

1.	Record Nr.	UNISA996336521003316
	Titolo	European journal of physics education
	Pubbl/distr/stampa	Kayseri, Turkey : , : Bayram Akarsu
	Descrizione fisica	1 online resource (volumes)
	Soggetti	Physics - Study and teaching Periodicals.
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Periodico
	Note generali	Refereed/Peer-reviewed
2.	Record Nr.	UNINA9911010532003321
	Autore	Pereira Allana Katiussya Silva
	Titolo	Agro-industrial Waste for New Pharmaceuticals : Sustainable Sources of Bioactive Compounds // edited by Allana Katiussya Silva Pereira, Ananias Francisco Dias Júnior
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
	ISBN	3-031-88534-1
	Edizione	[1st ed. 2025.]
	Descrizione fisica	1 online resource (226 pages)
	Collana	Green Energy and Technology, , 1865-3537
	Altri autori (Persone)	Dias JúniorAnanias Francisco
	Disciplina	363.728 628.4
	Soggetti	Refuse and refuse disposal Sustainability Agriculture Pharmacology Waste Management/Waste Technology
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Agro-industrial waste as a potential raw material for multiple products and promotion of a circular economy -- The use of bio-oil derived from the pyrolysis of biomass in the formulation of new medications -- Biochar and bonechar produced with agro-industrial waste in water treatment and immobilization of residual herbicides in the soil -- Recent advances of silk fibroin nanoparticles associated with Amazon oils: Potential larvicidal activity against *Aedes aegypti* -- How to value açai waste and make its production chain more sustainable? - Challenges, opportunities, and future perspectives regarding the valorization of agro-industrial waste.

This book is written to foster discussions on the valorization of agro-industrial waste as a raw material for bioactive compounds that can assist in disease containment, the protection of soil resources, and consequently, human health. The agro-industry encompasses a broad spectrum of activities focused on transforming raw materials from agriculture, livestock, aquaculture, and forestry. In addition to producing a diverse range of goods, these processes generate substantial amounts of residual biomass from various cultivation and processing systems. In this context, the intensification of climate change and the overexploitation of natural resources have been major drivers of emerging infectious diseases. A recent and impactful example is SARS-CoV-2, which escalated into a global pandemic with severe mortality rates. Additionally, Latin America has experienced a sharp rise in dengue cases, prompting the Pan American Health Organization to issue an epidemiological alert due to the increasing incidence of arboviruses across the region. Given the need to explore possibilities for valuing and utilizing agro-industrial waste, this book presents the potential of this material in the context of human health. The authors present a comprehensive review of recent research on pyrolytic liquid as a rich source of bioactive compounds, alongside the use of biochar and bone char in water treatment and herbicide immobilization in soil. Additionally, the book provides an in-depth analysis of methodologies for extracting bioactive compounds from "açai" (*Euterpe oleracea* and *E. precatoria*) waste, highlighting its potential for high-value applications. In this way, the book highlights the challenges and opportunities to transform these materials into beneficial resources, both for the environment and for society, contributing to the advancement of public health and environmental conservation in the context of climate change.