

Isolation and Characterization of Antimicrobial Substances from *Hovenia dulcis* Thunb Leaves and Stems

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(Abstract)

The methanol-soluble fraction from the hot water extracts of *Hovenia dulcis* Thunb leaves and stems showed antimicrobial activity against *Staphylococcus aureus* and *Escherichia coli*. The methanol-soluble fraction was successively purified through solvent fractionation, silica gel adsorption chromatography, Sephadex LH-20 column chromatography, and octadecylsilane column chromatography. Further purification through high performance liquid chromatography gave two antimicrobial substances which were, respectively, identified as 2,3-dihydroxy-4-hydroxymethyl-6-methoxy-pyridine and 3(Z)-dodecenedioic acid through MS and NMR analyses. These compounds showed antimicrobial activity against *S. aureus* and *E. coli* at 500 μ g of concentration using the paper disc method.

(References)

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