

**PERBEDAAN JUMLAH ANGKA JAMUR UDARA SEBELUM DAN
SESUDAH PENYINARAN LAMPU ULTRAVIOLET 144 WATT DENGAN
VARIASI JARAK DUA DAN TIGA METER**

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ABSTRAK

Latar Belakang : Jamur udara di ruang laboratorium mikologi dapat mengganggu dalam pemeriksaan sampel. Pengendalian mikroba menggunakan radiasi sangat sangat diperlukan baik di rumah sakit, institusi pembelajaran ,rumah maupun di industri guna mencegah pencemaran udara dan mencegah penyakit.

Tujuan Penelitian : Penelitian ini bertujuan untuk mengetahui perbedaan jumlah angka jamur udara sebelum dan sesudah penyinaran lampu ultraviolet 144 watt dengan jarak dua dan tiga meter selama 30 menit di Laboratorium Mikologi Jurusan Analis Kesehatan Poltekkes Kemenkes Yogyakarta.

Metode Penelitian : Jenis penelitian ini *Quasy Experiment* adalah dengan desain penelitian *Non Equivalent Control Group*. Objek penelitian ini adalah udara di ruang laboratorium mikologi jurusan analis kesehatan. Sampel penelitian ini adalah jamur udara yang dilakukan dengan 16 kali pengulangan sebelum maupun sesudah penyinaran UV. Data yang diperoleh dianalisis secara statistik menggunakan *SPSS 24.0 for windows* dengan uji parametrik *Paired Sample t Test* dan Mann Whitney.

Hasil Penelitian : Rata-rata penurunan angka jamur udara pada jarak 2 m sebesar 7,8 CFU/m³. Sedangkan Rata-rata penurunan angka jamur udara pada jarak 3 m sebesar 7,1 CFU/m³. Uji statistik Mann Whitney diperoleh *Asym.sig (2-tailed)* 0,777

Kesimpulan : Tidak ada perbedaan jumlah angka jamur udara sebelum dan sesudah penyinaran lampu ultraviolet 144 watt dengan jarak dua dan tiga meter selama 30 menit

Kata Kunci : Jamur Udara, Radiasi, Ultraviolet

**THE DIFFERENCE OF AIR MOLD QUANTITY BEFORE AND AFTER
144-WATT ULTRAVIOLET LAMP IRRADIATION WITH TWO AND
THREE METER DISTANCE VARIATIONS**

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ABSTRACT

Background: Air mold in the mycology laboratory can interfere with sample examination. Microbial control using radiation is very needed both in hospitals, learning institutions, homes and in industry to prevent air pollution and prevent disease.

Research aim : This research aims to determine the difference of air mold quantity before and after irradiating 144 watts of ultraviolet light at a distance of two and three meters for 30 minutes in the Mycology Laboratory, Health Analyst Department of the Poltekkes Kemenkes Yogyakarta.

Research methods: This type of research is a Quasy Experiment with a Non Equivalent Control Group research design. The object of this research is the air in the mycology laboratory room, majoring in health analyst. The sample of this research was air mold which was carried out with 16 repetitions before and after UV irradiation. The data obtained were analyzed statistically using SPSS 24.0 for windows with the Paired Sample t Test and Mann Whitney parametric test.

Research results: The average reduction in air mold quantity at a distance of 2 m was 7,8 CFU / m³. Meanwhile, the average reduction in air mold numbers at a distance of 3 m was 7,1 CFU / m³. Mann Whitney statistical test obtained Asym.sig (2-tailed) 0.777

Conclusion: There is no difference of airborne fungi quantity before and after exposure to the 144 watt ultraviolet lamp with a distance of two and three meters for 30 minutes

Keywords: Air Mold, Radiation, Ultraviolet