

## ABSTRAK

### UJI AKTIVITAS ANTIFUNGI EKSTRAK SEGAR DAN SIMPLISIA BATANG DAN DAUN KITOLOD (*Laurentia longiflora* (L.) Peterm.) TERHADAP PERTUMBUHAN JAMUR *Fusarium oxysporum* SECARA *in vitro*

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*Fusarium oxysporum* merupakan fungi patogen penyebab penyakit layu *Fusarium* pada berbagai jenis tanaman, antara lain: cabai, tomat, pisang, dan kentang. Tumbuhan kitolod (*Laurentia longiflora* (L.) Peterm.) diketahui memiliki kandungan senyawa alkaloid, flavonoid, polifenol, tanin, dan saponin. Senyawa-senyawa tersebut memiliki beberapa aktivitas antimikroba salah satunya adalah antifungi. Tujuan penelitian ini adalah untuk mengetahui aktivitas antifungi ekstrak segar dan simplisia batang dan daun kitolod dalam menghambat pertumbuhan jamur *Fusarium oxysporum*. Penelitian ini dilakukan menggunakan Rancangan Acak Lengkap dengan 4 taraf perlakuan dan 8 kali ulangan. Metode uji antimikroba yang digunakan adalah metode difusi cakram Kirby-Bauer dengan parameter diameter zona bening di sekitar kertas cakram sebagai indikator aktivitas antifungi ekstrak. Data yang diperoleh dianalisis varians (ANOVA) satu arah dan dilanjutkan dengan uji Duncan. Hasil penelitian menunjukkan bahwa ekstrak segar dan simplisia batang dan daun kitolod dapat menghambat pertumbuhan jamur *Fusarium oxysporum*. Perlakuan ekstrak yang paling optimal dalam menghambat pertumbuhan jamur *Fusarium oxysporum* adalah ekstrak segar daun kitolod dengan rata-rata diameter zona bening sebesar 18,37 mm yang tidak berbeda nyata dengan kontrol positif dithane M-45.

**Kata kunci:** *Fusarium oxysporum*, kitolod (*Laurentia longiflora* (L.) Peterm.), zona bening.

## ABSTRACT

### ANTIFUNGAL ACTIVITY TEST OF FRESH AND DRIED EXTRACTS OF KITOLOD (*Laurentia longiflora* (L.) Peterm.) LEAVES AND STEMS ON THE GROWTH OF *Fusarium oxysporum in vitro*

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*Fusarium oxysporum* is a pathogenic fungus that causes *Fusarium* wilt disease on various types of plants, including: chilies, tomatoes, bananas, and potatoes. Kitolod (*Laurentia longiflora* (L.) Peterm.) is known to contain alkaloids, flavonoids, polyphenols, tannins, and saponins. These compounds have several antimicrobial activities, one of which is antifungal. The purpose of this study was to determine the antifungal activity of fresh and dried extracts of kitolod stems and leaves in inhibiting the growth of the fungus *Fusarium oxysporum*. This research was conducted using a completely randomized design with 4 levels of treatment and 8 replications. The antimicrobial test method used was the Kirby-Bauer disc diffusion method with the parameters of the diameter of the clear zone around the paper discs as an indicator of the antifungal activity of the extract. The data obtained were analyzed for one-way variance (ANOVA) and continued with Duncan's test. The results showed that the fresh and dried extract of kitolod stems and leaves could inhibit the growth of the fungus *Fusarium oxysporum*. The most optimal extract treatment in inhibiting the growth of *Fusarium oxysporum* was a fresh extract of kitolod leaves with an average clear zone diameter of 18.37 mm which was not significantly different from the positive control of dithane M-45.

**Keyword:** *Fusarium oxysporum*, kitolod (*Laurentia longiflora* (L.) Peterm.), antifungal.