Antioxidant and Antimicrobial Activities of Essential Oil and Extracts of *Saurauia lantsangensis* Hu Root

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Antioxidant and antimicrobial activities of the essential oil and *n*-hexane (HEE), chloroform (CHE), ethyl acetate (EAE), and methanol (MEE) extracts, respectively, from the root of *Saurauia lantsangensis* Hu were investigated. The GC-MS analysis revealed 39 compounds representing 96.41% of the oil containing T-muurolol (13.85%), acetophenone (7.46%), *Ŭ*-cadinol (6.26%), methyl palmitate (5.36%), *n*-hexadecanoic acid (4.31%), torreyol (3.69%), and isospathulenol (3.48%) as major components. Antioxidant activities determined by three various testing systems, *i. e.* DPPH radical scavenging, superoxide anion radical scavenging, and reducing power assay, increased in the order: HEE < CHE < oil < MEE < EAE. CHE, EAE, MEE and oil exhibited a promising antimicrobial effect determined as the diameter of zones of inhibition (13.3–16.2, 16.5–20.4, 13.5–16.6, and 16.5–22.7 mm), respectively, along with their respective MIC values (500–1000, 125–500, 250–500, and 250–500 μg/ml) against Gram-negative bacteria (*Pseudomonas aeruginosa*, *Escherichia coli*), Gram-positive bacteria (*Bacillus subtilis*, *Staphylococcus aureus*), and a yeast (*Hansenula anomala*).

Key words: Antioxidant, Antimicrobial, *Saurauia lantsangensis* Hu