

Supplementary Material

1. Cluster analysis based on the agglomerative hierarchical method. Euclidean squared. IBM SPSS Statistics (version 22), for water and sediment samples at the three sites studied in the Sinos River.

Water

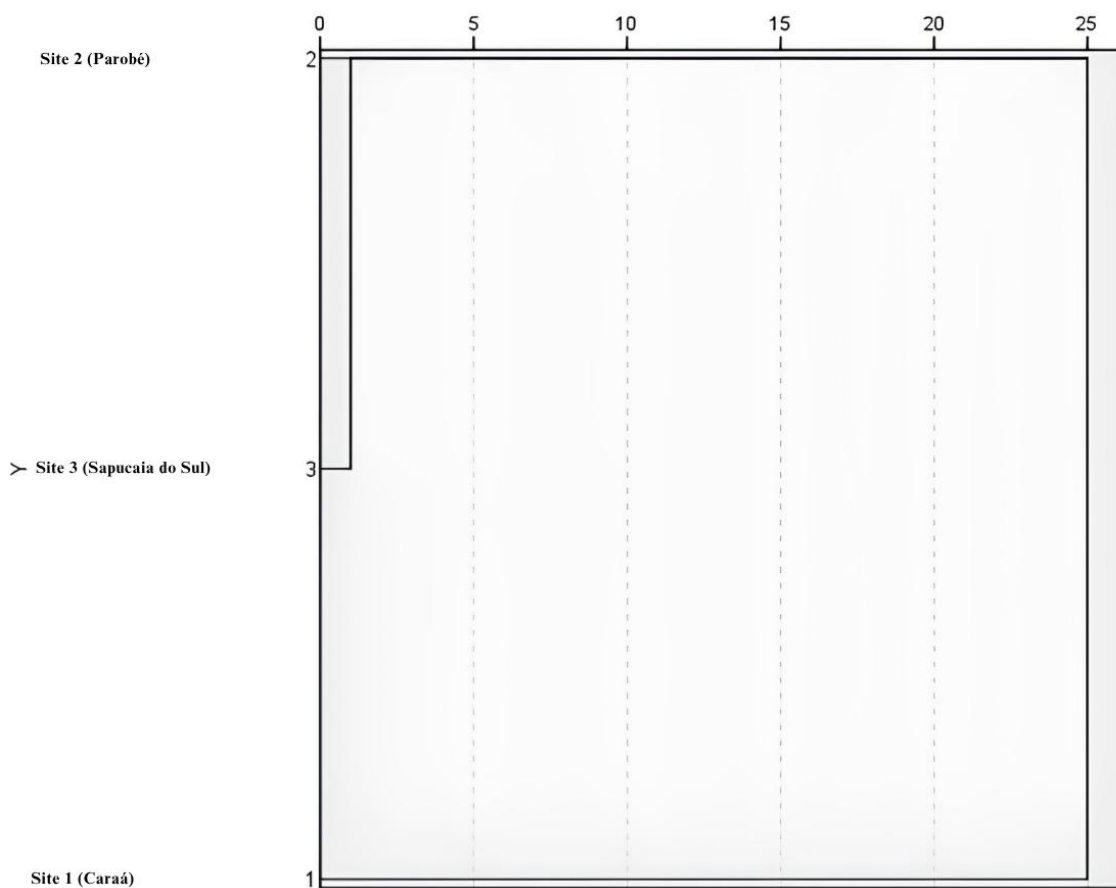
Case processing summary ^a					
Cases					
Valid		Missing		Total	
N	%	N	%	N	%
3	100,0	0	,0	3	100,0
a. Single-linkage					

Proximity matrix			
Case	Squared Euclidean Distance		
	1:Site 1 (Caraá)	2:Site 2 (Parobé)	3:Site 3 (Sapucaia do Sul)
1:Site 1 (Caraá)	,000	2254,000	7364,000
2:Site 2 (Parobé)	2254,000	,000	1726,000
3:Site 3 (Sapucaia do Sul)	7364,000	1726,000	,000
This is a dissimilarity matrix			

Single-linkage

Agglomeration planning						
Stage	Cluster combined		Coefficients	The stage cluster is shown first		Next stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	2	3	1726,000	0	0	2
2	1	2	2254,000	0	1	0

Dendrogram using single-linkage. Rescaled distance cluster combination.



The dendrogram shows that there is similarity for the variables observed for sites 2 and 3, and dissimilarity with the same ones for Caraá (1)

Sediment

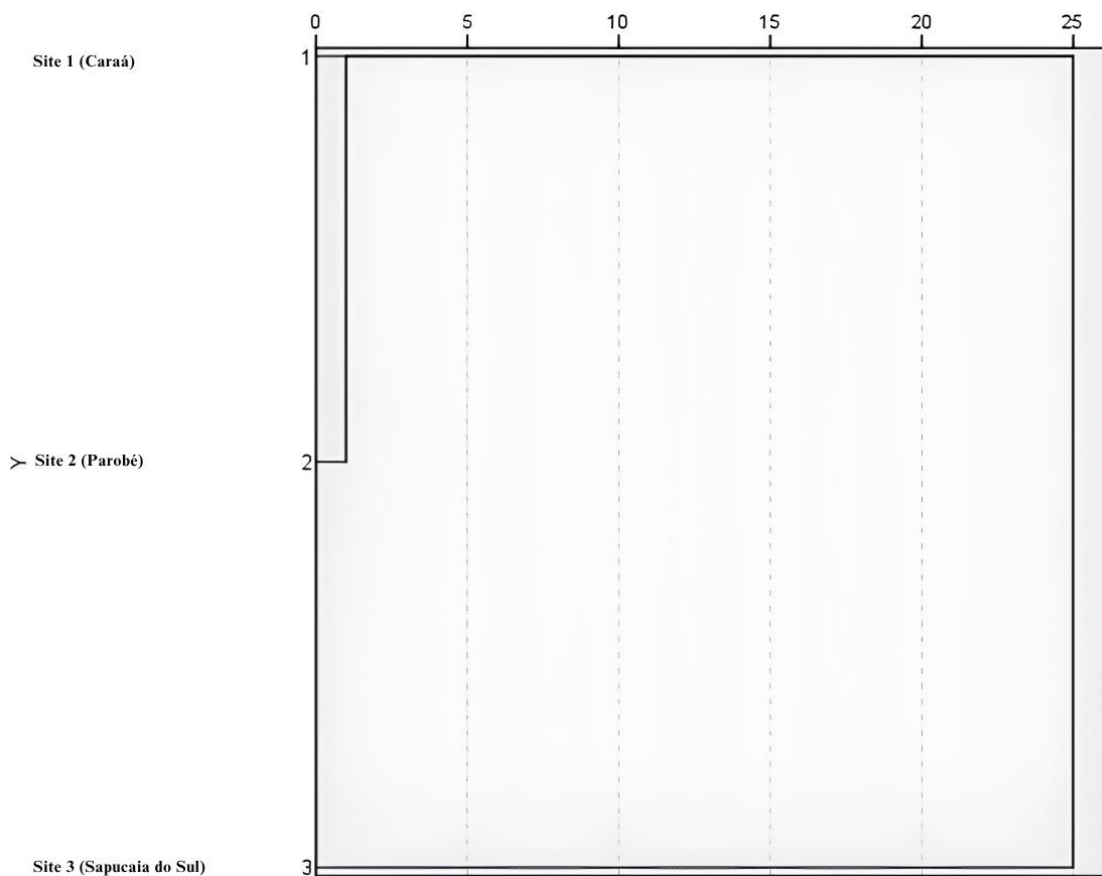
Case processing summary ^a					
Cases					
Valid		Missing		Total	
N	%	N	%	N	%
3	100,0	0	,0	3	100,0
a. Single-linkage					

Proximity matrix			
Case	Squared Euclidean Distance		
	1:Site 1 (Caraá)	2:Site 2 (Parobé)	3:Site 3 (Sapucaia do Sul)
1:Site 1 (Caraá)	,000	1024,000	4305,000
2:Site 2 (Parobé)	1024,000	,000	1233,000
3:Site 3 (Sapucaia do Sul)	4305,000	1233,000	,000
This is a dissimilarity matrix			

Single-linkage

Agglomeration planning						
Stage	Cluster combined		Coefficients	The stage cluster is shown first		Next stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	1	2	1024,000	0	0	2
2	1	3	1233,000	1	0	0

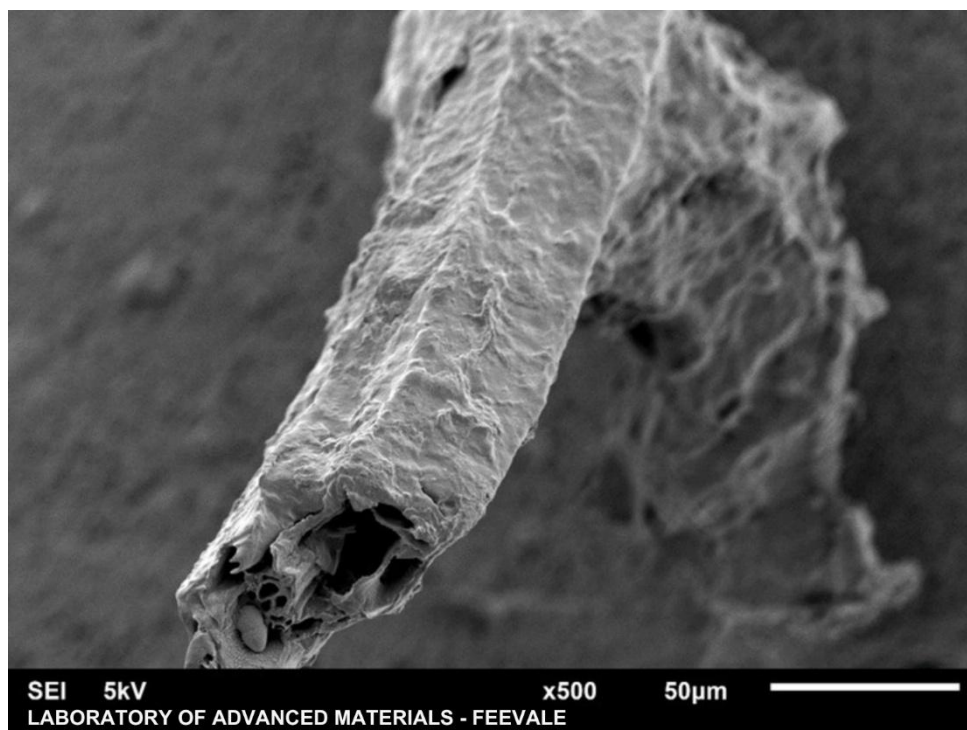
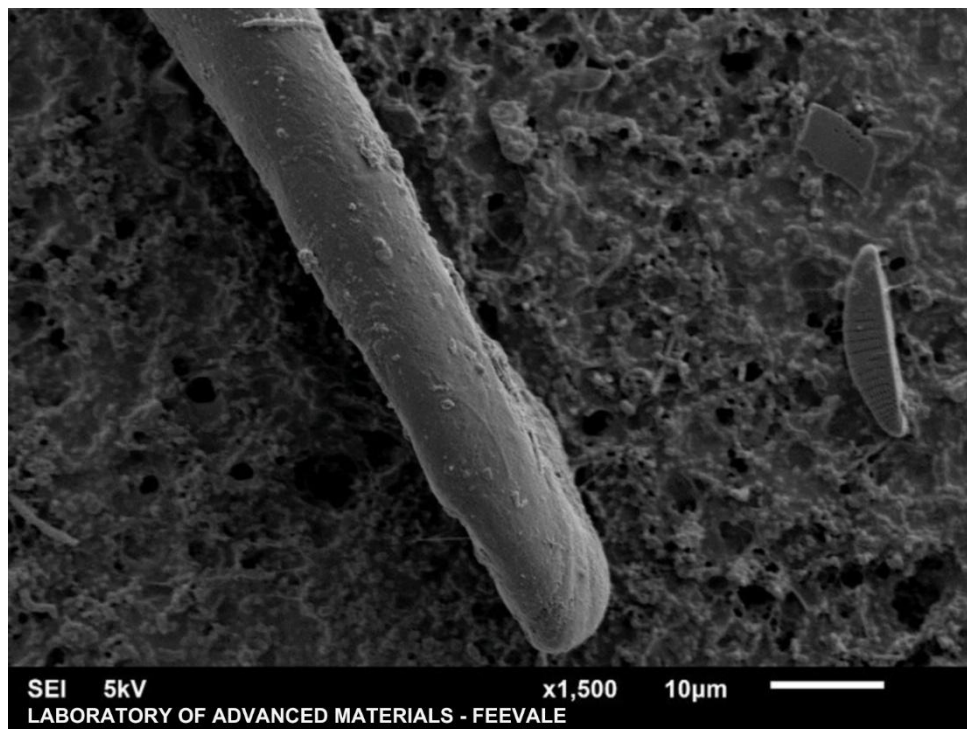
Dendrogram using single linkage. Rescaled distance cluster combination.



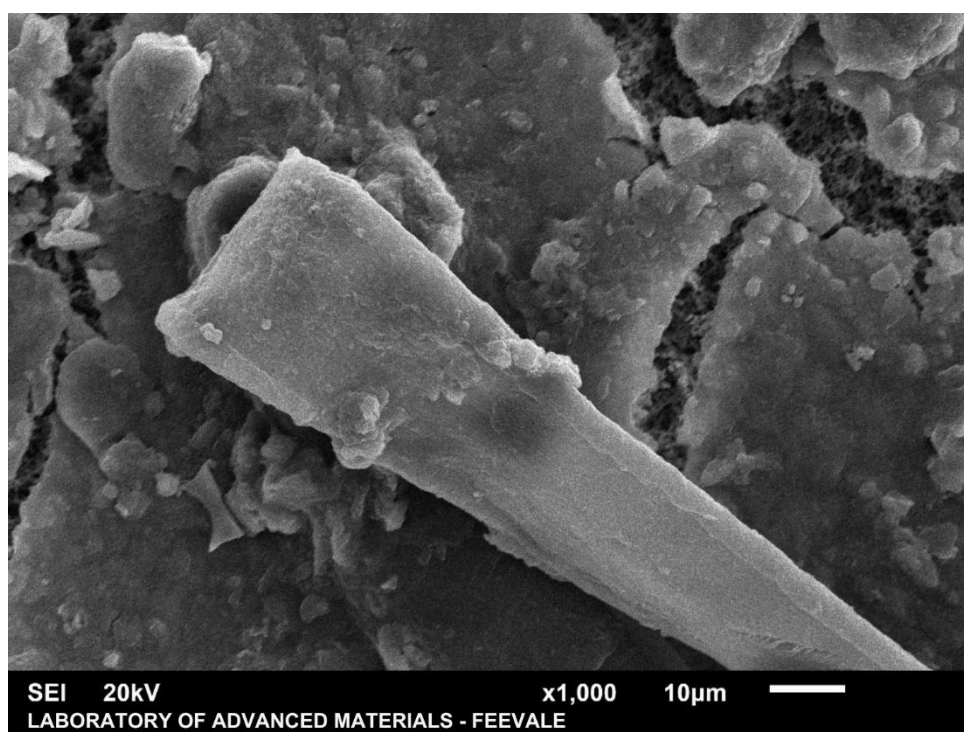
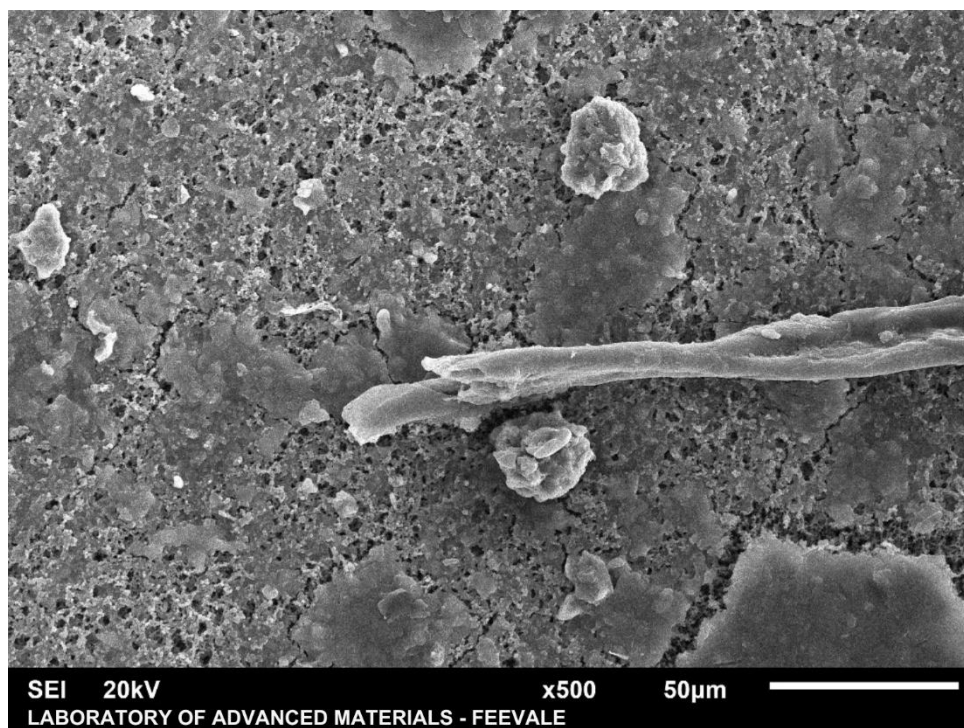
It can be seen in the dendrogram that there is similarity for the variables observed for sites 1 and 2 and dissimilarity with the same ones for Sapucaia do Sul (3).

2. SEM images of microfibers ends isolated from water and sediment samples at the three sites studied in the Sinos River.

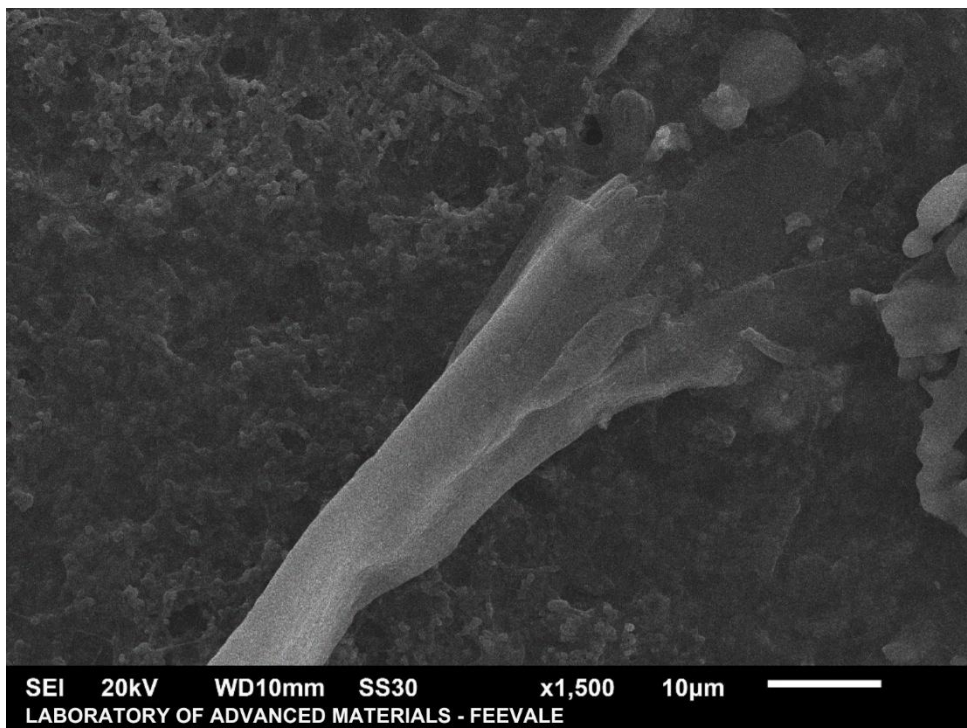
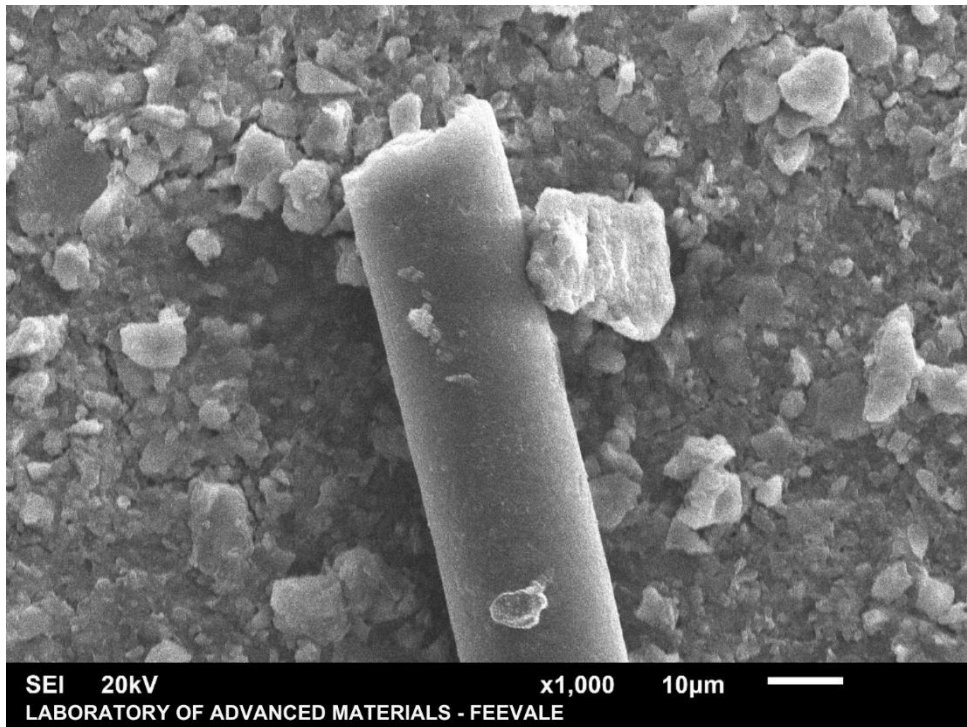
Site 1 – Caraá



Site 2 – Parobé



Site 3 – Sapucaia do Sul



3. Images obtained by stereomicroscopy **A**, and SEM **B**, together with the EDS spectra and the atomic percentage values of carbon and oxygen **C**, for different fibers found in water and sediment samples in the Sinos River.

