P-134

Preliminary Screening of Natural Vanillin Presence from In Vitro and In Vivo Plants of Vanilla Planifolia Via thin Layer Chromatography (TLC)

Siti Safura Jaapar*, Saliha Azlan and Syafiqah Zainoddin

Faculty of Pharmacy, Universiti Teknologi MARA, 42300 Puncak Alam, Malaysia; E-mail: sitisa2790@puncakalam.uitm.edu.my

Vanillin, a phenolic compound which is a major component of Vanilla planifolia, has been gaining interests due to its potential as natural food preservative and anti-oxidant. Vanillin is usually extracted from the pods of V. planifolia. This study deals with the detection of vanillin from different dried parts of in vitro and in vivo plant of V. planifolia, namely leaves, stem, and common root. The solvent used was ethyl acetate. The crude extract obtained was analyzed by using Thin Layer Chromatography (TLC) with a mixture of hexane and ethyl acetate with a volume ratio of 8:2 as the mobile phase and iodine vapors as the developing agent. The different parts of both in vivo and in vitro plant of Vanilla planifolia were found to contain vanillin. For sample concentration of 25 %, the Rf values for the leaves, common root and stem of in vivo plant was 0.545, 0.539 and 0.532 respectively and for the in vitro plant was 0.532, 0.545, and 0.532. For sample oncentration of 50 %, the Rf values for the leaves, common root and stem of in vivo plant was 0.469, 0.481 and 0.475 respectively and for the in vitro plant was 0.463, 0.475, and 0.494.

Keywords: Euphorbiaceae, Macaranga triloba, Flavonoid, Malaysianone A, Antiplasmodial.