



# Soil Emission of Nitrous Oxide and its Mitigation

*By David Ussiri, Rattan Lal*

Download now

Read Online ➔

**Soil Emission of Nitrous Oxide and its Mitigation** By David Ussiri, Rattan Lal

Nitrous oxide gas is a long-lived relatively active greenhouse gas (GHG) with an atmospheric lifetime of approximately 120 years, and heat trapping effects about 310 times more powerful than carbon dioxide per molecule basis. It contributes about 6% of observed global warming. Nitrous oxide is not only a potent GHG, but it also plays a significant role in the depletion of stratospheric ozone. This book describes the anthropogenic sources of N<sub>2</sub>O with major emphasis on agricultural activities. It summarizes an overview of global cycling of N and the role of nitrous oxide on global warming and ozone depletion, and then focus on major source, soil borne nitrous oxide emissions. The spatial-temporal variation of soil nitrous oxide fluxes and underlying biogeochemical processes are described, as well as approaches to quantify fluxes of N<sub>2</sub>O from soils. Mitigation strategies to reduce the emissions, especially from agricultural soils, and fertilizer nitrogen sources are described in detail in the latter part of the book.

↓ [Download Soil Emission of Nitrous Oxide and its Mitigation ...pdf](#)

📄 [Read Online Soil Emission of Nitrous Oxide and its Mitigation ...pdf](#)

# Soil Emission of Nitrous Oxide and its Mitigation

*By David Ussiri, Rattan Lal*

## **Soil Emission of Nitrous Oxide and its Mitigation** By David Ussiri, Rattan Lal

Nitrous oxide gas is a long-lived relatively active greenhouse gas (GHG) with an atmospheric lifetime of approximately 120 years, and heat trapping effects about 310 times more powerful than carbon dioxide per molecule basis. It contributes about 6% of observed global warming. Nitrous oxide is not only a potent GHG, but it also plays a significant role in the depletion of stratospheric ozone. This book describes the anthropogenic sources of N<sub>2</sub>O with major emphasis on agricultural activities. It summarizes an overview of global cycling of N and the role of nitrous oxide on global warming and ozone depletion, and then focus on major source, soil borne nitrous oxide emissions. The spatial-temporal variation of soil nitrous oxide fluxes and underlying biogeochemical processes are described, as well as approaches to quantify fluxes of N<sub>2</sub>O from soils. Mitigation strategies to reduce the emissions, especially from agricultural soils, and fertilizer nitrogen sources are described in detail in the latter part of the book.

## **Soil Emission of Nitrous Oxide and its Mitigation** By David Ussiri, Rattan Lal Bibliography

- Sales Rank: #4721840 in Books
- Published on: 2012-11-12
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x 1.00" w x 6.40" l, .0 pounds
- Binding: Hardcover
- 378 pages

 [Download Soil Emission of Nitrous Oxide and its Mitigation ...pdf](#)

 [Read Online Soil Emission of Nitrous Oxide and its Mitigatio ...pdf](#)

## **Editorial Review**

From the Back Cover

This book offers a clear and concise analysis of the global budget of nitrous oxide and the factors controlling its emission. It also describes the anthropogenic sources of nitrous oxide with major emphasis on agricultural activities. Anthropogenic activities have more than doubled the availability of reactive nitrogen in the biosphere, primarily through agricultural activities. Increasing nitrogen availability is producing unintended environmental consequences, including enhanced nitrous oxide emissions. Nitrous oxide gas is a long-lived radiatively active greenhouse gas (GHG) with an atmospheric lifetime of approximately 120 years, and heat trapping effects about 310 times more powerful than carbon dioxide on a per molecule basis. Nitrous oxide is not only a potent GHG, but it also plays a significant role in the depletion of stratospheric ozone. This book offers an extensive look at mitigation techniques to reduce emissions from agricultural soils and fertilizer nitrogen sources.

The global nitrogen cycle and role of enhanced reactive nitrogen in nitrous oxide emission is discussed. The Present and the future of enhanced nitrous oxide emissions on climate change and ozone depletion is outlined. The majority of the book focuses on soil borne nitrous oxide emissions. The spatial-temporal variation of soil nitrous oxide fluxes and underlying biogeochemical processes are described, as well as approaches to quantify fluxes from soils. Global nitrous oxide budget estimation based on various techniques and the associated uncertainties are outlined with the emphasis on research need to provide data for modeling. Mitigation strategies to reduce the emissions, especially from agricultural soils and fertilizer nitrogen sources are described in detail in the later part of the book.

## **Users Review**

**From reader reviews:**

**Virginia Boone:**

In this 21st millennium, people become competitive in every way. By being competitive today, people have do something to make these survives, being in the middle of often the crowded place and notice by surrounding. One thing that occasionally many people have underestimated it for a while is reading. Sure, by reading a e-book your ability to survive raise then having chance to remain than other is high. For you personally who want to start reading the book, we give you this specific Soil Emission of Nitrous Oxide and its Mitigation book as nice and daily reading publication. Why, because this book is greater than just a book.

**Alysa Appel:**

This book untitled Soil Emission of Nitrous Oxide and its Mitigation to be one of several books in which best seller in this year, honestly, that is because when you read this guide you can get a lot of benefit onto it. You will easily to buy this book in the book retailer or you can order it by way of online. The publisher of the book sells the e-book too. It makes you quicker to read this book, because you can read this book in your Mobile phone. So there is no reason to you to past this guide from your list.

**Charles Payne:**

Reading a book for being new life style in this 12 months; every people loves to read a book. When you learn a book you can get a lots of benefit. When you read ebooks, you can improve your knowledge, simply because book has a lot of information onto it. The information that you will get depend on what types of book that you have read. If you need to get information about your analysis, you can read education books, but if you want to entertain yourself look for a fiction books, these kinds of us novel, comics, and soon. The Soil Emission of Nitrous Oxide and its Mitigation offer you a new experience in examining a book.

**Donald Murray:**

This Soil Emission of Nitrous Oxide and its Mitigation is brand new way for you who has intense curiosity to look for some information since it relief your hunger of knowledge. Getting deeper you onto it getting knowledge more you know otherwise you who still having bit of digest in reading this Soil Emission of Nitrous Oxide and its Mitigation can be the light food for you personally because the information inside this kind of book is easy to get by means of anyone. These books produce itself in the form that is reachable by anyone, sure I mean in the e-book contact form. People who think that in book form make them feel sleepy even dizzy this book is the answer. So there is not any in reading a e-book especially this one. You can find actually looking for. It should be here for anyone. So , don't miss the idea! Just read this e-book style for your better life along with knowledge.

**Download and Read Online Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal #XEG53MFCLQK**

## **Read Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal for online ebook**

Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal books to read online.

### **Online Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal ebook PDF download**

#### **Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal Doc**

**Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal Mobipocket**

**Soil Emission of Nitrous Oxide and its Mitigation By David Ussiri, Rattan Lal EPub**