Poster Session 1 – Population Dynamics

51 Population dynamics, breeding pattern and home ranges of rodent species in fallow lands of Mukwe Constituency, Kavango-East Region, Namibia

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Rodents have a very important role in ecosystems; they act as bio-indicators of environmental conditions because of their rapid turnover and ability to invade disturbed areas. In addition, some rodents are agricultural pests in rural communities causing crop damage and food shortage across Africa as well contribute to the spread of zoonotic diseases. Rodent species show spatial and temporal patterns in numbers, often linked to environmental factors. The main aim of the study was to determine the population abundance, breeding patterns, species diversity and home range sizes of rodents in Mukwe Constituency, Kavango-East Region (Namibia). The capture-mark-recapture method was carried out over a period of two years in two (labelled DVA and DVB) 70 x 70 m grids (49 Sherman traps each). The rodent species composition in Diyogha Village Grid A (DVA) was: *Mastomys natalensis* (28.6%), *Gerbilliscus leucogaster* (49%), *Saccostomus campestris* (18.6%), *Steatomys pratensis* (0.7%) and other species (2.4%) and for Diyogha Village Grid B (DVB): *Mastomys natalensis* (12.6%), *Gerbilliscus leucogaster* (72.6%), *Saccostomus campestris* (13.7%) and *Steatomys pratensis* (1.1%). All three dominant species showed a significant temporal variation within grids: *Mastomys natalensis* (t = 2.6672; P < 0.05), *Saccostomus campestris* (t = 3.2925; P<0.05) and *Gerbilliscus leucogaster* (t = 4.6728, P<0.05). Although most species seems to breed during the wet season, *Gerbilliscus leucogaster* showed breeding signs in the dry season. Most captured animals were adults, while sub-adults and juveniles were rarely present. Sex ratio did not differ significantly from the 1:1 ratio. Home range overlap was found within and between species, indicating that animals are not territorial.

459
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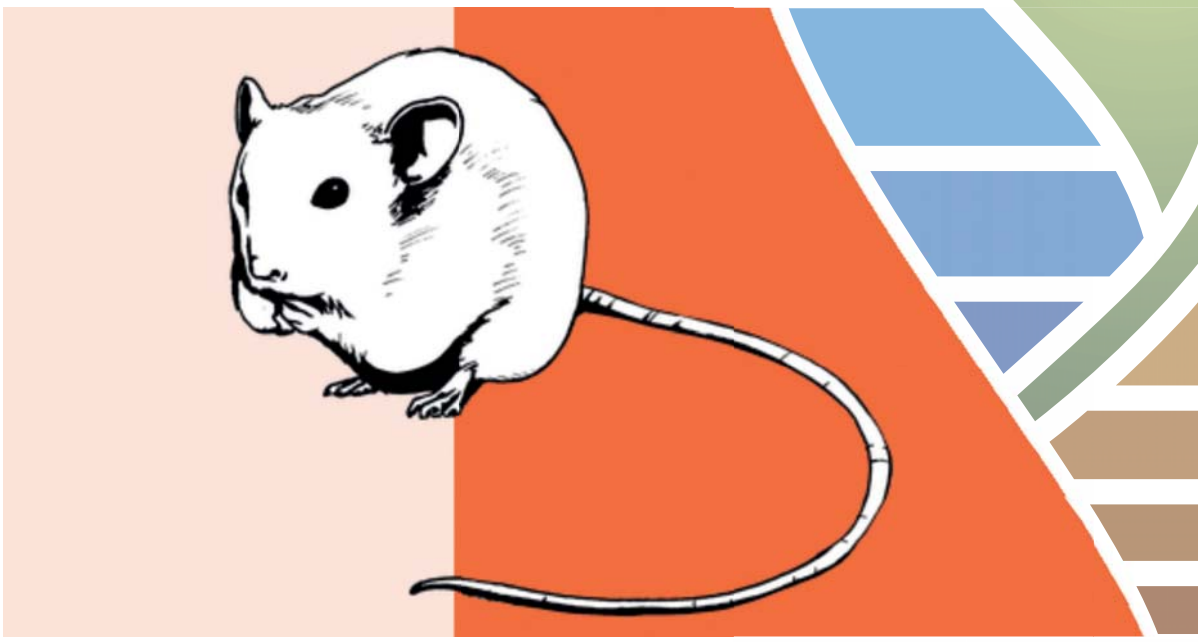

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459
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