



ABSTRACT

Name of Institution: De La Salle University – Dasmariñas

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Title: Corn Kernel: A Substitute for Imported Oil in Producing Biodegradable Polylactide Polymer (PLA)

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Objective of the Study:

- A. General. To solve the expanding problem regarding to garbage Disposal of non –Biodegradable materials
- B. Specific: To produce a kind of that plastic is biodegradable.

Scope and Coverage:

The study focuses on how Corn Kernel could be used as an Alternative component in producing Biodegradable Plastic. The said production could minimize the problem in disposing garbage in every part of the country.

Methodology:

The thesis writer used books from the school library for references. They downloaded information from the Internet for additional knowledge regarding their thesis.



Major Findings:

In doing the study, the proponent found out the following data.

- Polyhydroxyalkanoates (PHA) act as a leading candidate to replace conventional plastics on large, industrial scale.
- Corn Kernel has many direct uses such as feed for cattle, hogs, and other livestock and poultry. Corn meal in form of flakes. And indirect uses such as production of American whiskeys, paints, synthetic rubber, glycerin, lactic acid, and many more.
- If the Corn Kernel will be used as an Alternative component in Producing Plastic it will lessen the problem in disposing used plastics worldwide.

Conclusion:

In thorough analysis of the problem and solution, the proponents concludes that if Corn Kernel will be used as an Alternative component in producing Biodegradable Polylactide Polymer it will be a big help in saving our environment. On the contrary, there is also an adhere effect because it take a long process before it could be produced. Second it increases the consumption of energy compared to polystyrene Production.

Recommendation:

The proponent highly recommend that Corn Kernel should be used as an Alternative component in producing Biodegradable Polylactide Polymer since it will be cheaper to produce such than the conventional Petroleum – based Plastic. Manufacturers could use the available resources like corn, than importing goods, which is costly. Second, it will give remedy to garbage disposal in our country. All of us are aware that Plastics are non-Biodegradable which can cause bigger problem in the future.