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<p>(51) International classification :B65D0065460000, B09B0003000000, C12P0007625000, C08L0099000000, C08J0005180000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)PAAVAI ENGINEERING COLLEGE Address of Applicant :PAAVAI INSTITUTIONS, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637018, TAMILNADU, INDIA. -----</p> <p>2)PROF.S. GOWTHAM KUMAR Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)PROF.S. GOWTHAM KUMAR Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF FOOD TECHNOLOGY, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637 018, TAMILNADU, INDIA. PACHAL -----</p> <p>2)MS. LOGA PRIYA V Address of Applicant :UG STUDENT, DEPARTMENT OF FOOD TECHNOLOGY, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637 018, TAMILNADU, INDIA. PACHAL -----</p> <p>3)MS. NANDHINI.A Address of Applicant :UG STUDENT, DEPARTMENT OF FOOD TECHNOLOGY, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637 018, TAMILNADU, INDIA. PACHAL -----</p> <p>4)MS. NAVEENA.D Address of Applicant :UG STUDENT, DEPARTMENT OF FOOD TECHNOLOGY, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637 018, TAMILNADU, INDIA. PACHAL -----</p> <p>5)MR. SACINTHRA.A Address of Applicant :UG STUDENT, DEPARTMENT OF FOOD TECHNOLOGY, PAAVAI NAGAR, NH-44, PACHAL, NAMAKKAL (D.T) -637 018, TAMILNADU, INDIA. PACHAL -----</p>
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(57) Abstract :

Packaging material plays a major role in food industries. Even the property of the food the product is protected by the packaging materials from damages like contamination, spoilage by bacteria etc... The packaging materials are commonly produced from non-renewable reserves. This packaging material are disposed in soil will never fully return to a natural state and will continue to pollute the environment with its chemical compounds. Use of packaging material is an inevitable thing in this modern world. There is also a substitute that replaces petroleum-based packaging material known as Bioplastics. Bioplastic are plastics that uses organic material as a main source. One main advantage in the bioplastic is that it can be degraded into natural component which does not disturb the environment. Bioplastic are produced from sources like starch, corn, sugarcane and protein from other food sources (ie,)bioplastic production needs some nutrient food waste. There is also a scarcity of nutrient rich foods. So, our project is producing bioplastic from fibers of organic waste. Organic waste from Food industry like peels and seeds of fibrous fruit, coconut husk etc. contains fiber which can be used to produce bioplastic. Already invented bioplastic requires some costly and inadequate food/plant sources. Our Bioplastic is produced from easy source that is organic food waste. These bioplastics will help to solve the environmental issues with packaging. As we are producing plastic from organic waste, there is a reduced amount of wastage. The driving in acceptance of bioplastic is it is high consumer acceptance, and the need for more eco-friendly products in future, material. In this bioplastic production we extracted fiber from various food wastes as first step. Then we tried bioplastic with those individual fibers. After that we set certain composition of that fiber and tried bioplastic with that. Likewise, we make bioplastic with various extracted fiber compositions. Then we compared those bioplastics for mechanical stability during packaging like elongation and molding. After that the bioplastic have been tested for moisture absorption and biodegradability.

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