

Rodents



Fig 1. *Arvicanthis niloticus* (Biolib.cz)

Introduction

- Rodent populations thrive where there is adequate food, water and shelter in close proximity.
- The species found in rice growing areas include striped grass rat (*Arvicanthis niloticus*), multimammate rat (*Praomys natalensis*), black rat (*Rattus rattus*), spotted grass mouse (*Lemniscomys striatus*) and pigmy rat (*Mus musculoides*) and squirrels like striped ground squirrel (*Xerius erythropus*)

Distribution

- Rodents are found in all rice agro ecologies but the species composition and number vary across agro-ecological zones (AEZs).
- They are important as pests in all rice growing areas of Kenya. Some are reported to travel more than two kilometres in search of food, water and shelter.



Fig 2. Striped grass mouse *Lemniscomys striatus* (wikipedia.org)

Damage on rice crop

- Damage to rice occurs at all stages of cultivation,
 - At planting rodents dig up and eat sown seeds
 - Rodents also attack the germinating seeds and seedlings;
 - At tillering, the cane rat can totally uproot the rice plants, depending on the population of the pest species.
 - Rats also feed on lodged rice and mature stems.
- Rats also feed on stored grain and are vectors of diseases like plague
- In stored grains losses of up to 100% have been reported.



Fig 3. Striped ground squirrel) *Xerius erythropus* Desmarest (www.kenstorey.com)

Management Strategies

Cultural Control

- Use traps and decoy baits
- Erect water barriers around the rice fields.
- Clear bushy bands around the rice paddies.
- Ensure paddies are weed free to eliminate rodents.
- Use predators, e.g. cats, snakes to eliminate rodents.
- Rat proof rice storage facilities.