

Supporting information

Myxotyrosides A and B, Unusual Rhamnosides from *Myxococcus* sp.

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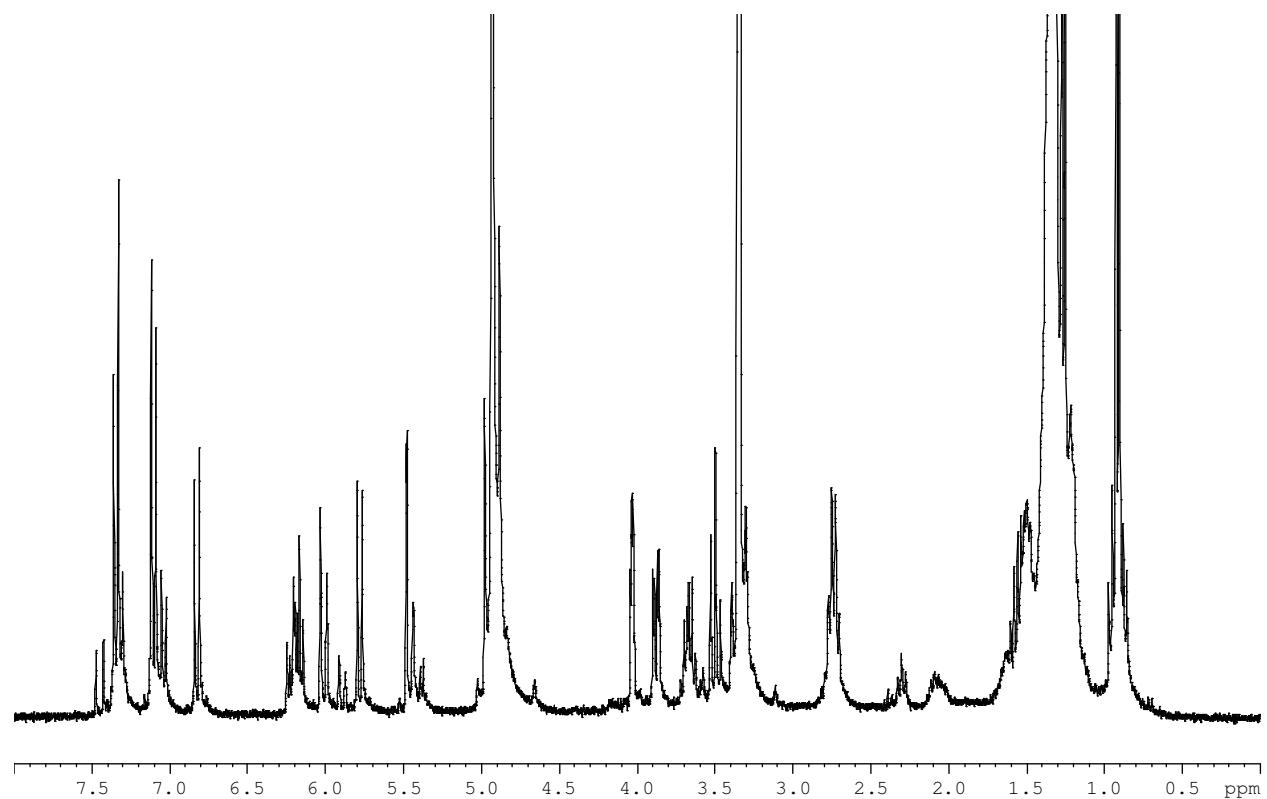
S1. NMR Spectroscopic Data (300MHz, CD₃OD) for myxotyrosides A and B

position	myxotyroside A (1)			myxotyroside B (2)	
	δ_{C} , mult	δ_{H} (J in Hz)	HMBC	δ_{C} , mult	δ_{H} (J in Hz)
1	121.8, CH	6.83, d (9.5)	1",2, 3	121.8, CH	6.83, d (9.9)
2	112.7, CH	5.77, d (9.5)	1, 4+8	112.7, CH	5.78, d (9.9)
3	131.1, qC			131.1, qC	
4+8	130.7, CH	7.34, d (8.8)	6, 2, 4+8, 5+7	130.7, CH	7.35, d (8.8)
5+7	117.7, CH	7.11, d (8.8)	6, 4+8, 5+7, 1	117.7, CH	7.10, d (8.8)
6	156.6, qC			156.5, qC	
1'	99.8, CH	5.48, d (1.8)	5', 6	99.8, CH	5.46, d (1.8)
2'	72.1, CH	4.04, dd (1.8, 3.3)	2', 3', 4', 5', 6'	72.0, CH	4.04, dd (1.8, 3.7)
3'	72.2, CH	3.88, dd (3.3, 9.5)	2', 5', 4'	72.2, CH	3.89, dd (3.7, 9.5)
4'	73.8, CH	3.50, t (9.5)	2', 5', 4'	73.8, CH	3.50, t (9.5)
5'	70.7, CH	3.67, dd (6.2, 9.5)	1', 4', 6'	70.7, CH	3.68, dd (6.2, 9.5)
6'	18.0, CH ₃	1.26, d (6.2)	5', 4'	18.0, CH ₃	1.26, d (6.2)
1"	166.9, qC			166.9, qC	
2"	122.4, CH	6.02, dt (11.7, 1.1)	1", 3", 4"	122.4, CH	6.01,dt (11.7, 1.5)
3"	149.5, CH	6.18, dt (11.7, 7.3)	1", 2", 4"	149.5, CH	6.19, dt (11.7, 7.0)
4"	30.5, CH ₂	2.74, dt (7.3, 1.1)	2", 3", 5"-13"	30.1, CH ₂	2.75, qd (7.0, 1.5)
5"-13"	28.6-31.5, CH ₂	1.3-1.5		29.7-30.8 CH ₂	1.3-1.6
14"	40.3, CH ₂	1.20, m	5"-13"	33.1, CH ₂	1.32, m
15"	29.2, CH	1.54, m	16"+17", 5"-13", 14"	23.8, CH ₂	1.33, m
16"+17"	23.1, CH ₃	0.91, d (6.6)	16"+17", 5"-13",14"	14.5, CH ₃ ^b	0.93, m ^c

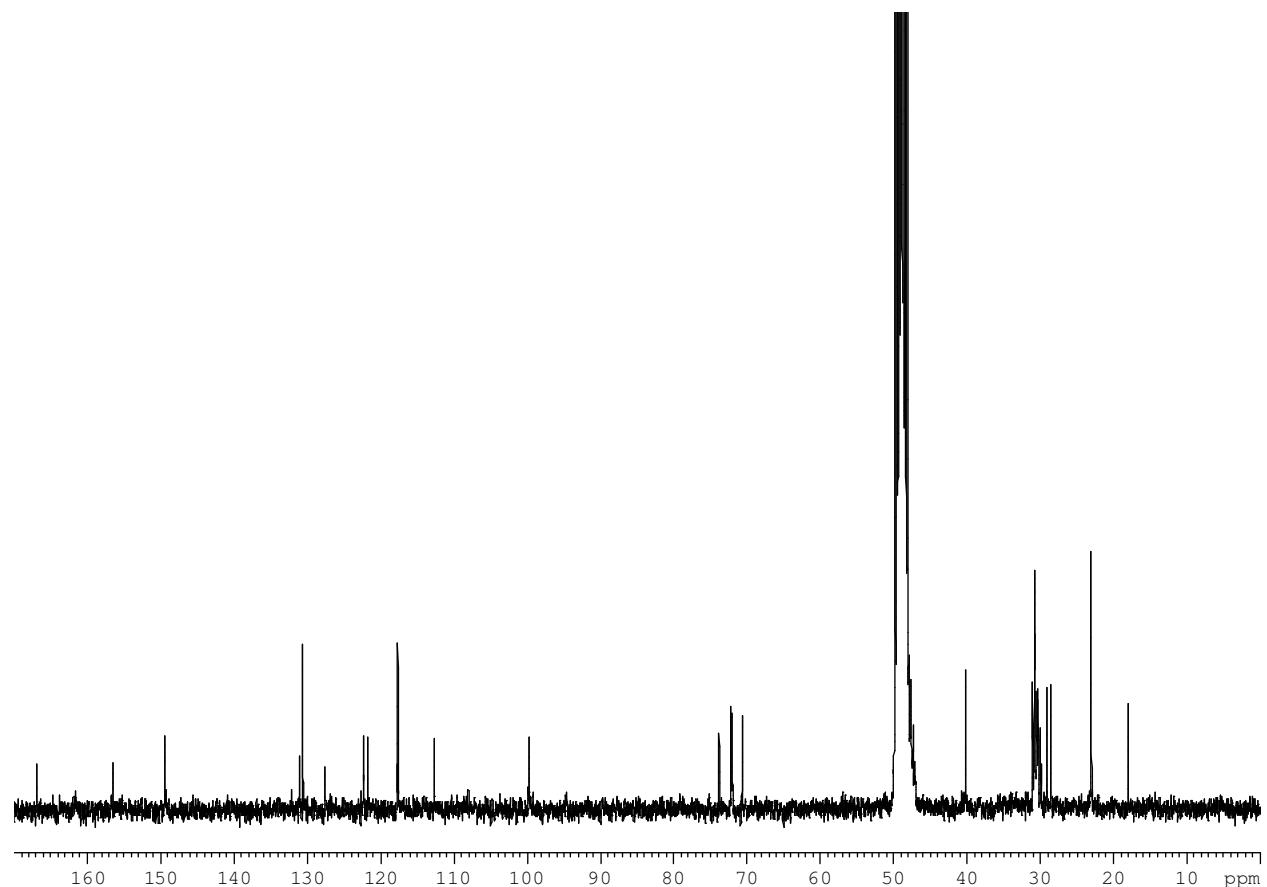
^bonly one methyl group, CH₃-16" is present in the fatty acid part of **2**

^cshould be a triplet, but the signal is overlapping with the signal of an impurity

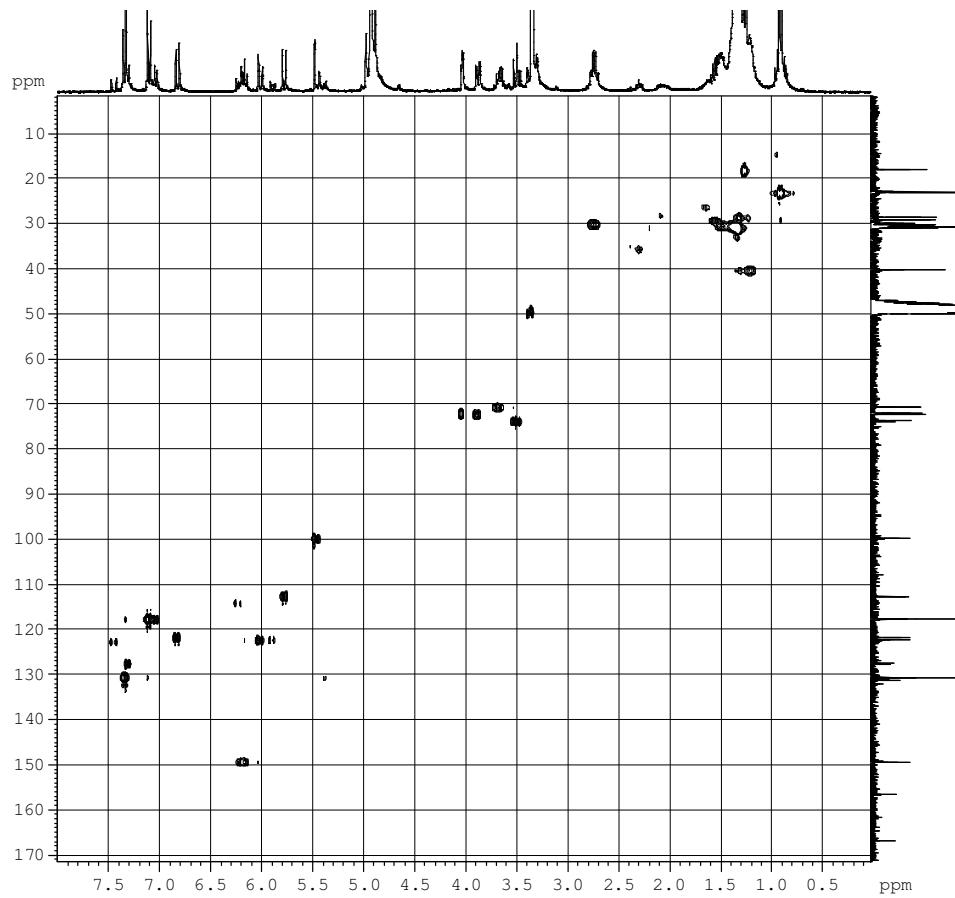
S2. ^1H -NMR in CD_3OD , 300MHz of myxotyroside A (**1**)



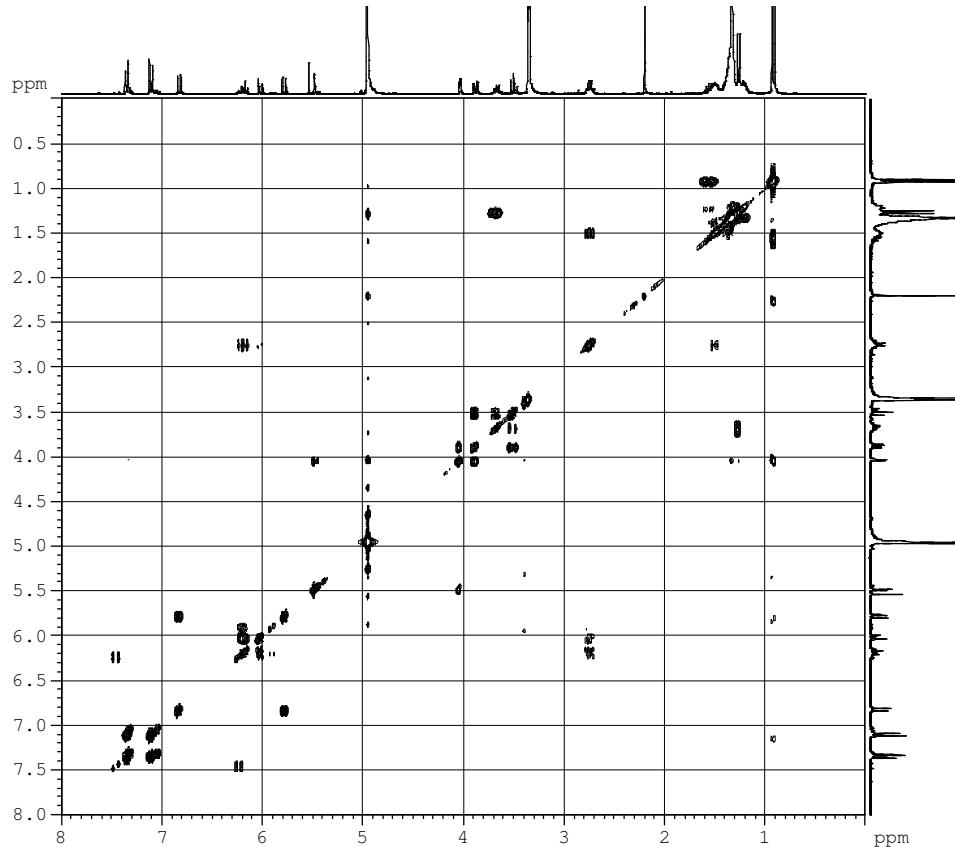
S3. ^{13}C -NMR in CD_3OD , 300MHz of myxotyroside A (**1**)



S4. ^1H - ^{13}C -HSQC in CD_3OD , 300MHz of myxotyroside A (**1**)



S5. ^1H - ^1H -COSY in CD_3OD , 300MHz of myxotyroside A (**1**)



S6. ^1H - ^{13}C -HMBC in CD_3OD , 300MHz of myxotyroside A (**1**)

