

Supplementary

High Efficiency Mercury Sorption by Dead Biomass of *Lysinibacillus sphaericus*. New Insights into the Treatment of Contaminated Water

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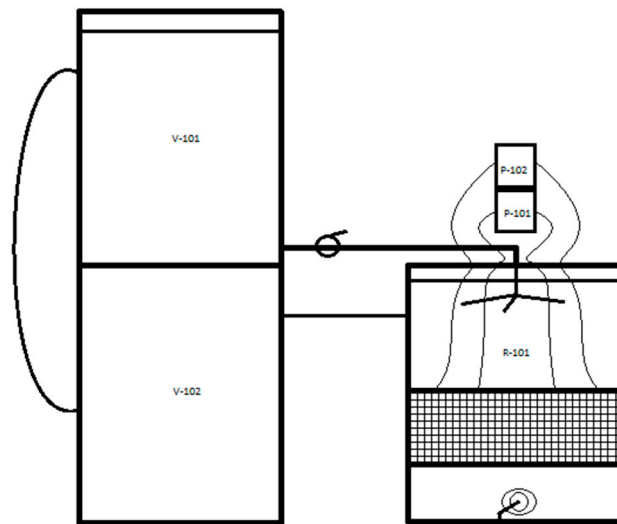
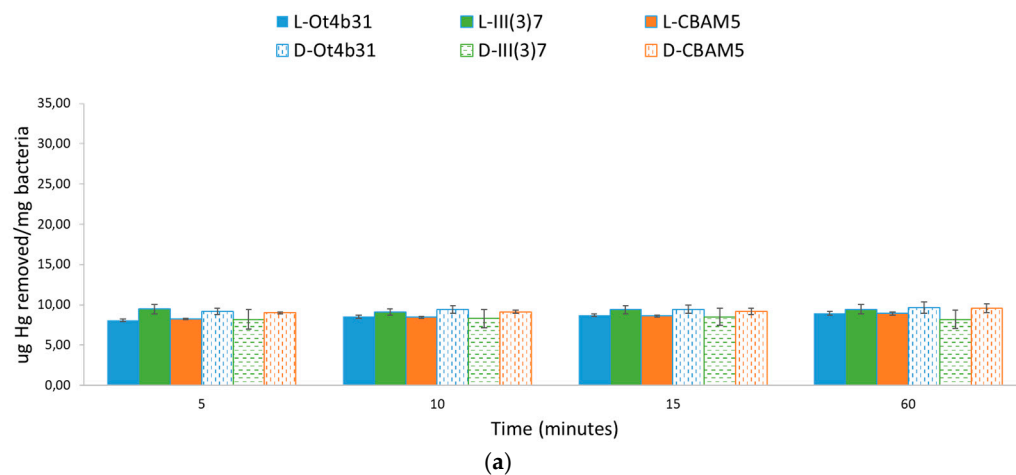


Figure S1. Diagram of BFB reactor designed for escalated treatment of Hg. V-101: Hg loading vessel. V-102: Secure vessel. P-101 and P-102: Air pumps for bubbling mixing in RH bed. R-101: Packed reactor with a filter filled with RH.



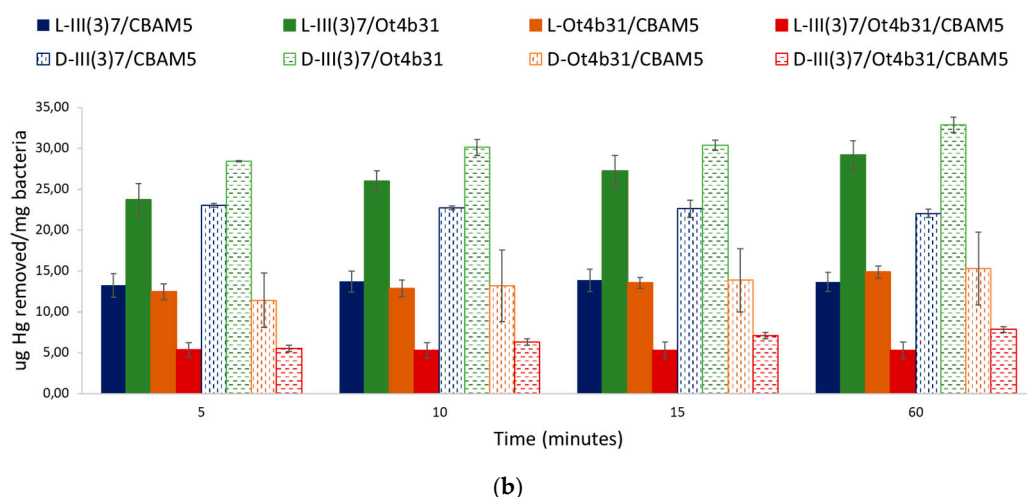


Figure S2. Efficiency in mercury removal. (a) Single strains efficiency. (b) Mixed strains efficiency. (D): Dead. (L): Live.

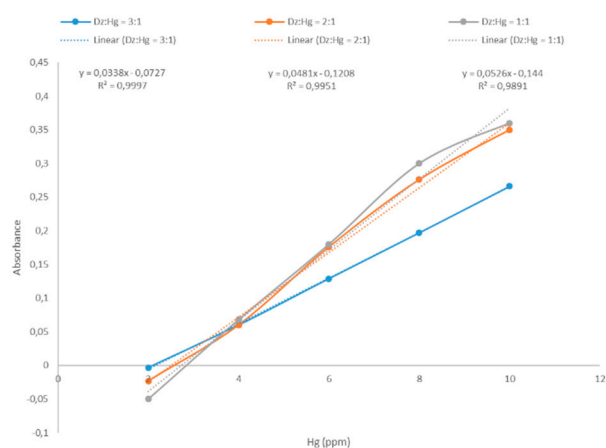
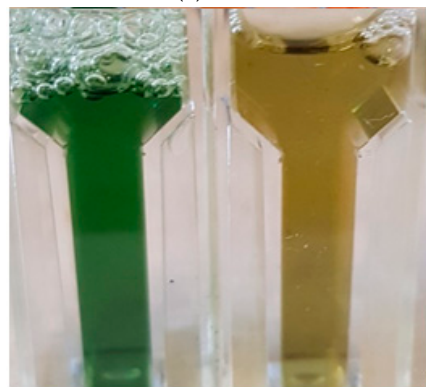


Figure S3. Calibration curves for dithizone. (a) Reaction in excess of mercury (0 ppm, 8 ppm and 10 ppm). (b) Reaction in excess of dithizone (0 ppm, 8 ppm). (c) Calibration curves for different proportions of Dz-Hg.



Figure S4. Stability of Dz in Triton X114 at different pH. From left to right: pH 3,5,6,7,8.



Figure S5. Detail of a *L. sphaericus* cell attached to RH surface.

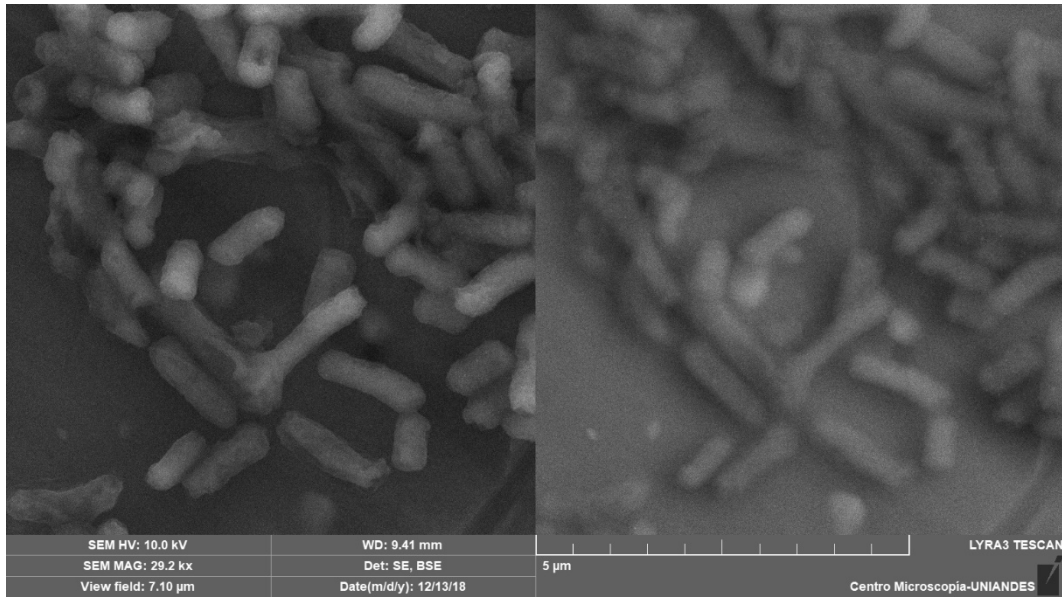


Figure S6. EDS-SEM of *E. coli* K12 C600 after 1 h in contact with HgCl_2 .

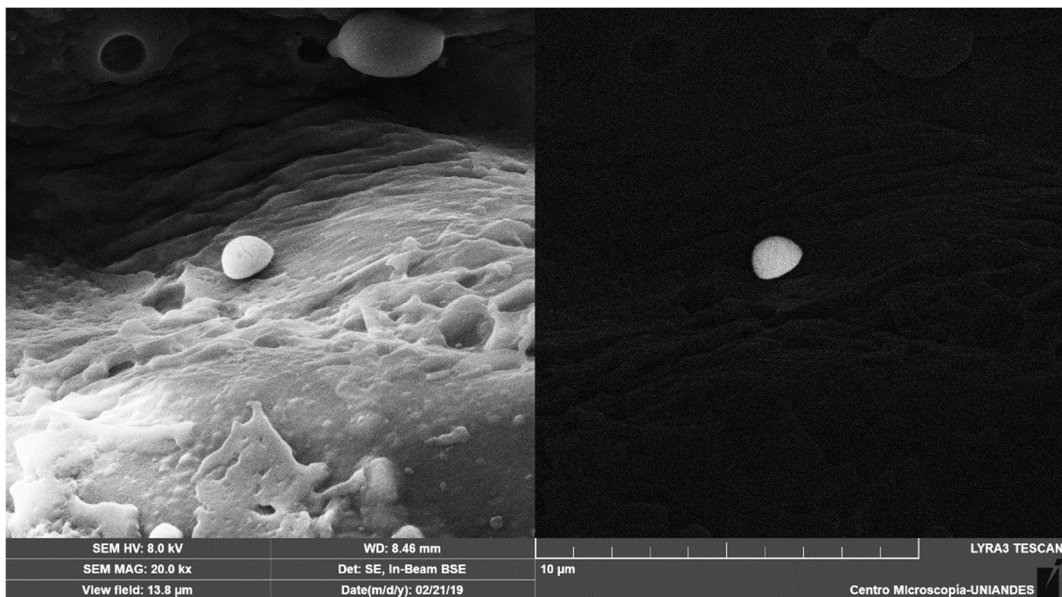


Figure S7. RH with a large Hg particle attached to its surface.