
Effects of extraction solvent on the total phenolic and flavonoid content extracted from orange colored Kiwifruit (*Actinidia macrosperma* L.)

S.K. Hettihewa^{1,2}* and Y. Hemar²

¹Allied Health Sciences, Faculty of Medicine, University of Ruhuna, Galle, Sri Lanka

²School of Chemical Sciences, University of Auckland, 23 Symonds Street, Auckland 1142, New Zealand

In this study, phenolic compounds from *Actinidia macrosperma* kiwifruit were extracted in to different extraction solvents namely 70% aqueous acetone, 80% aqueous methanol, 80% aqueous ethanol, 100% methanol and water. Total phenolic, total flavonoid contents as well as total flavanol content of the extracts were assessed spectrometrically. Among the solvents employed, 70% aqueous acetone resulted in the highest values of total phenolic (823.1±14.4 mg gallic acid equivalent/ 100 g DW), total flavonoid (170.9±1.9 mg catechin equivalent/ 100 g DW), and total flavanol (82.6±0.6 mg catechin equivalent/ 100 g DW) contents. It is concluded that 70% aqueous acetone extract from *A. macrosperma* kiwifruit contains many flavonoids which can be isolated and identified in the future studies and selected as the best extraction medium for this fruit.

Key words: Antioxidants, Extracts, Flavonoids, Kiwifruit, Polyphenols

Acknowledgements: Authors thank Dr. D.E.Stevenson, Plant and Food Research, Raukura, New Zealand and for providing the kiwifruit samples.

*krishanthi2001@yahoo.com