



## **ISOLASI, IDENTIFIKASI, DAN UJI KEPEKAAN ANTI BAKTERI DAN ANTI JAMUR TERHADAP MEGABACTERIUM**

INTISARI  
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Penelitian ini bertujuan untuk melakukan isolasi, identifikasi dan uji kepekaan beberapa jenis obat anti bacterial dan anti jamur terhadap Megabacterium.

Isolasi bakteri dilakukan dengan cara mengambil sampel dari feses burung kenari yang diduga positif terinfeksi megabacterium. Swab steril yang telah dioleskan pada feses di kloaka burung kenari, dimasukkan ke dalam tabung steril, kemudian ditanam pada media-media antara lain : BHI Agar, Brucella Agar, MRS dan media khusus yang terdiri dari : MRS, NBCS 20%, dan Sakarosa 5%, dan kemudian diinkubasikan pada suhu 37 °C selama 24-48 jam dalam suasana anaerob. Setelah didapatkan kultur murni dari penanaman bakteri, dilakukan identifikasi dan karakterisasi bakteri dengan cara pemeriksaan mikroskopis dan pengujian sifat biokimiawi. Uji sensitivitas terhadap bakteri dilakukan dengan Ampisilin, Enrofloksasin, Eritromisin, Klindamisin, Kloramfenikol, Streptomisin, Tetrasiklin, Griseofulvin, Ketokonazol dan Nystatin. Pengujian kepekaan beberapa obat tersebut dilakukan dengan metode penghambatan dish. Hasil yang diperoleh dapat dianalisis secara deskriptif.

Berdasarkan hasil penelitian dapat diisolasi megabacterium yang mempunyai sifat-sifat biokimiawi sebagai berikut : dapat memfermentasikan glukosa, sukrosa, manitol, dan tidak memfermentasikan laktosa dan maltosa, serta menunjukkan hasil reaksi negatif pada uji Indol, MR-VP, Citrat (IMViC) dan Urea. Hasil pemeriksaan mikroskopis menunjukkan bahwa Megabacterium adalah bakteri berbentuk batang memanjang, gram positif dan tahan asam. Hasil uji sensitivitas menunjukkan bahwa megabacterium resisten terhadap Ampisilin, dan sensitif terhadap Enrofloksasin, Klindamisin, Kloramfenikol, Eritromisin, Tetrasiklin dan Streptomisin. Megabacterium juga sensitif terhadap obat anti jamur : Griseofulvin, Nystatin, dan Ketokonazol.



## **ISOLATION, IDENTIFICATION, AND SENSITIVITY TEST OF ANTI BACTERIAL AND ANTI FUNGAL AGENTS AGAINST MEGABACTERIUM**

### **ABSTRACT**

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This study aims at performing isolation, identification and sensitivity testing of various types of anti bacterial and anti mycotic agents against Megabacterium.

Bacterial isolation is performed by taking sample of canary's bird's faeces supposedly to be positively infected by Megabacterium. A sterile swab that has been smeared at the of at the canary bird's cloaca, is put into a sterile tube, and then put in media such as : *BHI Agar*, *Brucella Agar*, *MRS Agar*. and special media that consist of : *MRS*, *NBCS 20%* and *Saccharosa 5%*, and then incubated at temperature 37°C for 24 to 48 hours in anaerobic condition. When pure culture is obtained from the bacterial planting, bacterial identification and characterization is performed by microscopic observation and biochemical testing. Sensitivity testing of the bacteria is performed by Ampicillin, Enrofloxacin, Erithromicin, Clindamycin, Chloramphenicol, Streptomycin, Tetracyclin, Griseofulvin, Ketokonazol and Nystatin. Sensitivity testing of the agents is performed by dish inhibition method. The result can be analyzed descriptively.

Based on the result of the study, isolation of is made for the megabacterium having the following biochemical characters : being able to ferment glucose, sucrose and manitol, and not fermenting lactose and maltose, and showing negative reaction in Indol test, MR-VP, Citrate (IMViC) and Urea. microscopic observation suggest that megabacterium is a long bar-shaped bacterium, positive Gram and acid resistant. Sensitivity test suggest that megabacterium is resistant to Ampicillin, and sensitive to Enrofloxacin, Erithromicin, Clyndamicin, Chloramphenicol, Tetracyclin and Streptomycin. Megabacterium is also sensitive to anti fungal agents : Griseofulvin, Nystatin, and Ketokonazol.