

Move over plastics; bioplastic is here

Bioplastics, made using biomass products, are available in India. They're used for lesser greenhouse gas emissions



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Stop and think! When was the last time you told the cashier at the store that you DID NOT want the plastic bag? Most plastic waste that are strewn around can be attributed to the packaging of goods we use daily like toothpastes, shampoos, milk and vegetables. As online shopping becomes popular, plastic, card board and thermacol invade our daily lives. Some plastic is indeed recycled, but that is miniscule compared to the overall use. What can be a sustainable option available to combat this vermin? 'Bioplastics' it seems, and thank god it has arrived just on time!

These new age plastics called 'bioplastic' (BP) are derived from renewable biomass sources — aka vegetable fats, oils and corn starch. BP can be made from agricultural by-products or reused plastic bottles. They do not use as much fossil fuels (or petrochemicals) like common plastics. Hence



Products made using bioplastic

they tend to produce less greenhouse gases in their life cycle. BPs are composed of starches, cellulose, biopolymers, and a variety of other materials. 'Global Bioplastics Market 2016-2020,'

forecast the global BP's market to have a compound annual growth rate exceeding 29% by 2020. This is great news for global sustainability and heralds a new dawn for a world that will be less dependent

on conventional plastic.

There has been a surge in interest to fund the search for new and alternate bio-based renewable materials. Scientists are looking among grasses, trees and plants,

as well as meat, organic materials and animal tissues that get decomposed by microorganisms. Several biodegradable starch-based plastics have become dramatically prominent since they break down by approximately 65% within three months! Compare this to the usual 500+ years for conventional plastics and you will be stunned by the discovery. Suddenly we seem to have a solution for disposing plastic waste in an eco-friendly way.

More than 25% of consumers in a 2015 global consumer survey were of the opinion that food packaging vendors should concentrate more on the development of 'green packaging' products. On their part, governments encourage the purchase of sustainable and eco-friendly products by consumers. Besides legislations that curb the use of traditional plastics, governments around the world are offering incentives such as tax exemptions and certifications to promote, pro-

duce and consume 'green' materials. These factors are combining to force a discernible shift among plastic manufacturers to aggressively spend on research for BP alternatives based on renewable sources.

Millennial consumers are more aware about environmental degradation, global warming and climate change and they actively participate in measures to reduce their carbon footprints.

Governments worldwide are also becoming more committed to legislate anti-pollution laws. The increasing demand from consumers for eco-friendly packaging is compelling manufacturers and packaging vendors toward BP packaging. There seems to be a formidable alignment of forces to drive the change for better plastics. So the next time you click on the web site or add an item to the cart in the corner store, stop and think of the packaging on the product — you will become a conscious consumer!