Title : Antimicrobial and Antioxidant Activity of Some Thai Medicinal Plants
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Abstract*

The preliminary result of the antimicrobial activity in 6 microorganisms and antioxidant activity tests of ethanol extracts from 25 Thai medicinal plants in 5 families found that the Thai medicinal plants in Combretaceae family and Caesalpiniaceae family revealed that they displayed high activity. In Combretaceae family can inhibited specific Staphylococcus aureus and Bacillus cereus which are gram positive bacteria. In Caesalpiniaceae family inhibited all microorganisms but exhibited high activity in the gram positive bacteria. Almost Thai medicinal plants showed antioxidant activity. Therefore the Combretaceae family and the Caesalpiniaceae family was to further studied by fractional extraction with n-hexane, dichloromethane, ethyl acetate and methanol respectively. The antimicrobial activity found that crude hexane, crude dichloromethane and crude ethyl acetate had not or rather low antimicrobial activity. For the methanol extract had potentiality antimicrobial activity. The Combretaceae family can inhibit specific gram positive bacteria while the Caesalpiniaceae inhibit all microorganisms but exhibited very high activity in gram positive bacteria. In minimum inhibition concentrations for S.aureus found that Caesalpinia sappan L. has lowest MICs (6.3 mg/ml). For B. cereus Senna garrettiana Craib. has lowest MICs (3.1 mg/ml). The EC_{50} of antioxidant activity test showed Terminalia chebula Retz. was lowest (0.2 \mu g/ml)

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