

UJI DAYA HAMBAT MINYAK ATSIRI DAUN KENIKIR
(*Cosmos caudatus* Kunth) TERHADAP JAMUR *Tricophyton mentagrophytes*
SECARA *IN VITRO*

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ABSTRAK

Latar Belakang: Dermatofitosis merupakan jamur yang disebabkan golongan jamur dermatofit, seperti jamur *Tricophyton mentagrophytes*. Jamur *mentagrophytes* merupakan penyebab tinea kruris yang masih ditemukan di Indonesia. Tinea kruris mempunyai gejala bercak dan gatal yang akan meluas sampai ke lipat paha. Daun kenikir (*Cosmos Caudatus* Kunth) merupakan salah satu tumbuhan tradisional yang mempunyai kandungan minyak atsiri.

Tujuan: Mengetahui daya hambat minyak atsiri daun kenikir (*Cosmos caudatus* Kunth) terhadap pertumbuhan jamur *Tricophyton mentagrophytes*.

Metode penelitian: Jenis Penelitian adalah penelitian murni dan desain penelitian yang digunakan adalah *Post Test Only with Control Group Design*. Penelitian ini menggunakan jamur *Trichophyton mentagrophytes* yang dibuat suspensi jamur dengan biakan berumur 2 x 24 jam, kemudian dihomogenkan dengan *Sabouraud Dextrose Agar* (SDA) di dalam cawan petri. Metode yang digunakan yaitu metode difusi *Kirby Bauer* cakram disk yang telah di rendam dalam minyak atsiri dengan konsentrasi 25%, 50%, 50% dan 100%.

Hasil: Rerata konsentrasi minyak atsiri 25%, 50%, 75% dan 100% memiliki diameter zona hambat sebesar 5,35 mm, 10,11 mm, 10,89 mm dan 13,99 mm. Semakin tinggi konsentrasi minyak atsiri daun kenikir yang diberikan, maka semakin tinggi kandungan zat antifungi yang terdapat dalam minyak atsiri daun kenikir tersebut, sehingga minyak atsiri daun kenikir (*Cosmos Caudatus* Kunth) memiliki daya hambat sebagai antifungi terhadap pertumbuhan Jamur *Tricophyton mentagrophytes* menghasilkan diameter zona hambat yang semakin besar.

Kesimpulan: Minyak atsiri daun kenikir (*Cosmos Caudatus* Kunth) memiliki daya hambat sebagai antifungi terhadap pertumbuhan Jamur *Tricophyton mentagrophytes*.

Kata kunci: Minyak atsiri daun kenikir, Jamur *Tricophyton mentagrophytes*, diameter zona hambat

INHIBITORY TEST OF KENIKIR LEAF ESSENTIAL OIL

(*Cosmos caudatus* Kunth) AGAINST *Tricophyton mentagrophytes* IN VITRO

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ABSTRAK

Background: Dermatophytosis is a fungus caused by a group of dermatophyte fungi, such as the fungus *Tricophyton mentagrophytes*. Dermatophyte can digest keratin (keratinophilic) so that it can attack the skin layers. *Tricophyton mentagrophytes* is a cause of tinea cruris which is still found in Indonesia. Tinea cruris has patchy and itchy symptoms that will extend to the groin. Kenikir leaves (*Cosmos Caudatus* Kunth) are one of the traditional plants that contain essential oils.

Objective: Determine in the inhibition of essential oils of kenikir leaves (*Cosmos Caudatus* Kunth) against *Trichophyton mentagrophytes* growth.

Research methods: This type of research is pure research and the research design used is Post Test Only with Control Group Design. This research used *Trichophyton mentagrophytes* made by fungus suspension with a culture of 2 x 24 hours, then homogenized with Sabouraud Dextrose Agar (SDA) in a petri dish. The method is a Kirby Bauer diffusion with disk method that has been soaked in essential oils with concentrations of 25%, 50%, 50% and 100%.

Results: The average concentration of essential oils of 25%, 50%, 75% and 100% had a diameters of the inhibition zone of 5.35 mm, 10.11 mm, 10.89 mm and 13,99 mm. The higher the concentration of kenikir leaves essential oil is given, the higher the content of antifungal substances contained in the kenikir leaves essential oil, so that the kenikir leaves essential oil (*Cosmos Caudatus* Kunth) has inhibitory power as an antifungal to the growth of *Tricophyton mentagrophytes* resulting diameter of the inhibition zone that is the greater it is.

Conclusion: Kenikir leaves essential oil (*Cosmos Caudatus* Kunth) has inhibitory power as an antifungal to the growth of *Tricophyton mentagrophytes*.

Keywords: Kenikir leaves essential oil, *Tricophyton mentagrophytes* , diameter of the inhibition zone