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"DESIGN AND DEVELOPMENT OF ROLLER BREAKERS FOR DE-SHELLING OF PONGAMIA SEEDS"

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Submitted by

MECHANICAL ENGINEERING

Project team

1. HARISH BABU S (1HM09ME025)
2. RAKESH R (1HM09ME070)

Under the guidance of

Dr. C.B. VIJAYA VITTALA

M.E, Ph.D, Dean (R&D)
Dept. of Mechanical Engg.
H.M.S.I.T, TUMKUR



DEPARTMENT OF MECHANICAL ENGINEERING

H.M.S INSTITUTE OF TECHNOLOGY
Manchakalkuppe, NH4, Kesaramadu Post, Kyathasandra
Tumkur-572104

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ABSTRACT

Interest in use of pongamia oil for the production of biodiesel has renewed interest in cultivation of pongamia. The post harvesting technologies for extraction and processing of pongamia seed is one of the important activities focused by Scientist/Engineers.

One of the drudgery processes in post harvest technique fallowed today is seed separation from the pod. The present work has been aimed at developing the tool for separation, where by drudgery is reduced.

Manual process of separation is recorded by visiting to the pavagada village and collecting samples physical parameters of pod and seed as been recorded. Units having decorticator were visited for the purpose of understanding the process.

Several concepts have been developed through brainstorming section. The feasible concept in discussion with farmer is selected and equipment as been design based on that. The designed equipment is fabricated and tested. It is found that the equipment provides an efficiency of 70-84% in decortications process.