

Structural and functional patterns of active bacterial communities during aging of harpacticoid copepod fecal pellets

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Supplement. Analysed samples and additional data and analyses.

Fig. S1. Cluster analysis of *Seminavis robusta* and copepod bacterial communities to indicate the change in copepod bacteria resulting from *S. robusta* feeding: (a) for *Paramphiascella* ('Para') and (b) for *Platychelipus* ('Pla'). Copepods were sampled after feeding on *S. robusta* ('fed') and after feeding on *S. robusta* followed by gut clearance ('fed and emptied gut'). In addition, control copepods, i.e. copepods which had not been exposed to *S. robusta*, were sampled directly from the batch culture ('culture')

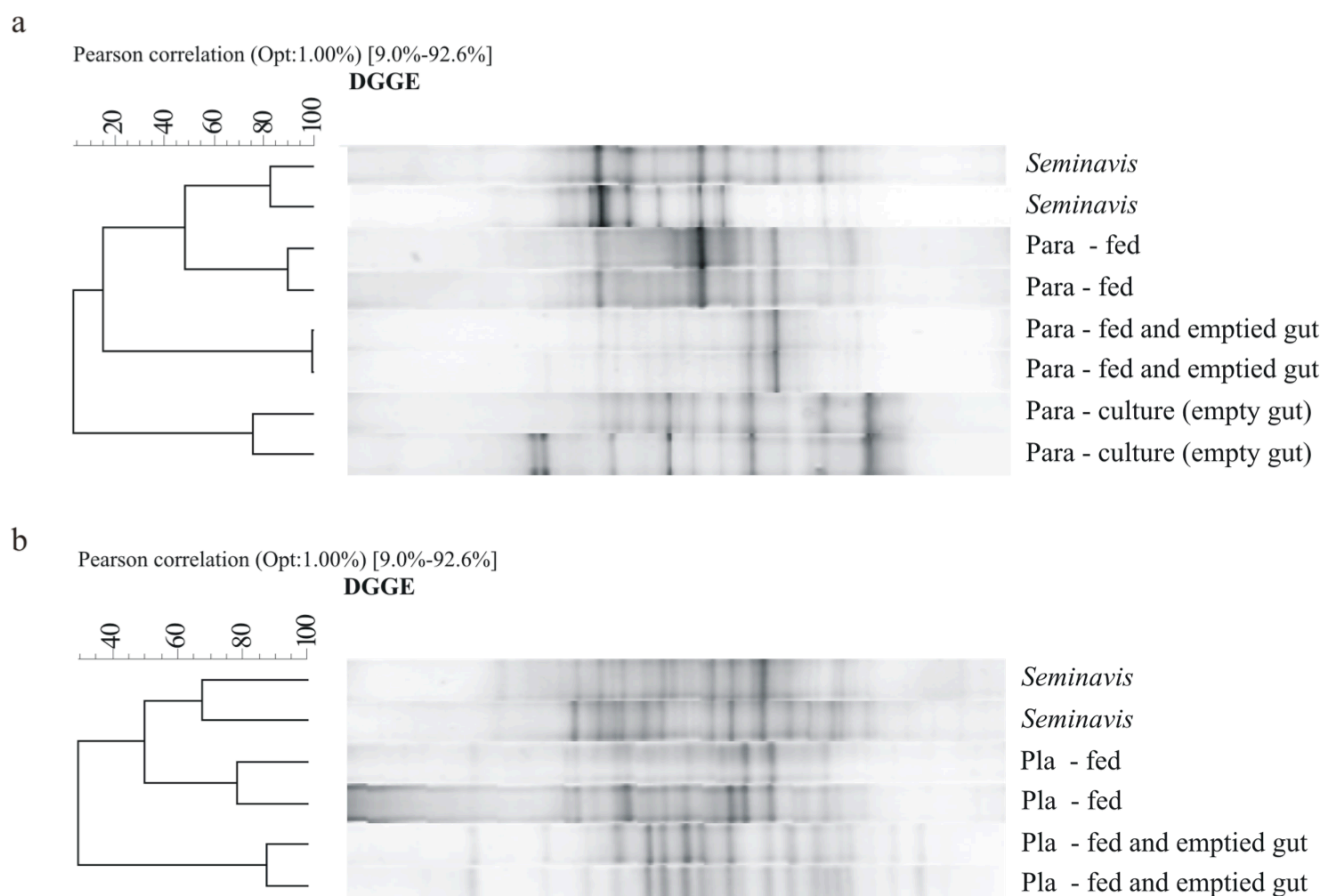


Fig. S2. Principle components (PC) analysis based on carbon source utilization patterns of bacterial communities from fresh and aged copepod fecal pellets (fp)

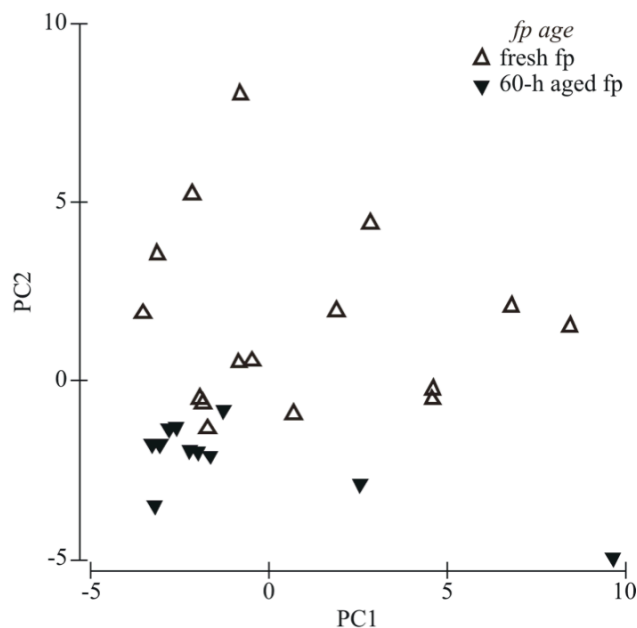


Table S1. Overview of all sample types analyzed with DGGE and Biolog and indication of the number of replicates

Sample type	Copepod	Origin	Treatment	DGGE # rep*	Biolog # rep**	
Fecal pellet	<i>Platychelipus</i>	natural	fresh	3	4	
			20h	1		
			40h	1		
			60h	1	4	
		laboratory fed	fresh	4		
			20h	2		
			40h	2		
			60h	2	6	
	<i>Paramphiascella</i>	laboratory fed	fresh	2	4	
			20h	2		
			40h	2		
			60h	2	2	
Copepod	<i>Platychelipus</i>	field	defecated		6	
		laboratory fed	full gut	2	3	
	<i>Paramphiascella</i>	culture	defecated	2		
			laboratory fed	full gut	2	
				defecated	2	
			<i>Seminavis</i>			4
Natural seawater					3	

* biological replicates, originating from different copepod batches (1500 to 2500 specimens per batch)

** technical replicates

Table S2. Substrate richness S (number of positive substrate responses per sample) per substrate guild for bacteria from fresh and aged fecal pellets (fp) and for *Seminavis robusta*, copepods and natural seawater (NSW). Differences in guild size (number of substrates per guild) were taken into account

Sample type	Carbohydrates	Carboxylic acids	Amino acids	Polymers	Amines	Miscellaneous
Fresh fp	4.10	0.13	1.69	4.08	1.41	1.31
Aged fp	1.29	0.17	0.50	1.69	0.75	0.25
<i>Seminavis</i>	0	0	0	4.50	0	0
Copepod	1.86	0	1.67	2.75	0	1.33
NSW	5.14	0.67	2.00	3.00	0	0