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Phytochemical and antioxidant properties from different parts of Salacia chinensis L

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The root and stem of *Salacia chinensis* L. have been traditionally used as herbal medicine for the treatment of various ailments, the leaf, however has not been investigated and may contain high levels of phytochemicals. This study aimed to compare phytochemical and antioxidant properties of the root, stem and leaf of *Salacia chinensis* L. The results showed that the root of *S. chinensis* had the highest content of phenolics, flavonoids, proanthocyanidins and saponins (64.4 mg GAE/g DW, 106 mg CE/g DW, 43.5 mg CE/g DW and 799.9 mg EE/g DW, respectively), followed by the stem and leaf. In addition, results from the ABTS, DPPH, FRAP and CUPRAC antioxidant assays revealed that the root of *S. chinensis* had the highest antioxidant capacity (632.2, 577.1, 443.3 and 365.0 μ M TE/g DW, respectively), again followed by the stem and leaf. HPLC analysis revealed that the root and stem had three major compounds, while the leaf had more major individual compounds in lower quantities in comparison with the root and stem. As the root contained high phytochemical and antioxidant properties, future studies are recommended to isolate and identify the major bioactive compounds from the root for further industrial utilization.

Biography

Thanh Van Ngo is currently a PhD student in Food Science at the University of Newcastle, Australia. Presently, he is a Lecturer and Researcher at College of Forestry Biotechnology, Vietnam National University of Forestry and has published about 10 papers in different journals.

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