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Descrizione fisica	1 online resource (IX, 322 p. 108 illus., 26 illus. in color.)
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Soggetti	Air - Pollution Botany Agriculture Forests and forestry Atmospheric Protection/Air Quality Control/Air Pollution Plant Sciences Forestry
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part-1:Air Pollution in East Asia -- Gaseous species -- Aerosols -- Acid deposition -- Part-2: Effects of Gaseous Air Pollutants on Plants in Japan -- Effects of ozone on Japanese crops -- Effects of ozone on Japanese trees -- Combined effects of ozone and other environmental factors on Japanese trees -- Environmental monitoring with indicator plants for Air pollutants in Asia -- Part-3: Case Studies in Japanese Forests -- Flux-based ozone risk assessment for Japanese temperate forests -- Tree decline at somma of Lake Mashu in northern Japan -- Decline of Fagus crenata in Tanzawa Mountains, Japan -- Reactions between ozone and terpenoids within a forest of Mt. Fuji -- Part-4: Effects of Gaseous Air Pollutants on Plants in China -- Effects of ozone on Chinese crops -- Effects of ozone on Chinese trees -- Part-5: Effects of Acid Deposition on Asian Plants -- Effects of simulated acid rain on Asian crops and garden plants -- Effects of simulated acid rain on Asian trees -- Combined effects of simulated acid rain and other environmental factors on Asian trees -- Effects of soil acidification on Asian Trees -- Effects of nitrogen load on Asian trees -- Part-6: Effects of Aerosol on Plants -- Effects of aerosol particles on plants -- Effects

	of black carbon and ammonium sulfate particles on plants -- Dry deposition of aerosols onto forest.
Sommario/riassunto	This is the only book to offer an up-to-date overview of air pollution in East Asia and the effects of air pollutants such as ozone, acid deposition and aerosols on Asian crops and trees. It is unique in that it discusses the fundamentals of environmental plant science and research advances in the area at the plant ecophysiology level. It addresses various topics, including gaseous air pollutants such as ozone; soil acidification and atmospheric nitrogen deposition due to acid deposition; PM2.5 and the effects of air pollutants on growth, yield and physiological functions such as photosynthesis of crops and trees in East Asia. It is a valuable resource for environmental scientists, plant scientists, government officials, industrialists, environmentalists, undergraduate and graduate students and anyone interested in the application of the latest findings to agricultural production and protection of forest ecosystems in Asia. It also provides useful information for professionals involved in research, development, production, processing and marketing of agricultural products, including those in developing countries who are interested in advanced environmental science in this field.