Effect of Roasting on the Development of Aroma-relevant Compounds in Cold-pressed Argan oil as Marker for the Sensory Quality

Bernadette Sinning¹, <u>Bertrand Matthäus¹</u>, Ludger Brühl¹, Zoubida Charrouf²

¹Max Rubner-Institut, Institute for Safety and Quality of Cereals, Detmold, Germany

²University Mohammed V-agdal, Faculty of Sciences, Rabat, Maroc

Argan oil, a basic ingredient of the Berber's diet is becoming more and more popular as high cuisine cold-pressed edible oil in European countries. One reason is the typical roasty taste and smell of the oil caused by roasting of the kernels before oil extraction. It is known that aroma-relevant Maillard-reaction products such as pyrazines but also aldehydes or ketones contribute to the aroma of oil from roasted argan seeds, but it is unclear which compounds contribute to which extent. Additionally it is unknown how the compounds develop during the roasting process. Argan oil from goat digested seeds has a specific Roquefort chesse like taste and smell. The key compounds of this off-flavour are also unknown.

The paper presents results from the analysis of aroma-relevant compounds from coldpressed edible argan oils and shows specific key compounds for oils from roasted and goat-digested seeds. Also a correlation between the sensory evaluation of argan oil samples tested by experienced tasters and the results from the analysis of the aromarelevant compounds are shown.