

# Proton Nuclear Magnetic Resonance ( $^1\text{H}$ NMR) Metabolic Profiles Discriminate two Monovarietal Extra Virgin Olive Oils, Cultivars Arbequina and Koroneiki, with Different Geographical Origin

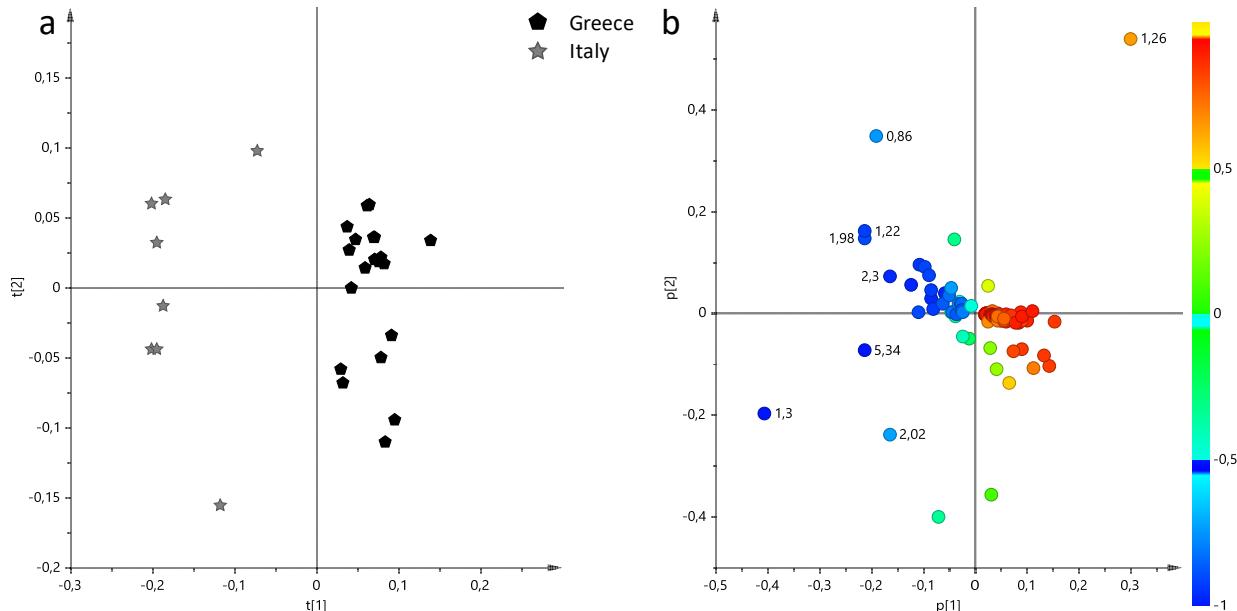
Federica Angile<sup>1</sup>, Laura Del Coco<sup>1</sup>, Chiara Roberta Girelli<sup>1</sup>, Francesca Calò<sup>1</sup>, Lucia Mazzi<sup>2</sup>, Francesco Paolo Fanizzi<sup>1,\*</sup>, Gaetano Alessandro Vivaldi<sup>3</sup> and Salvatore Camposeo<sup>3,\*</sup>

<sup>1</sup> Department of Biological and Environmental Sciences and Technologies, University of Salento, Prov.le Lecce-Monteroni, 73100 Lecce, Italy

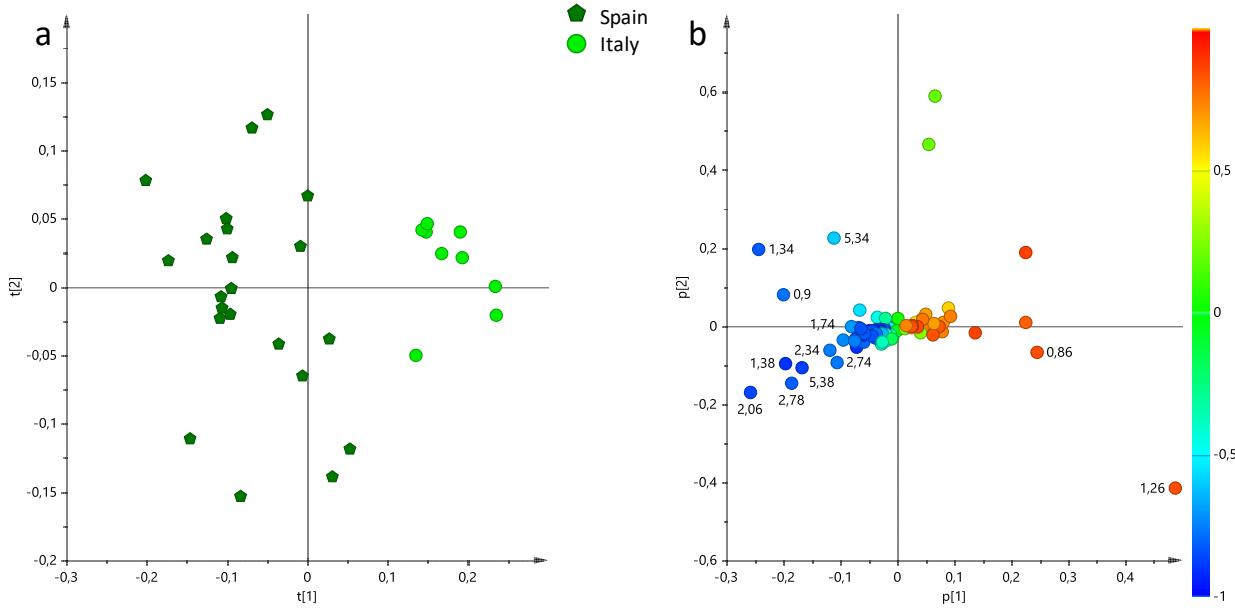
<sup>2</sup> Certified Origins Italia Srl, Località Il Madonnino, 58100 Grosseto, Italy;

<sup>3</sup> Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, 70125 Bari, Italy

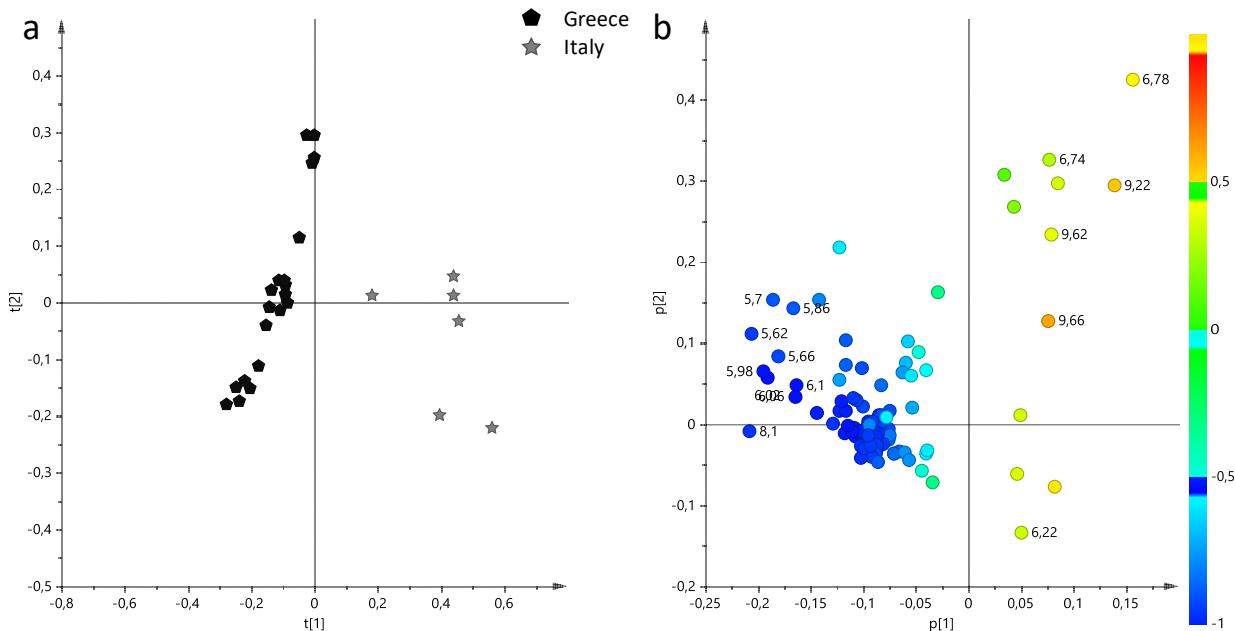
\* Correspondence: fp.fanizzi@unisalento.it (F.P.F.); Tel.: +39-0832-299265; salvatore.camposeo@uniba.it (S.C.); Tel.: +39-080-5442982



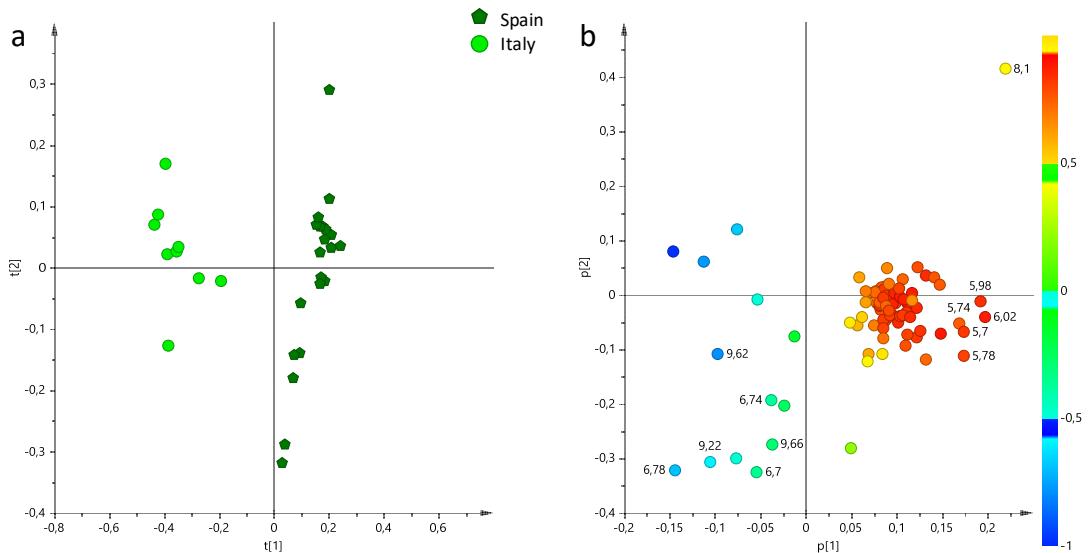
**Figure S1.** (a)  $t[1]/t[2]$  PCA score plot (3 PCs,  $R^2X = 0.903$ ,  $Q^2 = 0.810$ ) performed on major components (BUCKET-1) for Koroneiki olive oil samples obtained from Greece and Italy, (b) PCA loading plot colored according to the correlation-scaled loading vector ( $p(\text{corr})$ ). The variables indicated the chemical shift value (ppm) in the  $^1\text{H}$  NMR spectrum.



**Figure S2.** (a)  $t[1]/t[2]$  PCA score plot (3 PCs,  $R^2X = 0.870$ ,  $Q^2 = 0.696$ ) performed on major components (BUCKET-1) for Arbequina olive oil samples obtained from Spain and Italy, (b) PCA loading plot model colored according to the correlation-scaled loading vector ( $p(\text{corr})$ ). The variables indicated the chemical shift value (ppm) in the  $^1\text{H}$  NMR spectrum.



**Figure S3.** (a)  $t[1]/t[2]$  PCA score plot (2 PCs,  $R^2X = 0.798$ ,  $Q^2 = 0.744$ ) performed on minor components (BUCKET-2) for Koroneiki olive oil samples obtained from Greece and Italy, (b) PCA loading plot colored according to the correlation-scaled loading vector ( $p(\text{corr})$ ). The variables indicated the chemical shift value (ppm) in the  $^1\text{H}$  NMR spectrum.



**Figure S4.** (a)  $t[1]/t[2]$  PCA score plot (2 PCs,  $R^2X = 0.727$ ,  $Q^2 = 0.619$ ) performed on minor components (BUCKET-2) for Arbequina olive oil samples obtained from Spain and Italy, (b) PCA loading plot model colored according to the correlation-scaled loading vector ( $p(\text{corr})$ ). The variables indicated the chemical shift value (ppm) in the  $^1\text{H}$  NMR spectrum.