

**P16 ANALGESIC EFFECTS OF THE ETHANOLIC EXTRACT FROM
CISSUS QUADRANGULARIS DRIED STEM**

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Cissus quadrangularis Linn., known locally as "Phet-Cha-Sung-Khat", is a plant in family Vitaceae. It has been considered to be a folk medicine for bone healing and antihemorrhoid. In these studies, we initially examined the analgesic property of a range of the ethanolic extract of *C. quadrangularis* dried stem (CQ) doses in the mouse hot-plate test. Hot-plate latencies (cut-off 45 sec) were determined in male ICR mice prior to the i.p. administration of 0.9% normal saline solution (NSS), morphine (MO: 10 mg/kg), acetylsalicylic acid (ASA: 150 mg/kg) or various doses of CQ (43.75-700 mg/kg). Hot-plate latencies were subsequently determined at 15, 30, 45, 60, 90, 120 and 240 min. The mean percent maximum possible effect (%MPE) was calculated and used in the determination of the area of analgesia (%MPE-min). Study then was performed in mouse tail-flick test. Tail-flick latencies (cut-off 4 sec) were determined in male ICR mice prior to the i.p. administration of NSS, MO (10 mg/kg), ASA (150 mg/kg) or various doses of CQ (43.75- 700 mg/kg). Tail-flick latencies were subsequently determined at 7 time intervals. CQ in doses of 87.5 mg/kg and higher produced a significant dose-related analgesic response in both hot-plate and tail-flick analgesia assays. CQ (175-700 mg/kg) produced analgesic response that was naltrexone-sensitive suggesting opioid-mediated mechanism. The results demonstrate that the ethanolic extract of *C. quadrangularis* dried stem produced analgesic effect that was dose-dependent in hot-plate and tail-flick analgesic testing models and mechanism of action seems to be related to opioid receptor.

Key words: ethanolic extract, *Cissus quadrangularis*, analgesic