

Dear Editor

Oecologia Australis

5th July 2018

Please find enclosed our manuscript entitled “**Gasohol effects on microbial community of a soil originated from the Atlantic forest**”, which we would like to submit for publication as a full-length text in Oecologia Australis.

Our work explores the changes in the genetic and functional diversity of the bacterial community of a soil from the tropical Atlantic Forest upon contamination with gasohol. Gasohol had an immediate impact on genetic structure of Bacteria and on respiratory metabolism of soil microbial community. After contamination of soil, we analyzed the profile of microbial community using DGGE and respiration rates of the soil. We proposed that gasohol contamination causes a strong transient impact on soil microbial community structure that is completely reversed after a few days following contaminant removal. Secondary succession following contamination results in a soil bacterial community identical to that present before contamination, in terms of both genetic structure and catabolic function. Our results point to a high resilience of microbial community found in Atlantic Forest soil.

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with submission to Oecologia Australis. The study was supported by a grant from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil. The authors have no conflicts of interest to declare.

Please address all correspondence to:

Marcos Rogério Tótola, Laboratório de Biotecnologia e Biodiversidade para o Meio Ambiente. ECS 342, Universidade Federal de Viçosa, Viçosa, MG. Brazil. 36570-000.

We look forward to hearing from you at your earliest convenience.

Yours sincerely,

Marcos Rogério Tótola
Professor

Below are the names of the suggested reviewers:

Julliane Dutra Medeiros – Universidade Federal de Juiz de Fora
PhD in Genetics
jdutramedeiros@gmail.com

Fernanda de Souza Freitas – Universidade Federal de Viçosa
PhD in Agricultural Microbiology
fernandaufv@yahoo.com.br

Dionéia Evangelista Cesar - Universidade Federal de Juiz de Fora
PhD in Biological Oceanography
dioneia.cesar@ufjf.edu.br

Ana Carolina Morais Apolônio - Universidade Federal de Juiz de Fora
PhD in Biological Sciences (Microbiology)
carolinaapolonio@gmail.com

Daniel Kumazawa Morais - Czech Academy of Sciences
PhD in Agricultural Microbiology
kdanielmorais@hotmail.com