

Stability of andrographolide in andrographis paniculata under selected storage conditions.

ABSTRACT

Fresh *Andrographis paniculata* was dried by a thin layer drying technique using hot air at a temperature of 55 °C and velocity of 1.0 m/s. The dried sample was then ground and kept in air-tight glass bottles at three selected storage conditions ($5\pm 2^{\circ}\text{C}$; $25\pm 2^{\circ}\text{C}$ with $60\%\pm 5\%$ RH; $30\pm 2^{\circ}\text{C}$ with $(60\%\pm 5\% \text{RH})$) for three months period. The contents of the active compound andrographolide present in the dried *Andrographis paniculata* at the beginning and at the end of each month during the storage period were determined by using the HPLC. It was found that there was no significant reduction of the active compound andrographolide for all of the selected storage conditions. Storage at ambient conditions ($30\pm 2^{\circ}\text{C}$, $60\pm 5\%$ RH) was also able to maintain andrographolide content in *Andrographis paniculata* during the three months period. This would enhance the production and supply of *Andrographis paniculata* as raw material with ease, without requiring the use of cooling equipment for storage purpose.

Keyword: *Andrographis paniculata* storage; Andrographolide content; Andrographolide stability; Dried herbs; Herb storage; Storage stability.