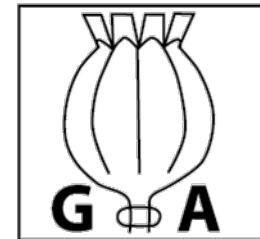


eSymposium

Society for Medicinal Plant and Natural Product Research



Estragole

Occurrence, toxicity and regulation
of the alkenylbenzene estragole in
food, feed and botanical drugs



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23. February 2026, 13:30 – 17:15
online

Introduction

Dear colleagues,

Estragole, a substance found in herbal medicinal products that form the core of phytotherapy, is in the focus of new regulatory measures. As an allylphenol, estragole belongs to a group of secondary plant compounds that are widespread in the plant kingdom and occur in numerous medicinal and aromatic plants, as well as in fruits and vegetables. Sources of exposure accordingly include food, food flavourings and foodsupplements, but also herbal medicinal products. Given that genotoxic effects have been described in toxicological models, some allylphenols have been subject to safety assessment and regulation in food and medicinal products already in the past.

Both the HMPC, which revised its earlier view on herbal medicinal products containing estragole in 2022, as the EFSA, which published a new draft scientific opinion in 2025, based their assessments on data existing so far, while in the meantime new scientific evidence has evolved, both by new toxicological studies increasingly substantiating the evidence for a thresholded effect of this compound, as by new exposure data for the general population. This symposium aims, based on lectures of leading researchers in the field, at integrating earlier assessments and new data, to allow a new, state of the art perspective on the risk profile of medicinal, aromatic and nutritional plants containing estragole.

Monday, 23rd February, 2026

13:30 - 13:40 Welcome and Introduction

Michael Heinrich, UCL School of Pharmacy, University of London, London, UK
President of GA Society
Jörg Fahrer RPTU, Kaiserslautern (D)

Session I

Chairs: Stefan Gafner, Burlington (USA) and Michael Heinrich, London (GB)

13:30 - 14:00 Determination of Pyrrolizidine Alkaloids (PAs) in tea and honey with automated SPE clean-up and ultra-performance liquid chromatography/tandem mass spectrometry

Oliver Keuth, Münster (D)

14:00 - 14:30 Novel aspects in PA occurrence: Seasonal variation of levels and transfer from feed to cow's milk

Patrick P.J. Mulder, Wageningen (NL)

14:30 - 15:10 Effects of pesticides on the genotoxicity of pyrrolizidine alkaloids

Ad Peijnenburg, Wageningen (NL)

15:00 - 15:15 Coffee Break

Session II

Chairs: Karen Nieber, Leipzig (D) and Jürgen Reichling, Heidelberg (D)

15:15 - 15:45 Uptake, organ-specific metabolism and characterization of hepatotoxicity of the pyrrolizidine alkaloid senecionine

Stefanie Hessel-Pras, Berlin (D)

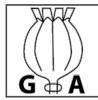
15:45 - 16:15 Assessment of the genotoxic potency of PA N-oxides: role of oxygen supply

Stefan Pfuhrer, Cincinnati (USA)

16:15 - 16:45 Relative potency factors (RPFs) of pyrrolizidine alkaloid N-oxides at realistic low dose levels

Frances Widjaja, Wageningen (NL)

13:30	Welcome	Prof. Dr. Michael Heinrich UCL School of Pharmacy, University of London, London, UK President of GA Society
13:35	Introduction	Prof. Dr. Jörg Fahrer, RPTU Kaiserslautern-Landau, Germany
13:40	Occurrence of Estragole and related Alkenylbenzenes in plant with emphasis on food plants	Prof. Dr. Michael Wink, Institute for Pharmacy and Molecular Biotechnology, University Heidelberg, Heidelberg, Germany
14:10	Biomarkers of exposure to estragole	Bernhard Monien German Federal Institute for Risk Assessment, Berlin, Germany
14:40	Concentration-response studies on the genotoxic potential of estragole	Prof. Dr. Jörg Fahrer, RPTU Kaiserslautern-Landau, Germany
15:10	Break	
15:30	Quantitative approaches for assessing the genotoxicity of estragole	Prof. Dr. George Johnson Swansea University, Wales, UK
16:00	Regulation of estragole in Food, HMP and Cosmetics: status and challenges	Dr. Hartwig Sievers, Phytolab GmbH & Co. KG, Vestenbergsgreuth, Germany
16:30	Round Table	Prof. Dr. Dieter Schrenk, RPTU Kaiserslautern-Landau, Germany
17:00	Summary/Conclusion	Prof. Dr. Jörg Fahrer, RPTU Kaiserslautern-Landau, Germany



Organization

Society for Medicinal Plant and Natural Product Research



Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung e.V.

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Food Chemistry and Toxicology, University of
Kaiserslautern
Gottlieb-Daimler-Straße
67663 Kaiserslautern

Registration

This Seminar is offered free of charge.

Please use [this link](#) to register. You will receive a Zoom link via email afterwards – please check your spam-folder. If you don't receive any link, please contact events@g-a-online.org (Cornelia Kern).

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