



*Cyrtorchis arcuata*



*Peperomia rotundifolia*



*Platynerium elephantotis*



*Chassalia cristata*



*Ficus natalensis*



*Begonia emini*

# The influence of habitat disturbance on epiphyte and liana communities in East African rain forests

K. Rembold & E. Fischer

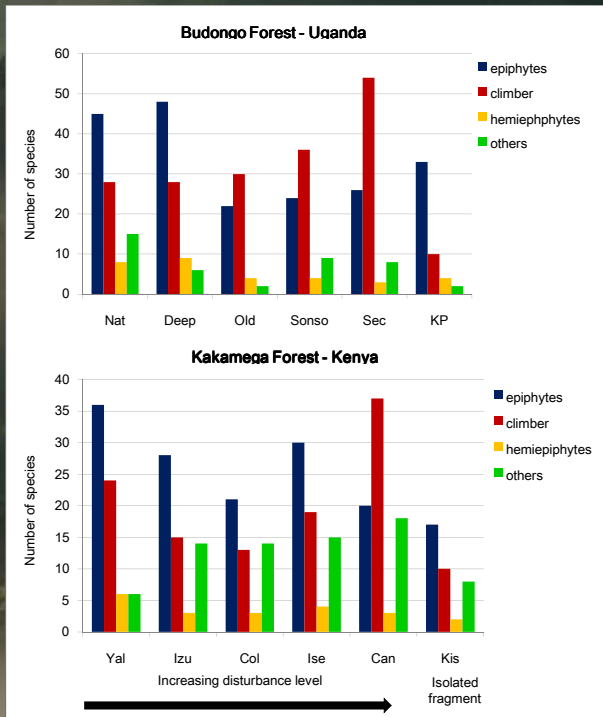
Institute of Integrated Natural Sciences, Department of Biology, University of Koblenz-Landau, Germany

Contact: rembold@uni-koblenz.de

The biodiversity of epiphytes in African rain forests is low compared to Neotropical or Asian rain forests, though our knowledge about African epiphyte communities is very limited. Our study aims to record the species composition of vascular epiphytes along a disturbance gradient and give evidence about the conservation status of the respective species. In order to involve forest types under different anthropogenous and ecological pressures, the study was carried out in two East African rain forests in Uganda and Kenya.



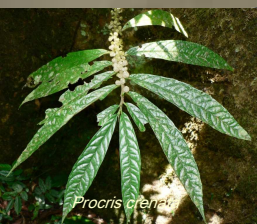
Position of the two study sites in Uganda and Kenya



With increasing disturbance level, we observed not only a decrease in vascular epiphyte diversity, but also an increase in the number of liana species. As both trends are likely to be linked, the latter were included in this study.

A large number of species occurs only in forest types with a certain degree of disturbance or at least in a conspicuously increased number. Those species provide information about the recovery capacities of epiphyte and liana communities after deforestation, which allow us to estimate the extent of species loss resulting from the continuous decline of primary forests.

Based on this data and in close cooperation with the Botanical Garden of Maseno (Kenya) we establish an ex-situ conservation collection of the endangered plant species of both forests.



*Procris ornata*



*Bolusiella maudiae*



*Piper guineense*



Kakamega Forest, Kenya



*Antrophyum mannianum*



*Rhipsalis papillata*