

Nutrient Cycling in Agroecosystems

Volume 89 · Number 1 · January 2011

Dynamics of methane emission, active soil organic carbon and their relationships in wetland integrated rice-duck systems in Southern China

M. Zhan · C. Cao · J. Wang · Y. Jiang · M. Cai · L. Yue · A. Shahrear 1

Nutrient recycling potential of rock phosphate and waste mica enriched compost on crop productivity and changes in soil fertility under potato-soybean cropping sequence in an Inceptisol of Indo-Gangetic Plains of India

D.R. Biswas 15

Soil phosphorus distribution in sequentially extracted fractions in tropical coffee-agroecosystems in the Atlantic Forest biome, Southeastern Brazil

F.A.d.S. Xavier · E.F. Almeida · I.M. Cardoso · E. de Sá Mendonça 31

Runoff capture through vegetative barriers and planting methodologies to reduce erosion, and improve soil moisture, fertility and crop productivity in southern Orissa, India

A. Dass · S. Sudhishri · N.K. Lenka · U.S. Patnaik 45

Spatial distribution of soil phosphorus and herbage mass in beef cattle pastures: effects of slope aspect and slope position

G.C. Sigua · S.W. Coleman · J. Albano · M. Williams 59

Quality of soil organic matter and C storage as influenced by cropping systems in northwestern Alberta, Canada

M.A. Arshad · Y.K. Soon · J.A. Ripmeester 71

Effect of drainage in the fallow season on reduction of CH₄ production and emission from permanently flooded rice fields

G. Zhang · X. Zhang · J. Ma · H. Xu · Z. Cai 81

Elevated CO₂ effects on nutrient competition between a C₃ crop (*Oryza sativa* L.) and a C₄ weed (*Echinochloa crusgalli* L.)

Q. Zeng · B. Liu · B. Gilna · Y. Zhang · C. Zhu · H. Ma · J. Pang · G. Chen · J. Zhu 93

Greenhouse gas emissions when composting manure from cattle fed wheat dried distillers' grains with solubles

X. Hao · M. Benke · F.J. Larney · T.A. McAllister 105

Decomposition, nitrogen and phosphorus mineralization from winter-grown cover crop residues and suitability for a smallholder farming system in South Africa

F.S. Murungu · C. Chiduzza · P. Muchaonyerwa · P.N.S. Mkeni 115

Fertilizer dynamics in different tillage and crop rotation systems in a Vertisol in Central Mexico

O.A. Grageda-Cabrera · J.A. Vera-Núñez · J.L. Aguilar-Acuña · L. Macías-Rodríguez · G.A. Aguado-Santacruz · J.J. Peña-Cabriales 125

Short-term fates of high sulfur inputs in Northern California vineyard soils

E.S. Hinckley · S. Fendorf · P. Matson 135