

SUPPLEMENTARY MATERIAL

EVALUATION OF ROASTING EFFECT ON GREEN TEA SELECTED VOLATILE FLAVOR COMPOUNDS AND PYRAZINES CONTENT BY HS-SPME GC-MS

Roberto Gotti¹, Alberto Leoni¹, Jessica Fiori,²

¹ Department of Pharmacy and Biotechnology, University of Bologna, Via Belmeloro 6, 40126 Bologna, Italy

² Department of Chemistry “G. Ciamician”, University of Bologna, Via Selmi 2, 40126 Bologna, Italy

Table S1 List of the commercially available green teas and black teas.

<i>Green tea</i>			<i>Black tea</i>
Bancha	Jasmine	Dong yang	Ceylon
Bancha Hojicha	White monkey	Mao feng	Pagoda
Sencha Ariake	Jade needle	Xiang	
Sencha Fukujyu	Pagoda	Xialongao	
Ceylon	Chungmee	Fkagoza	
Gun powder	Mu dan	Silvery	
Genmaicha	Lu Mu Dan		
Osmanthus	Gyokuro		

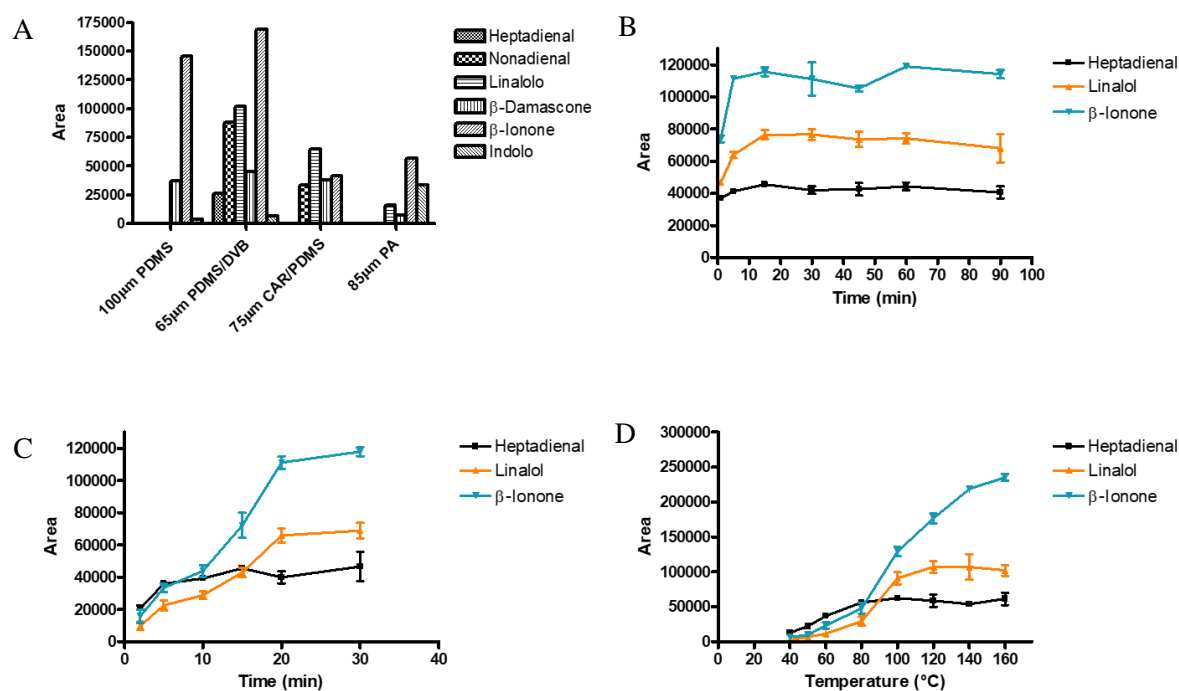


Figure S1. HS-SPME optimization. A) Effects of the fibre extraction efficacy on the peak area of six representative VOCs. HS-SPME Conditions: sample 1 mL of tea infusion, extraction time 20 min, temperature 100 $^{\circ}$ C, stirring rate 400 rpm. The applied GC-MS conditions are described in the Experimental section. Effects of HS-SPME equilibration time (B), extraction time (C) and temperature (D) on the peak area of three representative VOCs. HS-SPME Conditions: sample 1 mL of tea infusion, variable extraction time and temperature, stirring rate 400 rpm. The applied GC-MS conditions are described in the Experimental section.

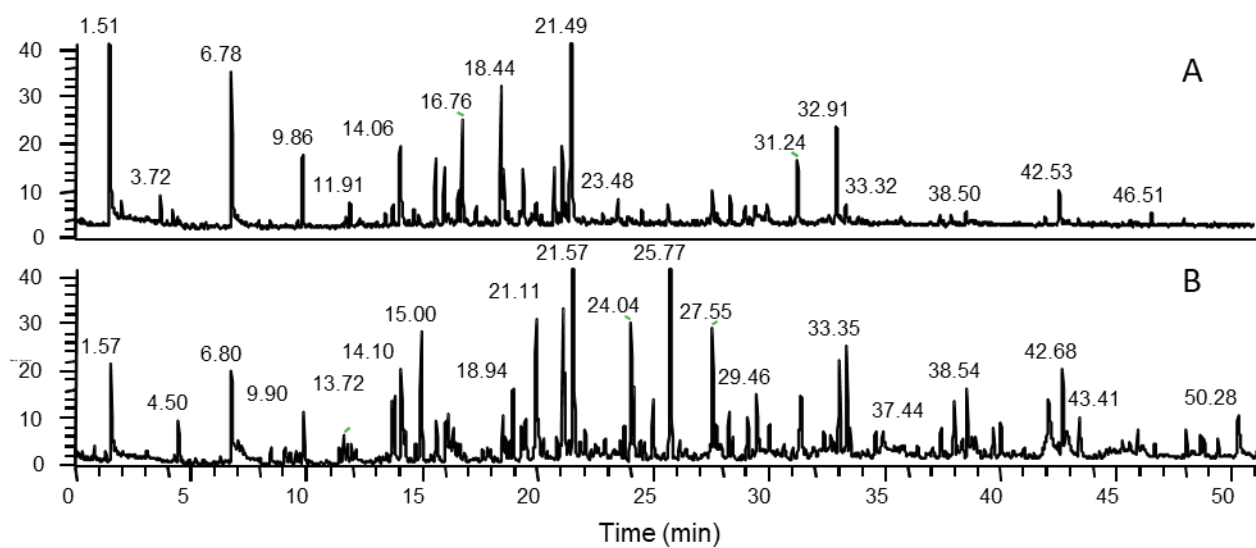


Figure S2 TIC chromatograms on ZB5 column of a representative tea (Bancha) before (A) and after (B) roasting. Chromatographic conditions: initial 40°C (hold time: 1 min), then ramped by 3°C/min to 220°C (hold time: 10 min), helium gas flow rate 1 mL/min.