

ABSTRAK

EFEKTIVITAS ANTIFUNGI EKSTRAK SERAI WANGI (*Cymbopogon nardus* (L.) Rendle) TERHADAP PERTUMBUHAN *Microsporium gypseum* IN VITRO

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Microsporium gypseum merupakan salah satu penyebab dermatofitosis yaitu penyakit kulit pada hewan kesayangan yang disebabkan oleh kolonisasi jamur dermatofit dan bersifat zoonosis. Pengobatan yang digunakan masih menggunakan obat-obatan kimia. Pada penelitian ini Serai wangi (*Cymbopogon nardus* (L.) Rendle) dijadikan sebagai alternatif pengobatan herbal untuk dermatofitosis. Serai wangi (*Cymbopogon nardus* (L.) Rendle) mengandung senyawa aktif seperti saponin, tanin, flavonoid, polifenol, alkaloid dan minyak atsiri dengan efek antifungi. Penelitian ini bertujuan untuk mengetahui kemampuan ekstrak serai wangi dalam menghambat pertumbuhan *Microsporium gypseum*.

Kemampuan ekstrak serai wangi dalam menghambat pertumbuhan *Microsporium gypseum* diuji dengan metode difusi agar menggunakan teknik sumuran (*Agar Well Diffusion*). Rancangan penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 7 perlakuan konsentrasi ekstrak serai wangi yaitu 5%, 10%, 25%, 50%, 100%, flukonazol sebagai kontrol positif dan PBS sebagai kontrol negatif.

Hasil penelitian menunjukkan bahwa ekstrak serai wangi pada konsentrasi 5%, 10%, 25%, 50%, dan 100% mampu menghambat pertumbuhan *Microsporium gypseum* dengan rata-rata lebar zona hambat pada media MHA masing-masing 8,5 mm; 9,5 mm; 11 mm; 14 mm; 16,5 mm dan pada media SDA 12 mm; 12 mm; 20,5 mm; 23,5 mm; 25 mm. Kemampuan ekstrak serai wangi efektif dalam menghambat pertumbuhan *Microsporium gypseum*.

Kata kunci: dermatofitosis, ekstrak serai wangi, antifungi, *Microsporium gypseum*

ABSTRACT

EFFECTIVENESS OF ANTIFUNGI EXTRACT OF CITRONELLA (*Cymbopogon nardus* (L.) Rendle) AGAINST GROWTH OF *Microsporium gypseum* IN VITRO

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Microsporium gypseum is one of the causes of dermatophytosis, which is a skin disease in pets caused by dermatophyte fungal colonization and is zoonotic. The treatment used is still using chemical drugs. In this study citronella (*Cymbopogon nardus* (L.) Rendle) was used as an alternative herbal treatment for dermatophytosis. Citronella (*Cymbopogon nardus* (L.) Rendle) contains active compounds such as saponins, tannins, flavonoids, polyphenols, alkaloids, and essential oils with antifungal effects. This study aims to determine the ability of citronella extract in inhibiting the growth of *Microsporium gypseum*.

The ability of citronella extract to inhibit the growth of *Microsporium gypseum* was tested by the agar diffusion method using the agar well diffusion technique. The design of this study used a completely randomized design (CRD) with 7 treatments of citronella extract concentration, namely 5%, 10%, 25%, 50%, 100%, fluconazole as a positive control and PBS as a negative control.

The results showed that citronella extract at concentrations of 5%, 10%, 25%, 50%, and 100% was able to inhibit the growth of *Microsporium gypseum* with an average width of the inhibition zone on MHA media of 8.5 mm, respectively; 9.5 mm; 11 mm; 14 mm; 16.5 mm and on SDA media 12 mm; 12 mm; 20.5 mm; 23.5 mm; 25 mm. The ability of citronella extract is effective in inhibiting the growth of *Microsporium gypseum*.

Keywords: dermatophytosis, citronella extract, antifungal, *Microsporium gypseum*