

1. Record Nr.	UNINA9910253879703321
Titolo	Phosphorus in Agriculture: 100 % Zero // edited by Ewald Schnug, Luit J. De Kok
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2016
ISBN	94-017-7612-1
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIV, 353 p. 41 illus.)
Disciplina	581.7
Soggetti	Plant ecology Plant Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1.Urgent Need for Action in the Baltic Sea Are -- 2. The Enigma of Fertilizer Phosphorus Utilization -- 3. Fate of Fertilizer P in Soils: Inorganic Pathway -- 4. Fate of Fertilizer P in Soils - the Organic Pathway -- 5. Determination of Plant Available P in Soil -- 6. Assessing the Plant Phosphorus Status -- 7. P solubility of Inorganic and Organic P Sources -- 8. Variability of P Uptake by Plants -- 9. Management options for an efficient utilization of phosphorus in agroecosystems -- 10. Phosphorus – the Predicament of Organic Farming -- 11. Utilization of Phosphorus at Farm Level in Denmark -- 12. Trace Element Contaminants and Radioactivity from Phosphate Fertiliser -- 13. Organic Xenobiotics -- 14. Energy Neutral Phosphate Fertilizer Production using High Temperature Reactors -- 15. Justice and Sustainability: Normative Criteria for the Use of Phosphorus -- 16. Governance Instruments for Phosphorus Supply Security.
Sommario/riassunto	The title 'Phosphorus in Agriculture: 100 % Zero' is synonymous for make-or-break. And it stands up to the promise. This book sends an important message as it delivers background information, intrinsic hypotheses, validation approaches and legal frameworks, all for balanced phosphorus fertilization in agriculture. This implies firstly that the phosphorus requirement of crop is fully satisfied by applying exclusively fertilizers which contain the nutrient in completely available form. Secondly, environmental demands through eutrophication and

hazardous contaminants must not be compromised. The book identifies equally knowledge gaps and deficits in the transformation and implementation of research into practice. Bottom line is that research delivers the tools for a sustainable phosphorus management while legal frameworks are insufficient.
