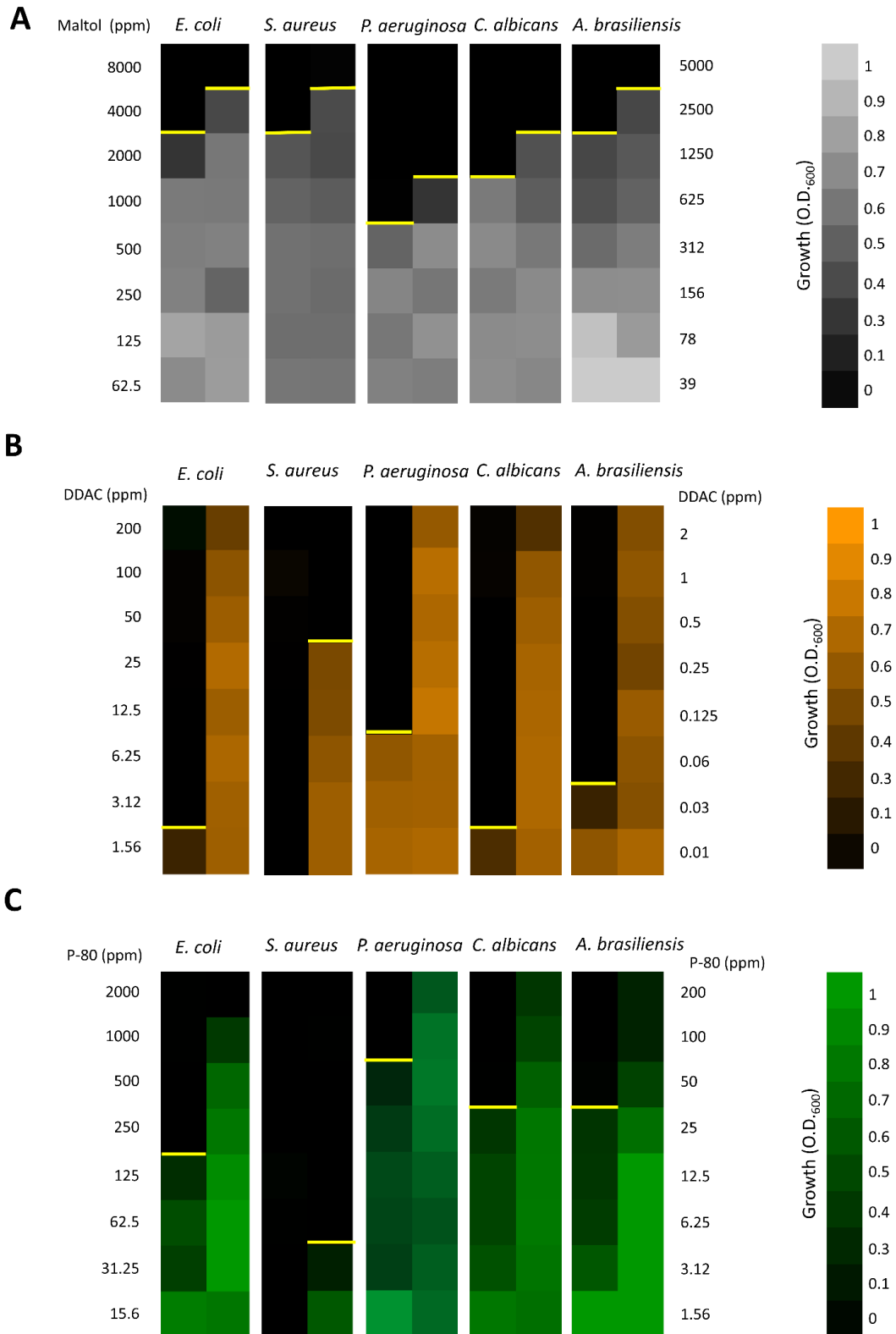
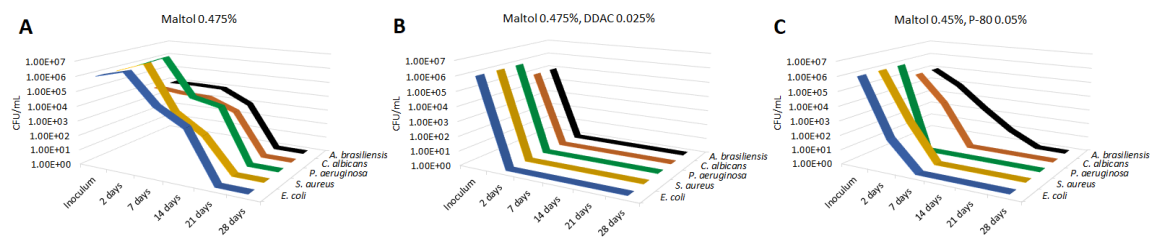


## Supplementary Materials



**Figure S1: MIC<sub>100</sub> of Maltol, DDAC and P-80 compounds.** MIC assay of (A) Maltol in a concentration range of 39-5000 ppm (right column) and 62.5-8000 ppm (left column), (B) DDAC in a concentration range of 0.0156-2 ppm and 1.56-200 ppm, and (C) P-80 in a concentration range of 1.5-200 ppm and 15.5-2000 ppm, against *E. coli*, *S. aureus*, *P. aeruginosa*, *C. albicans* and *A. brasiliensis*. Yellow lines indicate the MIC<sub>100</sub> value with a full growth inhibition.



**Figure S2: Challenge test with maltol and maltol blends with cationic surfactants.** Challenge test of (A) 0.475% maltol (4750 ppm), (B) 0.475% maltol and 0.025% DDAC, and (C) 0.45% maltol and 0.05% P-80, in a basic cream formulation, against *E. coli*, *S. aureus*, *P. aeruginosa*, *C. albicans* and *A. brasiliensis*. One gram from each inoculated formulation was sampled at 2, 7, 14, 21, and 28 days and was seeded using serial dilutions, to enumerate the viable microorganisms. Data are presented as CFU/mL.