

Antioxidant activity, phenolic, flavonoid and tannin content of piper betle and Leucosyke capitella

Abstract

Piper betle and Leucosyke capitella are plants that are commonly used as traditional medicine. In this study, antioxidant Activity, Phenolic, Flavonoids and Tannin content of these plants were evaluated. The plants were extracted using petroleum ether, acetone and methanol. The total phenolic, flavonoid and tannin extract of both plants is in the order of acetone > methanol > petroleum ether. The result shows that the total phenolic, flavonoid content for Piper Betle and Leucosyke Capitella is in the range of 31.25 to 47.48 mg/g and 1.68 to 7.19 mg/g, respectively. For Piper betle, the total flavonoid content is in the range of 29.58 to 46.08 mg/g and for Leucosyke capitella is in the range of 1.08 to 6.83 mg/g. It is also found that Piper betle extracted with methanol has higher antioxidant activity than vitamin E, butylated hydroxytoluene (BHT) and catechin but lower than quercetin.