ABSTRAK

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Judul : Uji Antifungi Isolat RLC 5 Kapang Endofit Akar Kayu Jawa (*Lannea coromandelica* (Houtt.) Merr.) Terhadap *Candida albicans, Malassezia furfur* dan *Trichophyton mentagrophytes.*

Kapang endofit RLC 5 merupakan mikroba endofit yang tumbuh dalam tanaman kayu jawa (*Lannea coromandelica (Houtt.)Merr.).* Pertumbuhan kapang endofit RLC 5 menggunakan media *Potatoes Dextrose Agar* (PDA) dan *Potatoes Dextrose Broth* (PDB). Kapang endofit RLC 5 dilakukan peremajaan selama 7 hari kemudian dilakukan fermentasi dengan metode statis selama 21 hari. Hasil proses fermentasi dipisahkan menjadi 2 bagian yaitu biomassa dan supernatan. Biomassa diekstraksi menggunakan pelarut metanol, supernatan diekstraksi menggunakan pelarut etil asetat hingga diperoleh larutan jernih yang kemudian dipekatkan dengan *vacuum rotary evaporator* untuk diperoleh ekstrak biomassa dan supernatan kapang endofit RLC 5. Ekstrak biomassa dan supernatan dilakukan uji skrining senyawa metabolit sekunder. Pada ekstrak biomassa dan supernatan positif mengandung senyawa metabolit sekunder saponin, alkaloid dan steroid. Kandungan senyawa metabolit sekunder kapang endofit RLC 5 berperan aktif dalam menghambat pertumbuhan fungi *Candida albicans, Malassezia furfur* dan *Trichophyton mentagrophytes* dan *Pseudomonas aeruginosa.* Ekstrak supernatan hasil fermentasi isolat kapang endofit RLC 5 memiliki aktivitas antifungi dengan diameter daya hambat sebesar 9,03 mm terhadap *Candida albicans,* 11,09 mm terhadap *Malassezia furfur* dan 19,83 mm terhadap *Trichophyton mentagrophytes.* Sedangkan ekstrak biomassa memiliki aktivitas antifungi dengan diameter daya hambat sebesar 10,45 mm terhadap *Trichophyton mentagrophytes.*

Kata kunci:
Kapang endofit, *Candida albicans, Malassezia furfur* dan *Trichophyton mentagrophytes*

ABSTRACT

Name : Vina septianingsih
Study Program : Pharmacy
Title : Antifungal Activity Isolate Test (RLC5) Endophytic Mold of Javanese Root (*Lannea coromandelica* (Houtt.) Merr) Against *Candida albicans, Malassezia furfur* and *Trichophyton mentagrophytes*

RLC 5 endophytic molds are endophytic microbia that grow in Javanese wood root (*Lannea coromandelica* (Houtt.) Merr). The growth of RLC 5 endophytic molds uses *Potatoes Dextrose Agar* (PDA) and *Potatoes Dextrose Broth* (PDB) media.First, rejuvenation of RLC 5 isolates was carried out for 7 days and then static method cultivation was carried out for 21 days. The results of the fermentation process are separated into 2 parts, namely biomass and supernatant. Biomass was extracted using methanol solvent, the supernatant was extracted using ethyl acetate solvents to obtain clear solutions which were then concentrated with a vacuum rotary evaporator to obtain endophytic mold biomass and supernatant extract. Biomass and supernatant extracts were screened for secondary metabolites. Positive biomass extracts and supernatant contain secondary metabolites of saponins, alkoloid and steroids. Content of secondary metabolites compounds RLC 5 endophytic molds play an active role in inhibiting the growth of *Candida albicans, Malassezia furfur* and *Trichophyton mentagrophytes*. In *Candida albicans*, RLC 5 endophytic mold supernatant extract produced a inhibition zone of 9.03 mm, in *Malassezia furfur* with a inhibition zone of 11.09 mm and In *Trichophyton mentagrophytes* with a inhibition zone of 19.83 mm and while biomass extract produced a inhibition zone of 10.45 mm in *Trichophyton mentagrophytes.*

Keyword:
Endophytic fungi, *Candida albicans, Malassezia furfur* and *Trichophyton mentagrophytes*