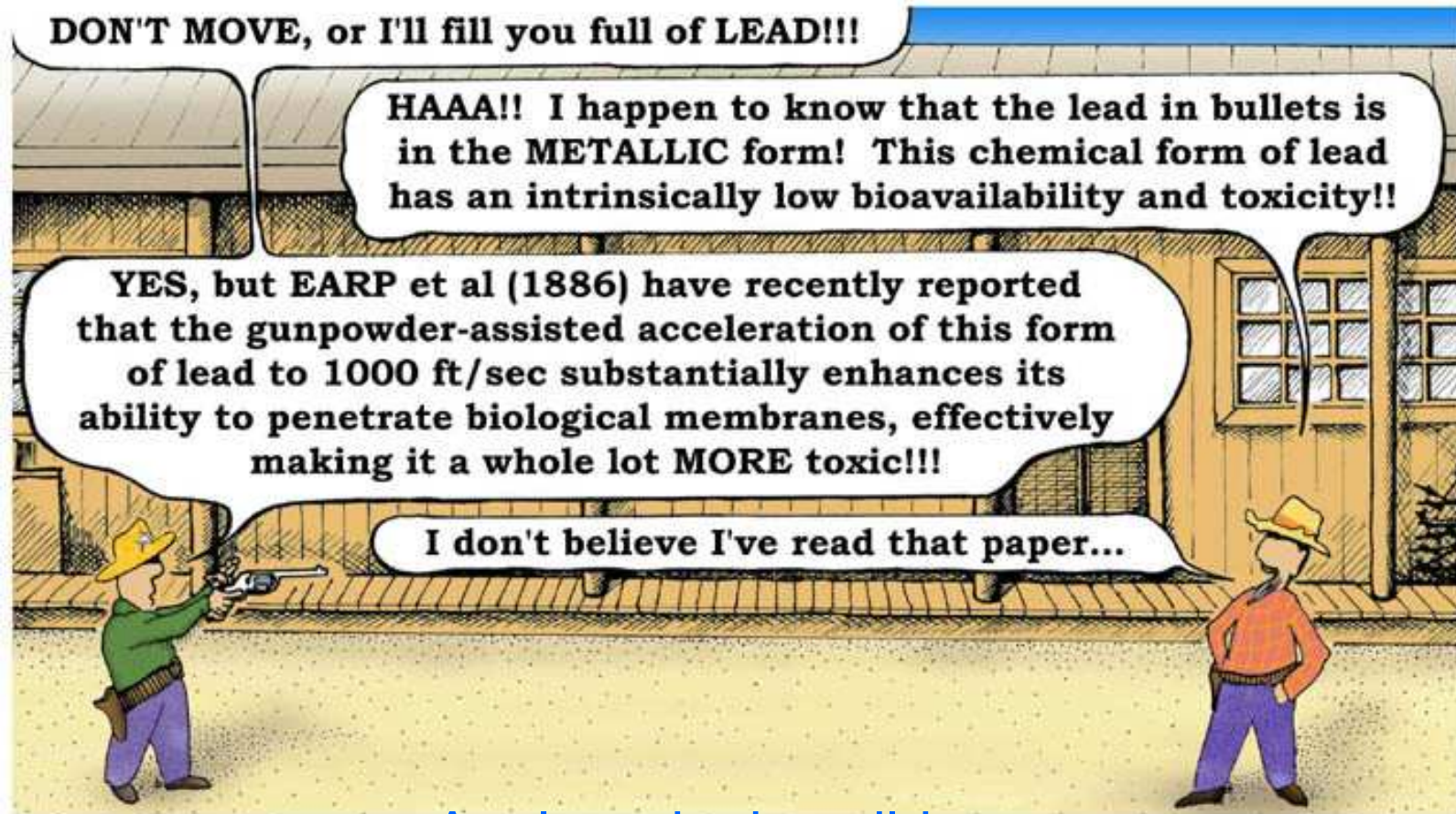


G. Morlock

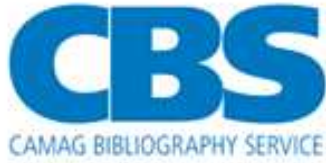
cbs@camag.com

They use the most adequate method!





Analysts in the wild west



Discussion about CBS

- Still as hardcopy?
- On recycling paper?
- Is 'know CAMAG' of interest?
- Further topics to present
- Form of the presentations
- Interviews

Ideas are welcome → cbs@camag.com

