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Potential bioavailability of organic matter from atmospheric particles to marine heterotrophic bacteria

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Table S1. Summary of the subsampling selected times for bacterial abundance (BA), bacterial production (BP), ectoenzymatic activities (EEA; aminopeptidase, B-glucosidase and lipase), dissolved organic carbon (DOC), dissolved organic nitrogen (DON) and dissolved organic phosphate (DOP).

Incubation period; d	AB	BP	EEA	DOC	DON	DOP
*T0	x	x	x	x	x	x
T=1.7	x	x				
T=2.7	x	x				
T=3.7	x	x				
T=4.7	x	x				
T=5.7	x	x	x	x	x	x
T=6.7	x	x				
T=7.7	x	x				
T=8.7	x	x				
T=11.7	x	x				
T=13.7	x	x				
T=15.7	x	x	x	x	x	x

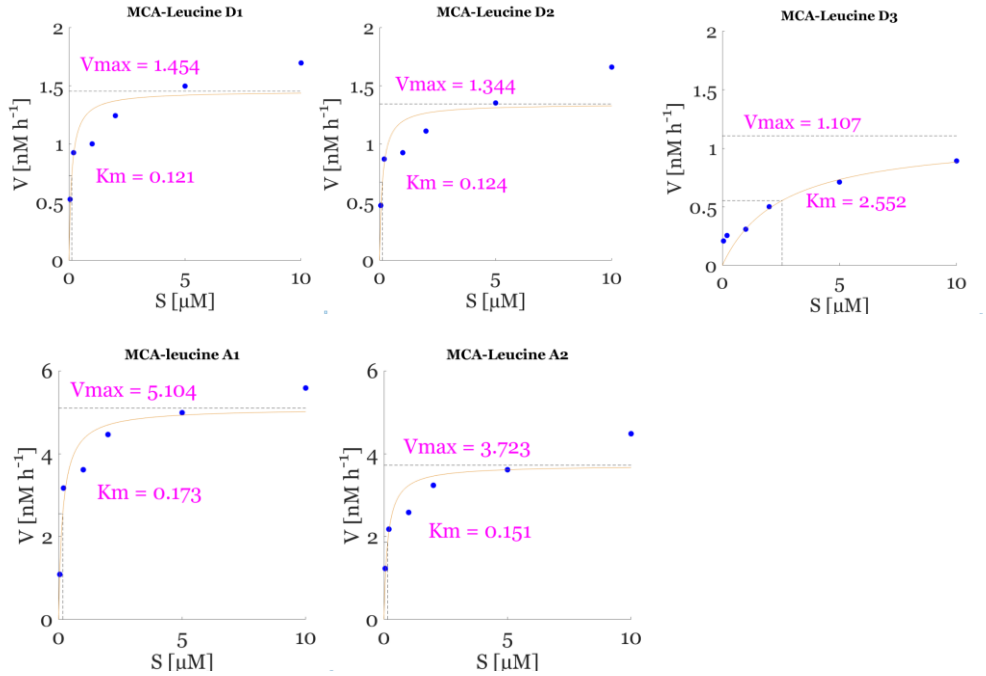
*The sampling at T0 was performed 1 hour after anthropogenic, Saharan dust aerosols and glucose additions.

Table S2. Elemental C:N:P ratios in the amended treatments and in the control, over the incubation period.

	Glucose	Saharan Dust aerosol	Anthropogenic Aerosol	Control
Incubation period; days	DOC:DON			
0	23 ± 3	9 ± 0.4	9	8 ± 0.5
5.7	10± 3	9 ± 2	6.5	10 ± 5
15.7	6 ± 2	8 ± 6	5	8 ± 1
	DOC:DOP			
0	1667 ± 790	1657 ± 446	781	-
5.7	255 ± 104	606 ± 251	872	677 ± 300
15.7	-	-	-	-
	DON:DOP			
0	79 ± 39	181 ± 51	106	-
5.7	25 ± 3	76 ± 44	136	84 ± 23
15.7	-	-	-	-

(-) DOP values were below the detection limit of the conventional automated procedure

Panel A



Panel B

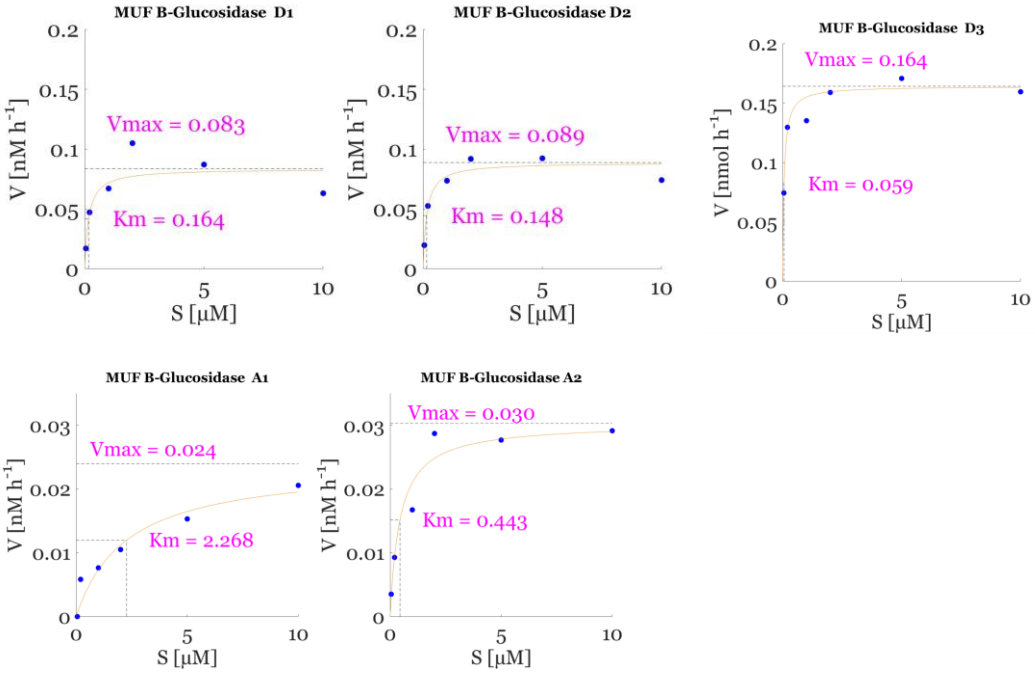


Figure S1. Amino-peptidase (MCA- leucine; panel A), B-gluosidase (MUF B-glucosidase; panel B) and lipase (MUF-palmitate; Panel C) activities in the anthropogenic and Saharan dust (D) amended treatment at the end of the incubation period (t=15.7 days). D1, D2 and D2 refer to the triplicate of the Sharan dust treatment while A1 and A2 reflect those of the anthropogenic aerosol treatment. Vmax and Km refer to the maximum hydrolysis rate and to the Michalis Menten constant, respectively.