ANEXO 3

Resultados del análisis de porcentaje de similitud (SIMPER) para los factores impacto y sustrato

APPENDIX 3

Results of the similarity percentage analysis (SIMPER) for impact and substrate factors

Comparaciones por tipo de impacto				
Morfoespecie	Abundancia promedio (%)			P valor
	Minería	Referencia	Contribución acumulativa	
Baetodes	13.165049	10.527778	0.217	0.01
Cricotopus	3.631068	9.935185	0.371	0.43
Andesiops	3.708738	4.064815	0.4551	0.01
Smicridea	0.504854	4.064815	0.5201	0.01
Simulium	1.339806	3.444444	0.5724	1
Camelobaetidius	0.718447	3.046296	0.6206	0.01
Nanomis	2.019417	1.074074	0.6668	0.01
Leptohyphes	3.213592	0.722222	0.7071	0.01
Chironominae sp. 1	0.776699	1.583333	0.7438	1
Atopsyche	0.446602	1.888889	0.7722	0.01
Helicopsyche	0.07767	1.416667	0.7946	0.01
Tanypodinae sp. 1	0.126214	1.175926	0.8144	0.01
Anchytarsus	0.417476	0.833333	0.834	0.01
Anacroneuria	0.757282	0.453704	0.8503	0.03
Morfoespecie	Abundancia promedio (%)			P valor
	Referencia	Agricultura	Contribución acumulativa	
Simulium	3.444444	21.30303	0.2108	0.01
Cricotopus	9.935185	6.68687	0.3813	0.01
Baetodes	10.527778	0.0202	0.5011	1
Smicridea	4.064815	0.25253	0.5641	0.01
Andesiops	4.064815	0.0101	0.6223	0.94
Chironominae sp. 1	1.583333	2.07071	0.6701	0.18
Camelobaetidius	3.046296	0	0.7099	0.01
Atopsyche	1.888889	0	0.7343	0.01
Rhagovelia	0.296296	0.77778	0.7564	0.25
Helicopsyche	1.416667	0.0202	0.7775	0.01
Nanomis	1.074074	0	0.7965	1
Tanypodinae sp. 1	1.175926	0.12121	0.8155	0.01
Calopterygidae sp. 1	0.027778	0.83838	0.8327	0.08
Anchytarsus	0.833333	0.0404	0.8486	0.14

Morfoespecie	Abundancia promedio (%)			P valor
	Minería	Agricultura	Contribución acumulativa	
Simulium	1.339806	21.30303	0.2479	0.01
Baetodes	13.165049	0.0202	0.4371	0.02
Cricotopus	3.631068	6.68687	0.5533	0.95
Andesiops	3.708738	0.0101	0.6232	0.03
Chironominae sp. 1	0.776699	2.07071	0.6718	0.08
Nanomis	2.019417	0	0.7119	0.04
Leptohyphes	3.213592	0	0.7493	0.01
Rhagovelia	0.048544	0.77778	0.7757	0.02
Calopterygidae sp. 1	0	0.83838	0.7986	0.01
Smicridea	0.504854	0.25253	0.8168	1
Anacroneuria	0.757282	0	0.8324	0.01
Tipula	0.349515	0.20202	0.8461	0.07
Camelobaetidius	0.718447	0	0.8588	1
Comparaciones por tipo de sustrato				
Morfoespecie	Abundancia promedio (%)			P valor
	Sedimento	Roca	Contribución acumulativa	
Baetodes	2.125	15.555556	0.224	0.01
Simulium	1.42708	9.277778	0.3774	0.96
Cricotopus	3.69792	5.851852	0.5184	0.58
Andesiops	1.52083	2.675926	0.5892	0.17
Chironominae sp. 1	1.35417	1.148148	0.6377	0.21
Nanomis	1.27083	1.212963	0.682	0.01
Smicridea	0.25	1.796296	0.7223	0.88
Camelobaetidius	0.8125	1.833333	0.762	0.02
Rhagovelia	0.36458	0.435185	0.7852	0.32
Atopsyche	0.125	0.851852	0.8024	0.95
Tanypodinae sp. 1	0.6875	0.444444	0.8196	0.09
Helicopsyche	0.46875	0.62963	0.8364	0.24
Calopterygidae sp. 1	0.13542	0.268519	0.8494	0.7
Morfoespecie	Abundancia promedio (%)			P valor
	Sedimento	Hojarasca	Contribución acumulativa	
Simulium	1.42708	13.962264	0.1837	0.11
Cricotopus	3.69792	10.584906	0.3389	0.12
Baetodes	2.125	5.764151	0.4472	1
Andesiops	1.52083	3.650943	0.5147	0.43
Smicridea	0.25	2.811321	0.5662	0.11
Chironominae sp. 1	1.35417	1.90566	0.6155	0.21
Leptohyphes	0.0625	3.367925	0.6597	0.01
Nanomis	1.27083	0.669811	0.6922	0.73
Camelobaetidius	0.8125	1.198113	0.7188	0.89
Tipula	0.0625	0.707547	0.7404	0.01
Atopsyche	0.125	1.377358	0.7611	0.21
Rhagovelia	0.36458	0.301887	0.78	0.49
Calopterygidae sp. 1	0.13542	0.415094	0.7972	0.09
Anchytarsus	0.05208	0.811321	0.814	0.11
Anacroneuria	0.05208	0.858491	0.8304	0.03
Tanypodinae sp. 1	0.6875	0.358491	0.8447	0.49
Helicopsyche	0.46875	0.471698	0.8582	0.69

Morfoespecie	Abundancia promedio (%)			P valor
	Roca	Hojarasca	Contribución acumulativa	
Simulium	9.277778	13.962264	0.1929	0.1
Baetodes	15.555556	5.764151	0.3761	0.24
Cricotopus	5.851852	10.584906	0.5112	0.93
Andesiops	2.675926	3.650943	0.5713	0.98
Smicridea	1.796296	2.811321	0.6248	0.17
Leptohyphes	0.425926	3.367925	0.6634	0.01
Chironominae sp. 1	1.148148	1.90566	0.6991	1
Camelobaetidius	1.833333	1.198113	0.7276	0.87
Nanomis	1.212963	0.669811	0.7516	0.98
Atopsyche	0.851852	1.377358	0.7742	0.12
Rhagovelia	0.435185	0.301887	0.7914	0.68
Anchytarsus	0.425926	0.811321	0.8082	0.23
Anacroneuria	0.287037	0.858491	0.8232	0.16
Tipula	0.074074	0.707547	0.8378	0.09
Calopterygidae sp. 1	0.268519	0.415094	0.8515	0.66

Se presentan las comparaciones al interior de cada factor.

Resultado general para estación: R = 0.3258, P valor = 0.001; resultado general para sustrato: R = 0.0818, P valor = 0.001. The comparisons are presented within each factor. General result for station: R = 0.3258, P value = 0.001; general result for substrate: R = 0.0818, P value = 0.001.