

THE POTENTIAL OF RICE HUSK WASTE TO SYNTHESISE ZINC OXIDE NANOPARTICLES AND ASSESSMENT TO THE ANTIBACTERIAL ACTIVITIES

Nurfitriah Amran ^a, Siti NurSyazwani Maadon ^a, Yamin Yasin ^b, Nik Rozlin Nik Masdek ^c, Mohd Rafii Yusop ^d, Nor Hazlina Mat Sa'at ^e, Nor Monica Ahmad ^b, Nor'Aishah Hasan ^{a*}

^aSchool of Biology, Faculty of Applied Sciences, MARA University of Technology, Cawangan Negeri Sembilan, Kampus Kuala Pilah, 72000 Kuala Pilah, Malaysia

^bSchool of Chemistry and Environment, Faculty of Applied Sciences, MARA University of Technology, Cawangan Negeri Sembilan, Kampus Kuala Pilah, 72000 Kuala Pilah, Malaysia

^cSchool of Mechanical Engineering, College of Engineering, MARA University of Technology, 40450 Shah Alam, Selangor, Malaysia

^dInstitute of Tropical Agriculture and Food Security, University of Putra Malaysia (UPM), Serdang, Selangor, Malaysia

^eHorticulture Research Centre, Malaysian Agricultural Research and Development Institute, Persiaran (MARDI)-UPM 43400 Serdang, Selangor, Malaysia

*e-mail: aishahnh@uitm.edu.my

Received: 16 July 2024/ Revised final: 11 October 2024/ Accepted: 14 October 2024

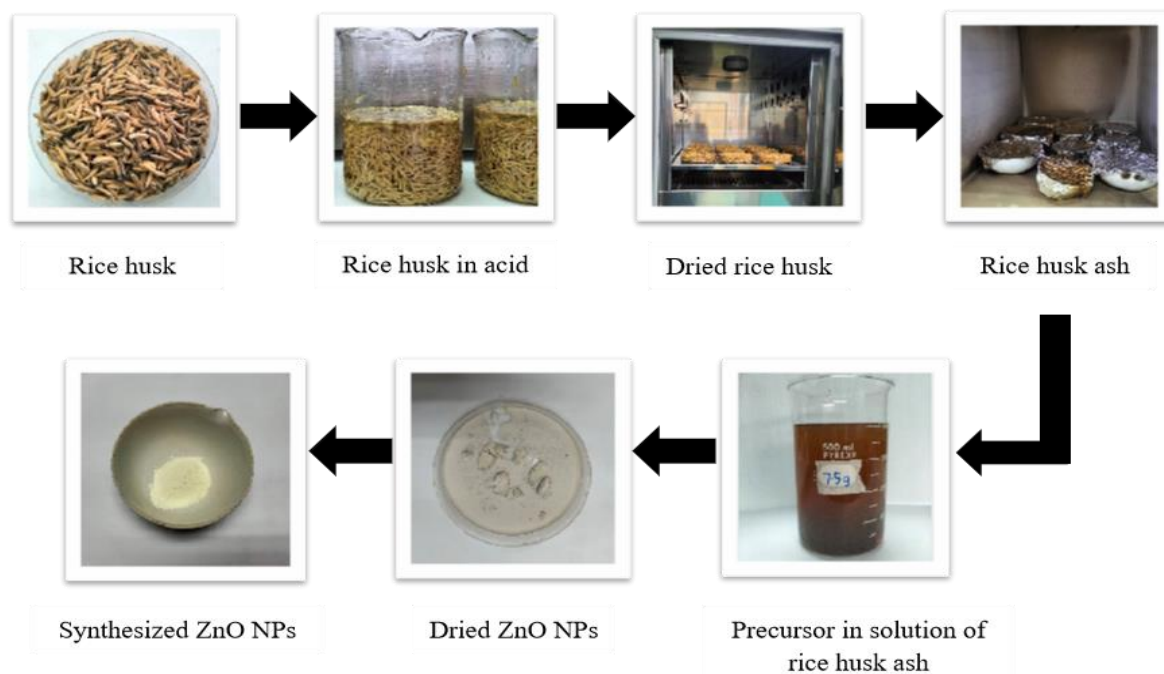


Figure S1. Stages and procedures to prepare ZnO NPs.

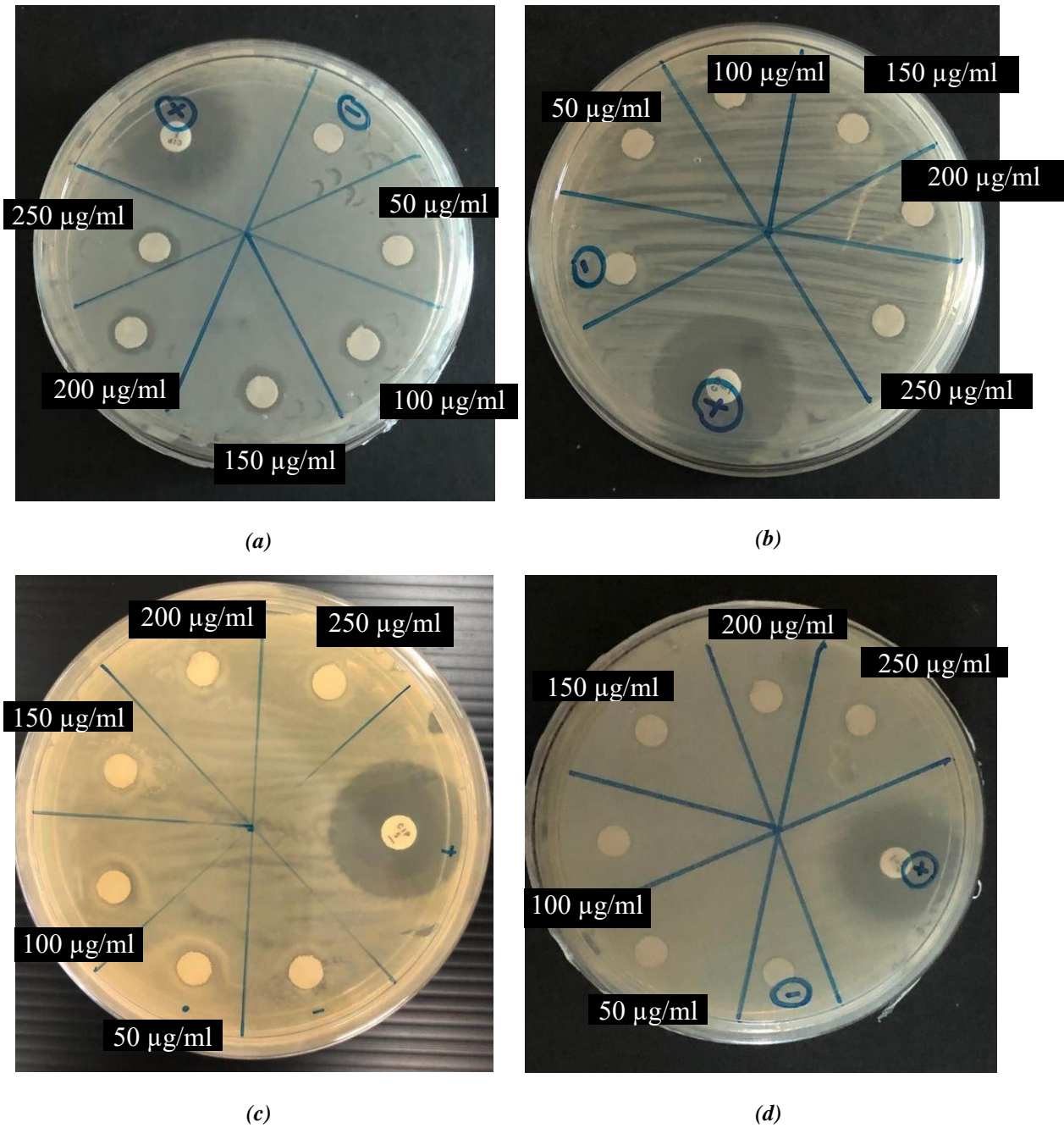


Figure S2. Antibacterial evaluation of ZnO NPs at *Escherichia coli* (a), *Staphylococcus aureus* (b), *Klebsiella pneumoniae* (c) and *Bacillus subtilis*(d).