

**PRELIMINARY STUDY ON PROPERTIES DIFFERENT TYPES OF PADDY
STRAW FOR PAPER**

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Partial Fulfilment of the Requirement for the
Degree of Bachelor of Science (Hons.) Plantation Management and Technology
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DECLARATION

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ABSTRACT

Nowadays, the nature fiber in production of paper is one of the good alternatives for reduce dependency in wood tree resources. Demand on paper increase time to time according their need and want. This situation can causes felling of tree uncontrolled and contribute ecosystem in out of balance. Therefore, a study on the impact of sodium hydroxide to produce paper from types of paddy straw and identify the physical characteristic of the paper that produced from different types of paddy straw which is MRQ76 and MR220 has being occur. Sample preparation is done through several important processes such as supply of raw material, immersion process, cooking process, filtering process and lastly drying process. Each of the sample that produced by different types of paddy straw with different concentration of NaOH which is 20%, 25% and 30% for determining the best of mechanical properties. Among the test that were performed is thickness test, burst test, tearing test that consist angle, index, strength, and ratio and the lastly is tensile test. The result show a 25% of concentration NaOH for paddy straw MRQ76 has a higher value in tensile test with 180.16N/mm^2 and tears strength of paper is 1874 and burst test is 5.458kgcm while the paddy straw MR220 the value of tensile test is lower this is because the paddy straw of MRQ 76 have a long stem and leaf with higher return of yield. The uses of NaOH can improve the characteristics of nature fiber in production of paper.