Karakteristik antioksidan dan fitokimia daun beluntas (pluchea indica) pada lahan salin di wanamina blanakan, Subang = Antioxidant and phytochemistry of pluchea indica leafs at saline soil in blanakan silvofishery, Subang

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Abstrak

ABSTRAK
Penelitian kali ini bertujuan untuk menganalisa fitokimia secara kuantitatif dan kualitatif; aktivitas antioksi dan ekometabolomik daun beluntas yang tumbuh pada lahan salin. Metode yang digunakan dalam uji aktivitas antioksidan adalah metode 2,2-diphenyl-1-picrylhydrazyl (DPPH) and High Performance Liquid Chromatography (HPLC) digunakan untuk menganalisa ekometabolomik. Hasil uji kualitatif fitokimia ekstrak metanol daun beluntas pada lahan salin menunjukkan negatif terhadap terpenoid dan steroid dan positif terhadap alkaloid, flavonoid, tanin, dan saponin. Hasil uji kualitatif fitokimia ekstrak metanol daun beluntas pada lahan non salin menunjukkan positif terhadap alkaloid, flavonoid, tanin, saponin, terpenoid dan steroid. Kandungan total fenol dan flavonoid ekstrak metanol daun beluntas pada lahan salin lebih kecil daripada non salin. Rata-rata kadar total fenol ekstrak daun beluntas pada lahan salin dan non salin adalah 938,33 dan 966,83 mg GAE/100 mg berat kering. Rata-rata kadar flavonoid ekstrak daun beluntas pada lahan salin dan non salin adalah 836,74 dan 888,70 mg QE/ 100 gram. Kandungan total flavonoid dan fenol berbanding lurus aktivitas antioksidan. Ekstrak metanol daun beluntas pada lahan non salin memiliki mutu yang lebih bagus dengan luasan peak yang lebih tinggi pada beberapa senyawa yang sama namun jumlah senyawa yang dimiliki lebih sedikit.
<hr>ABSTRACT
The present study aims to analyze phytochemicals quantitatively and qualitatively; antioxidant activity and ecometabolomic of beluntas (Pluchea indica) leaves that grow on saline area, Blanakan. The method used in the antioxidant activity test were the 2,2-diphenyl-1-picrylhydrazyl (DPPH); and High Performance Liquid Chromatography (HPLC) method used to analyze ecometabolomics. Qualitative test results of phytochemical methanol extract of beluntas leaves on saline area showed negative effects on terpenoids and steroids and were positive for alkaloids, flavonoids, tannins and saponins. Qualitative test results of phytochemical methanol extract of beluntas leaves on non-saline fields showed positive effects on alkaloids, flavonoids, tannins, saponins, terpenoids and steroids. The total content of phenol and flavonoids of methanol extract of P. indica leaves on saline fields was smaller than non-saline. The average total phenol content of P. indica leaf extract on saline and non-saline area was 938.33 and 966.83 mg GAE / 100 mg dry weight respectively. The average flavonoid levels of P. indica leaf extract on saline and non-saline fields were 836.74 and 888.70 mg QE / 100 grams respectively. The total content of flavonoids and phenol is directly proportional to antioxidant activity. The methanol extract

of beluntas leaves on non-saline land has better quality with a higher peak area in some of the same compounds, but the number of compounds possessed were less.
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