

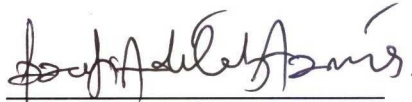
**OKARA AS AN ALTERNATIVE MEDIA
FOR PROBIOTIC GROWTH**

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

JULY 2019

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ABSTRACT

OKARA AS AN ALTERNATIVE MEDIA FOR PROBIOTIC GROWTH

Tofu, soymilk and other soy based products are highly consumed by Malaysians. The high demand on soy based product releases tonnes of by-product called okara. Besides, okara usually being used as animal feed, biofertilizer and the rest will be disposed into the river or burnt. Meanwhile, probiotic bacteria which are well-known will give beneficial health effect to the human gut have been increase in demand. In order to get higher production of probiotic with low cost, an alternative media which rich in nutrient need to be developed. Thus this study was designed to produce an alternative media by using okara as a substitute of meat extract, yeast and peptone in the commercial MRS agar. The probiotic bacteria was grew on both alternative media and MRS media. The visible colonies formed were observed and was calculated by using colony forming units per ml (CFU/ml). The highest CFU/ml of probiotics colony can be seen on MRS agar which is 15266.67 CFU/ml, followed by alternative agar with 30g of okara powder which is 6033.33 CFU/ml and the lowest CFU/ml of probiotics colony is at alternative agar with 20g of okara powder. The probiotics bacteria then were confirmed by using morphological test and biochemical test. Throughout this study, alternative media by using okara as part of the content have been proven to support the growth of probiotic bacteria.