**FULL ARTICLE TEMPLATE FOR THE ASEAN BIOENERGY AND BIOECONOMY CONFERENCE 2020**

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**ABSTRACT**

The objective of this work is to …………………………………………………………………………………….

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**Keywords:** Aaaaaaa, Bbbbbbb, Ccccccc, Ddddddd

**INTRODUCTION**

The pineapple (Ananus comosus) is one of Thai economic tropical fruit exported to various countries such as USA, Singapore and Japan. The products are also available in fresh cut, freeze dried fruit and canned pineapple. The pineapple stem is the waste of harvesting crop from the field; however, it contains a lot of valuable components which are very profitable. The extraction can produce bromelain enzyme, which is a very useful ingredient for pharmaceutical and cosmetic industries (Novaes et al., 2016).

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**MATERIALS AND METHODS**

*Sample preparation*

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*Chemical analysis*

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*Effects of Temperature, pH, and Culture Conditions*

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**RESULTS AND DISCUSSION**

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Figure 1

**Figure 1.** Absorbance (a) and second derivative (b) spectra of the fermented solutions.

**Table 1** Comparison of lignocellulosic components in the feedstock based on dry basis

|  |  |  |  |
| --- | --- | --- | --- |
| Biomass | Lignocellulose contents (% wt, dry basis) | | |
| Cellulose | Hemicellulose | Lignin |
| A | 49.00 | 20.50 | 16.00 |
| B | 40.75 | 20.50 | 44.15 |
| C | 19.00 | 17.20 | 11.48 |
| D | 34.00 | 37.20 | 14.00 |

**CONCLUSIONS**

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**ACKNOWLEDGMENT**

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