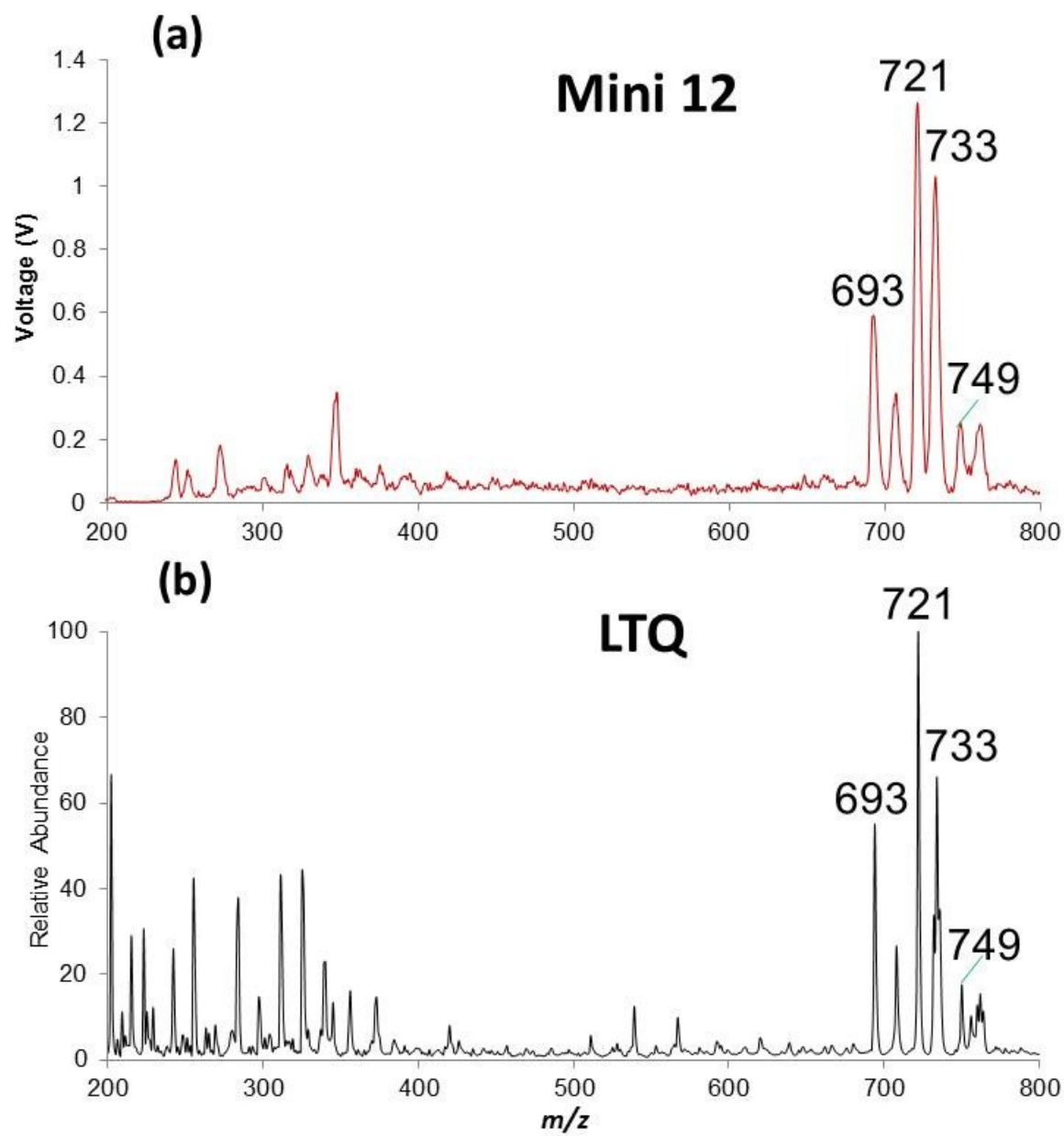
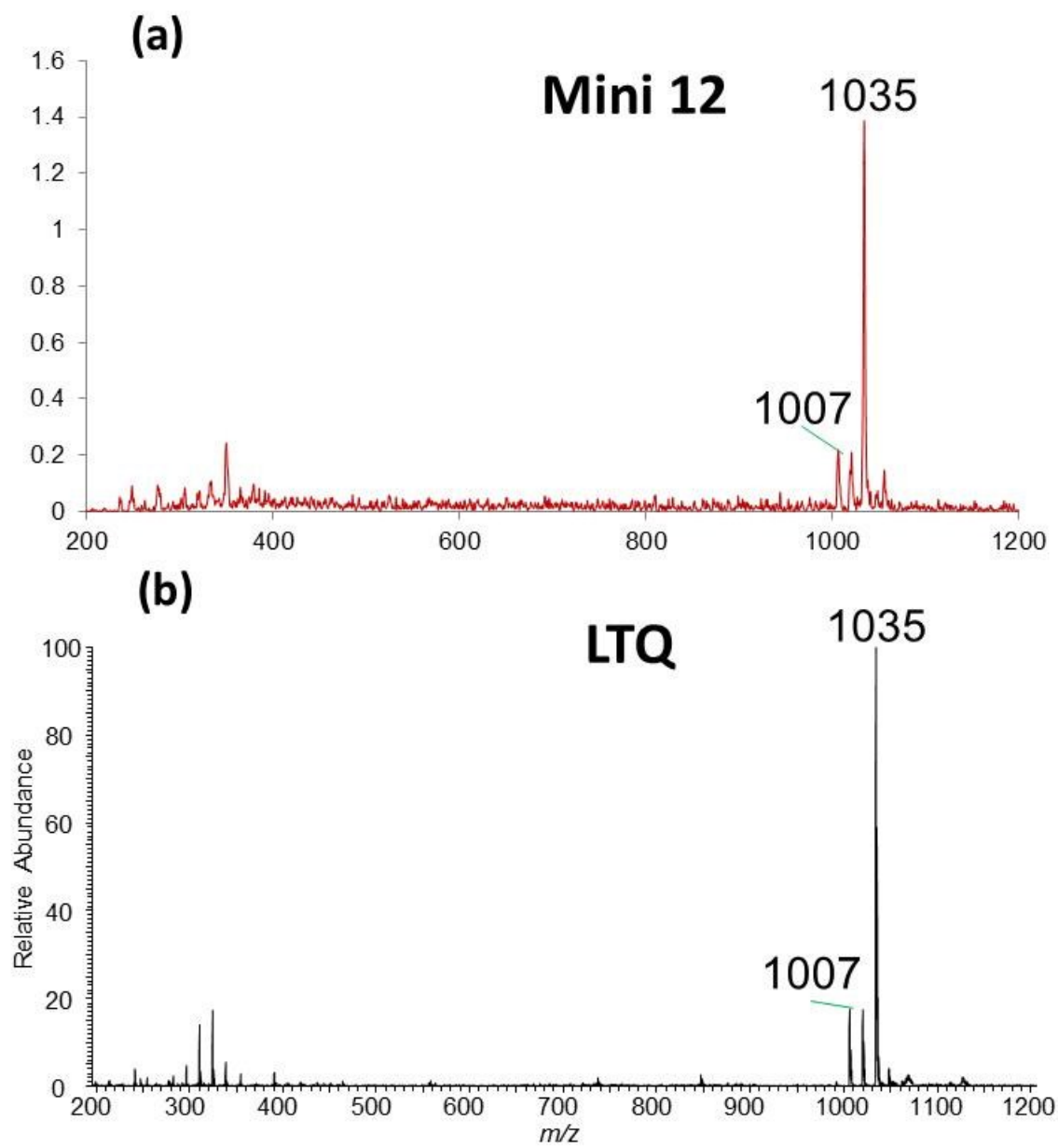


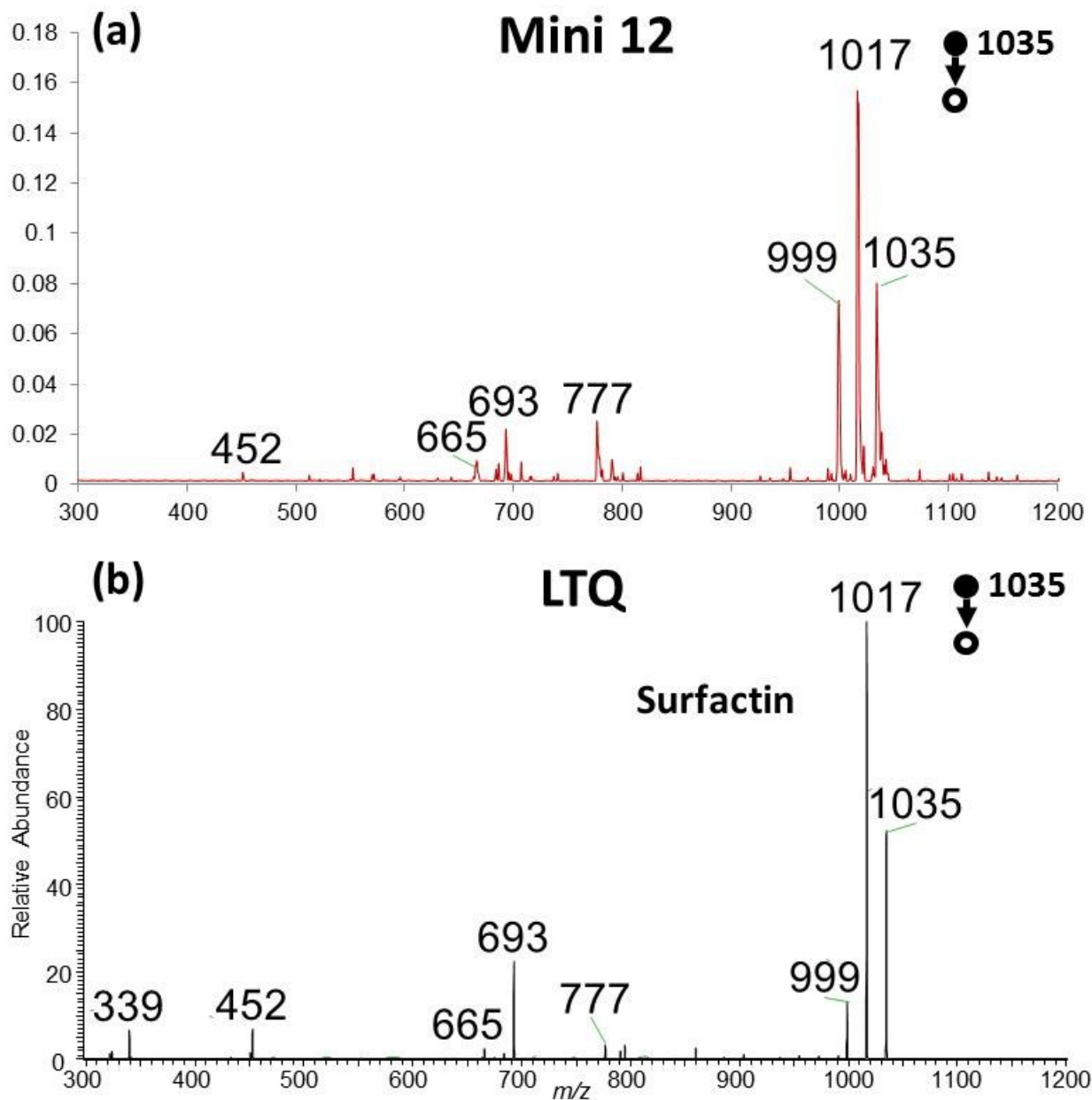
**Figure TOC:** Mass spectral profiles in the lipid region for 8 species of bacteria analyzed on the Mini 12. Six spectra from each species were chosen for normalization. All 48 spectra were normalized by total ion current, and the signal within each set of six was subsequently averaged to give the spectra shown.



**Figure S1.** Mass spectra of *S. aureus* obtained in the negative ion mode using paper spray and a (a) miniature mass spectrometer, (b) benchtop linear ion trap mass spectrometer.



**Figure S2.** Mass spectra of *B. subtilis* obtained in the negative ion mode using paper spray and a (a) miniature mass spectrometer, (b) benchtop linear ion trap mass spectrometer.



**Figure S3.** Negative ion mode MS/MS of  $m/z$  1035 in *B. subtilis* using paper spray and a (a) miniature mass spectrometer, (b) benchtop linear ion trap mass spectrometer.