Identifying plant species in the diets of herbivores

Prof G. Kerley, Nelson Mandela Metropolitan University
IBIP-BS13100452303

Subtropical thicket is known for the high diversity of plant and herbivore species that it supports. Understanding the relationships between the plants and the herbivores is key to managing thicket plant communities as these are impacted by herbivores. This understanding relies upon the identification of plant species consumed by these herbivores and this project aims to establish a DNA-barcoded reference collection of a suite of the potential consumed plant species. These will be compared with the dietary DNA-barcoded profiles of these herbivores (diet for 13 species already collected and being analysed in a separate project). The project will therefore comprise the sampling for DNA-barcoding and the preparation of herbarium voucher specimens of about 500 plant species (list currently being refined) in the Addo Elephant National Park. The DNA-barcoding of these plant samples will be undertaken by Dr Pierre Taberlet (Joseph Fourier University, France), although funding for this aspect is not sought here. The sequenced codes will be lodge in Genebank.