ABSTRACT

Determination of sinensetin in *Orthosiphon stamineus* Benth. extract by TLC-Densitometry and Its Validation

A simple TLC-Densitometry method has been developed for the determination of sinensetin in *Orthosiphon stamineus* Benth. extract. Silica gel F 254 as a stationare phase and chloroform-acetic acid (16:1) as a mobile phase. Qualitative identification was done by comparing Rf and spectrum profile of sinensetin’s marker compound of *Orthosiphon stamineus* Benth. extract with standard. The maximum wavelength was detected at 337 nm. Linearity response was found with regression of equation $Y = 45.18X + 1597$ ($r = 0.9994$; $V_{ax} = 3.07\%$). Limit of detection (LOD) of sinensetin was 0.0247 ng. Limit of quantitation (LOQ) was 0.0824 ng. The recovery of sinensetin was 80-120%. These results demonstrate that TLC-Densitometry can be a simple technique for quantification sinensetin in *Orthosiphon stamineus* Benth. extract.

Keyword: Sinensetin, TLC-Densitometry, *Orthosiphon stamineus* Benth.