

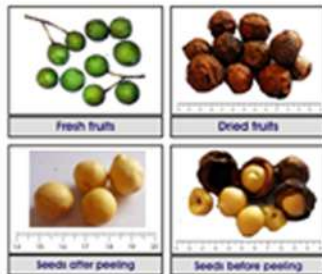
CALOPHYLLUM INOPHYLLUM (CI) FRUITS KERNEL SEED SEPARATOR FOR BIOLUBRICANT PRODUCTION LINE

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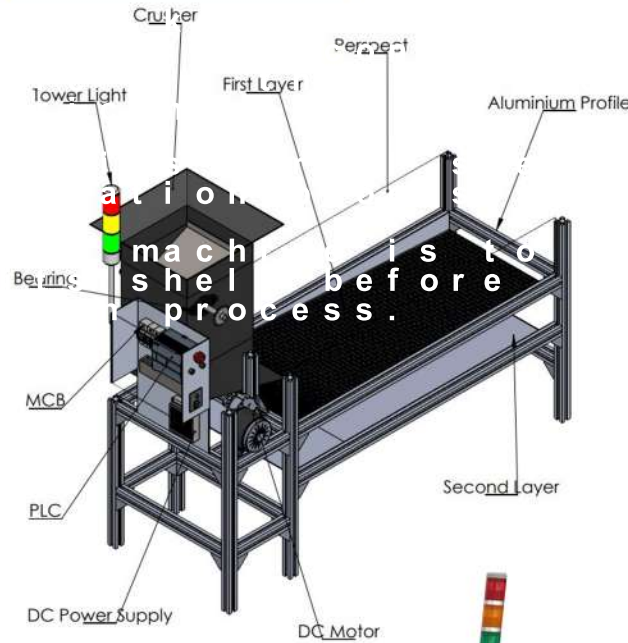


PROJECT BACKGROUND

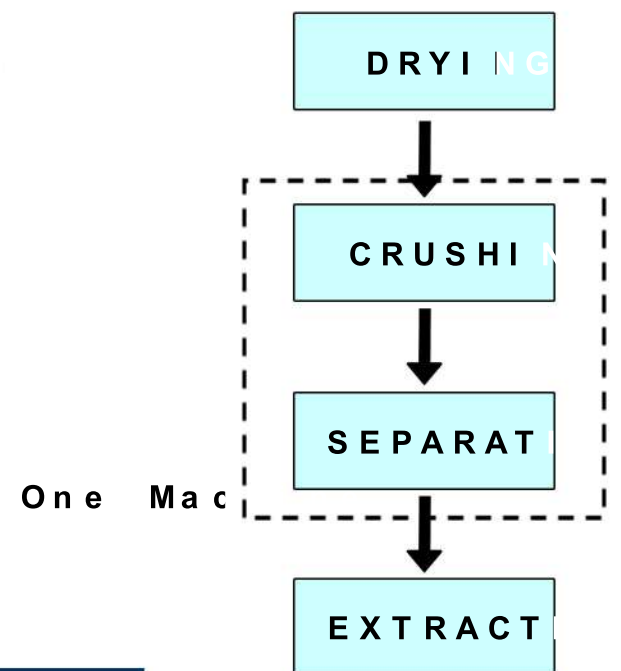
Calophyllum Inophyllum is mostly known for and is a type of vegetable process to become bio. The oil is extracted through the transesterification process. The main objective of this project is to separate the seed from the husk and undergo transesterification.



METHODOLOGY



PROCESSES



NOVELTY & INVENTIVENESS

Accelerate the preparation for oil extraction.

- The kernel seed is not damaged.
- Effortless separation of kernel seed and husk.
- Require less manpower.
- Low preparation cost.

ADVANTAGES

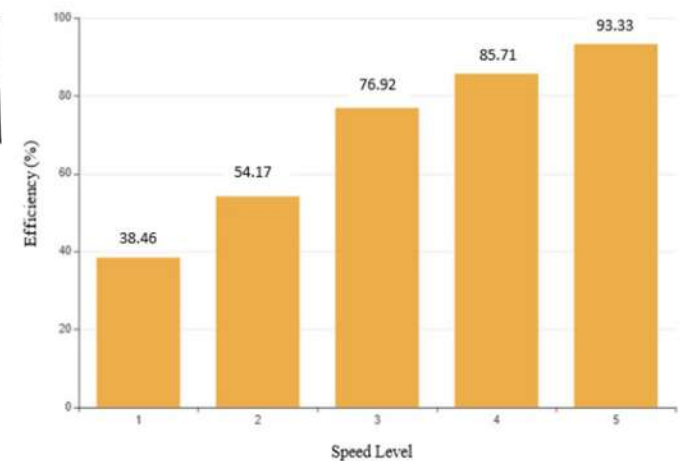
Not damage of kernel seed.

Can process with the Calophyllum Inophyllum (CI) fruits.

RESULTS

Speed level	Testing (frequency)	Amount of Fruits	
		Inserted	Crushed
1	1	12	3
	2	14	7
	Mean	13	5
2	1	11	7
	2	13	6
	Mean	12	3.5
3	1	13	11
	2	13	9
	Mean	13	10
4	1	12	10
	2	16	14
	Mean	14	12
5	1	14	13
	2	16	15
	Mean	15	14

* Process takes



BENEFITS TO SOCIETY

Machi

Economical
 Able to crack other size of Calophyllum Inophyllum fruits
 User friendly

Tamanu

Biolubricant
 Raw material in cosmetics
 Traditional medicine
 Biofuels production

ENVIRONMENTAL EFFECT

Promotes sustainable development by reducing the use of fossil fuels.



MARKETABILITY

Small and Medium Industries
 Biolubricant production
 Utilizing in academic and Teaching
 Tamanu Oil production



STATUS OF INNOVATION

Prototype with pre-readiness

COLLABORATION

LOI with

