



中药全球化联盟

CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE



第20屆中藥全球化聯盟會議  
20<sup>th</sup> MEETING OF CGCM

HENGQIN | 橫琴 2024.08.19-22

# Regional Report

## European Chapter

Report by Prof. Dr. Rudolf Bauer,  
Chairman of the European Chapter of CGCM



CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

## European Chapter

	CGCM Member Institutes	Contact Person	Email
1.	Medical University of Vienna	Prof. Ma Yan	<a href="mailto:yan.ma@meduniwien.ac.at">yan.ma@meduniwien.ac.at</a>
2.	TCM Research Center Graz, University of Graz	Prof. Rudolf Bauer	<a href="mailto:rudolf.bauer@uni-graz.at">rudolf.bauer@uni-graz.at</a>
3.	German-Chinese Research Foundation of TCM (Deutsch-Chinesische Forschungsgemeinschaft)	Prof. Johannes Greten	<a href="mailto:info@dcfg-tcm.de">info@dcfg-tcm.de</a>
4.	HanseMerkur Center for TCM at the University Medical Center Hamburg Eppendorf	Dr. Sven Schroeder	<a href="mailto:Schroeder@tcm-am-UKE.de">Schroeder@tcm-am-UKE.de</a>
5.	Sardegna Ricerche	Prof. Giovanni Biggio	<a href="mailto:songini@sardegnaricerche.it">songini@sardegnaricerche.it</a> , <a href="mailto:dichiara@unica.it">dichiara@unica.it</a> ; <a href="mailto:gadichia@tiscali.it">gadichia@tiscali.it</a> ,
6.	The University of Florence	Prof. Anna Rita Bilia	<a href="mailto:ar.bilia@unifi.it">ar.bilia@unifi.it</a>
7.	Leiden University, European Center for Chinese Medicine and Natural Compounds	Dr. Mei Wang	<a href="mailto:mei.wang@subiomedicine.com">mei.wang@subiomedicine.com</a>



# Report from University of Graz, Department of Pharmacognosy, Institute of Pharmaceutical Sciences



- Prof. Dr. Rudolf Bauer retired in October 2024, now Prof. emeritus
- His successor: Prof. Dr. Andreas Köberle (left)
- His predecessor: Prof. Dr. Theodor Kartnig (right)

# Still serving on the International Advisory Board of Hong Kong Chinese Materia Medica Standards



# Elaboration of Monographs for TCM herbs for PhEur

TCM-Working Party 建立传统中药研究团队  
Chairman: Rudolf BAUER 鲍儒德

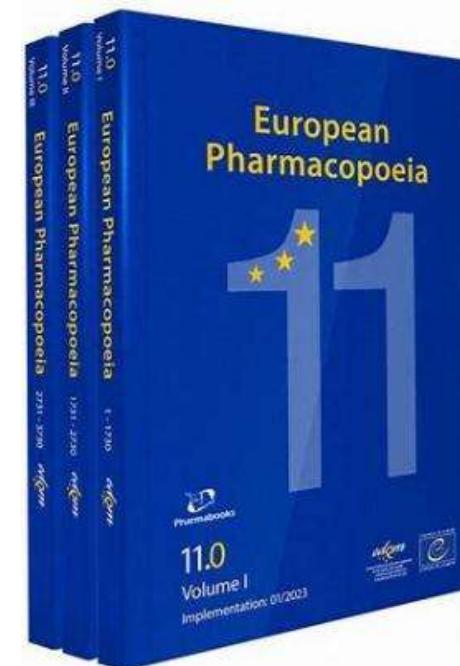


BALD	Melanie	France
BAUER	Rudolf	Austria
BILIA	Anna Rita	Italy
BUNNER	Benedicte	France
CHAN	Kelvin	Hong Kong, China
CHANG	Yuan Shiun	Taiwan, China
CICI	Delina	France
DUEZ	Pierre	Belgium
DUFAT	Thi Hanh	France
GASSER	Uwe Michael	Germany
GUO	De-An	China
HARMS	Henrik	Germany
HOENOW	Ruth	Germany
HOERNIG	Michael	Germany
KOPF	Mireille	France
KUKUŁA-KOCH	Virginia	Poland
LAENGER	Reinhard	Austria
PETER	Samuel	Switzerland
REICH	Eike	Switzerland
SABATINI-SAMORI	Cristiana	France
SCHERUEBL	Rosmarie	Germany
SPIELDENNER	Bruno	France
STOEGER	Erich Andreas	Germany
STURTZ	Tiphaine	France
VIELLE	Cathie	France
WANG	Mei	Netherlands
WANG	Tie Jie	China
WANG TSCHEN	Shu-Yuan	Switzerland
WEBER	Matthias	France
WIESNETH	Stefan	Germany

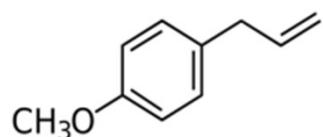
## Elaboration of Monographs for TCM herbs for the European Pharmacopoeia 欧洲药典的中草药专著的确立和发展

### Current Status of Work

- 96 Monographs adopted by the Eur. Pharmacopoeia Commission  
欧洲药典委员会已接纳 96 篇专著
- Ca. 20 attributed to Specialists  
约20人取得专家资格认证
- Monographs published as drafts in PHARMEUROPA  
多篇论文作为草案在欧洲药典官网上发表
- Monographs for General Methods 通用方法论著：
  - Chapter on processing: 加工制作
  - Test for aristolochic acids: 马兜铃酸的检测
  - Test for pyrrolizidine alkaloids 喀烷类生物碱的测试



# Alkenylbenzenes, like estragole and methyleugenol, and monoterpenes, like $\alpha$ -/ $\beta$ - thujone, menthofuran and pulegone have mutagenic and possibly carcinogenic potential in animal studies

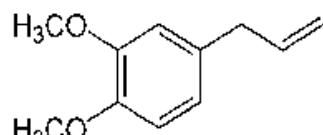


Methylchavicol  
(= Estragol)



Component of essential oils extracted from tarragon (60–75% estragol), chervil (60% estragol), basil (23–88% estragol), anise, star anise, bay, fennel, allspice, nutmeg, pine and turpentine

自龙蒿(60-75%雌蕊糖)、山萝卜(60%雌蕊醇)、罗勒(23-88%雌蕊醇)、茴香、八角茴香、月桂、茴香、多香果粉、肉豆蔻、月桂、月桂精油中天分  
肉豆蔻、松、松节油中提取之分

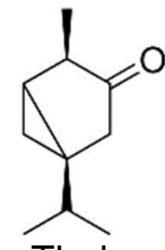


Methyleugenol

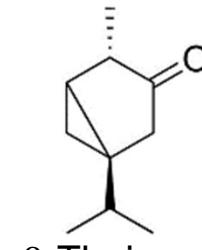


Methyl eugenol is a natural constituent in the essential oils of fennel, roses, basil, anise, allspice, nutmeg, bay or laurel

甲基丁香酚茴香、玫瑰、罗勒、茴香、多香果粉、肉豆蔻、月桂、月桂精油中天分  
肉豆蔻、松、松节油中提取之分



$\alpha$ -Thujone

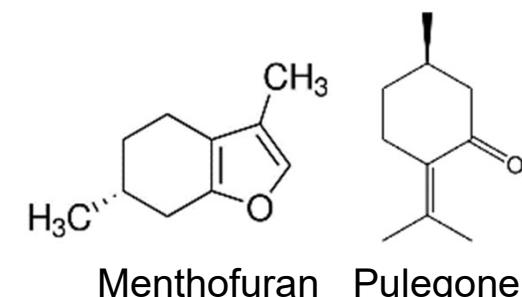


$\beta$ -Thujone



Thujones are found in the essential oil of wormwood (*Artemisia absinthium L.*), tansy (*Tanacetum vulgare L.*) and sage (*Salvia officinalis L.*)

侧柏酮在艾(*Artemisia absinthium L.*)、艾菊(*Tanacetum vulgare L.*)、鼠尾草(*Salvia officinalis L.*)精油中。



Menthofuran      Pulegone



Menthofuran and pulegone are found in the essential oils of peppermint and other mint species

薄荷呋喃、蒲酮在薄荷及诸薄荷种  
精油中

12 May 2023

EMA/HMPC/137212/2005 Rev 1 Corr 1\*

Committee on Herbal Medicinal Products (HMPC)



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

## Public statement on the use of herbal medicinal products<sup>1</sup> containing estragole

Final

- the intake of estragole from HMPs in the general population should be as low as possible, which includes a short-time duration of use (maximum 14 days)
- to reach or come as close as possible to the guidance value of **0.05 mg/person per day**
- the usage of estragole containing HMPs in pregnant and breast-feeding women is not recommended if the daily intake of estragole exceeds the guidance value of **0.05 mg/person per day**
- The usage of estragole containing HMPs in **children up to 11 years** is not recommended if the daily intake of estragole exceeds the guidance value of **1.0 µg/kg**
- 凡人HMPs雌酚摄入量尽可下,须臾用(最多14天)
- 尽近0.05毫克/人日指导值
- 若雌酚日摄入量过0.05mg/人日指导值,则不议孕妇、哺乳期妇人含HMPs雌酚
- 若雌酚日摄入量过1.0µg/ kg之指导值,则不议于11岁以下童子中用含HMPs雌酚

# Examples of botanicals generally containing alkenylbenzenes

## 常含烯基苯物药之例

Pin Yin name	Alternative name in Pin yin	Latin name	References
Hui Qin 秦晖	N.A.	<i>Pimpinella anisum</i> L.	( <a href="#">She et al., 2005</a> )
Ba Jiao 八角	Ba Jiao Hui Xiang, Da Hui Xiang	<i>Illicium verum</i> Hook.f.	( <a href="#">Xia and Saunders, 2008</a> )
Hui Xiang 惠翔	Xiao Hui Xiang	<i>Foeniculum vulgare</i> Mill.	( <a href="#">She et al., 2005</a> )
Ou Qin 或秦	Ba Xi Li, Xiang Qin	<i>Petroselinum crispum</i> (Mill.) Hill	( <a href="#">She et al., 2005</a> )
Rou Dou Kou 柔豆口	Rou Guo, Yu guo	<i>Myristica fragrans</i> Houtt.	( <a href="#">Li and Wilson, 2008</a> )
Luo Le 罗乐	Jiu Ceng Ta, Lan Xiang	<i>Ocimum basilicum</i> L.	( <a href="#">Li and Hedge, 1994</a> )
Long Hao 龙浩	She Hao, Qing Hao	<i>Artemisia dracunculus</i> L.	( <a href="#">Lin et al., 2011</a> )
Rou Gui 桂柔	Yu Gui, Gui Pi	<i>Cinnamomum cassia</i> Presl	( <a href="#">Li et al., 2008</a> )
Chang Pu 张璞	Shi Chang Pu, Bai Chang Pu	<i>Acorus calamus</i> L.	( <a href="#">Li et al., 2010</a> )
Ning Meng Cao 宁萌曹	Xiang Mao	<i>Cymbopogon citratus</i> (DC.) Stapf	( <a href="#">Chen and Sylvia, 2006</a> )

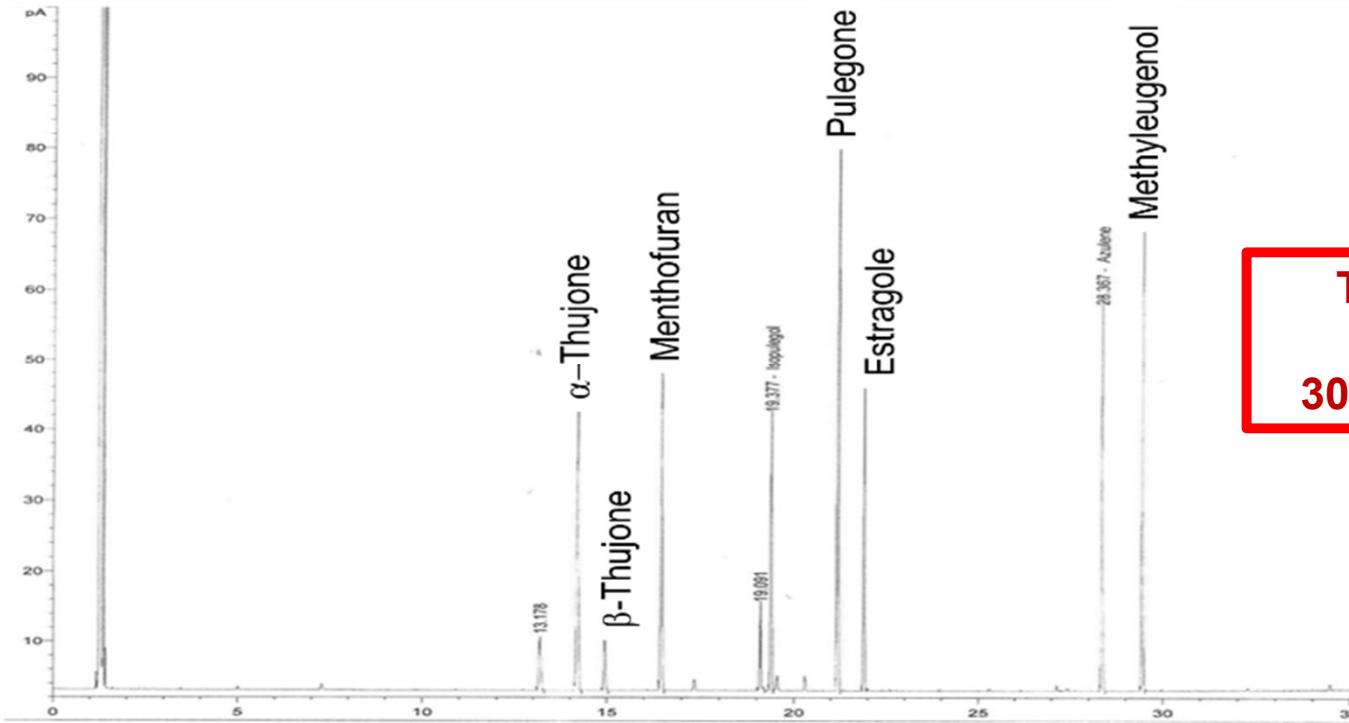
Ning, J., Cui, X., Kong, X., Tang, Y., Wulandari, R., Chen, L., Wesseling, S., & Rietjens, I. M. C. M. (2018).

Risk assessment of genotoxic and carcinogenic alkenylbenzenes in botanical containing products present on the Chinese market.

*Food and chemical toxicology*, 115, 344–357.

# New Chapter 2.8.27. Determination of Estragole has been published in Pharmeuropa 37.3

<https://pharmeuropa.edqm.eu/app/phpa/content/issue37-3/20827E.htm?highlight=on&terms%5B%5D=estragole>



The deadline for comments is  
30. September 2025

# Sino-Austrian Joint Research Project – Metabolic and pharmacological profiling of the TCM formula Hanshiyi used for the treatment of COVID-19



## Cooperation partners

### Austria

- PI: Prof. Dr. Dr. h.c. Rudolf BAUER, Institute of Pharmaceutical Sciences, University of Graz, Austria
- Priv.-Doz. Dr. nat. techn. Dagmar BRISLINGER, MSc., Gottfried Schatz Research Center for Cell Signaling, Metabolism and Aging, Medical University of Graz, Austria
- Mag. pharm. Dr. rer. nat. Eva-Maria PFERSCHY-WENZIG, Institute of Pharmaceutical Sciences, University of Graz, Austria
- Mag. pharm. Stefanie TIEFENBACHER (PhD student), Institute of Pharmaceutical Sciences, University of Graz, Austria

### China

- PI: Academician Prof. Dr. TONG Xiaolin, Department of Endocrinology, Guang'anmen Hospital, CACMS, Beijing, China
- Prof. Dr. LI Min, Department of Endocrinology, Guang'anmen Hospital, China Academy of Chinese Medical Sciences, Beijing
- Dr. YAO Yangfeng, Institute of Virology, Wuhan National Bio-Safety Level 4 Lab of CAS, Wuhan, China
- Assoc. Prof. Dr. GAO Juntao, National Research Center for Information Science and Technology, Tsinghua University, Beijing
- Dr. TIAN Jiaxing, Department of Endocrinology, Guang'anmen Hospital, CACMS, Beijing
- Dr. HAN Lin, Department of Endocrinology, Guang'anmen Hospital, CACMS, Beijing
- Dr. ZHOU Yanyan, Institute of Chinese Materia Medica, CACMS, Beijing
- Dr. WANG Weihao, Institute of Chinese Materia Medica, CACMS, Beijing
- GOU Xiaowen, MSc, Department of Endocrinology, Guang'anmen Hospital, CACMS, Beijing
- YAO Chensi, MSc, Department of Endocrinology, Guang'anmen Hospital, CACMS, Beijing

# Published research papers related to TCM in 2024/25

Engineering 43 (2024) 159–172



Contents lists available at ScienceDirect

Engineering

journal homepage: [www.elsevier.com/locate/eng](http://www.elsevier.com/locate/eng)



Research  
Medical Engineering—Article

## Sanhan Huashi Formula and Its Bioactive Compounds Exert Antiviral and Anti-Inflammatory Effects on COVID-19



Chuanxi Tian <sup>a,b,\*</sup>, Hang Liu <sup>c,\*</sup>, Qian Wang <sup>d,#</sup>, Jinyue Zhao <sup>e,#</sup>, Chensi Yao <sup>f,#</sup>, Yanfeng Yao <sup>c</sup>, Xu Zhang <sup>g,h</sup>, Qinhai Ma <sup>i</sup>, Weihao Wang <sup>g</sup>, Yanyan Zhou <sup>g</sup>, Mengxiao Wang <sup>g</sup>, Xiaomeng Shi <sup>d</sup>, Xiangyan Li <sup>e</sup>, Shan Wang <sup>j</sup>, Yingying Yang <sup>j</sup>, Xiaowen Gou <sup>a</sup>, Lijuan Zhou <sup>a</sup>, Jingyi Zhao <sup>a</sup>, Li Wan <sup>a</sup>, Jiarui Li <sup>e</sup>, Stefanie Tiefenbacher <sup>k</sup>, Juntao Gao <sup>l</sup>, Rudolf Bauer <sup>k,\*</sup>, Min Li <sup>m,\*</sup>, Xiaolin Tong <sup>a,\*</sup>

<sup>a</sup> Institute of Metabolic Diseases, Guang'anmen Hospital, China Academy of Chinese Medical Sciences, Beijing 100053, China

<sup>b</sup> Graduate School, Beijing University of Chinese Medicine, Beijing 100029, China

<sup>c</sup> Center for Biosafety Mega-Science, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan 430071, China

<sup>d</sup> State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Sciences, Peking University, Beijing 100191, China

<sup>e</sup> Graduate School, Changchun University of Chinese Medicine, Changchun 130117, China

<sup>f</sup> Department of Endocrinology, The First Affiliated Hospital of Zhejiang Chinese Medicine University, Hangzhou 310006, China

<sup>g</sup> Institute of Chinese Materia Medica, China Academy of Chinese Medical Sciences, Beijing 100700, China

<sup>h</sup> College of Pharmacy, Hebei Medical University, Shijiazhuang 050017, China

<sup>i</sup> State Key Laboratory of Respiratory Disease & National Clinical Research Center for Respiratory Disease & Guangzhou Institute of Respiratory Health, The First Affiliated Hospital of Guangzhou Medical University, Guangzhou 510120, China

<sup>j</sup> National Center for Integrative Medicine, China-Japan Friendship Hospital, Beijing 100029, China

<sup>k</sup> Institute of Pharmaceutical Sciences, University of Graz, Graz 8010, Austria

<sup>l</sup> Institute for TCM-X, MOE Key Laboratory of Bioinformatics/Bioinformatics Division, Beijing National Research Center for Information Science and Technology, Center for Synthetic & Systems Biology, Tsinghua University, Beijing 100084, China

<sup>m</sup> Molecular Biology Laboratory, Guang'anmen Hospital, China Academy of Chinese Medical Sciences, Beijing 100053, China

*We work for  
tomorrow*



June 2019 © University of Graz, Press & Communication

*Thank you very much for your attention*  
非常感谢您的关注



New Address: **Beethovenstrasse 8, 8010 Graz, Austria,**

[rudolf.bauer@uni-graz.at](mailto:rudolf.bauer@uni-graz.at)