

Supplementary Materials

Submicron-Sized Vermiculite Assisted Oregano Oil for Controlled Release and Long-term Bacterial Inhibition

Sukitha Geethma Kothalawala¹, Jun Zhang^{1,*}, Yue Wang¹, and Chengzhong Yu^{1,2,*}

¹ Australian Institute of Bioengineering and Nanotechnology, University of Queensland, Brisbane City, QLD, 4072, Australia; s.kothalawala@uq.net.au (S.G.K.); j.zhang11@uq.edu.au (J.Z.); yue.wang1@uq.edu.au (Y.W.)

² School of Chemistry and Molecular Engineering, East China Normal University, 200241 Shanghai, China; czyu@chem.ecnu.edu.cn (C.Y.)

* Correspondence: j.zhang11@uq.edu.au, czyu@chem.ecnu.edu.cn

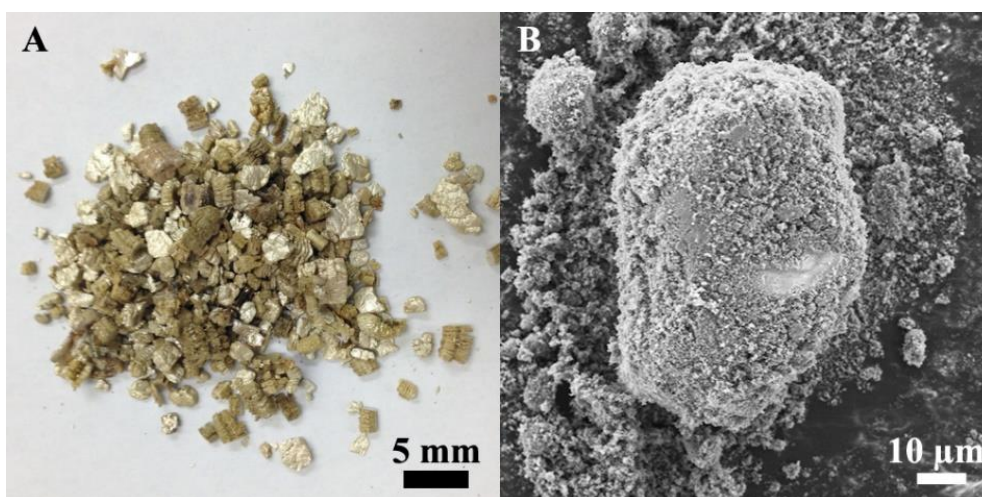


Figure S1. (A) Digital photo of RV, (B) SEM image of pre-milled vermiculite.



Figure S2. Digital photo of SMV.

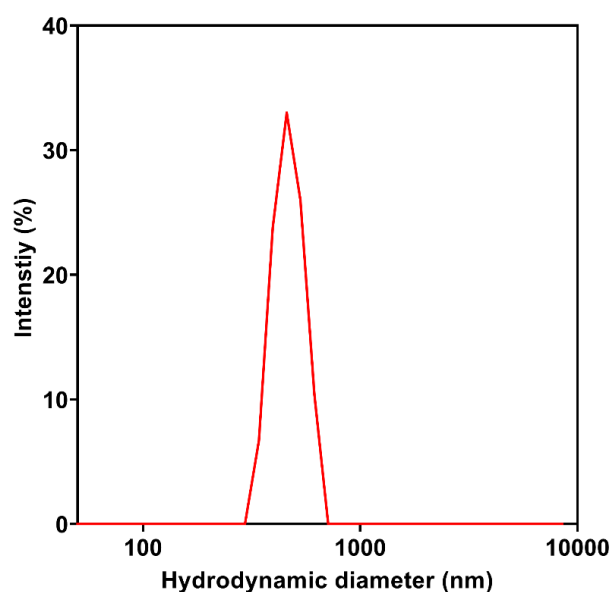


Figure S3. DLS size distribution of SMV in water.

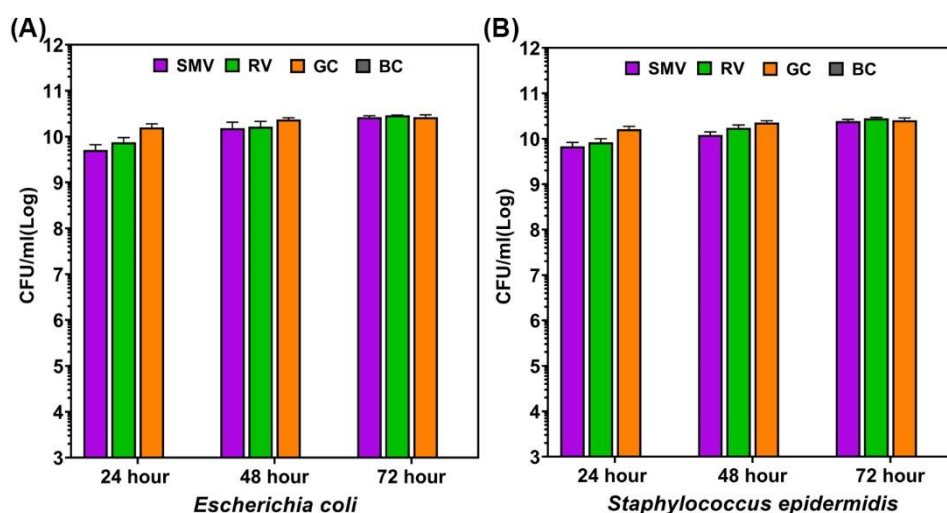


Figure S4. In vitro time-dependent bacterial inhibition test results of SMV and RV towards (A) *E. coli* (B) *S. epidermidis*.

Table S1. Elemental percentages from EDS analysis of SMV

Element	Atomic number	Mass percentage (%)	Atom percentage (%)	Absolute percentage error (%)
K	19	2.94	1.63	0.13
Fe	26	4.63	1.79	0.18
Al	13	2.01	1.61	0.10
Si	14	40.20	30.98	0.20
Mg	12	7.50	6.68	0.26
Ti	22	0.53	0.24	0.05
O	8	42.19	5.07	1.34