Electronic supplementary material

Figure S1. Bacterial consortia were recovered from the marine organisms: *Hymedesmia versicolor* (Porifera) (**A**), *Didemnum sp*. (Tunicata) (**B**), and *Filograna implexa* (Annelida) (**C**). Samples pictured in their natural environment.

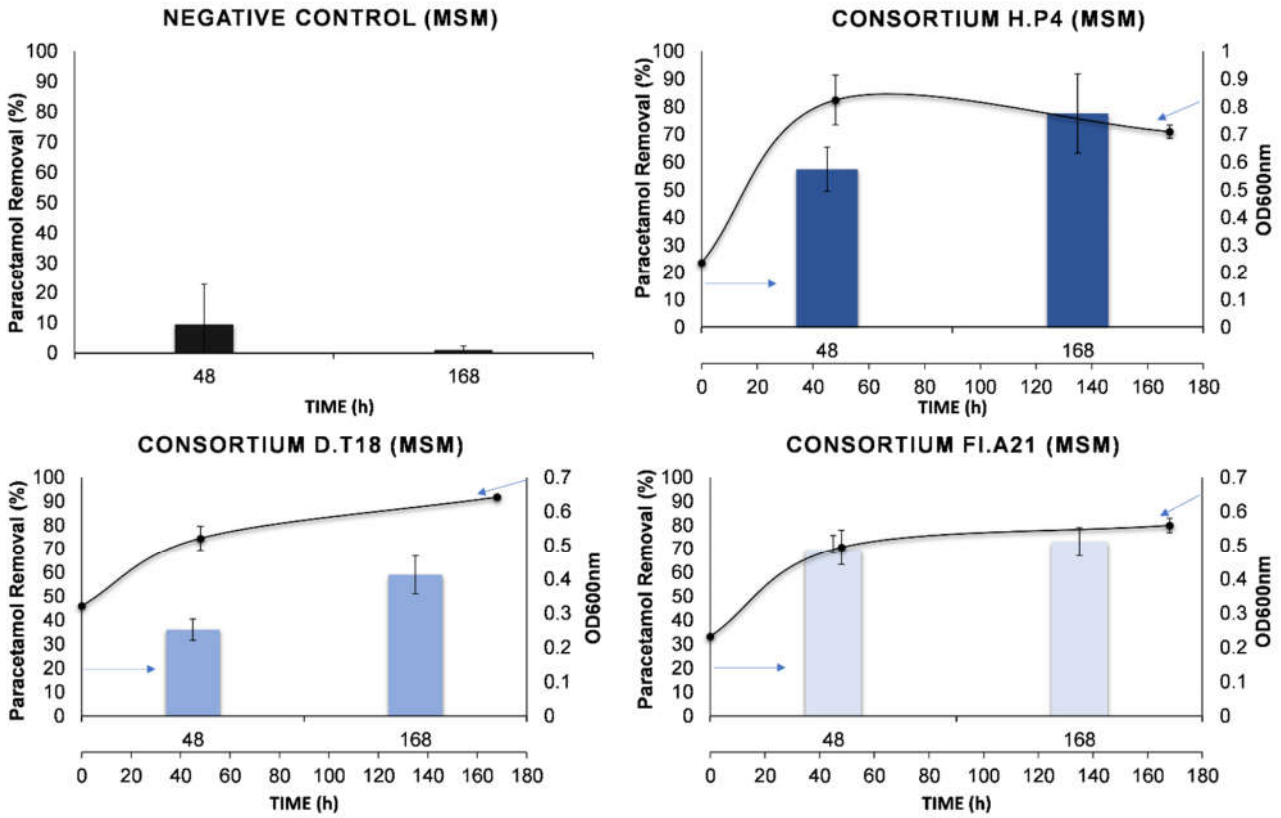

Figure S2. Paracetamol removal (%) and bacterial growth (OD_{600}) of bacterial consortia H.P4, D.T18 and FI.A21 recovered from marine organisms in MSM liquid cultures in the presence of 86 mg/L of paracetamol, after 48 h and 168 h at room temperature, 150 rpm and in dark conditions (n=3; mean ± standard deviation).

Table S1. Morphological and biochemical characteristics of the bacterial isolates which have maintained the ability to use paracetamol as unique carbon source.

Sample	Bacteria	Colony Morphology	Colony Color	Gram Staining	Oxidase	Catalase	Visual representation
1	***Paenibacillus pabuli***	Circular, small size, grew into agar, multiple colonies present	Creamy brown	Positive	-	+	
2	***Paenibacillus typhae***	Circular, large size, grew into agar	White	Positive	-	+	
3	***Paenibacillus odorifer***	Irregular shape, small size, grew into agar	Cream	Positive	+ -	+	
4	***Micrococcus yunnanensis***	Smooth and circular with entire margins	Yellow	Positive	-	+	
5	***Paenibacillus tianjinensis***	Slightly irregular, Slightly filamentous, Medium size, grew into agar	Cream	Positive	+	+	
6	***Paenibacillus typhae***	Irregular, small size, grew into agar, multiple colonies present, grew into agar	White	Positive	-	+	
7	***Microbacterium ginsengisoli***	Oval shape, punctiform, medium size, grew into agar	Cream	Positive	+	+	

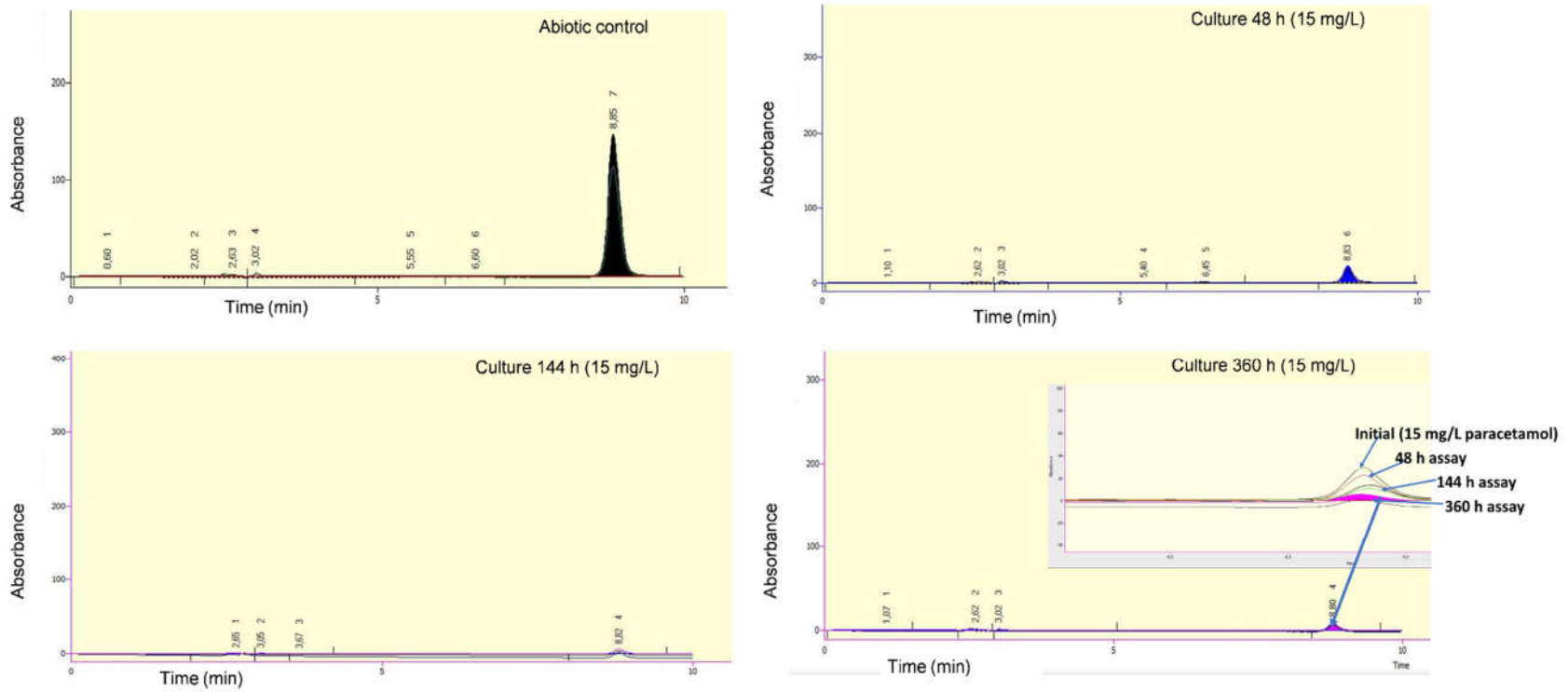

Figure S3. Representative chromatograms of the identification of putative paracetamol biodegradation products in the medium with an initial concentration of paracetamol of 15 mg/L. Detectable peaks after 48 h and after 360 h.

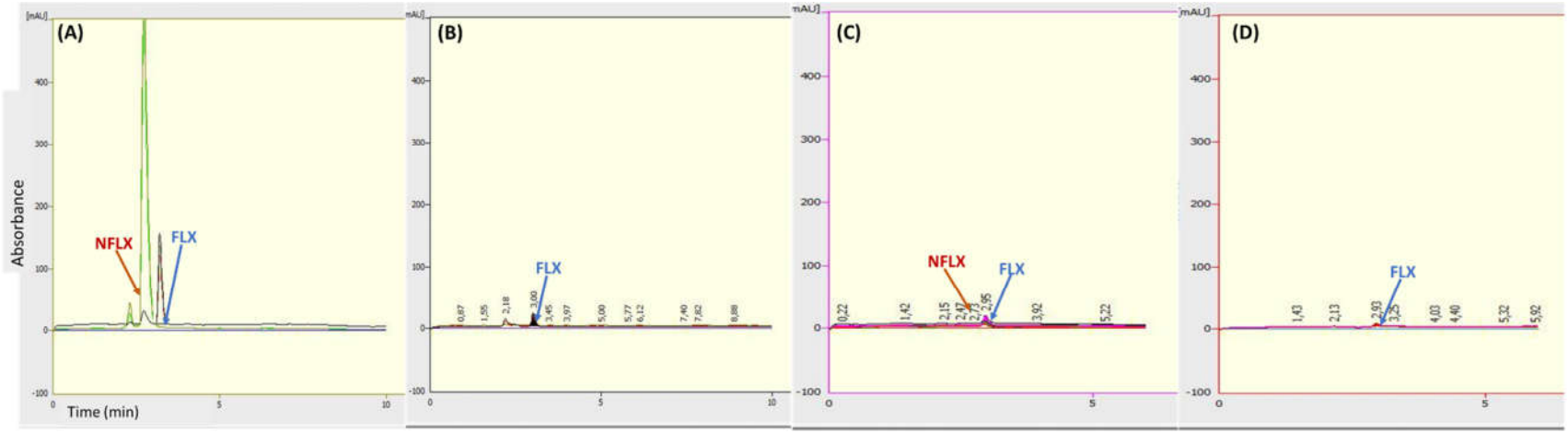

Figure S4. Representative chromatograms of the identification FLX and NFLX its metabolic product in cultures with *M. yunnanensis* in the presence of 16 mg/L FLX as sole carbon source. Detectable peaks in A) standard solutions; at B) 48 h C) 144 h and D) 504 h.

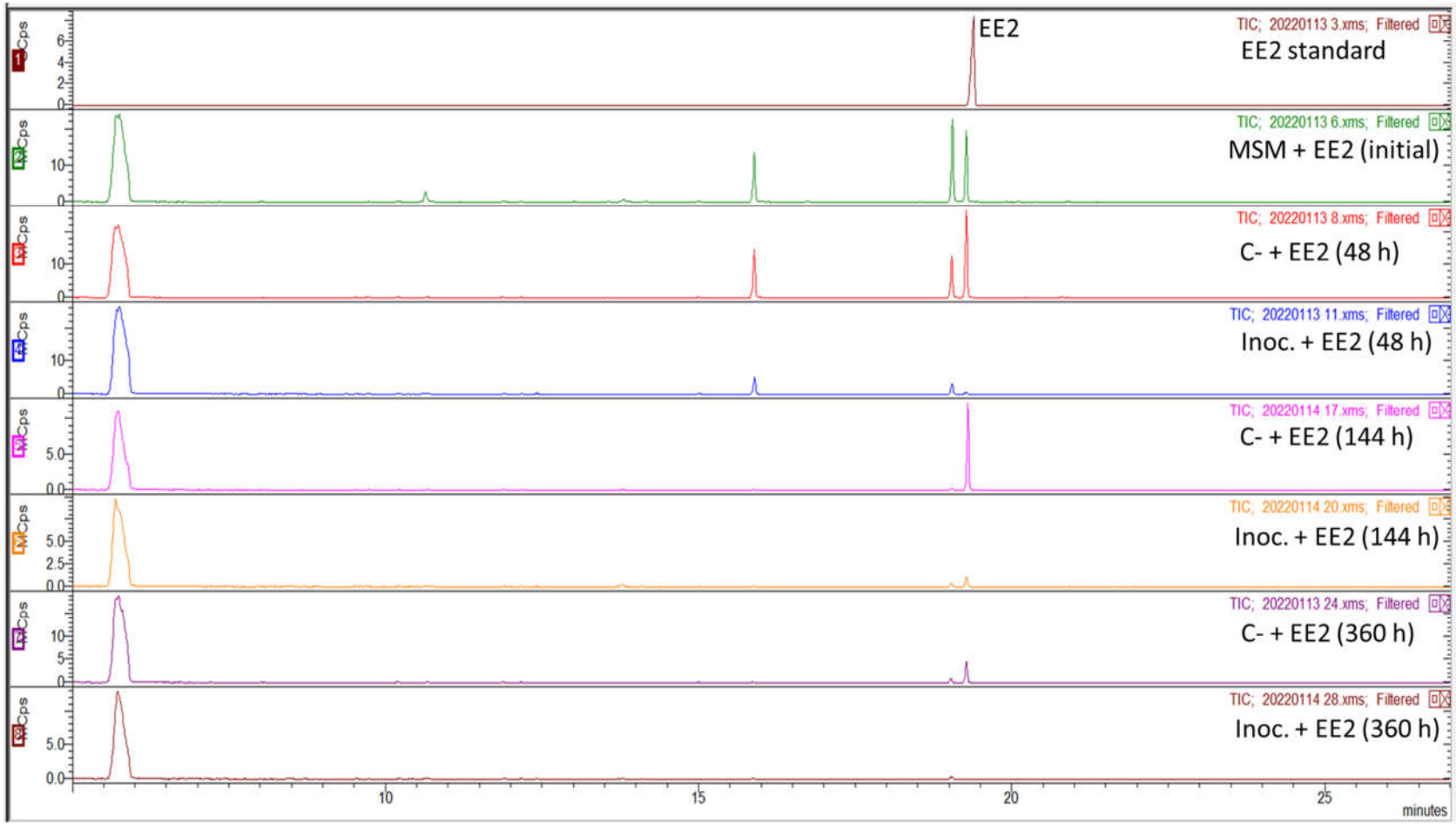

Figure S5. Representative chromatograms of the identification of putative EE2 biodegradation products in the medium with an initial concentration of EE2 of 13 mg/L. Negative control (C-) plus EE2; Inoculum (Inoc.) plus EE2. Detectable peaks after 48 h, 144 h and after 360 h.

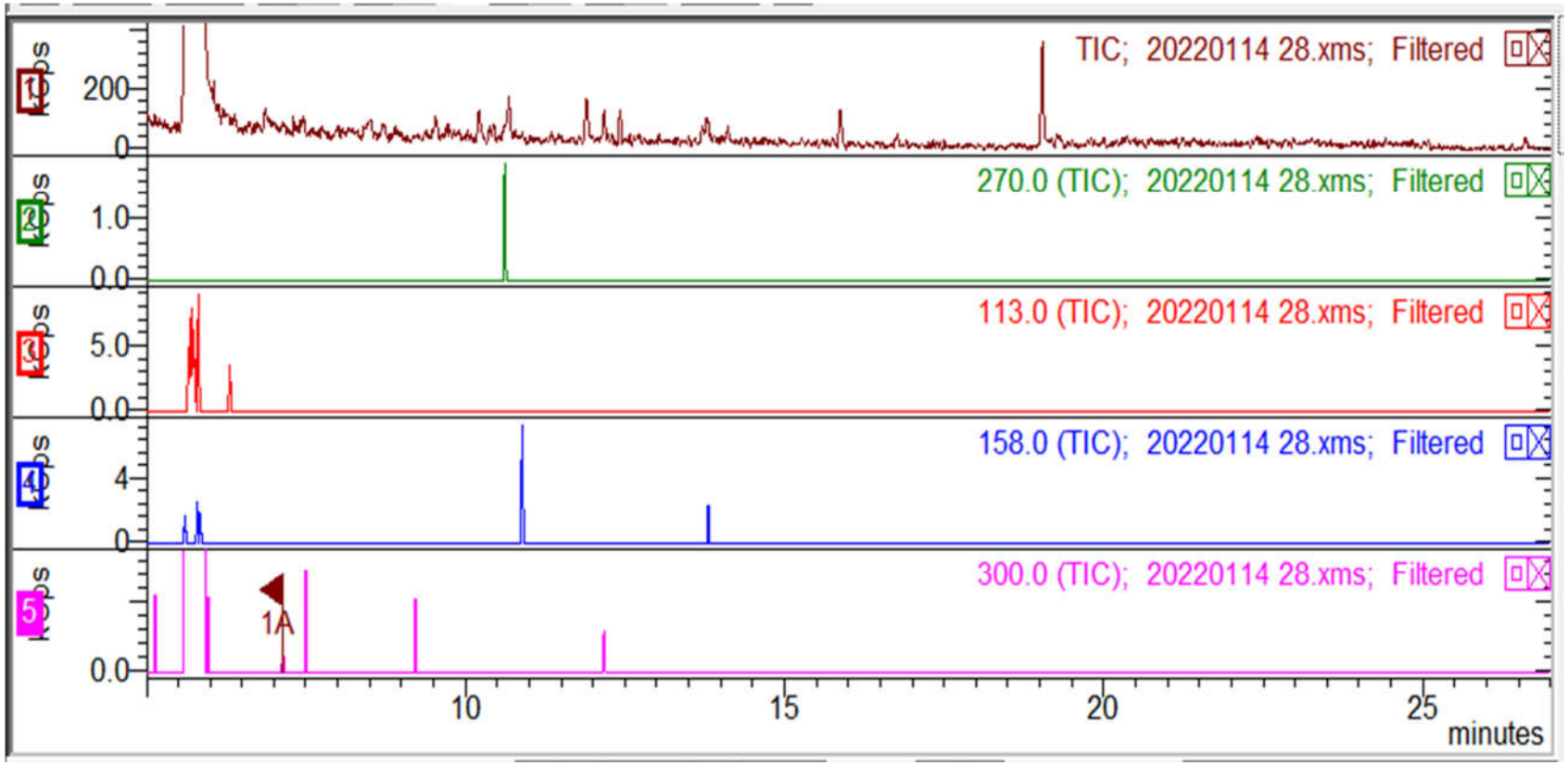

Figure S6. Representative chromatograms of the identification of putative EE2 biodegradation products in the medium with an initial concentration of EE2 of 13 mg/L. Detection was based on the peak known as dominant ion peak of the compound (m/z). Peaks detectable after 360 h.