Benchmarking Bioplastics: A Natural Step Towards a Sustainable Future

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ABSTRACT:

The ubiquitous presence of plastic litter and its tending fate as marine debris have given rise to a strong anti-waste global movement which implicitly endorses bioplastics as a promising substitute. With 'corporate social responsibility' growing ever more popular as a business promotional tool, companies and businesses are continually making claims about their products being "green", "environmentally friendly", "biodegradable", or "100% compostable". Imprudent use of these words creates a false sense of assurance at the consumer end about them being responsible towards the environment by choosing these products. The policies surrounding bioplastics regulation are neither stringent not enforceable at both national and international stage which indirectly allow these "safe words" to be used as an easy plug to validate the supposed corporate social responsibility. Similar to conventional plastics, unregulated and mismanaged bioplastics could potentially create another environmental mayhem. Therefore, it is a crucial time to harness the power of law to set applicable standards with a high threshold for the classification of "bioplastics", which companies can aspire to, and customers can trust. In this review, we analyse the multifarious international bioplastics standards, critically assess the potential shortcomings and highlight how the intersection of law with science and technology is crucial towards the reform of bioplastics regulation.