News Releases

Soil Science Society of America
677 South Segoe Road • Madison WI 53711-1086 • 608-273-8080 • Fax 608-273-2021
www.soils.org
Twitter | Facebook | RSS News Release Feed

NEWS RELEASE
Contact: Sara Uttech, Soil Science Society of America, 608-268-4948, suttech@soils.org

Is Nitrogen the New Carbon?

The new book, Nitrogen Fixation in Crop Production, presents the science, application, and politics of using nitrogen-fixing crop plants to help provide a sustainable food supply.

MADISON, WI, SEPTEMBER 21, 2009 -- In looking forward to the next Green Revolution, researchers have been carefully examining the role of nitrogen fixation in delivering successful crops around the globe.

For too long, nitrogen fixation of the soil has involved a dependence upon fertilizers, pesticides, and herbicides that are petroleum-based, thus tying the agricultural industry to the availability and market price of fossil fuels. Many researchers agree that the next generations of technologies should emphasize clean and renewable sources to maintain the sustainability of agricultural development.

A new book, *Nitrogen Fixation in Crop Production*, is a resource for the science, application, and politics of the use of nitrogen-fixing crop plants across the globe and in various environments. From the microscopic to the global scale, the book contains a wide range of approaches to the role of nitrogen fixation. The book is published by the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America.

Nitrogen Fixation in Crop Production strongly emphasizes the economics of implementing advanced technologies in the process of nitrogen fixation. The goal of these technologies is the growth of agricultural yields worldwide, creating a system in which regions that typically struggle with their own agricultural sustenance would be able to become more self-sufficient. Nitrogen fixation is widely recognized as a method of achieving these gains, making the book a very timely commodity. For example, the United Nations Millennium Project emphasizes the nitrogen fixation strategy for its sub-Saharan Africa villages.

"Biological nitrogen fixation is an important economic issue for the global economy, as it represents the potential to reduce manufactured fertilizer nitrogen use in certain cropping systems. The economic and societal benefits of biological nitrogen fixation, especially where soil nitrogen supplies and funds for purchased inputs are limiting, are addressed in this book, as is the potential for mitigation of greenhouse gases," writes American Society of Agronomy President Marcus M. Alley of Virginia Tech in the foreword.

The book was edited by David W. Emerich, University of Missouri and Hari Krishnan, U.S. Department of Agriculture's Agricultural Research Service, Columbia, MO.

The American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America previously published a book on nitrogen fixation in 1984, but with the recent advancements in this science, an updated approach was needed. These nitrogen fixation discoveries include genome sequencing and genetically engineered crops. View the full Table of Contents here: https://portal.sciencesocieties.org/Downloads/pdf/B40724.pdf

Nitrogen Fixation in Crop Production is 422-pages, hardcover, and is available for $100 from ASA-CSSA-SSSA at www.societystore.org, or call 608-268-4960 or email books@agronomy.org

The Soil Science Society of America (SSSA) is a progressive, international scientific society that fosters the transfer of knowledge and practices to sustain global soils. Based in Madison, WI, and founded in 1936, SSSA is the professional home for 6,000+ members dedicated to advancing the field of soil science. It provides information about soils in relation to crop production, environmental quality, ecosystem sustainability, bioremediation, waste management, recycling, and wise land use.

SSSA supports its members by providing quality research-based publications, educational programs, certifications, and science policy initiatives via a Washington, DC, office. For more information, visit www.soils.org.

SSSA is the founding sponsor of an approximately 5,000-square foot exhibition, Dig It! The Secrets of Soil, which opened July 19, 2008 at the Smithsonian's National Museum of Natural History in Washington, DC.