

ABSTRAK

NABILA. Eksplorasi komponen kimia ekstrak etanol daun Miana (*Coleus scutellariodes* (L) Benth.) dengan metode Gas Chromatography-Mass Spectrometry (Dibimbing oleh **Muammar Fawwaz** dan **Aminah**)

Daun miana (*Coleus scutellariodes* (L) Benth.) banyak digunakan oleh Masyarakat untuk mengobati batuk, bisul, dan radang mata dan telinga penggunaan daun iana sebagai tumbuhan obat berkaitan dengan kandungan kimianya yaitu saponin, tanin, fenolik, tanin dan alkaloid. Penelitian ini bertujuan untuk menentukan komponen kimia ekstrak etanol daun Miana (*Coleus scutellariodes* (L) Benth.) Metode ekstraksi yang digunakan yaitu Ultrasonic Assisted-Extraction (UAE). Lalu ekstrak dipekatkan dengan menggunakan alat rotary vacum evaporator dan hasil ekstrak dianalisis menggunakan Gas Chromatography-Mass Spectrometry (GC-M). Hasil yang diperoleh dari kromatogram 79 senyawa kimia yang terdiri dari asam lemak, ester, fenolik, sterol, terpenoid, alkohol, gula, dan senyawa heterosiklik, dan 2 diantaranya merupakan senyawa turunan fenolik yang peak areanya dibawah 1% yaitu 4-(3,5-Di-tert-butyl-4-hydroxypheny)butyl acrylate dengan peak area 0,20% dengan retensi waktu 34.943 dan 4,6-Bis(1,1dimethylethy1)-4-methy-1,1' biphenyl-2-o1 peak area 0,17% dengan retensi waktu 35.569

KATA KUNCI: Daun Miana, komponen kimia, ultrasonik, metode GC-MS

ABSTACT

NABILA Chemical Composition Analysis of Ethanol Extract from Miana Leaves (*Coleus scutellarioides* (L) Benth.) Using Gas Chromatography-Mass Spectrometry (Supervised by Muammar Fawwaz and Aminah).

Miana leaves (*Coleus scutellarioides* (L) Benth.) have been traditionally utilized for their medicinal properties, particularly in the management of cough, cutaneous abscesses (boils), and ophthalmic/otologic inflammatory disorders. These therapeutic effects are attributed to their bioactive constituents, such as saponins, tannins, phenolics, and alkaloids. Therefore, this study aimed to investigate the chemical composition of the ethanol extract derived from Miana leaves through Gas Chromatography-Mass Spectrometry (GC-MS) analysis. To achieve this, Ultrasonic-Assisted Extraction (UAE) was employed for efficient compound extraction, followed by concentration using a rotary vacuum evaporator. The extract was then subjected to GC-MS, which detected 79 distinct chemical compounds, including fatty acids, esters, phenolics, terpenoids, alcohols, and sugars. Notably, two phenolic derivatives—4-(3,5-Di-tert-butyl-4-hydroxyphenyl)butyl acrylate with a peak area of 0.20% with a retention time of 34,943 and 4,6-Bis(1,1dimethylethy1)-4-methy-1,1' biphenyl-2-o1 peak area of 0.17% with a retention time of 35,569

KEYWORDS: Miana leaves, chemical constituents, ultrasonic-assisted extraction, GC-MS analysis