

**ISOLATION AND IDENTIFICATION OF BACTERIA FROM  
LICHENS OF UiTM PAHANG**

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## ABSTRACT

### ISOLATION AND IDENTIFICATION OF BACTERIA FROM LICHENS

There are many types of lichens identified living in the University area such as crustose, fruticose, and foliose lichens. These lichens live naturally on tree barks, trunks, buildings, soil and buildings' wall. The research was be done to know what are the types of bacteria that have symbiotic association with fungus which forming the lichens. They usually composed of mycobiont (fungal) and one or few photobiont (photosynthetic organism) which are usually cyanobacterium or green alga. The objective of this study are to isolate bacteria from lichens, to identify bacteria that asociated with fungus in lichens and to identify types of lichens. The lichens were identified from their external characteristics. The bacteria were isolated and culture with agar and broth media. And lastly the bacteria were identified from their morphology on plates, staining, and biochemical characteristics. The results of this study showed that, there are seven identified bacteria and two unidentified bacteria that were able to be cultured from this research. The possible identified bacteria from this research are from genus *Acetobacter*, *Bradyrhizobium*, *Actinobacillus*, *Azospirillum*, *Brucella*, *Leuconostoc*, and *Cornybacter*. Two types of lichens were identified from this study which are foliose and crustose lichens.