

A SURVEY ON AMOEBA'S CONTAMINATION OF CONTACT  
LENS CASES IN KUALA TERENGGANU

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**BY**

**NORINE MAJAMAN**

**This project report is submitted in partial fulfillment of  
the requirements for the Degree of  
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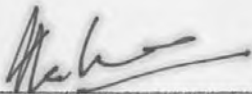
**JABATAN BIOLOGI  
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**BORANG PENGESAHAN DAN KELULUSAN  
LAPORAN AKHIR PROJEK**

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OF CONTACT LENS CASES IN TERENGGANU

Dengan ini disahkan bahawa saya telah menyemak laporan projek ini dan

- i. semua pembetulan yang disarankan oleh pemeriksa-pemeriksa telah dibuat,
- ii. laporan ini telah mengikut format yang diberikan dalam Panduan BIO 4999 (Projek) Unit Sains Biologi, Fakulti Sains Teknologi, Universiti Putra Malaysia Terengganu, 1999/2000.



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## ABSTRACT

A random survey of amoeba's contamination of contact lens cases which involved 100 contact lens wearers in Kuala Terengganu including UPMT was conducted over 7 months period. Cotton neck swab was used to collect the amoeba from the contact lens storage cases and inoculated onto the center of the plate containing non-nutrient agar seeded with heat-killed *E.coli*. Contact lens rinsing solutions was also collected and examined for amoeba's presence. The amoebae obtained from the contact lens cases and its rinsing solution were cultured and identified to its genus level.

The result of this survey showed that there were no amoebae detected in all 100 contact lens cases and its rinsing solutions. The good care hygiene, compliance of the contact lens wearer to the manufacturer's instruction and basic knowledge about the do's and don'ts of contact lens wear perhaps contributed to such result. The random selection and small coverage of this survey due to limited time also affected the results. These findings imply that good care hygiene can reduce the risk of amoebic contamination.

## ABSTRAK

Tinjauan rawak kontaminasi amoeba ke atas kotak penyimpanan kanta sentuh yang melibatkan 100 orang pengguna kanta sentuh di Kuala Terengganu termasuk UPMT telah dijalankan selama 7 bulan. Persampelan ameoba dilakukan pada kotak penyimpan kanta sentuh dengan menggunakan cotton swab. Air pencuci kanta sentuh juga turut diambil dan dikaji akan kehadiran ameoba. Agar non-nutrien yang mengandungi *E.coli yang* di bunuh haba digunakan sebagai medium untuk mengkultur ameoba. Amoeba yang diperolehi dipencilkan, dikultur dan seterusnya dikenalpasti sehingga ke tahap genus.

Dari tinjauan ini didapati tidak ada ameoba dikesan pada kesemua 100 buah bekas penyimpan dan air pencuci kanta sentuh yang dikaji. Cara penjagaan kanta sentuh yang baik, kepatuhan pada arahan yang diberikan oleh pengeluar produk serta pengetahuan asas tentang penjagaan kanta sentuh, menyumbang kepada keputusan sebegini. Pemilihan pengguna kanta sentuh secara rawak serta liputan yang tidak menyeluruh juga turut mempengaruhi keputusan yang diperolehi. Hasil tinjauan ini menunjukkan bahawa penjagaan kebersihan yang baik boleh mengurangkan risiko kontaminasi amoeba.