

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM, KARNATAKA



SHRI B.V.V SANGHA'S
BASAVESHWAR ENGINEERING COLLEGE,
BAGALKOT



2008-2009

DEPARTMENT OF MECHANICAL ENGINEERING

A Project Report On

“A DEVICE TO EXTRACT POMEGRANATE SEEDS”
(KSCST Approved)

Project Guide

Dr. S. N. Kurbet

HOD

Dr. V. R. Kabadi

Project Associates

Mr. MEGHARAJ

2BA05ME040

Mr. FIORELLO FERNANDES

2BA05ME018

Mr. K. VIJAY KUMAR

2BA05ME096

Mr. BASAVARAJ NERKIMANI

2BA05ME011

ABSTRACT

Design is conversion of ideas into reality .Design needs creativity. Creativity can be defined as a talent for discovering combination of principles, materials or components, which are suitable as solutions to the problem in hand.

Agriculture plays a vital role in economy building of a country, hence we must increase the rate of production of agriculture. Pomegranate is one of the fruits which gives the higher returns to farmers. Pomegranate seeds are used in ready to serve beverages and in medicine industry, hence seed separation is very much essential. Presently separation of seeds is carried out by manual methods only.

A machine needs a mechanism for the separation of seeds, up till there is no mechanism and machine existing in India. Here an attempt is made to find out the basic mechanism starting from scratch. Initially with no idea of particular mechanism, numbers of new mechanisms were developed such as centrifugal force mechanism, water jet impinging mechanism and relative motion mechanism.

Among all of them relative motion mechanism was found to be more effective. Thus relative motion mechanism can be applied to get a crushing and rubbing action on a fruit resulting into effective separation of seeds.

Based on this, new mechanism a machine is developed.