

**POLTEKKES KEMENKES TANJUNGKARANG
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Desta Meliana

**Uji Daya Hambat Ekstrak Daun Nangka (*Artrocarpus heterophyllus*)
Terhadap Pertumbuhan Jamur *Aspergillus flavus***

xvi + 46 halaman, 3 tabel, 4 gambar, dan 13 lampiran

ABSTRAK

Aspergillus flavus menghasilkan aflatoxin yang dapat menimbulkan bahaya kesehatan bagi manusia, ketika spora terhirup dan masuk ke dalam tubuh dapat menyebabkan penyakit kanker hati. Berbagai jenis obat antijamur yang telah ditemukan untuk pengobatan infeksi *Aspergillus flavus* salah satunya obat golongan azole. Bahan alam dapat digunakan sebagai pengendalian alternatif yaitu Daun Nangka (*Artrocarpus heterophyllus*). Hasil uji fitokimia pada Daun Nangka (*Artrocarpus heterophyllus*) terdapat senyawa antimikroba seperti Saponin, Tannin, Flavonoid, Steroid, Terpenoid, dan Fenolik. Tujuan khusus penelitian ini untuk mengetahui diameter zona hambat Ekstrak Daun Nangka (*Artrocarpus heterophyllus*) dalam menghambat pertumbuhan jamur *Aspergillus flavus* dan mengetahui konsentrasi Daun Nangka (*Artrocarpus heterophyllus*) yang efektif dalam menghambat pertumbuhan jamur *Aspergillus flavus*. Subjek penelitian yaitu Daun Nangka (*Artrocarpus heterophyllus*). Metode penelitian menggunakan difusi cakram Kibry Bauer dengan 4 kali pengulangan. Analisa data dihasilkan tidak terdistribusi normal pada uji normalitas dan homogenitas, sehingga melakukan uji Non parametrik menggunakan uji Kruskal wallis dan Mann Whitney. Hasil penelitian menunjukkan tidak terbentuknya zona hambat pada semua konsentrasi sehingga dapat disimpulkan bahwa ekstrak Daun Nangka (*Artrocarpus heterophyllus*) pada konsentrasi 20%, 40%, 60%, 80%, dan 100% tidak dapat menghambat pertumbuhan jamur *Aspergillus flavus* dengan kontrol positif ketokonazol menghasilkan zona hambat sebesar 22 mm.

Kata kunci : *Aspergillus flavus*, Uji daya hambat, Ekstrak Daun Nangka (*Artrocarpus heterophyllus*)

Daftar Bacaan : 48 (2008-2023)

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Desta Meliana

Test of the Inhibitory Power of Jackfruit Leaf Extract (*Artocarpus heterophyllus*) Against the Growth of *Aspergillus flavus* Fungus

xvi + 46 halaman, 3 tabel, 4 gambar, dan 13 lampiran

ABSTRACT

Aspergillus flavus produces aflatoxin which can pose a health hazard to humans, when the spores are inhaled and enter the body it can cause liver cancer. Various types of antifungal drugs have been found to treat *Aspergillus flavus* infections, one of which is the azole class of drugs. Natural ingredients that can be used as alternative control are Jackfruit Leaves (*Artocarpus heterophyllus*). Phytochemical test results on Jackfruit Leaves (*Artocarpus heterophyllus*) contained antimicrobial compounds such as Saponins, Tannins, Flavonoids, Steroids, Terpenoids and Phenolics. The specific aim of this research is to determine the diameter of the inhibition zone of Jackfruit Leaf Extract (*Artocarpus heterophyllus*) to inhibit the growth of the *Aspergillus flavus* fungus and to determine the concentration of Jackfruit Leaves (*Artocarpus heterophyllus*) which is effective in inhibiting the growth of the *Aspergillus flavus* fungus. The research subject is Jackfruit Leaves (*Artocarpus heterophyllus*). The research method used Kibry Bauer disc diffusion with 4 repetitions. Analysis of the resulting data was not normally distributed in the normality and homogeneity tests, so non-parametric tests were carried out using the Kruskal Wallis and Mann Whitney tests. The results of the study showed that no inhibition zone was formed at all concentrations so it could be concluded that Jackfruit Leaf (*Artocarpus heterophyllus*) extract at concentrations of 20%, 40%, 60%, 80% and 100% could not inhibit the growth of the fungus *Aspergillus flavus* with the positive control ketoconazole. inhibition zone of 22 mm.

Keywords : *Aspergillus flavus*, Inhibition test, Jackfruit Leaf Extract (*Artocarpus heterophyllus*)

Reading list : 48 (2008-2023)