Electronic Supplementary Material (ESI) for Environmental Science: Nano.

Supporting Information

Development of lignin-coated natural polysaccharide-based nanopesticides for both high foliar adhesion and rapid release of pesticide molecules against bacteriostasis

Hanchen Lin, Shanshan Li, Like Ning, Ning Ma, Peng Xu, Mei Hong, Fei Wang, Chaoqun You*

Jiangsu Co-Innovation Centre of Efficient Processing and Utilization of Forest Resources; Jiangsu Key Lab for the Chemistry and Utilization of Agro-Forest Biomass; College of Chemical Engineering, Nanjing Forestry University, Nanjing 210037, China

*Corresponding author:

Chaoqun You, College of Chemical Engineering, Nanjing Forestry University, Nanjing 210037, PR China

E-mail: chemyoucq@njfu.edu.cn

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Table S1. Formulation of all tested samples.

Samples	Composition				
	CS	MC	SA	LGN	NES
CMs	√	√	√		
LCMs	√	√	√	√	
NES@CMs	√	√	√		√
NES@LCMs	√	√	√	√	√

Table S2. Loading efficiency (LE) of NES@CMs

	NES@CMs	LE in theory (%)
LE (%)	45.66±0.05	47.25

Table S3. Loading efficiency (LE) of NES@LCMs

	NES@LCMs	LE in theory (%)
LE (%)	37.97±0.05	39.02

Figure S1 From left to right, NES@LCMs, NES@CMs, LCMs, CMs, NES Sample photos.

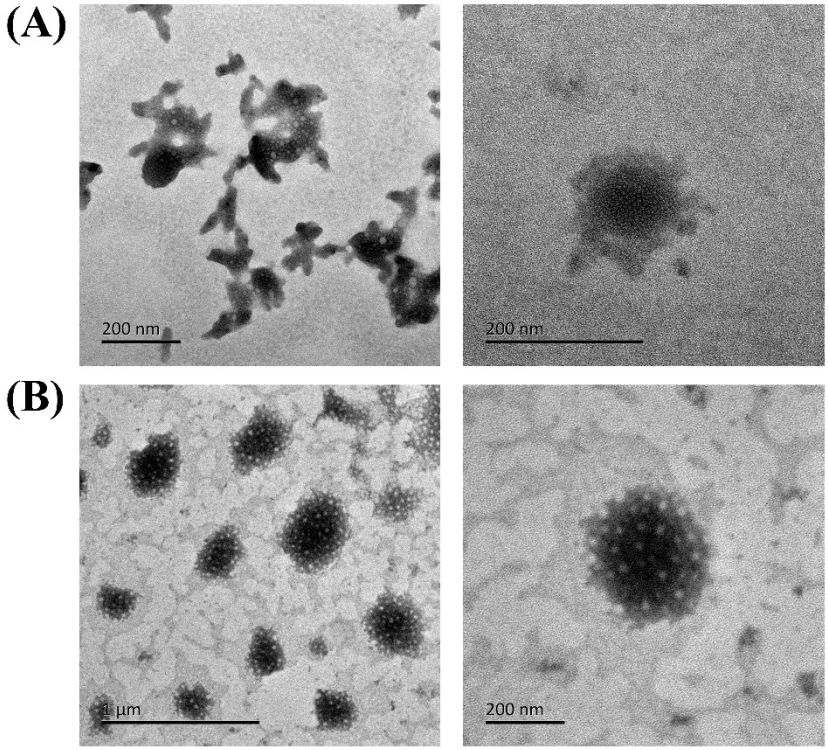

Figure S2 TEM images of NES@CMs (A), and NES@LCMs (B).

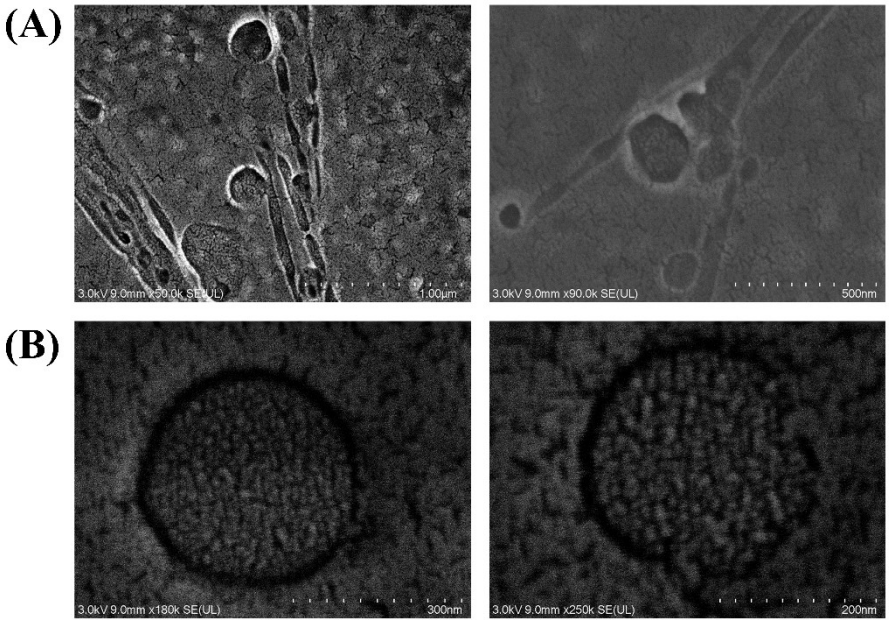

Figure S3 CF-SEM images of NES@CMs (A), and NES@LCMs (B).

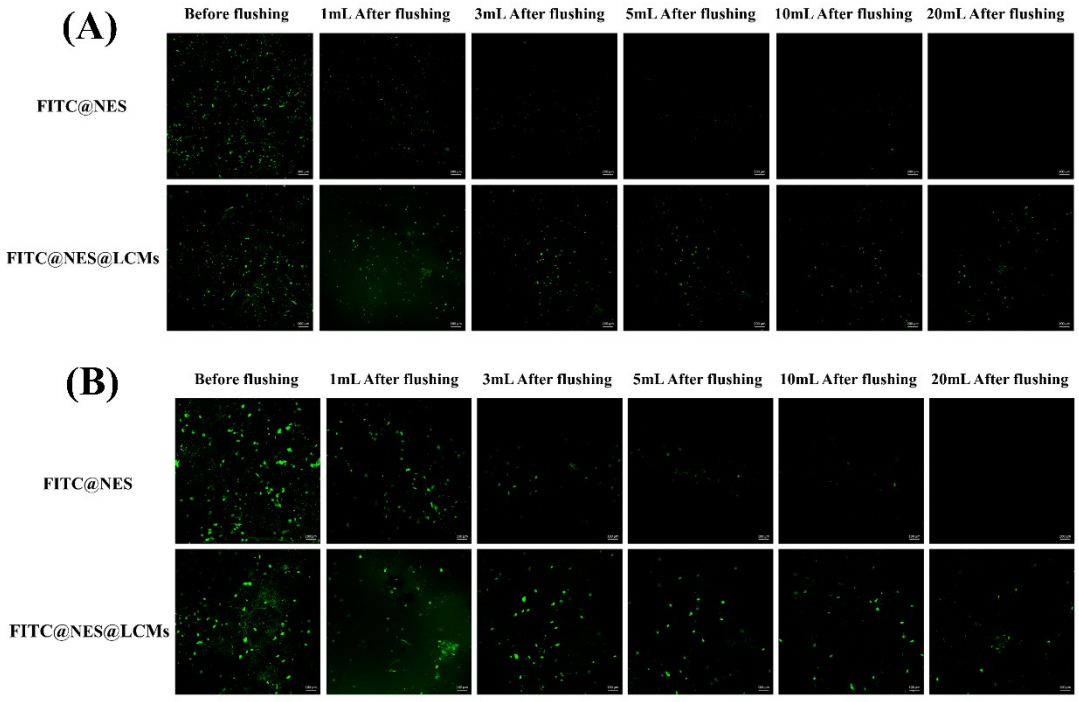

Figure S4 Images of NES and NES@LCMs taken before and after rinsing with water at 5x (A) and 10x (B) of the microscope.

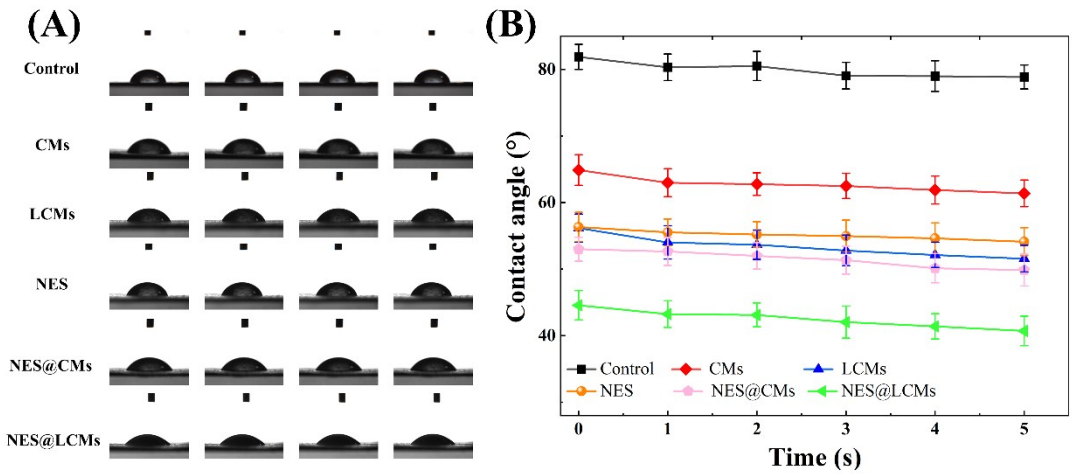

Figure S5 Contact angle images (A) and values (B) of control, CMs, LCMs, NES, NES@CMs, and NES@LCMs dispersions on leaves.

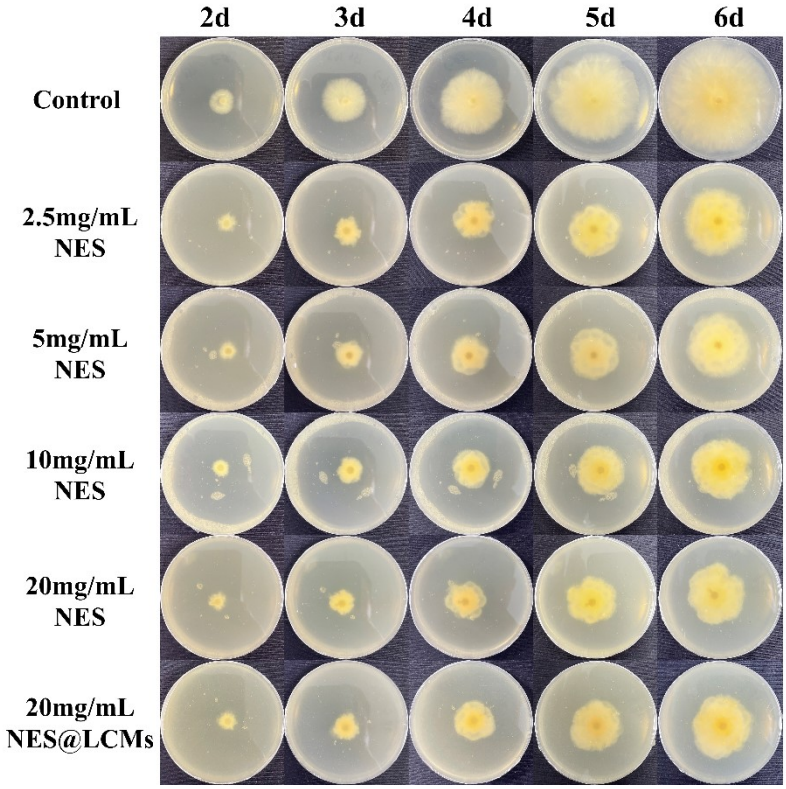

Figure S6 Images of the antifungal activity of different concentrations of NES and NES@LCMs.

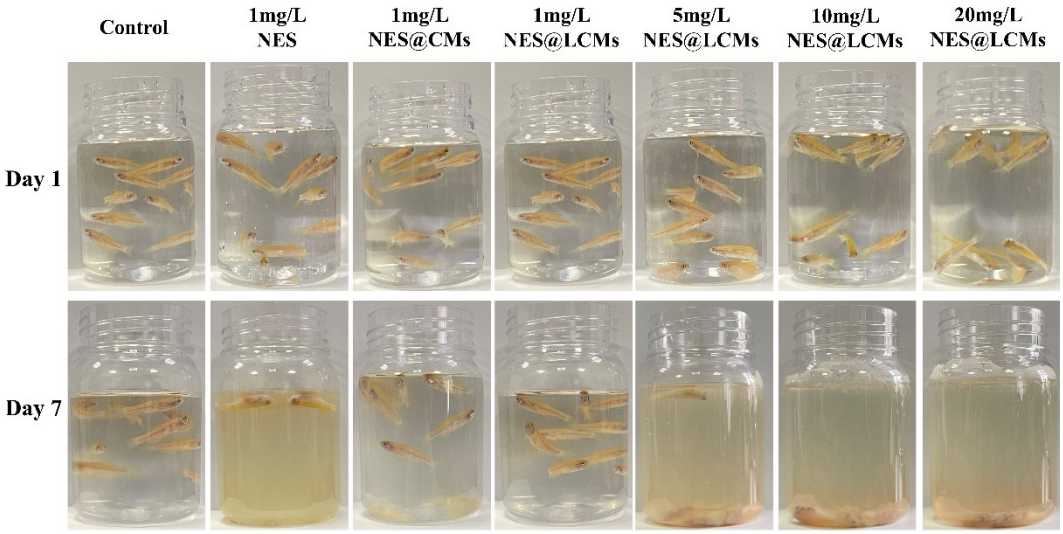

Figure S7 Comparison of survival pictures of zebrafish treated with NES, NES@CMs, and NES@LCMs.

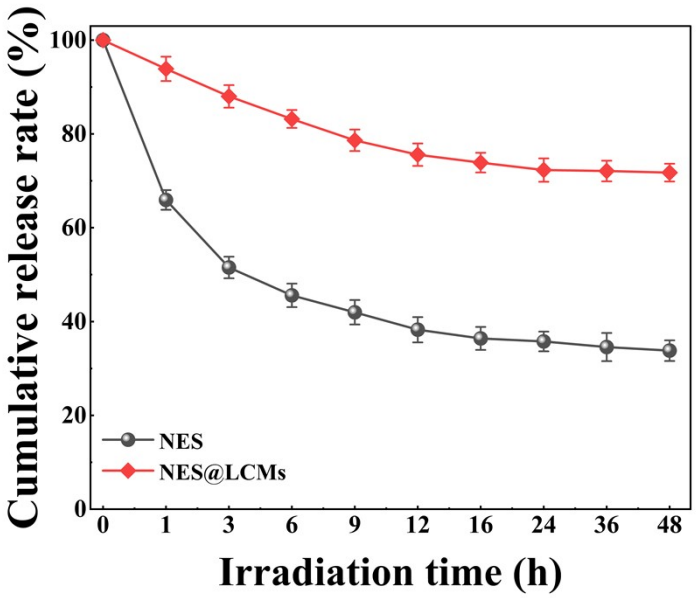

Figure S8 Comparative change of accumulated NES residue rate with time in NES solution and NES@LCMs after ultraviolet irradiation.

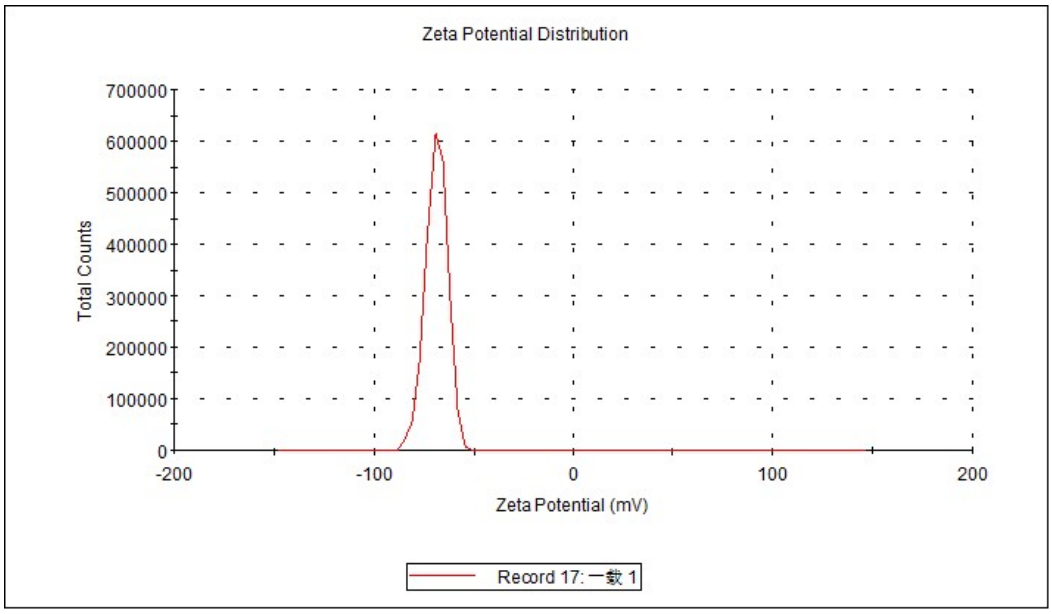

Figure S9 The zeta potential of NES@LCMs.