

**SUPPLEMENTARY DATA 3**—Calculated lipid- and group-specific proportions (given in wt%) and their mean compound-specific carbon isotopic values. The sulfate-reducer lipids are included in the group of overall bacterial lipids, but are also separately highlighted in the lowermost box. d lam = distinctly laminated, f lam = faintly laminated, dend = dendritic, sed = sediment, sat. = saturated, FA = fatty acids, MAGE = mono-*O*-alkyl glycerol ethers, tr = trace amounts, n.d. = not detected, n.m. = not measurable.

Site	Tiarei				Mara'a											
	TAH 10		TAH 15		TAH 11		TAH 12		TAH 13		TAH 14		TAH 19		TAH 9	
Sample	dend		d lam		f lam		f lam		f lam		d lam		d lam		sed	
Type of sample	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)	wt. %	$\delta^{13}\text{C}$ (‰)
short-chain sat. FAs C <sub>14-19</sub>	29	-20	31	-20	35	-20	49	-19	49	-19	33	-19	33	-20	47	-22
C <sub>18:1<math>\omega</math>7</sub> , C <sub>18:1<math>\omega</math>9</sub>	4	<i>n.m.</i>	3	<i>n.m.</i>	1	<i>n.m.</i>	4	<i>n.m.</i>	n.d.	<i>n.m.</i>	3	<i>n.m.</i>	10	-20	5	<i>n.m.</i>
Brassicasterol, Dinosterol	2	-21	3	-22	5	<i>n.m.</i>	2	<i>n.m.</i>	2	-20	3	-22	6	<i>n.m.</i>	1	-21
<b>SUM, putative source: marine organisms</b>	<b>36</b>		<b>37</b>		<b>41</b>		<b>55</b>		<b>51</b>		<b>39</b>		<b>49</b>		<b>54</b>	
long-chain <i>n</i> -FAs C <sub>20-30</sub>	17	-22	17	-22	8	<i>n.m.</i>	14	-20	21	-20	23	-23	31	-21	5	-21
long-chain <i>n</i> -alcohols C <sub>20-28</sub>	14	-29	8	-26	7	<i>n.m.</i>	1	<i>n.m.</i>	1	<i>n.m.</i>	5	-24	2	<i>n.m.</i>	15	-26
<b>SUM, putative source: higher land plants</b>	<b>31</b>		<b>25</b>		<b>15</b>		<b>15</b>		<b>22</b>		<b>28</b>		<b>33</b>		<b>20</b>	
<i>iso/ai</i> FAs C <sub>15-19</sub>	13	-19	21	-19	21	-19	26	-19	21	-19	19	-19	11	<i>n.m.</i>	4	-22
<i>iso</i> -FAs C <sub>15-19</sub>	10	-18	16	-19	14	-17	19	-17	15	-17	14	-18	9	<i>n.m.</i>	3	-20
<i>anteiso</i> -FAs C <sub>15-19</sub>	3	-21	5	-19	7	-21	7	-21	6	-21	5	-20	2	<i>n.m.</i>	1	-23
10-Me-C <sub>16:0</sub> FA	n.d.	<i>n.m.</i>	2	-17	n.d.	<i>n.m.</i>	n.d.	<i>n.m.</i>	2	-18	2	-17	1	<i>n.m.</i>	n.d.	<i>n.m.</i>
MAGEs	3	-23	6	-17	10	<i>n.m.</i>	1	<i>n.m.</i>	n.d.	<i>n.m.</i>	4	-18	<i>n.m.</i>	<i>n.m.</i>	1	-25
Bishomohopanol	3	-21	5	-21	7	-21	3	-22	2	-20	5	-21	5	<i>n.m.</i>	1	-22
<b>SUM, putative source: bacteria</b>	<b>19</b>		<b>33</b>		<b>39</b>		<b>30</b>		<b>25</b>		<b>31</b>		<b>17</b>		<b>6</b>	
Others (lipids without specification)	14		5		5		0		2		2		1		20	
<i>iso/ai</i> FAs C <sub>15 &amp; 17</sub>	10	-19	16	-19	18	-19	20	-19	18	-19	14	-19	8	<i>n.m.</i>	3	-22
<i>iso</i> -FAs C <sub>15 &amp; 17</sub>	7	-18	11	-19	11	-17	13	-17	12	-17	9	-18	6	<i>n.m.</i>	2	-20
<i>anteiso</i> -FAs C <sub>15 &amp; 17</sub>	3	-21	5	-19	7	-21	7	-21	6	-21	5	-20	2	<i>n.m.</i>	1	-23
10-Me-C <sub>16:0</sub> FA	n.d.	<i>n.m.</i>	2	-17	n.d.	<i>n.m.</i>	n.d.	<i>n.m.</i>	2	-18	2	-17	1	<i>n.m.</i>	n.d.	<i>n.m.</i>
MAGEs	3	-23	6	-17	10	<i>n.m.</i>	1		n.d.	<i>n.m.</i>	4	-18	n.d.	<i>n.m.</i>	1	-25
<b>SUM, putative source: sulfate-reducing bacteria</b>	<b>13</b>		<b>24</b>		<b>28</b>		<b>21</b>		<b>20</b>		<b>20</b>		<b>9</b>		<b>4</b>	