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Antioxidative and Antimicrobial Activity of Epicatechin Isolated from Leaves of Loquat(*Eriobotrya japonica*)

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The loquat(Rosaceae), is a small tree native to Japan and China that is widely cultivated for its succulent fruit. Its leaves have been used as a folk medicine for treatment of chronic bronchitis, coughs, phlegm, high fever, and ulcers in Japan and other Asian countries. Extracts were obtained from the leaves of loquat(2 kg) in methanol and successively fractionated with solvent of hexane, chloroform, ethyl acetate, butanol, and water, successively. The fraction of ethyl acetate was represented the highest antioxidative and antimicrobial activity.

Therefore, the ethyl acetate fraction was purified and identified the chemical structure by ¹H and ¹³C-NMR spectra, FT-IR and EI/MS spectroscopies. The isolated antioxidative and antimicrobial substance was identified as epicatechin.