

Key Aroma Compounds of Soluble Coffee

D. BASSOLI, R. S. F. SILVA

Companhia Iguaçu de Café Solúvel S.A., Research and Development Department,
BR-369 km 88 C. Procópio, Brazil
Depto. de Ciência e Tecnologia de Alimentos, Universidade Estadual de Londrina,
Rodovia Celso Garcia Cid km 6, Londrina, Brazil

SUMMARY

Relatively few data on the volatile composition and sensorial relevant fraction of soluble coffee has been published, reinforcing the importance of a better understanding of its aroma composition, obtaining more details on the subtle differences of applicable productive techniques and among products. Considering an approach that understands both analytical and sensorial techniques, this work aims to identify the main components of soluble coffee aroma and their sensorial impacts, enabling the focused development of technological alternatives for aroma enhancement, potentially reflecting on the economics of its commercialization. The volatile components were isolated via HS-SPME technique and then identified by GC-MS. The GC-FID/O technique was used for the volatiles qualitative sensorial description by the Free Choice Profile method. A comparison with data obtained using an electronic nose proved it to be a functional tool to classify instant coffees. On the seven samples tested, up to 414 volatile compounds were analytically detected, being 24 quantified, 132 detected on the sensorial analysis, indicated to be of sensorial impact, amidst which 22 were quantified.