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Diversity and ecology of tree Sciuridae (Rodentia, Mammalia) in the Yoko Forest Reserve (Ubundu, DR Congo)

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Tropical forest ecosystems host a high biological diversity, but are severely degraded by human activities (Katuala, 2005). However, according to Katuala (2009), the taxonomy of small mamma species and their distribution are still poorly known in tropical Africa. The Yoko Forest Reserve (YFR) in the DRC is not immune to these gaps in knowledge of wildlife inventories or threats to ecosystems and forest degradation.

For more than three decades, the Faculty of Science at the University of Kisangani has been studying small mammals diversity but focused mostly on terrestrial species. As such the diversity, distribution, species population dynamics and ecological preferences of Sciuromorphic Rodents in the region are still poorly known (Baelo et al., 2016). Describe Sciuridae specific richness taking into account the spatio-temporal dynamic of trapping success according to habitat type and strata (sub-canopy).

We caught in total 123 squirrels in 8775 trap nights (trapping success=1,4) and inventoried six species (*Funiscisurus anerythrus*, *F. bayonii*, *F. congicus*, *Heliosciurus rufobrachium*, *Paraxerus boehmi* and *Protoxerus stangeri*). *F. anerythrus* was the most abundant species in the collection and in fallow land. Number of non-sampled species is higher in Jc (R=4 and Chao1=6±0.24). The sampling coverage rate provides homogeneous values between habitats; FP (ACE=5.26±1.19), FS (ACE=5.84±1.15) at Jc (ACE=6.7). FS is more diversified (H'=1.49 and 1-D=0.7149) than FP (H'=1.257 and 1-D=0.687) and Jc (H'=0.569 and 1-D=0.2936). Habitat type influences trapping succes with more species caught in fallow land ($F = 13{,}042$; ddl = 2 ; $p < 0{,}0001$). Mature, reproductive individuals were 2 times more abundant than immatures of the same sp. The sex ratio was balanced for both groups. The reproduction rate in *F. anerythrus* is 0.75. This first study shows the relevance of systematic inventories and phylogenetics of this poorly studied taxonomic group.

(POSTER)