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Title:	Bioplastics: A boon or bane?
Authors:	Nandakumar, Ardra (/jspui/browse?type=author&value=Nandakumar%2C+Ardra)
Keywords:	Bioplastics Greenwashing Disposal Environmental benefits Biodegradable
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Abstract:	Petroleum-based plastics have come under a lot of scrutiny in the past decade owing to the properties that made them ubiquitous items; their durability and expendability. The exploitation of such features during the industrial era has now culminated into the major environmental issue of plastic pollution. As a means of mitigating this issue, bioplastics are being considered as an environment-friendly alternative. However, not all materials under this category are the same and this has caused many misconceptions about the commodity and its after-life processing, which has led to false advertising and consumer indifference. Proper disposal and sorting procedures required for many of these bioplastics are not well known, which affects their optimum degradation. This review aims to: (i) outline the production and properties of the most prominent bioplastics along with their impacts on the environment and the economy, (ii) discuss the differences between biodegradable and compostable materials, (iii) explore the basic differences in the disposal of bioplastics compared to conventional plastics, and (iv) enumerate the future directions that can help them become a ubiquitous commodity. Proper knowledge of the various bioplastics and the implementation of proper disposal methodologies may alleviate health as well as environmental impacts of plastics and reduce plastic pollution.
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