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Effects of drying methods, solvents and extraction methods on phytochemical compounds and antioxidant capacity from Xao tam phan (*Paramignya trimera*) root

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Drying methods, solvents and extraction methods greatly affect the phytochemical compounds and biological activity from plant materials. The aims of this study were to determine the effects of different drying methods, various solvents and extraction methods on the phytochemical compounds and antioxidant capacity from Xao tam phan (*Paramignya trimera*) root obtained from Vietnam. The results showed that microwave drying was an effective method in removal of water in terms of shortest drying time, lowest energy consumption and greatest retention of phytochemical compounds and antioxidant capacity from the *P. trimera* root while methanol and microwave-assisted extraction were the best solvent and method for greatest extraction of the phytochemical compounds and antioxidant capacity from the *P. trimera* root. The findings from this study allow retaining the highest levels of phytochemical compounds and antioxidant capacity from the *P. trimera* root for potential application in the nutraceutical industry.

Biography

Van Tang Nguyen graduated in food technology from the HaNoi University of Science and Technology. He received his Master degree in food science from the National Taiwan Ocean University and has been doing his PhD degree in food science at the University of Newcastle, Australia. His current research focuses on natural bioactive compounds, pharmacological activity and functional foods. He has published a number of research papers in various journals and being reviewers for different journals. He is also working as a Casual Academic in food science at the University of Newcastle and a Lecturer in food science and technology at the NhaTrang University.

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