

International Journal of PharmTech Research

CODEN (USA): IJPRIF, ISSN: 0974-4304, ISSN(Online): 2455-9563 Vol.9, No.7, pp 146-153, 2016

PharmTech

Total Quantity of Phenol and Isolation Methanol Tannin Extract of Red Betel Leaf (*Piper crocatum*)

Afandi Saputra^{1*}, Sri Andayani¹, Happy Nursyam²

¹ Interest in Aquaculture, Fac. Of Fisheries and Marine Science. Universitas Brawijaya, Malang, Indonesia ²Interest in Aquatic Process, Fac. Of Fisheries and Marine Science. Universitas Brawijaya, Malang, Indonesia

Abstract : Red betel leaf (P. crocatum) is a plant-based product has been reported to function as anti-stress, growth promoters, stimulation of appetite, and immunostimulant. It is also acts as antimicrobial because it contains alkaloids, tannins, flavonoids, pigments, phenolics, terpenoids, steroids, and essential oil. This study was aimed to find out the results of phytochemical screening. Total value of phenols and tannins insulation class of compounds was characteristics of the methods of UV-Vis spectrophotometer and FTIR. The extraction method in this research is the method of maceration using methanol for 48 hours with a comparison sample and the solvent of 1: 2.5 (b; v). Qualitative phytochemical test conducted in this study was composed of test alkaloids, flavonoids, steroids, terpenoids, saponins and tannins. Characterization of total phenol red betel leaf is carried out using a UV-Vis spectrophotometer using Folin- Ciocalteu reagent, and its concentration is measured by the standard curve gallic acid. Insulation class compound tannin is using TLC and column chromatography. The test results of phytochemical screening of red betel leaf are a compound containing alkaloids, flavonoids, saponins and tannins. Results of testing the highest value of total phenols contained in fresh betel leaf is 41.29 ± 0.52 GAE / g. Insulation class compound tannin red betel leaves dry with the characteristics of UV-Vis spectrophotometer and FTIR which showed isolated compound is a class of compounds tannins.

Key word : Phytochemicals, Piper crocatum, total phenols, tannins and isolation.

Afandi Saputra et al /International Journal of PharmTech Research, 2016,9(7),pp 146-153.
