

Editorial Commentary

- 351 **Net land-atmosphere flows of biogenic carbon related to bioenergy: towards an understanding of systemic feedbacks**
Helmut Haberl

Original Articles

- 358 **Ethanol production potential of sweet sorghum assessed using forage fiber analysis procedures**
Kun-Jun Han, William D. Pitman, Misook Kim, Donal F. Day, Montgomery W. Alison, Michael E. McCormick and Giovanna Aita
- 367 **Common reeds (*Phragmites australis*) as sustainable energy source: experimental and modelling analysis of torrefaction and pyrolysis processes**
Francesco Patuzzi, Tanja Mimmo, Stefano Cesco, Andrea Gasparella and Marco Baratieri
- 375 **Impacts of herbaceous bioenergy crops on atmospheric volatile organic composition and potential consequences for global climate change**
Saber Miresmailli, Marcelo Zeri, Arthur R. Zangerl, Carl J. Bernacchi, May R. Berenbaum and Evan H. DeLucia
- 384 **Soil carbon stocks and changes after oil palm introduction in the Brazilian Amazon**
Leidivan A. Frazão, Keith Paustian, Carlos E. Pellegrino Cerri and Carlos C. Cerri
- 391 **Miscanthus biomass productivity within US croplands and its potential impact on soil organic carbon**
Umakant Mishra, Margaret S. Torn and Kevin Fingerman
- 400 **An assessment of the effect of harvest time and harvest method on biomass loss for *Miscanthus x giganteus***
Peter G. Meehan, Kevin P. McDonnell and John M. Finnan
- 408 **Effects of cross host species inoculation of nitrogen-fixing endophytes on growth and leaf physiology of maize**
Jenny L. Knoch, Soo-Hyung Kim, Gregory J. Ettl and Sharon L. Doty
- 419 **Invasiveness risk of the tropical biofuel crop *Jatropha curcas* L. into adjacent land use systems: from the rumors to the experimental facts**
Aklilu Negussie, Wouter M. J. Achten, Raf Aerts, Lindsey Norgrove, Thomson Sinkala, Martin Hermy and Bart Muys
- 431 **Simulating the effects of harvest and biofuel production on the forest system carbon balance of the Midwest, USA**
Scott D. Peckham and Stith T. Gower
- 445 **Effects of stump extraction on the carbon sequestration in Norway spruce forest ecosystems under varying thinning regimes with implications for fossil fuel substitution**
Ashrafal Alam, Seppo Kellomäki, Antti Kilpeläinen and Harri Strandman
- 459 **The role of forest residues in the accounting for the global warming potential of bioenergy**
Geoffrey Guest, Francesco Cherubini and Anders Hammer Strømman

Technical Advance

- 467 **The outcome is in the assumptions: analyzing the effects on atmospheric CO₂ levels of increased use of bioenergy from forest biomass**
Bjart Holtsmark

Corrigendum

- 474 **Application of probability distributions to the modeling of biogenic CO₂ fluxes in life cycle assessment**
Francesco Cherubini, Geoffrey Guest and Anders H. Strømman