1.	Record Nr.	UNINA9910555085403321
	Titolo	Agricultural and Environmental Applications of Biochar : Advances and Barriers / / Mingxin Guo, Zhongqi He, and Sophie Minori Uchimiya, editors
	Pubbl/distr/stampa	John Wiley & Sons, Inc Madison, WI
	ISBN	0-89118-967-X
	Disciplina	333.95/39
	Soggetti	Biochar
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Introduction to Biochar as an Agricultural and Environmental Amendment -- Pyrogenic Carbon in Terra Preta Soils -- Pyrogenic Organic Matter in Japanese Andosols: Occurrence, Transformation, and Function -- Production and Characterization of Biochar from Agricultural By-Products: Overview and Use of Cotton Biomass Residues -- Considerations in Biochar Characterization -- Application of Biochar for Soil Physical Improvement -- The Effects of Biochar Amendment on Soil Fertility -- Application of Biochar for Soil Biological Improvement -- Biochar and Soil Carbon Sequestration -- Use and Impact of Biochar and Charcoal in Animal Production Systems -- Interaction Mechanisms between Biochar and Organic Pollutants -- Impacts of Biochar Amendment on Greenhouse Gas Emissions from Agricultural Soils -- Application of Biochar for Soil Remediation -- Biochar Application for Abandoned Mine Land Reclamation -- Aqueous Contaminant Removal and Stormwater Treatment Using Biochar -- Research and Application of Biochar in China -- Research and Application of Biochar in Europe -- Research and Application of Biochar in New Zealand -- Regional Considerations for Targeted Use of Biochar in Agriculture and Remediation in Australia -- Research and Application of Biochar in North America -- Agricultural and Environmental Applications of Biochar: Advances and Barriers.
	Sommario/riassunto	Discover the mechanisms and processes of biochar amendment for

achieving stunning agricultural and environmental benefits. Agricultural and environmental communities are looking to biochar for enhancing soil carbon sequestration and crop productivity, but practical applications are elusive. Accomplished international researchers present a whole picture of biochar in improving soil quality, reducing soil greenhouse gas emissions, and decontaminating stormwater and mine sites. Composition and characteristics of biochar, its interactions with contaminants and soil constituents, and its transformation in the environment are addressed. Readers will appreciate the comprehensive review of the latest biochar research and applications and gain critical guidance in best biochar generation and use.--