

1. Record Nr.	UNINA9910437632503321
Titolo	Agriculture and air quality : investigating, assessing and managing / / Carole Bedos [and three others] editors
Pubbl/distr/stampa	Dordrecht, Netherlands : , : Springer, , [2020] ©2020
ISBN	94-024-2058-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XXI, 330 p. 48 illus., 44 illus. in color.)
Disciplina	363.7392
Soggetti	Air - Pollution Environmental sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Preamble -- Agriculture and air quality: background information -- Agriculture, environment and air quality: a historical perspective and social understanding -- Part I: Compounds, mechanisms and impacts -- Chapter 1. The main pollutants and their impacts on agriculture, ecosystems and health (Jean-François Castell, Juliette Faburé, Valérie Pernelet-Joly, Laurent Huber, Juliette Lathière) -- Chapter 2. Mechanisms of pollutant exchange at soil-vegetation-atmosphere interfaces and atmospheric fate (Sébastien Saint-Jean, Carole Bedos, Raluca Ciuraru, Sophie Génermont, Laurent Huber, Juliette Lathière, Benjamin Loubet, Raia Silvia Massad, Patrick Stella, Andrée Tuzet, Éric Villenave) -- Chapter 3. Necessary integrative approaches (Raia Silvia Massad, Pierre Cellier, Carole Bedos, Juliette Lathière, Nathalie de Noblet-Ducoudré, Paul Robin) -- Part II: Measurement and modelling methods -- Chapter 4. Measuring air pollutant concentrations and fluxes (Benjamin Loubet, Dominique Baisnée, Mathieu Cazaunau, Audrey Fortems-Cheiney, Raluca Ciuraru, Cathy Clerbaux, Jean-François Doussin, Gaëlle Dufour, Cristian Focsa, Christian George, Valérie Gros, Mélynda Hassouna, Jean-Luc Jaffrezo, Julien Kammer, Patricia Laville, Abdelwahid Mellouki, Maurice Millet, Denis Petitprez, Etienne Quivet, Nathalie Redon, Roland Sarda-Esteve, Stéphane Sauvage, Gaëlle Uzu, Éric Villenave, Nora Zannoni) -- Chapter 5. Modelling exchanges: from the process scale to the regional scale

(Raia Silvia Massad, Andrée Tuzet, Erwan Personne, Carole Bedos, Matthias Beekmann, Isabelle Coll, Jean-Louis Drouet, Audrey Fortems-Cheiney, Sophie Génermont, Benjamin Loubet, Sébastien Saint-Jean) -- Part III: From diagnosis to action -- Chapter 6. Establishing a diagnosis: inventorying, monitoring and assessing (Sophie Génermont, Benoît Gabrielle, Étienne Mathias, Carole Bedos, Christian Bockstaller, Jean-François Castell, Vincent Colomb, Aurélien Gouzy) -- Chapter 7. Reducing the impacts of agriculture on air quality (Pierre Cellier, Sophie Génermont, Antoine Pierart, Sophie Agasse, Jean-Louis Drouet, Nadège Edouard, Thomas Eglin, Laurence Galsomiès, Nadine Guingand, Benjamin Loubet, Isabelle Roussel) -- List of chemical compounds -- List of Acronyms.

#### Sommario/riassunto

This book gives an overview of the relationships between agriculture and air quality, which is an issue of increasing importance for practitioners and policy makers. It provides the keys to understand natural and anthropogenic mechanisms governing emission and deposition of pollutants produced by and/or impacting agricultural activities. It identifies how management practices can help mitigating emissions and how public policies on air pollution progressively addressed the agricultural sector. This book was written for students, researchers and agriculture actors as well as for public decision-makers.