

Phytochemical Investigation and in Vitro Antioxidant Activity of Citrus Sinensis Peel Extract

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Abstract: *The present study was undertaken to analyse the phytochemical constituents both qualitatively and quantitatively in the peel extract of Citrus sinensis. The studies showed that the major phyto constituents present in the methanolic extract was hesperidin and nobiletin. The DPPH and hydroxyl radical scavenging activity of the methanolic extract was found to be better than the other extracts used in the study. Finger printing assay of the extract was carried out using HPTLC and we report the presence of two flavonoids - nobelitin and hesperidin. Keywords: C.sinensis peel, HPTLC, antioxidant, phenolic compound, phyto constituents.*

Keywords: Phytochemical Investigation

REFERENCES

- [1] Ihrig M, qualitatskontrolle von subem orangeschalenol pharmazeutische Zeitung, 1995, 140, 2350-2353.
- [2] Ahmad, M.M., Salim-ur-Rehman, Z. Iqbal, F.M. Anjum and J.I. Sultan, Pak. J. Bot., 38,2, pp.319-324, 2006.
- [3] Schieber, A., F.C. Stintzing and R. Carle, Trends in Food Science and Technology, 2001,12,401- 413. [4] Sofowra, Africa J Altern Complemen.,1996, 2,3, 365-372.
- [5] Harborne JB, London. Chapman and Hall, Ltd., 1973, 49-188.
- [6] Obadoni, B.O., Ochuko, P.O., Glob.J. Pure Appl. Sci., 2001,86, 2003-2008.
- [7] Singleton VL, Orthofer R, Lamuela-Raventos RM. Methods Enzymol., 1999,299,152-178.
- [8] Chang CC, Yang MH, Wen Hm, Chern JC, J. Food Drug Anal., 2002, 10, 178-182.
- [9] Ebrahimzadeh, M.A., Nabavi, S.F., Nabavi, S.M., Pak J Biol Sci., 2001,12, 447-450.
- [10] Elizabeth, K. and Rao, M.N, Int. J. Pharm., 1990,58,237-40.
- [11] Akter R, Raquibul Hasan SM, Mokarram Hossain M, Jamila M, Sultana S, Chowdhury, Mazumder MEH, Rahman S, Australian Journal of Basic and Applied Sciences 2010, 4,3, 450-456.
- [12] Armoskaite V, Ramanauskiene K, Maruska A, Razukas A, Dagilyte A, Baranauskas A, Briedis V, Journal of Medicinal Plants Research, 2011, 5,5, 811-816.
- [13] Ahmad Siddique N, Mujeeb M, Kalam Najmi A, Akram M, African Journal of Plant Science, 2010, 4,1, 001- 005