

Title Characterisation of the aroma of green Mexican coffee and identification of mouldy/earthy defect

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Abstract

The aromas of a reference green Mexican coffee (Arabica) and of a coffee from the same origin, but having a pronounced earthy/mouldy off-taint, were characterised. From comparison of the two aroma profiles, the compounds causing the defect were detected by gas chromatography olfactometry, isolated and concentrated by preparative bi-dimensional gas chromatography, and characterised by gas chromatography-mass spectrometry. Six compounds participated in the off-flavour. Geosmin, 2-methylisoborneol, 2,4,6-trichloroanisole were found to be the main culprits, while three methoxy pyrazines (2-methoxy-3-isopropyl/-3-sec-butyl/-3-isobutyl pyrazine) contributed to a lesser extent to the earthy/green undertone. The occurrence of the off-flavour could tentatively be linked to post-harvest drying.