Uji aktivitas antioksidan ekstrak daun prasman (ayapana triplinervis vahl.) serta penetapan kadar flavonoid dan fenol total pada ekstrak teraktif = Antioxidant activity test on the extract of prasman leaf (ayapana triplinervis vahl.) and determination of total flavonoid and phenolic content in the most active extract

Yunitrianti, author

Abstrak

Tanaman Ayapana triplinervis Vahl. atau yang biasa dikenal dengan Prasman, merupakan tanaman yang dapat menghilangkan radikal bebas karena memiliki efek antioksidan. Belum banyak dilakukan penelitian mengenai aktivitas antioksidan dari Ayapana triplinervis Vahl. Berdasarkan uji DPPH 2,2-difenil-1-pikrilhidrazil menggunakan spektrofotometer UV-Vis ekstrak n-heksana, etil asetat, dan metanol pada konsentrasi akhir 25 g/mL berturut-turut memiliki nilai inhibisi 38,91, 51,03 dan 54,06. Setelah mendapat inhibisi didapatkan IC50 ekstrak etil asetat, dan metanol berturut-turut 28,71 g/mL dan 23,472 g/mL. Berdasarkan uji FRAP Ferric Reducing Antioxidant Power menggunakan microplate reader ekstrak etil asetat, dan metanol memiliki nilai FeEAC 460 mol/g, 828,99 mol/g dan 940,22 mol/g. Ekstrak metanol menunjukan aktivitas antioksidan tertinggi, dengan nilai IC50 23,47 g/mL dan nilai FeEAC 940,22 mol/g. Ekstrak etil asetat dan metanol pada konsentrasi awal memiliki kadar fenol total 12,06, dan 42,11 mg GAE/gram ekstrak, serta kadar flavonoid total 3,24 dam 3,41 mg QE/gram ekstrak. Berdasarkan uji penetapan kadar fenol dan flavonoid, ekstrak metanol menunjukkan nilai tertinggi.
.....Ayapana triplinervis Vahl. or Prasman is a plant that can eliminate free radicals due its antioxidant effects. There are slightly research have been conducted to explore the antioxidant activity of Ayapana triplinervis Vahl. Based on DPPH assay using UV Vis spectrophotometer, n hexane, ethyl acetate and methanol extract with a final concentration of 25 g mL have an inhibitory value of 38.91, 51.03 and 54.06 respectively. Using inhibition IC50 is obtained ethyl acetate extract and methanol are 28,71 g mL and 23,472 g mL.
Based on FRAP test using microplate reader of ethyl acetate and methanol extract have FeEAC 460 mol g, 828,99 mol g and 940,22 mol g. The methanol extract shows the highest antioxidant activity, with IC50 value is 940,22 g mL. The extracts of ethyl acetate and methanol at initial concentrations contained total phenol levels of 12.06, and 42.11 mg GAE gram extract respectively, as well as total flavonoid levels of 3.24 and 3.41 mg QE gram extract. Based on the test of the determination of phenol and flavonoid levels, methanol extract showed the highest value.