

**PRODUCTION OF COLORANT FROM NEWLY ISOLATED
FUNGI USING ORGANIC WASTE MEDIA**

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**Final Year Project Report Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Biology
in the Faculty of Applied Sciences
Universiti Teknologi MARA**

JULY 2018

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ABSTRACT

PRODUCTION OF COLORANT FROM NEWLY ISOLATED FUNGI USING ORGANIC WASTE MEDIA

Color are the most important aspect in our daily life. Fungi is selected to be one of the microorganism to produce color because their significant source of natural colorant due to large range of biological activities. Submerged fermentation of fungus is one of the technique that used in the present study in order to produce natural colorant. The fungal cultures were grown in Potato Dextrose (PD) broth and Banana Peel (BP) broth under static condition with temperature 28°C for 3 weeks. The color differences not obviously shown up between PD broth and BP broth. The surface area of fungal mycelium are greater in PD broth compared to BP broth after 3 weeks of incubation. The extraction methods of natural colorant that used is alcoholic method because it were most preferred to be dye medium. The extracted natural colorant used for dyeing in different mordant are Iron (II) sulfate and Tin (II) chloride and the type of fabric used is silk. The values of a* and b* indicates that most of the sample are mostly yellowish in color. The colorfastness to washing test shown that all dyed sample is shows good to excellent result except for dyed sample mordanted with Iron (II) sulfate in PD broth and BP broth shows good and moderate to good result. This project is successfully achieved the objective and the result were excellently obtained.