

TABLE S1 | PERMANOVA test for producers and consumers. Significant pairwise interaction is represented by subscribed (^{abc}). *Consumers removed from the analysis as described in the “Data analysis” section of the methods. C-01 = Ivinhema River, C-02 = Baía River, I-01 = Paraná River.

Producers						
Phytoplankton			DF = 5, R ² = 0.54, F = 3.95 e p = 0.001			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	06/2009	4	-26.18±0.66	3.96±1.02	a
C-01	River	12/2009	4	-25.80±0.44	3.04±0.74	a
C-02	River	06/2009	3	-28.18±0.63	2.46±0.75	a
C-02	River	12/2009	4	-28.84±0.20	2.05±0.81	a
I-01	River	06/2009	4	-25.69±0.47	5.08±3.21	a
I-01	River	12/2009	4	-24.56±1.42	3.09±2.24	a
Biofilm			DF = 4, R ² = 0.85, F = 22.28 e p = 0.001			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	06/2009	4	-26.07±0.64	3.61±1.03	a
C-01	River	12/2009	4	-26.74±1.01	4.85±2.16	a
C-02	River	06/2009	4	-26.13±1.60	3.37±1.01	a
C-02	River	12/2009	4	-28.94±2.84	4.10±2.61	a
I-01	River	06/2009	4	-15.41±0.77	6.45±0.53	a
Aquatic macrophytes			DF = 26, R ² = 0.96, F = 73.41 e p = 0.001			
Rivers	Site	Specie	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	<i>Eichhornia crassipes</i> (Mart.) Solms	4	-28.85±0.61	6.00±0.53	a
C-01	River	<i>Polygonum acuminatum</i> Kunth	4	-29.50±0.35	-3.32±1.28	a
C-01	River	<i>Pistia stratiotes</i> L.	3	-29.65±0.36	6.20±0.17	a
C-01	River	<i>Eichhornia azurea</i> (Sw.) Kunth	4	-31.05±0.12	5.02±0.47	a
C-01	River	<i>Narukila cordata</i> (L.) Nieuwl.	4	-28.83±0.98	3.10±0.80	a
C-01	River	<i>O. cubensis</i>	4	-29.97±0.35	6.98±0.34	a
C-01	River	<i>Hydrocotyle ranunculoides</i> L.f.	4	-28.77±0.48	6.19±0.59	a
C-01	River	<i>Utricularia foliosa</i> L.	4	-29.33±0.18	5.68±0.55	a
C-01	River	<i>Polygonum ferrugineum</i> Wedd.	4	-29.08±0.20	6.81±0.31	a
C-01	Lagoon	<i>Oxycaryum cubense</i> (Poepp. & Kunth) Lye	4	-28.72±0.20	4.65±0.28	a
C-01	Lagoon	<i>Eichhornia crassipes</i> (Mart.) Solms	4	-29.27±0.15	6.45±0.59	a
C-01	Lagoon	<i>Polygonum ferrugineum</i> Wedd.	4	-29.72±0.29	5.76±0.26	a
C-01	Lagoon	<i>Polygonum stelligerum</i> Cham.	4	-29.50±0.22	5.13±0.26	a
C-01	Lagoon	<i>Panicum</i> sp. L.	4	-27.94±0.12	4.82±0.42	a
C-02	River	<i>Pistia stratiotes</i> L.	4	-29.81±0.37	8.95±0.42	a
C-02	River	<i>Hydrocotyle ranunculoides</i> L.f.	4	-27.26±0.31	10.84±0.30	a



TABLE S1 | (Continued)

C-02	River	<i>Polygonum ferrugineum</i> Wedd.	4	-29.67±0.12	6.49±0.57	a
C-02	River	<i>Limnobiium laevigatum</i> (Humb. & Bonpl. ex Willd.) Heine	4	-27.46±0.43	9.61±0.43	a
C-02	River	<i>Oxycaryum cubense</i> (Poepp. & Kunth) Lye	4	-29.00±0.12	10.00±0.75	a
C-02	River	<i>Eichhornia crassipes</i> (Mart.) Solms	4	-29.17±0.18	12.05±0.50	a
C-02	Lagoon	<i>Pistia stratiotes</i> L.	4	-27.56±0.12	9.42±0.44	a
C-02	Lagoon	<i>Salvinia minima</i> Baker	4	-28.76±0.11	7.58±0.33	a
C-02	Lagoon	<i>Nymphaea amazonum</i> Mart. & Zucc.	4	-24.74±0.32	3.82±1.02	a
C-02	Lagoon	<i>Polygonum stelligerum</i> Cham.	3	-26.22±0.30	1.80±2.61	a
I-01	Lagoon	<i>Egeria najas</i> Planch.	4	-24.46±0.70	8.75±0.52	a
I-01	Lagoon	<i>Eichhornia azurea</i> (Sw.) Kunth	4	-30.21±0.27	8.90±1.02	a
I-01	Lagoon	<i>Salvinia auriculata</i> Aubl.	4	-27.55±0.19	8.56±0.35	a
Riparian Vegetation			DF = 11, R² = 0.94, F = 45.79 e p = 0.001			
Rivers	Site	Specie	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	<i>Inga vera</i> Willd.	4	-29.89±0.37	2.25±0.08	a
C-01	River	<i>Cecropia pachystachya</i> Trécul	4	-30.00±0.33	1.29±0.11	a
C-01	River	<i>Hymenaea courbaril</i> L.	4	-29.68±0.31	2.01±0.21	a
C-01	River	<i>H.stritatus</i>	4	-28.11±0.14	7.24±0.37	a
C-01	River	<i>Inga laurina</i> (Sw.) Willd.	4	-31.32±0.24	0.97±0.24	a
C-01	River	<i>Ficus obtusiuscula</i> (Miq.) Miq.	4	-28.71±0.07	3.54±0.36	a
C-01	River	<i>Croton urucurana</i> Baill.	4	-31.76±0.34	2.28±0.63	a
C-02	River	<i>C. aerosa</i>	4	-27.86±0.24	6.66±0.18	a
C-02	River	<i>Inga vera</i> Willd.	4	-29.92±0.40	1.61±0.38	a
I-01	River	<i>Inga vera</i> Willd.	4	-30.49±0.99	2.98±0.40	a
I-01	River	<i>Abuta Barrère</i> ex Aubl.	4	-33.06±0.70	3.91±0.26	a
I-01	River	<i>Syzygium cumini</i> (L.) Skeels	4	-31.64±0.91	5.42±1.51	a
Consumers			DF = 3, R² = 0.12, F = 2.33 e p = 0.069			
Schizodon borellii			DF = 3, R² = 0.12, F = 2.33 e p = 0.069			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	12/2009	17	-26.03±3.46	9.18±2.35	a
C-02	River	12/2009	8	-27.16±2.33	8.60±2.29	a
C-02	River	06/2010	10	-25.63±5.12	8.66±1.94	a
I-01	River	12/2009	21	-28.14±3.65	9.71±2.35	a



TABLE S1 | (Continued)

<i>Prochilodus lineatus</i>			DF = 4, R ² = 0.12, F = 1.07 e p = 0.362			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	12/2009	6*	-30.94±5.86	9.03±3.54	a
C-01	River	03/2010	6	-29.40±3.19	9.22±0.66	a
C-02	River	03/2010	4*	-32.90±0.51	8.84±1.46	a
C-02	River	06/2010	13	-27.93±4.23	9.30±1.44	a
I-01	River	12/2009	7	-23.74±3.32	10.58±2.30	a
<i>Pterodoras granulosus</i>			DF = 4, R ² = 0.46, F = 4.64 e p = 0.001			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	12/2009	9	-27.41±1.58	11.55±2.04	a
C-02	River	12/2009	5	-27.17±1.87	10.06±2.51	a
I-01	River	12/2009	6	-26.62±1.10	13.02±1.56	a
I-01	River	07/2010	4	-27.54±0.60	8.45±0.36	a
I-01	River	09/2010	3	-24.14±2.15	13.65±0.19	a
<i>Pseudoplatystoma corruscans</i>			DF = 8, R ² = 0.42, F = 3.11 e p = 0.002			
Rivers	Site	Date	n	δ ¹³ C	δ ¹⁵ N	
C-01	River	12/2009	7	-25.40±2.97	12.99±2.01	a
C-01	River	02/2010	4	-28.60±1.44	9.95±0.44	a
C-02	River	03/2010	5	-28.89±0.97	10.13±0.14	a
C-02	River	05/2010	6	-27.93±2.73	10.06±1.81	a
C-02	River	06/2010	4	-26.80±1.38	9.45±0.61	a
C-02	River	07/2010	4	-26.08±1.22	9.87±0.29	a
I-01	River	06/2010	7	-27.42±1.25	11.96±0.53	a
I-01	River	07/2010	3	-26.55±0.76	9.89±0.59	a
I-01	River	09/2010	3	-27.83±0.68	11.47±0.59	a



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