

**THE PROXIMATE ANALYSIS IN RAW AND POWDERED
SOURSOP (*Annona muricata* Linn) AND ITS
ANTIBACTERIAL ACTIVITY**

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This Final Year Project Report entitled “**THE PROXIMATE ANALYSIS IN RAW AND POWDERED SOURSOP (*Annona muricata Linn*) AND ITS ANTIBACTERIAL ACTIVITY**” was submitted by Firza Syafiqah Binti Haji Mohd Puzi, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons) Biology, in Faculty of Applied Sciences, and was approved by



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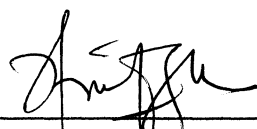
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ABSTRACT

THE PROXIMATE ANALYSIS IN RAW AND POWDERED SOURSOP (*Annona muricata*) AND ITS ANTIBACTERIAL ACTIVITY

Annona muricata is commonly known as soursop is widely found in Malaysia and always being consumed. This tropical fruits are easily rotten during ripening and they are seasonal fruits. In this study, the proximate analysis was study between puree and powdered soursop. The pH value for both puree and powder soursop resulted in as 4.40 ± 0.04 and 4.29 ± 0.02 . This pH leads to the sour taste because of the acidic pH. The solubility in powder soursop is significantly ($P < 0.05$) higher than puree with 83.10 ± 1.64 and 12.68 ± 0.40 respectively. The percentage of carbohydrate in powder soursop 87.46 ± 1.23 is higher than puree soursop because of the additive, maltodextrin. Maltodextrin also gives effect to fat content where after it process to powdered form, the value become 1.68 ± 0.12 . After went through spray-drying process the content are decreasing in moisture from 76.6 ± 0.44 to 10.43 ± 1.16 , fiber from 2.08 ± 0.00 to 1.07 ± 0.25 and ash from 1.26 ± 0.10 to 0.42 ± 0.11 . Protein content gives a very little result because the longer period, the protein content will decrease during ripened. This fruit can be preserved by using spray drying method since the nutrient value does not gives much different as raw fruit. So, it can be available at all the time. The antibacterial activity of *S.aureus*, *E.coli*, *P.aeruginosa* and *B.subtillis* shows the resistance capacity towards *Annona muricata* where it can be an antibiotic resistance towards this common bacteria in fresh fruit.