

# งานวิจัยเรื่อง การศึกษาความคงตัว และ ฤทธิ์ทางชีวภาพของสารสกัดตำรับยาปราบชมพูทวีป

โดย คุณดลิตา ชั่งสิริพร เกสัชกรชำนาญการ และคณะ

Stability study and biological activity of Prabchompoothaweeb ethanolic extracts.

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Prabchompoothaweeb (PCW) remedy as Thai traditional remedy, was listed in The National Herbal Drug List of Thailand 2011. This remedy is used to relieve common cold and allergic rhinitis (AR). It is composed of twenty-three herbs and the most ingredients have hot and spicy flavors. Crude PCW remedy was prescribed 8-10 capsules/day for AR patients at U-Thong Hospital, causing them to have low compliance. Thus, these have attempted to develop crude PCW remedy into extract drug that requires data on stability and efficacy for allergy. The purpose of stability testing is to investigate the quality of bioactivity and bioactive chemical markers of extract drug. PCW ethanolic extract exhibited the potent anti-allergic activity against release of  $\beta$ -hexosaminidase ( $IC_{50} = 28.32 \pm 4.18 \mu\text{g/mL}$ ) and anti-inflammatory activity by inhibiting nitric oxide (NO) production ( $IC_{50} = 17.40 \pm 1.68 \mu\text{g/mL}$ ). For chemical analysis, total phenolic content and piperine content of extract were  $89.20 \pm 1.42 \text{ mg GAE/g extract}$  and  $29.85 \pm 1.29 \text{ mg/g extract}$ . In accelerated stability testing PCW extract was tested on  $40^\circ\text{C}$  and 75% RH condition for 180 days. The anti-allergic activity had not significantly different in each period when compared to baseline (day 0) ( $p > 0.05$ ). Total phenolic and piperine contents had no significant changing, compared with day 0 ( $p > 0.05$ ) Therefore, PCW ethanolic extract which is kept in sealed container, protected from light can store at room temperature for at least 2 years without affecting on anti-allergic activity and chemical marker content. In the future, try to study about the safety of PCW extract capsules in healthy volunteers (clinical trial phase I) and study the efficacy of PCW extract capsules in Allergic Rhinitis patients (clinical trial phase II).

Keywords: Prabchompoothaweeb, Stability, biological activity, Allergic rhinitis