

## Supplementary Information

**Table S1.** Isotherm model constants and regression coefficients for biosorption of Cd<sup>2+</sup> by *Paecilomyces lilacinus* XLA and *Mucoromycote* sp. XLC from aqueous solution.

Strain	Experiment	Langmuir Parameters		
	$q^a$	$q_{max}^b$	$K_L$	$r^2$
XLA	61.89 ± 0.98	77.61 ± 0.58	0.014	0.981
XLC	61.94 ± 1.57	79.67 ± 1.14	0.013	0.979

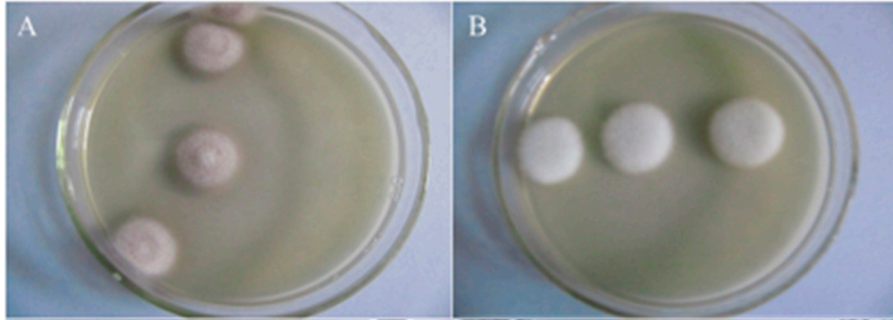
<sup>a,b</sup> data was presented as mean value ± standard deviation (SD) ( $n = 3$ ).

**Table S2.** Quantitative results of EDS analysis of XLA before and after Cd<sup>2+</sup> loading.

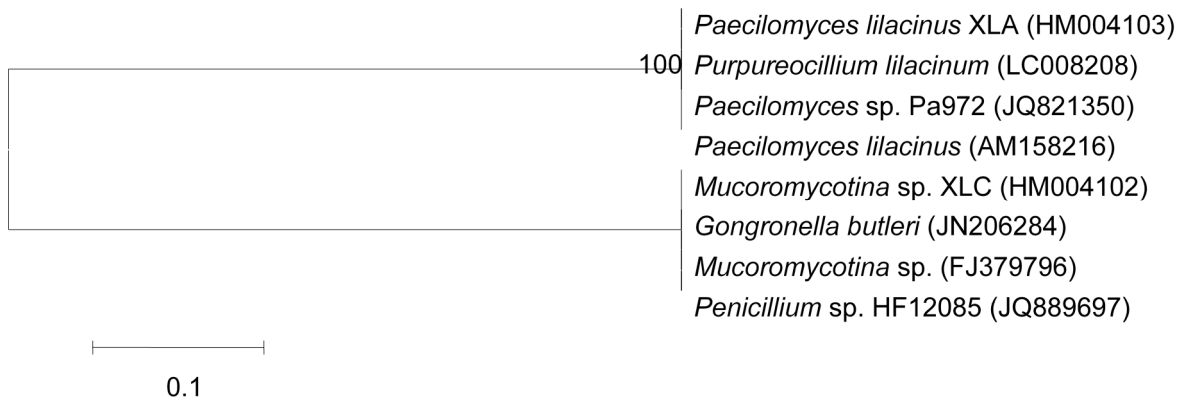
Biomass Type	Elements	wt. (%)	Atomic (%)
XLA-CK	O	71.12 ± 0.70	86.36
	Mg	2.57 ± 0.19	2.05
	Si	2.90 ± 0.15	2.01
	P	6.99 ± 0.25	4.38
	S	1.53 ± 0.15	0.92
	Cl	1.09 ± 0.13	0.60
	K	5.79 ± 0.18	2.88
	Pt	8.01 ± 0.69	0.80
	Totals	100.00	100.00
XLA-Cd	O	70.67 ± 1.00	90.51
	P	7.55 ± 0.33	5.00
	S	1.65 ± 0.20	1.06
	K	0.88 ± 0.20	0.46
	Cd	12.41 ± 0.56	2.26
	Pt	6.84 ± 0.93	0.72
	Totals	100.00	100.00

**Table S3.** Quantitative results of EDS analysis of XLC before and after Cd<sup>2+</sup> loading.

Biomass Type	Element	wt. (%)	Atomic (%)
XLC-CK	O	73.88 ± 0.87	89.38
	P	8.54 ± 0.32	5.33
	S	2.47 ± 0.21	1.49
	Cl	0.74 ± 0.16	0.41
	K	4.07 ± 0.20	2.01
	Ca	0.93 ± 0.15	0.45
	Pt	9.37 ± 0.86	0.93
		Totals	100.00
XLC-Cd	O	59.33 ± 1.46	85.56
	Si	0.87 ± 0.24	0.71
	P	9.91 ± 0.52	7.38
	S	2.89 ± 0.36	2.08
	Cd	12.39 ± 0.84	2.54
	Pt	14.62 ± 1.42	1.73
	Totals	100.00	100.00



**Figure S1.** Colonial features of filamentous fungi (A) XLA and (B) XLC in potato dextrose agar (PDA) medium.



**Figure S2.** Neighbor-joining phylogenetic tree based on a comparison of the ITS1-ITS4 gene sequences of strain XLA, XLC and their closest relative strains. Bootstrap values equal to or greater than 50% are shown, and the scale bar represents the number of substitutions per site. The accession number is shown directly next to the genera name.