

**Title:** Mykotoxine in der Nahrungskette - Sicherheitsgefahren, Nachweisverfahren, und Bekämpfungsverfahren  
*Mycotoxins in the Food Chain – Safety Hazard; Detection Methods and Elimination Techniques*

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**Event:** Seminar, Stellenbosch, South Africa, 26 February 2013

**Brief description:**

Mycotoxins are toxic secondary metabolites that are produced by fungi and attack agricultural crops such as corn, peanuts and soya beans. Due to their poisonous properties, mycotoxins represent a serious health risk: food and animal feed contaminated with mycotoxins can damage the liver, kidneys, digestive system, central nervous system and immune system of humans and livestock. The Food and Agriculture Organization estimates that around a quarter of the world's harvest is contaminated with mycotoxins. That is why it is important to reduce the level of mycotoxin contamination in agricultural products and, in doing so, increase the safety of food and animal feed – which is particularly challenging in southern Africa due to the hot climate and distribution of rainfall. For this purpose, a German-South African workshop on the topic of mycotoxins will be taking place in South Africa in February 2013. The aim of the workshop is not only to exchange the latest scientific findings and data, but also to define the need for research and to develop a joint strategy for reducing mycotoxin contamination.

Six South African scientists participated in the first organisational meeting held at Münster University in October 2012 to prepare the subject matter for the two-day workshop that is to take place at the *Stellenbosch Institute of Advanced Study (STIAS)* in February.

The focus was placed on the entire food chain: from cultivation to storage – the speakers cover all areas. The workshop will not only deal with the fundamental problems of food safety, but also focus on specific areas, such as the development of resistant seeds, the advancements made in recognising the structure of masked mycotoxins and the effect of mycotoxin contamination on the general provision of corn and peanuts as staple foods. The second day is dedicated to practical problems such as the effect cultivation methods have on the formation of mycotoxins, the possibilities of fast recognition and the destruction of mycotoxins using

environmentally friendly technical, microbiological and chemical methods. Last but not least, it also deals with how the spread of mycotoxins can be prevented in the further processing of foodstuffs. Topics relating to mycotoxins will also be dealt with, such as analytics, toxicology, biomarkers (i.e. measurable products from organisms that can be used as indicators for mycotoxin contamination), measures that can be taken by breeders, mycotoxin prevention, legal regulations and recommendations for farmers.