
Rodent Management – Session 2

The black rat (*Rattus rattus*) in Madagascar: threat to health and livelihoods

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Malagasy farmers face numerous risks to their agriculture, including frequent pest outbreaks. The black rat (*Rattus rattus*) is the primary rodent pest, and a key reservoir for a number of transmissible diseases including bubonic plague. Control using ecologically-based rodent management (EBRM) approaches has been shown to significantly reduce crop losses where it has been implemented in parts of Southeast Asia. EBRM is not presently practiced in Madagascar and there is an opportunity to develop strategies that improve both food security and human health. A good understanding of the breeding ecology and habitat use of the pest species is fundamental to the successful design and implementation of EBRM, as well as consideration of the specific agricultural production system. Experience in Southeast Asia has demonstrated the importance of integrating local knowledge and socio-cultural factors. Here, we present data on the size and breeding condition of *Rattus rattus* populations across Madagascar and discuss the implications of capture probability for the design of control programmes. As part of a wider study on the occurrence of rodent-borne illnesses, rodent trapping was conducted at paired rural and urban sites at twenty-eight locations across Madagascar between 2011 and 2013. Household questionnaire surveys were also conducted at the each site, and provide information on agricultural practices, local perceptions of the rodent problem, and control methods currently practiced.

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6th International Conference of Rodent
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and
16th Rodens et Spatium

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Book of Abstracts



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