



## CHEMICAL STUDY OF *Litchi chinensis* SEEDS CRUDE EXTRACT.

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Lychee (*Litchi chinensis* Sonn.) was introduced in Brazil in 1810 and is cultivated mainly in the Southeast region. Although the seeds play an important role, they are often discarded during consumption of the fruit, resulting in waste of a potentially valuable material. In traditional medicine, the seeds of *L. chinensis* have commonly been used to relieve neuralgic pain, abdominal pain, bloating, and testicular pain. The predominant chemical constituents in *L. chinensis* seeds include cyclopropanoic fatty acids, terpenes, flavonoids, phenolic compounds, glycosidic fatty acids, and lignans. This study aimed to isolate chemical compounds of *L. chinensis* seeds crude extract, since this extract showed antifungal and anti-insecticidal activity in preliminary assays. The dry seed material (2.7 kg) was extracted with ethanol, yielding 158.1 g of crude extract, which was subjected to a liquid-liquid partitioning with *n*-hexane, ethyl acetate, and *n*-butanol. The ethyl acetate fraction was further purified by Vacuum Liquid Chromatography (VLC) using silica and chloroform/methanol as mobile phase, furnishing six subfractions. Subfraction 4 (1.79 g) was purified by Sephadex LH-20 column, eluted with methanol, furnishing 4,5-dihydroxy benzoic acid, which had been previously isolated in earlier research. Further investigations are being conducted to isolate additional metabolites and to assess the biological properties of the obtained fractions and compounds.

**Keywords:** *Lychee*, *phenolic compounds*, *Sapindaceae*, *seeds*

