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species occurring in Africa and associated islands. Furthermore, bats play a wide range of ecosystem services including pollination, seed dispersal, and in agroecosystems, pest suppression.

Correct species identification is important for many disciplines including conservation of biodiversity. However, cryptic species make identifications difficult, a problem familiar to bat biologists, particularly those working in the tropics. I start by highlighting the importance of systematic and taxonomic studies which I illustrate using the example of Mt Nimba, West Africa. Over the course of three short surveys that I participated in, the number of bats increased from 32 to 59 species, including at least four new species to science. Furthermore, the endemic Hipposideros lamottei had been misdiagnosed in the original species description leading to much confusion in the literature over the past 30 years.

Traditionally, cryptic bat species were resolved by careful examination of specimens including detailed analyses of inter alia teeth, skulls and noseleafs; a practice requiring the sacrificing of specimens as vouchers. Advances in molecular techniques have allowed for species identification based on tiny tissue samples (typically wing punches in bats) that do not call for the taking of voucher specimens. This has led some bat workers to call for an end in the taking of specimens. I end the talk, by discussing how an approach that relies entirely on molecular sequencing for species identification (without vouchers) can lead to serious problems and confusion; particularly in an African context where new species are continuously being described. I illustrate this with examples based on my own experience.

(KEYNOTE LECTURE)

Diversity of Shrews and Rodents of disturbed areas in Yoko Forest Reserve and its vicinity: recolonization capacity in a slashed and burned area (Kisangani, DRC)

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We investigated rodents and shrews in three habitats of the Yoko Forest Reserve and surroundings to compare their composition and structure, and to assess their sequence of recolonization after slash and burning.

Six trap sessions were simultaneously carried out in three permanent plots of 16 ha (fallow land, old palm plantation and primary forest) from 2011 to 2012. Before the third trap session the fallow land plot was slashed and burned and then sampled one week after burning.

We combined Pitfall and Sherman traps in each plot, at the rate of two lines per location (in the center, at each diagonal side: 25m and 75m of the border).

We recorded 14 of shrews and 13 species and rodents in 40800 trap nights. In general, no difference was noted in the distribution of shrews species among habitats types, contrary to rodents for which higher abundances occurred in fallow land. Comparison of small mammals diversity before and after burning, show slight changes: lower species richness for shrews (S= 9 before vs 6 after, pi=7.1 vs 5,7 diversity index D=0.58 vs 0.51; H'= 0.97 vs 1.03 ; e=0.44 vs 0.57) against the highest relative abundance for rodents (4.78 vs 12.9: S=7 vs 5, s= with diversity index D=0.22 vs 0.31; H'=1.68 vs 1.32; e=0.86 vs 0.82). *Crocidura* cf *ludia* and *Praomys* cf *minor* are the most dominant species.

Some species like *Paracrocidura schoutedeni* are captured only at the edge (at 25m) of the fallow grid, close to remnant forests while others like *Dendromus mystacalis* appears later, two month after burning. Globally, when homogenous forest habitats are closer to the disturbed area, rodents and shrews´ community structure seem little affected by disturbance due to slash and burning practice.

(POSTER)

Assessing antifertility effects of *Acacia nilotica* and *Albizia lebbeck* on *Mastomys natalensis*

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The antifertility potential of medicinal herbs was investigated in male *Mastomys natalensis*. Stem bark and pods from *Albizia lebbeck* (AL) and *Acacia nilotica* (AN) respectively were initially processed. Crude extracts in distilled water and 70% methanol were obtained for AN and AL, respectively, after 72 hours. Extract from AN was concentrated in water bath at 400C. AL extract was concentrated in vacuumed rotor evaporator at 800C and water bath at 460C. Test animals (n=30) were randomly sorted into 3 groups of 10 and treated daily with 100mg of the plant´s crude extracts in 8g of broiler mash for 60days as follows: Group1: AN, Group2: AL, Group3 control: plain diet. Body weight was recorded at baseline and at day 60. Weights of reproductive organs, histology of the testis and sperm cells parameters were assessed at day 60. Rats on AN and AL displayed marked reduced mean body weights, testis, epididymis and seminal vesicles compared to the control. No sperm cells were observed in the AL treated rats. For the AN treated rats, no progressive motile sperm cells was observed and total sperm cells motility was significantly lower compared to the control. Sperm cells viability assessment indicated no sperm cells in the AL treated. Live sperm cell number was significantly lower in