JOURNAL OF LIMNOLOGY

DOI: 10.4081/jlimnol.2016.1337

SUPPLEMENTARY MATERIAL

Sedimentary lipid biomarkers in the magnesium rich and highly alkaline Lake Salda (south-western Anatolia)

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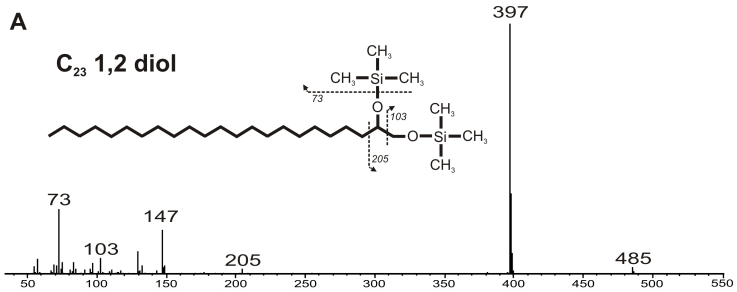
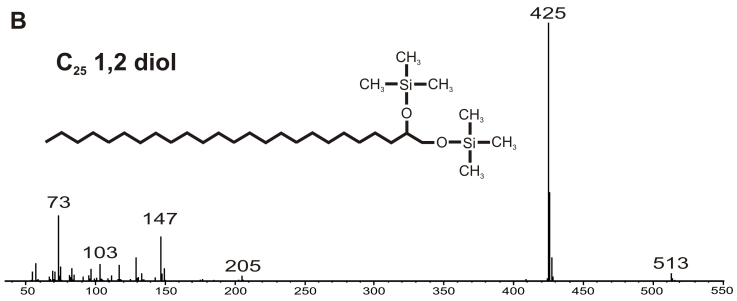
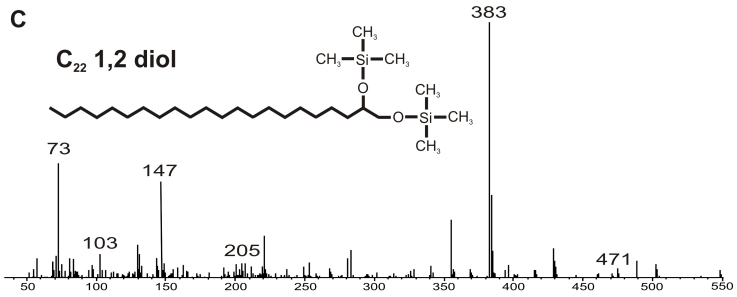
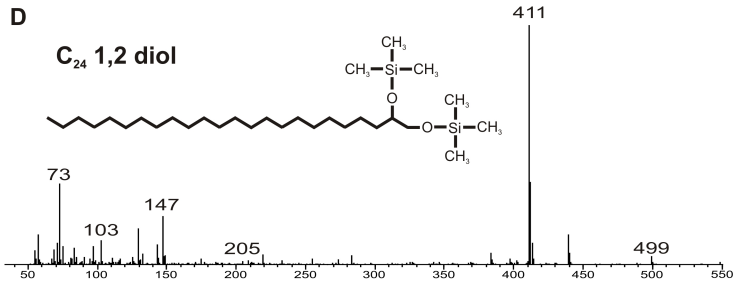


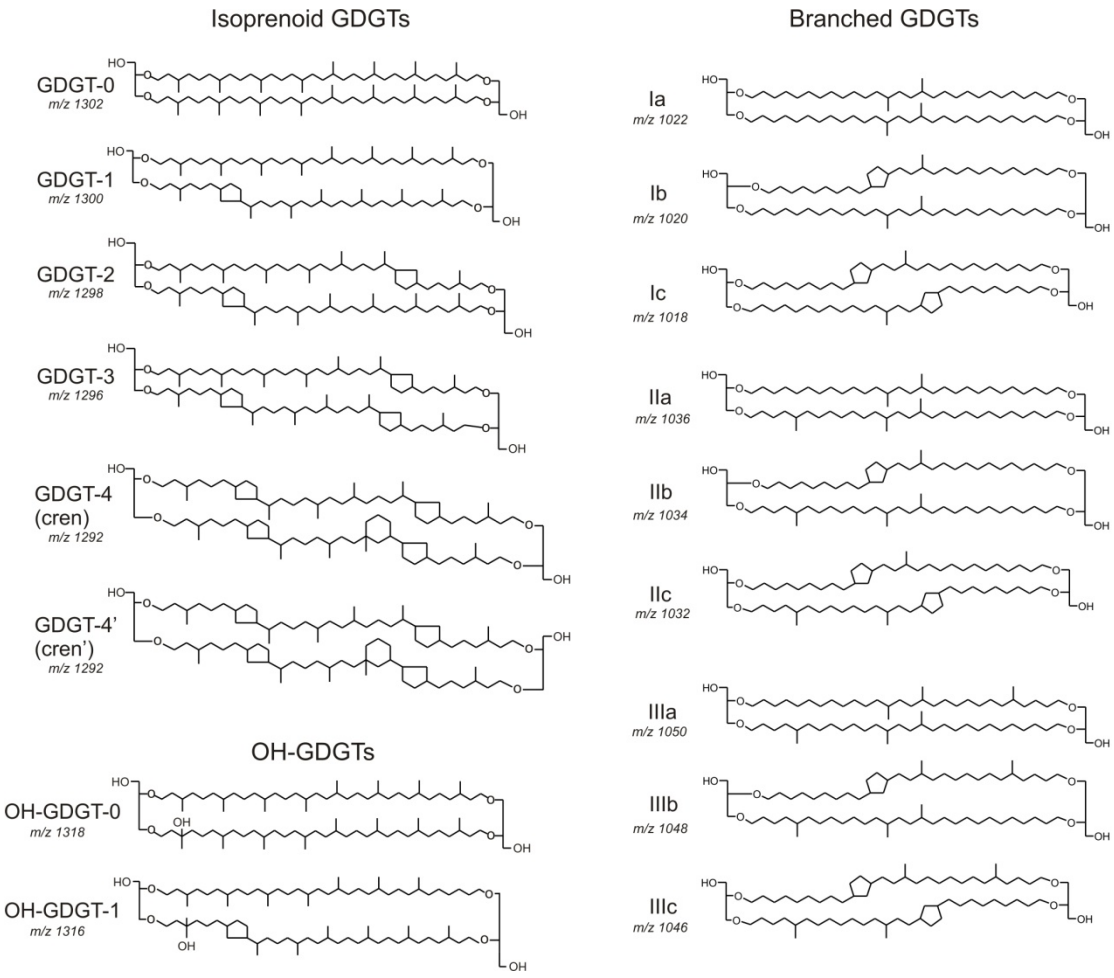






Name	M+	M-15	M-103
C_{20} 1,2 diol - TMSi	458	443	355
C_{21} 1,2 diol - TMSi	472	457	369
C_{22} 1,2 diol - TMSi	486	471	383
C_{23} 1,2 diol - TMSi	500	485	397
C_{24} 1,2 diol - TMSi	514	499	411
C_{25} 1,2 diol - TMSi	528	513	425

Supplementary Fig. 1. Mass spectra of C_{23} 1,2 diol (a) and C_{25} 1,2 diol (b), and tentatively identified C_{22} 1,2 diol (c) and C_{24} 1,2 diol (d) TMSi derivatives. Major fragmentations are shown in (a). All TMSi derivatives have common fragments with m/z 73 $[(CH_3)_3Si]^+$, m/z 103 $[CH_2O(CH_3)_3Si]^+$, m/z 147 $[(CH_3)_3SiOSi(CH_3)_2]^+$, which is characteristics for diols, and m/z 205 $[CH(CH_3)_3SiOCH_2OSi(CH_3)_3]^+$ caused by α-fragmentation of 1,2 diols.



Supplementary Fig. 2. Molecular structures and m/z diagnostic values $[M+H]^+$ of the detected GDGTs. See Liu *et al.* (2012b) for a detailed approach on the molecular structures of glycerol ether lipids.