Effects of Continuous Application of Urban Sewage Sludge on Heavy Metal Pollution Risks in Orchard Soils

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Table S1. Correlations between sludge application duration/rate and soil heavy metal pollution index.

Heavy metal pollution index	Correlation equation (Duration–PI)	Correlation r (Duration–PI)	Sig	Correlation equation (Rate–PI)	Correlation r (Rate–PI)	Sig
PI_{Cd}	y = 0.0104x+0.2213	0.4125	*	y = 0.0077x+0.2295	0.3622	*
PI_{Cr}	y = 0.0020x+0.2357	0.2188	ns	y = 0.00002x+0.2381	0.1131	ns
PI_{Pb}	y = -0.0019x+0.1003	0.1951	ns	y = -0.0004x+0.0978	0.1091	ns
PI_{Hg}	y = 0.0130x+0.0291	0.4171	*	y = 0.0017x+0.0314	0.4572	*
PI_{As}	y = 0.0016x+0.2280	0.0684	ns	y = 0.0002x+0.2286	0.0985	ns
NIPI	y = 0.0064x+0.2133	0.4372	**	/	/	/

Note: Sig.: statistical significance (***: $P < 0.001$; **: $P < 0.01$; *: $P \leq 0.05$; ns: $P > 0.05$).

Table S2. Correlation between sludge application duration/rate and the potential ecological risk indices of heavy metals in soil.

Heavy metal pollution index	Correlation equation (Duration–EI)	Correlation r (Duration–EI)	Sig	Correlation equation (Rate–EI)	Correlation r (Rate–EI)	Sig
EI_{Cd}	y = 0.3126x+6.6392	0.4008	*	y = 0.2311x+6.6885	0.3622	*
EI_{Cr}	y = 0.0041x+0.4714	0.2132	ns	y = 0.00003x+0.4763	0.1131	ns
EI_{Pb}	y = -0.0093x+0.5014	0.2339	ns	y = -0.0002x+0.4889	0.1091	ns
EI_{Hg}	y = 0.5217x+1.1622	0.4347	*	y = 0.0668x+1.2563	0.4572	*
EI_{As}	y = 0.0158x+2.2799	0964	ns	y = 0.0018x+2.2862	0.0985	ns
RI	y = 0.8449x+11.054	0.5771	**	/	/	/

Note: Sig.: statistical significance (***: $P < 0.001$; **: $P < 0.01$; *: $P \leq 0.05$; ns: $P > 0.05$).