

**Leaf breakdown in a natural open tropical stream**

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**Supplementary Tab. 1.** Invertebrate associated with litter of *Baccharis platypoda* incubated in Geraldinho stream during the decomposition process (average value  $\pm$  standard error).

Taxon	GTF	Days							
		3	7	15	21	30	60	90	120
Annelida									
Oligochaeta	CG	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	2.1 $\pm$ 1.3
Arthropoda									
Arachnida									
Acarina	Pr	0 $\pm$ 0	0 $\pm$ 0	0.5 $\pm$ 0.3	0 $\pm$ 0	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0.5 $\pm$ 0.5
Branchiopoda	CF	0.7 $\pm$ 0.7	0 $\pm$ 0	0 $\pm$ 0	0.2 $\pm$ 0.2	1.5 $\pm$ 0.9	0 $\pm$ 0	0.3 $\pm$ 0.3	0 $\pm$ 0
Insecta									
Ephemeroptera									
Baetidae	CG	0 $\pm$ 0	0.4 $\pm$ 0.2	12.2 $\pm$ 3.9	4.8 $\pm$ 1.4	4.2 $\pm$ 2.0	0 $\pm$ 0	0 $\pm$ 0	0.2 $\pm$ 0.2
Odonata									
Coenagrionidae	Pr	0 $\pm$ 0	0 $\pm$ 0	0.5 $\pm$ 0.3	0.4 $\pm$ 0.3	0 $\pm$ 0	0.3 $\pm$ 0.3	0 $\pm$ 0	0.2 $\pm$ 0.2
Coleoptera									
Dytiscidae	Pr	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0
Elmidae	CG/ Sc	0 $\pm$ 0	0 $\pm$ 0	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0
Hydrophilidae	Pr	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.2 $\pm$ 0.2
Hydroscaphidae	Sc	0 $\pm$ 0	0.3 $\pm$ 0.3	0 $\pm$ 0	0.5 $\pm$ 0.5	0.2 $\pm$ 0.2	2.5 $\pm$ 1.0	7.2 $\pm$ 3.1	2.6 $\pm$ 1.5
Trichoptera									
Helicopsychidae	Sc	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0
Hydroptilidae	Sc	0.2 $\pm$ 0.2	1.0 $\pm$ 0.4	0.8 $\pm$ 0.5	0.5 $\pm$ 0.3	0.2 $\pm$ 0.2	0.2 $\pm$ 0.2	0.3 $\pm$ 0.3	0 $\pm$ 0
Leptoceridae	CF/Sh/Pr	0 $\pm$ 0	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0
Diptera									
Ceratopogonidae	CG/Pr	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.5 $\pm$ 0.5	0 $\pm$ 0	1.0 $\pm$ 0.4
Chironomidae	*	1.7 $\pm$ 1.1	6.0 $\pm$ 2.9	7.3 $\pm$ 5.1	6.6 $\pm$ 1.9	2.9 $\pm$ 1.3	23.4 $\pm$ 8.9	41.7 $\pm$ 8.9	36.0 $\pm$ 5.1

CG, collector-gatherer; CF, collector-filterer; Pr, predator; Sh, shredder; Sc, scrapper; \*not classified in trophic groups.

**Supplementary Tab. 2.** Invertebrate associated with litter of *Coccoloba cereifera* incubated in Geraldinho stream during the decomposition process (average value  $\pm$  standard error).

Taxon	GTF	Days								
		3	7	15	21	30	60	90	120	
Annelida										
Oligochaeta	CG	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.1 $\pm$ 0.1	0.1 $\pm$ 0.1	0.4 $\pm$ 0.2	
Arthropoda										
Branchiopoda	CF	0.1 $\pm$ 0.1	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	0.1 $\pm$ 0.1	0.1 $\pm$ 0.1	0 $\pm$ 0	0 $\pm$ 0	
Insecta										
Ephemeroptera										
Baetidae	CG	0.2 $\pm$ 0.1	0.9 $\pm$ 0.4	4.2 $\pm$ 2.1	4.0 $\pm$ 2.0	4.4 $\pm$ 2.2	0.5 $\pm$ 0.5	0.1 $\pm$ 0.1	0.2 $\pm$ 0.1	
Leptohyphidae	CG	0 $\pm$ 0	0.1 $\pm$ 0.1	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	
Leptophlebiidae	CG	0 $\pm$ 0	0.1 $\pm$ 0.1	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	
Odonata										
Coenagrionidae	Pr	0 $\pm$ 0	0 $\pm$ 0	0.1 $\pm$ 0.1	0.1 $\pm$ 0.1	0 $\pm$ 0	0.2 $\pm$ 0.2	0 $\pm$ 0	0 $\pm$ 0	
Coleoptera										
Hydroscaphidae	Sc	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	1.3 $\pm$ 0.3	0.1 $\pm$ 0.1	2.6 $\pm$ 0.7	
Trichoptera										
Hydroptilidae	Sc	0.3 $\pm$ 0.2	0.2 $\pm$ 0.2	0.5 $\pm$ 0.3	0.1 $\pm$ 0.1	0.2 $\pm$ 0.2	0.2 $\pm$ 0.1	0.1 $\pm$ 0.1	0 $\pm$ 0	
Leptoceridae	CF/ShPr	0.1 $\pm$ 0.1	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	
Odontoceridae	Sc	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.1 $\pm$ 0.1	0 $\pm$ 0	0 $\pm$ 0	
Diptera										
Ceratopogonidae	CG/Pr	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0 $\pm$ 0	0.3 $\pm$ 0.1	
Chironomidae	*	0.6 $\pm$ 0.3	1.6 $\pm$ 0.8	2.2 $\pm$ 0.9	2.2 $\pm$ 0.7	4.9 $\pm$ 2.9	9.3 $\pm$ 2.3	5.2 $\pm$ 1.6	16.1 $\pm$ 4.8	

CG, collector-gatherer; CF, collector-filterer; Pr, predator; Sh, shredder; Sc, scrapper; \*not classified in trophic groups.