

## **ABSTRACT**

The fungus *Aspergillus brunneoviolaceus* is a species belonging to the uniseriate black *aspergillus* group with round vesicles. The ethyl acetate extract of the fungus *Aspergillus brunneoviolaceus* partial has the ability to inhibit antibacterial growth because it contains metabolites. The purpose of this study was to examine the effect of the ethyl acetate extract of the fungus *Aspergillus brunneoviolaceus* partial on *Salmonella typhi* bacteria. The research was carried out at the Biology Laboratory of UIN Raden Fatah Palembang. This type of research is quantitative Experiment. The research design used was Completely Randomized Design (CRD) using 5 treatments and 3 repetitions. The treatments given were positive control (*Ciprofloxacin* 4%), P1 (1000 ppm), P2 (500 ppm), P3 (250 ppm), and P4 (125 ppm). The parameters observed in this study were the activity of the bacterium *Salmonella typhi*. In the research results obtained MIC at a concentration of P4 (125 ppm). The research data were analyzed by ANOVA test (F test) and Duncan's test, with test criteria H1 was accepted and H0 was rejected. The research that has been done has a significant effect on the ethyl acetate extract of the fungus *Aspergillus brunneoviolaceus* partial on the growth of *Salmonella typhi* bacteria. In Duncan's test, it was found that there was a significant difference.

**Keywords:** Antibacterial, *Aspergillus brunneoviolaceus*, Ethyl Acetate Extract, Module, *Salmonella typhi*

## ABSTRAK

Jamur *Aspergillus brunneoviolaceus* merupakan spesies yang termasuk dalam kelompok uniseriate black aspergili dengan vesikel bulat. Ekstrak etil asetat jamur *Aspergillus brunneoviolaceus* partial memiliki kemampuan menghambat pertumbuhan antibakteri karena memiliki kandungan senyawa-senyawa metabolite. Tujuan penelitian ini ialah untuk melihat pengaruh ekstrak etil asetat jamur *Aspergillus brunneoviolaceus* partial terhadap bakteri *Salmonella typhi*. Penelitian dilaksanakan di di Laboratorium Biologi UIN Raden Fatah Palembang. Jenis penelitian kuantitatif *Experimen*. Desain penelitian yang di gunakan adalah Rancangan Acak Lengkap (RAL) dengan menggunakan 5 perlakuan dan 3 kali pengulangan. Perlakuan yang diberikan yaitu kontrol positif (*Ciprofloxacin* 4%), P1 (1000 ppm), P2 (500 ppm), P3 (250 ppm), dan P4 (125 ppm). Parameter yang diamati dalam penelitian ini yaitu aktivitas dari bakteri *Salmonella typhi*. Pada hasil penelitian diperoleh KHM pada konsentrasi P4 (125 ppm). Data hasil penelitian dianalisis dengan uji ANOVA (uji F) dan uji Duncan, dengan kriteria pengujian  $H_1$  diterima dan  $H_0$  ditolak. Penelitian yang telah dilakukan memiliki pengaruh signifikan ekstrak etil asetat jamur *Aspergillus brunneoviolaceus* partial terhadap pertumbuhan bakteri *Salmonella typhi*. Pada Uji Duncan diperoleh bahwa adanya beda nyata.

Kata Kunci : *Antibakteri, Jamur Aspergillus brunneoviolaceus, Ekstrak Etil Asetat, Modul, Salmonella typhi,*