## ABSTRAK

Indonesia dengan iklim tropis yang panas dan lembap mendukung pertumbuhan jamur dermatofita, salah satunya *Trichophyton rubrum* yang merupakan penyebab utama dermatofitosis. Penggunaan obat antijamur sintetis masih menghadapi keterbatasan efektivitas dan efek samping, sehingga diperlukan alternatif berbasis bahan alam. Kangkung pagar *(Ipomoea carnea* Jacq.*)* diketahui mengandung metabolit sekunder seperti alkaloid, flavonoid, tanin, steroid, dan glikosida yang berpotensi bersifat antijamur. Penelitian ini bertujuan mengkarakterisasi metabolit sekunder ekstrak etil asetat daun Ipomoea carnea Jacq. dengan metode *Liquid Chromatography-Mass Spectroscopy* (LC-MS) serta menguji aktivitas antijamurnya terhadap *Trichophyton rubrum*. Ekstraksi dilakukan menggunakan metode maserasi dengan pelarut etil asetat, dilanjutkan dengan skrining fitokimia, analisis LC-MS, dan uji aktivitas antijamur menggunakan metode difusi sumur. Hasil ekstraksi diperoleh rendemen sebesar 3,98% dengan bobot ekstrak 38,4 gr dari 970 gr simplisia. Skrining fitokimia menunjukkan adanya senyawa alkaloid, flavonoid, tanin, steroid, dan glikosida. Analisis LC-MS berhasil mengidentifikasi beberapa senyawa bioaktif seperti *chicoric acid, gallic acid, quercetin, tricafeoyl quinic acid*, serta *campesterol* yang diketahui memiliki aktivitas antimikroba. Uji aktivitas antijamur menunjukkan ekstrak etil asetat daun Ipomoea carnea Jacq. mampu menghambat pertumbuhan *Trichophyton rubrum* dengan zona hambat bervariasi sesuai konsentrasi, dan aktivitas terbaik mendekati kontrol positif (ketokonazol). Dengan demikian, ekstrak etil asetat daun Kangkung pagar *(Ipomoea carnea* Jacq.*)*. berpotensi dikembangkan sebagai kandidat agen antijamur alami terhadap *Trichophyton rubrum*.



**Kata kunci :** *Ipomoea carnea* Jacq., LC-MS, metabolit sekunder, antijamur, *Trichophyton rubrum.*

## *ABSTRACT*

*This Indonesia's tropical climate favors the growth of dermatophyte fungi, including Trichophyton rubrum, a major cause of dermatophytosis. Limitations of synthetic antifungal drugs, such as side effects and reduced efficacy, highlight the need for safer natural alternatives. Ipomoea carnea Jacq. (shrub morning glory) contains secondary metabolites alkaloids, flavonoids, tannins, steroids, and glycosides suspected to possess antifungal potential. This study aimed to characterize the secondary metabolites of ethyl acetate extract from I. carnea Jacq. leaves using Liquid Chromatography-Mass Spectroscopy (LC-MS) and to evaluate its antifungal activity against Trichophyton rubrum. The extraction was performed by maceration with ethyl acetate, followed by phytochemical screening, LC-MS analysis, and in vitro antifungal assays using the well diffusion method. The extraction yielded 38.4 g of extract with a rendement of 3.98% from 970 g of simplicia. Phytochemical screening confirmed the presence of alkaloids, flavonoids, tannins, steroids, and glycosides. LC-MS identified several bioactive compounds such as chicoric acid, gallic acid, quercetin, tricafeoyl quinic acid, and campesterol, known for antimicrobial properties. Antifungal testing revealed that the extract inhibited Trichophyton rubrum growth in a concentration-dependent manner, with the strongest inhibition comparable to ketoconazole. In conclusion, the ethyl acetate extract of I. carnea Jacq. leaves demonstrates promising potential as a natural antifungal candidate against Trichophyton rubrum.*



***Keywords:*** *Ipomoea carnea Jacq., LC-MS, secondary metabolites, antifungal, Trichophyton rubrum.*