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

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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 0.522, 0.545, and 0.475 respectively and for the *in vitro* 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.