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Soil Research

Supplementary Material

Microbiological indicators as sensitive indicators in the assessment of areas contaminated by heavy metals

Eliane Guimarães Pereira Melloni^A, Rogério Melloni^{A,}, Rocío Pastor-Jáuregui^B, Antonio Aguilar-Garrido^C, and Francisco José Martín-Peinado^C*

^AInstituto de Recursos Naturais, Universidade Federal de Itajubá, Campus Itajubá, MG, Brazil.

^BDepartamento de Recursos Hídricos, Universidad Nacional Agraria La Molina, Lima, Peru.

^CDepartamento de Edafología y Química Agrícola, Universidad de Granada, Granada, Spain.

*Correspondence to: Rogério Melloni Federal University of Itajuba, Avenida BPS, 1303, CEP 37500-903, Campus Itajubá, MG, Brazil Email: rmelloni@unifei.edu.br

Table S1. Location (UTM coordinates) of sampling plots showed in Figure 1.

Sampling plot	Latitude	Longitude
329	4153100	746007
325	4152785	746020
321	4152235	746408
317	4151613	746608
313	4151194	746604
309	4150905	746821
305	4150689	747004
301	4150246	746392
297	4149925	746738
293	4149530	746398
289	4148883	746459
281	4148420	746468
273	4147838	746371
265	4147120	746155
262	4146753	746733
261	4146753	746733
252	4145955	746076
249	4145065	746367
245	4144142	746146
240	4143836	745931
233	4142770	745737
225	4141614	755465
221	4141125	745402
217	4140633	745754
213	4139975	745717
209	4139581	745661
205	4138937	745570
201	4138888	745037
197	4137838	745271
193	4137301	745168
192	4137143	744992
189	4136603	744631
185	4135621	744875
181	4135237	744645
177	4134577	743958
173	4134142	743534
169	4133731	743581
165	4133159	743349
161	4133049	743538
129	4129681	743086
113	4127708	742701
97	4125796	743396
89	4125311	743391
87	4125437	742719
85	4125120	743575
81	4125079	743190
77	4124702	744844
72	4124498	743365

Table S2. Principal components analysis (PCA) of rotated components using Varimax with the Kaiser normalisation method, of the main biological indicators (Biomass: microbial biomass; qCO₂: metabolic quotient), main soil properties (pH; EC: electrical conductivity; CaCO₃ content; TOC: total organic carbon), and soluble in water (XxW) and total (XxT) concentration of pollutants. (Var: total explained variance; gray shading indicates the highest significant coefficient/s for each variable).

	Component				
	1	2	3	4	5
Biomass	-0.218	-0.073	-0.107	0.202	0.866
qCO ₂	0.534	-0.166	-0.003	0.088	-0.609
pH	-0.460	-0.810	-0.011	-0.087	0.134
EC	0.697	0.430	-0.267	0.196	-0.165
CaCO ₃	-0.228	-0.276	-0.052	-0.552	0.492
TOC	-0.103	-0.402	0.213	-0.360	0.664
PbW	-0.076	0.014	0.892	0.109	-0.198
AsW	0.007	-0.081	0.907	-0.035	0.206
CuW	0.057	0.628	0.682	0.266	-0.070
ZnW	0.219	0.874	0.001	-0.092	-0.054
PbT	0.808	0.208	0.031	0.167	-0.160
AsT	0.863	0.275	0.052	0.314	-0.213
ZnT	0.260	-0.165	-0.022	0.877	0.172
CuT	0.343	0.148	0.257	0.823	-0.131
ST	0.884	0.164	-0.012	0.216	-0.143
<i>Var. (%)</i>	<i>23.4</i>	<i>16.5</i>	<i>15.2</i>	<i>14.9</i>	<i>13.9</i>