Bacterial community responses to Soil-injected liquid ammonium nutrition and effect of temperature on barley (Hordeum vulgare L.) grain yield formation



Filesize: 6.87 MB

Reviews

Extensive guide! Its this kind of great read. It is really simplistic but excitement from the 50 percent of your pdf. I am just quickly will get a pleasure of looking at a composed book. (Tomasa Bins)

BACTERIAL COMMUNITY RESPONSES TO SOIL-INJECTED LIQUID AMMONIUM NUTRITION AND EFFECT OF TEMPERATURE ON BARLEY (HORDEUM VULGARE L.) GRAIN YIELD FORMATION



Cuvillier Verlag Feb 2008, 2008. Taschenbuch. Book Condition: Neu. 208x144x15 mm. Neuware - Injection of concentrated liquid ammonium nutrition into soil is an agricultural practice aimed at mitigating nitrogen losses. In Germany, it is referred to as controlled uptake long term ammonium nutrition (CULTAN) technique. In many soils, nitrate is mobile because as an anion, it is not bound to negatively charged surfaces of clay minerals or organic soil compounds. In contrast to phosphate, it is not specifically adsorbed. Nitrate fertilization may thus result in leaching and presents a potential environmental hazard. Ammonium ions, on the other hand, may be unspecifically bound to negatively charged surfaces or even fixed in inter-layers of 2:1 clay minerals. Following the injection of concentrated liquid ammonium into soil, ammonium is the predominant N nutrition form suggesting its stability in soil. After 30 days, though ammonium persisted in the soil, its concentration had drastically decreased. Unspecifically bound ammonium may be exchanged and readily oxidized to nitrate by nitrifying bacteria. Bacterial community occurrence within the perceived toxic ammonium injection-zones facilitated transformation of ammonium to nitrate. This resulted into a rapid reduction of ammonium due to microbial as well as crop uptake. Along side the reductions in ammonium concentrations, nitrate concentrations increased rapidly as the season progressed. The incorporation of nitrification inhibitor (Nitrapyrin(r)) improved the stability of injected liquid ammonium by suppressing the nitrification process. However, the inhibitor did not express any direct effect on ammonium concentration reductions. It suppressed the transformation of ammonium into nitrate. Non-incorporation of the inhibitor caused the formation of high concentrations of nitrate. The transformation of ammonium to nitrate under CULTAN fertilization suggests that the technique offers mixed nitrogen nutrition contrary to earlier assumptions that it supplies predominantly ammonium. The nitrogen switch from predominant ammonium to mixed nitrogen through the availability of...

Read Bacterial community responses to Soil-injected liquid ammonium nutrition and effect of temperature on barley (Hordeum vulgare L.) grain yield formation Online

Download PDF Bacterial community responses to Soil-injected liquid ammonium nutrition and effect of temperature on barley (Hordeum vulgare L.) grain yield formation

See Also



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Read Book »



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Read Book »



The Java Tutorial (3rd Edition)

Pearson Education, 2001. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Praise for "The Java' Tutorial, Second Edition" includes: "This book...

Read Book »



Adobe Indesign CS/Cs2 Breakthroughs

Peachpit Press, 2005. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Adobe InDesign is taking the publishing world by storm and...

Read Book »



Passing Judgement Short Stories about Serving Justice

Isinglass Press. Paperback. Book Condition: New. Paperback. 102 pages. Dimensions: 9.0in. x 6.0in. x 0.3in. Passing Judgment is a compact collection of twelve short stories about people who deliver their own form of justice. These are...

Read Book »



Accused: My Fight for Truth, Justice and the Strength to Forgive

BenBella Books. Hardback. Book Condition: new. BRAND NEW, Accused: My Fight for Truth, Justice and the Strength to Forgive, Tonya Craft, Mark Dagostino, This is the true story of a woman who prevailed against the

Save Book »



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625) (Paperback)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now

Save Book »



Who Am I in the Lives of Children? an Introduction to Early Childhood Education with Enhanced Pearson Etext -- Access Card Package (Paperback)

Pearson, United States, 2015. Paperback. Book Condition: New. 10th. 251 x 203 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies

Save Book »



To Thine Own Self (Paperback)

Dog Ear Publishing, United States, 2011. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Carefree and self assured Carolyn loves her life. Her uncle runs

Save Book »



Patent Ease: How to Write You Own Patent Application (Paperback)

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Patent Ease! The new How to write your own Patent book for beginners!

Save Book »