XIII Congresso de ECOLOGIA
III International Symposium of Ecology and Evolution
Múltiplas ecologias: evolução e diversidade
08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

Environmental variables influence on dung beetle community structure

Luiz Otávio Cortez[1]*; Bianca Souza[1]; Rafaella Maciel[2]; Júlio Louzada[1]

1. Departamento de Biologia, Setor de Ecologia, Universidade Federal de Lavras; 2. Departamento de Entomologia, Universidade Federal de Lavras, Lavras, 37200-000, Brasil. *Correspondência para locortez.bio@gmail.com

Tema/Meio de apresentação: Biologia da conservação/pôster

Transition regions between biomes are known by having a high biodiversity, however, this areas have a lack of researches. Cerrado and Caatinga are structurally similar biomes and meet at an extensive transition band. This areas has been suffering with the farming activity growth, however, there are few studies on this biodiversity transformation process. Therefore, this study aims to investigate which of the environmental variables best explain the dung beetles community structure variation in a transition region between Cerrando and Caatinga. The collections were conducted in Currais (PI). Were sampled five areas each system: Caatinga, Cerrado, dirty pasture (unmanaged pastures) and clean pasture (managed pasture). In each area, a transect (sample unit) was installed with five pitfall traps distant 50m from each other, baited with 30g of human faeces. Were collected 62 species and 48,659 individuals. The clean pasture presented the lowest species richness while Cerrado presented the greatest individual abundance. The environmental variables that best explain the community structure variation were: Canopy cover, clean pasture, fractal dimension, understory density and amount of sand, which together explain 70% of this variation. The dung beetles have habitat specificity, since the structure of their community is strongly affected by the vegetation type, so the forest cover is one of the most important factors for the beetles in the tropical region. Due to rolling and burying faeces behavior for feeding and nesting, soil composition is also a great important factor. Thus, it is possible to conclude that despite the similarity between the collected systems, some factors are determinant for the community structure.