

Recovery of phytochemical components from various parts of *Morinda citrifolia* extracts by using membrane separator

Abstract

In this study, extracts from various *Morinda Citrifolia* parts (leaf, fruit and root) by methanol was separated into permeate and retentate fractions using a membrane system equipped with a nanofiltration (NF) membrane. NF was carried on a ceramic membrane with MWCO of 5 kD. Effect of NF transmembrane pressure at 0.1, 0.12 and 0.17 bar was examined at constant temperature 45°C with constant flow rate. The influence of transmembrane pressure on the efficiency of antioxidant activity and total phenolic content of permeate retentate concentration was examined. The antioxidant activities of crude mengkudu extracts, NF permeate and retentate were evaluated by using the DPPH radical scavenging activity and total phenolic content. © 2007 Asian Network for Scientific Information.