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**EPIEDAPHIC COLEOPTERA IN THE DADIA FOREST RESERVE:
THE EFFECT OF HUMAN INTERVENTIONS
ON COMMUNITY ORGANIZATION PATTERNS**

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In this work we describe and compare the community organization patterns of Coleoptera in various sites of the Dadia forest reserve, which are subject to different human impacts. Ten sites were sampled, including different types of vegetation and management practices (grazing, afforestation, cultivation). Sampling was carried out every two months for a year, by means of unbaited pitfall traps, which remained in the field for seven days on each sampling occasion. For studying diversity and community structure, we used Renyi's parametric index of diversity and Motomura's environmental constant. In order to study the changes of species composition, we used the Indicator Value method of Dufrene and Legendre, after a tree clustering of our sampling sites.

According to our results, the three management practices had different effects on the communities of epiedaphic Coleoptera. Grazing did not alter the species composition of the communities but increased their diversity and altered the community structure. The communities in the ungrazed forests are overdominated by one species, while in the grazed sites dominance is shared by several species. On the other hand, the main effect of cultivation and afforestation on the coleopteran communities was the significant change in species composition. The cultivated and the afforested sites were dominated by characteristic species that were absent from all other sites.

Finally, although certain species of Coleoptera seemed to be good indices for assessing human impacts on natural environment, our results showed that the study of changes in the community organization patterns is even more appropriate.