

OPD7) Antimicrobial and Antioxidant Activity of the Extracts and Fraction from *Osmanthus insularis*

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This study was designed to investigate the possible utilization of *Osmanthus insularis* extract for the development of natural cosmetics ingredients. We evaluated the antimicrobial and antioxidant effect of leaves of 70% ethanol and solvent fractions from *O. insularis*. Antimicrobial activities of *Staphylococcus aureus*, *Staphylococcus epidermidis* and *Propionibacterium acnes* strains including two antibiotic resistant strains were observed in paper disc method and MIC showed inhibition of bacterial growth. In antibacterial activity by the disc diffusion assay against *S. aureus*, *S. epidermidis* and *P. acnes*, the dichloromethane fraction showed stronger antibacterial activity than other fractions and the extract. Antioxidant activities of DPPH and ABTS radical scavenging activity were screened for the 70% ethanol and solvent fractions, the highest antioxidant activity was exhibited by the dichloromethane and ethylactate fractions. In conclusion we found that the 70% ethanol and fraction of *O. insularis* may be utilized as an efficient material in cosmetics to prevent contamination by human skin microbes.

Key words : *Osmanthus insularis*, Antibacterial, Antioxidant, cosmetics