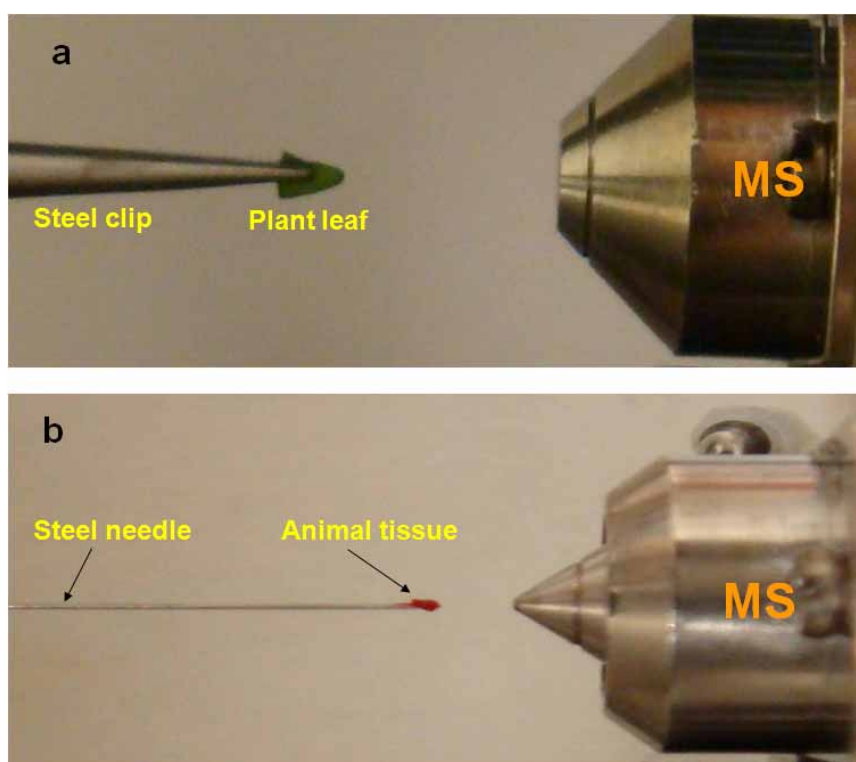


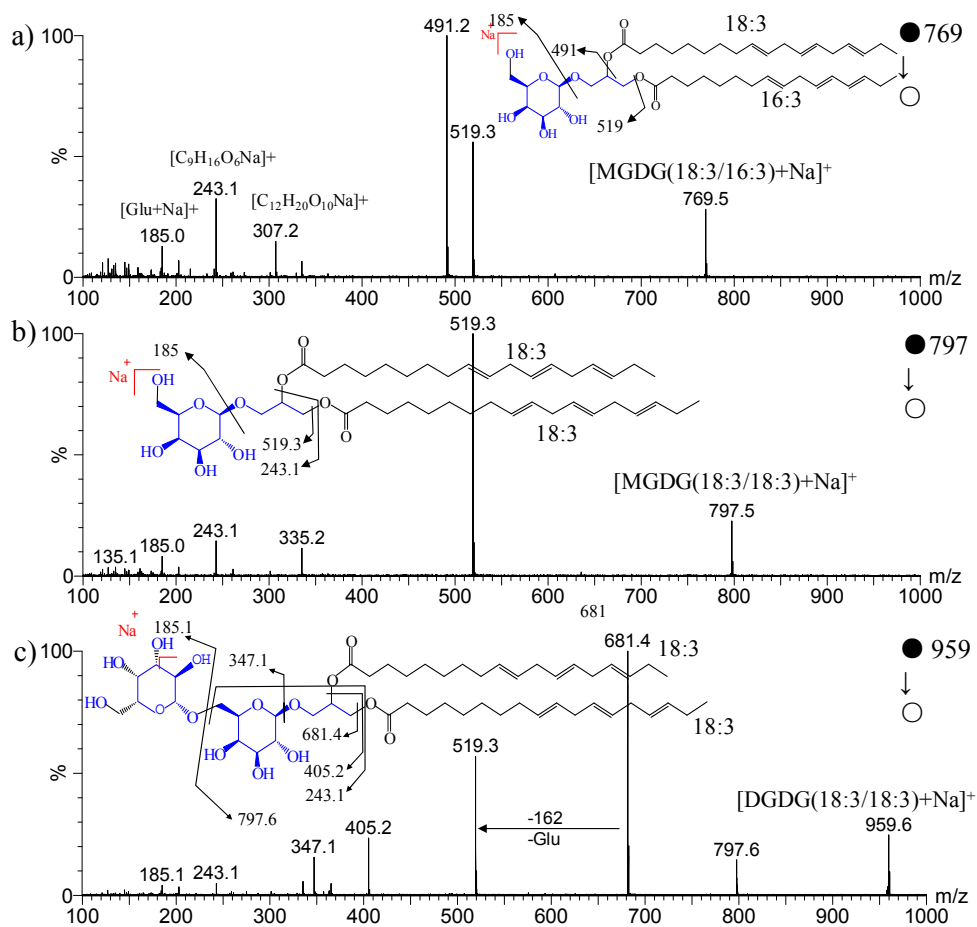
## Supporting Information

# Direct Ionization of Biological Tissue for Mass Spectrometric Analysis

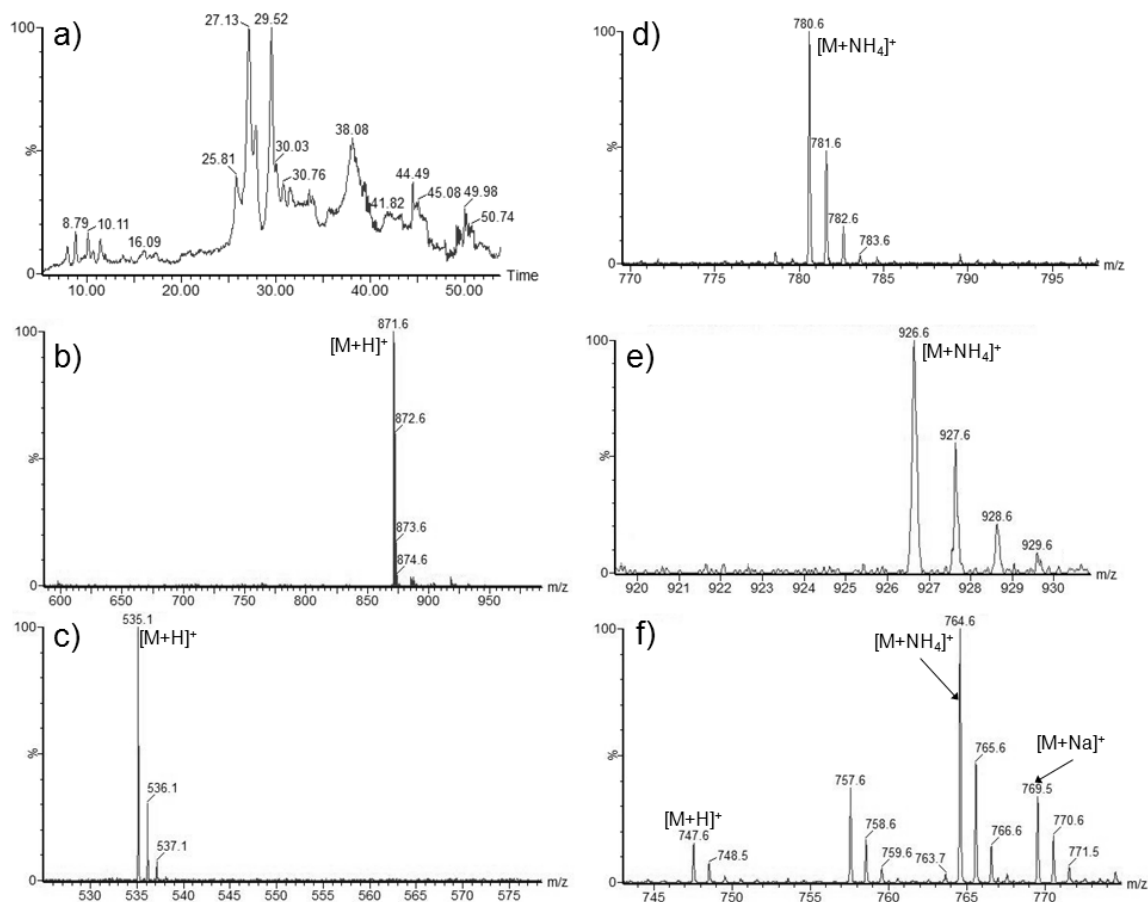
*Bin Hu, Ying- Han Lai, Pui-Kin So, Huanwen Chen,\* and Zhong-Ping Yao\**



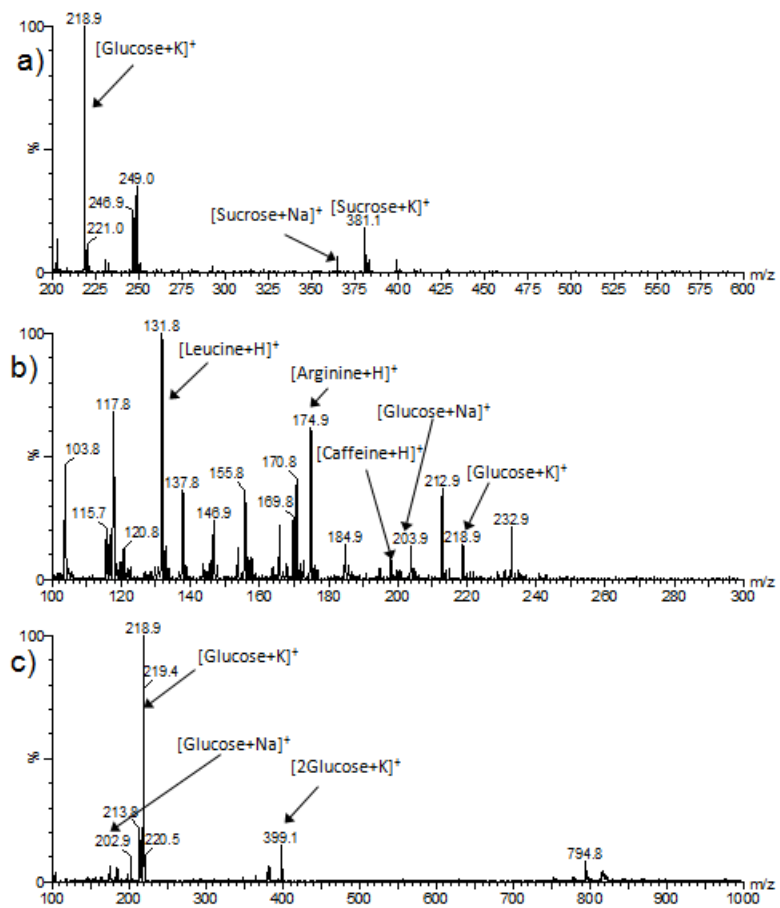
**Figure S1.** Photos of experimental setup for DI analysis of plant tissue (a) and animal tissue (b).



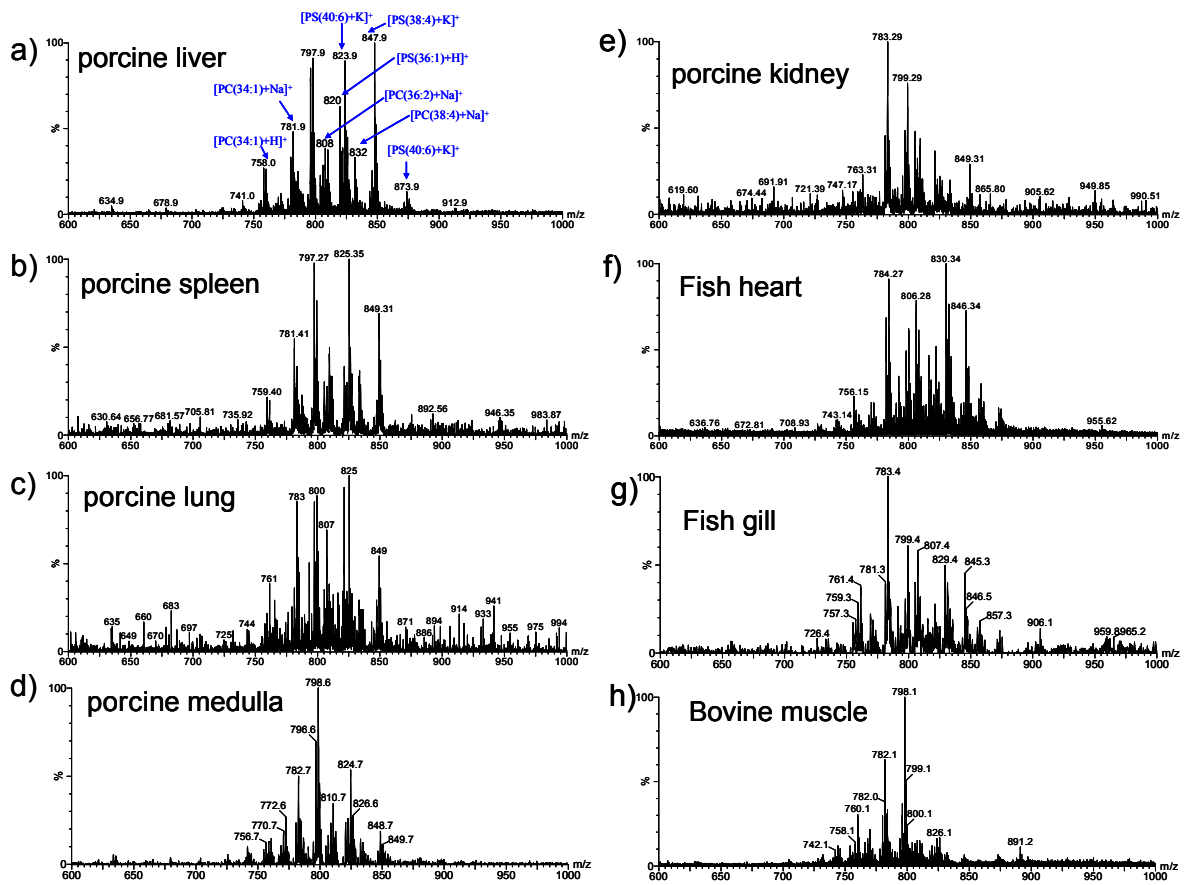
**Figure S2.** MS/MS spectra of major ions observed in DI spectrum of the spinach leaf.



**Figure S3.** Total ion chromatogram (a) and mass spectrum of phenophytina a (retention time ( $t_r$ ): 38.1 min) (b), pyropheophorbide a ( $t_r$ : 20.0 min) (c), OPDA/16:2 MGD or 18:2/dnOPDA MGD ( $t_r$ : 30.8 min) (d), DGDG (34:6) ( $t_r$ : 25.8 min) (e), and MGDG (18:3/16:3) ( $t_r$ : 27.9 min) (f) obtained by LC-MS analysis of the spinach extract.



**Figure S4.** DI spectra of (a) chilli, (b) tea, and (c) radish root acquired on the triple-quadrupole mass spectrometer with methanol/water (1/1) as the added solvent.



**Figure S5.** DI spectra of various animal tissues with methanol/water (1/1) as the added solvent. Spectra b, c and d were acquired on the triple-quadrupole mass spectrometer.