Field observations on three scolopendrid centipedes from Mauritius and Rodrigues (Indian Ocean) (Chilopoda: Scolopendromorpha)

John G.E. Lewis1, Peter Daszak2, Carl G. Jones3, Janet D. Cottingham4, Esther Wenman5 & Aleksandra Maljkovic6

1 Somerset County Museum, Taunton Castle, Castle Green, Taunton, Somerset TA1 4AA and Entomology Department, Natural History Museum, Cromwell Road, London, SW7 5BD, UK. Address for Correspondence: Manor Mill Farm, Halse, Taunton, Somerset TA4 3AQ, UK.  
2 School of Life Sciences, Kingston University, Penrhyn Road, Kingston-upon-Thames, Surrey KT1 2EE, UK. Present address: Wildlife Trust, 460 west 34th Street, New York 10001, USA.  
3 Mauritian Wildlife Foundation, Black River, Mauritius and Durrell Wildlife Conservation Trust, Les Augres Manor, Trinity, Jersey, Channel Island, UK.  
4 Wildlife Trust, 460 west 34th Street, New York 10001, USA.  
5 The Zoological Society of London, Regent’s Park, London, NW1 4RY, UK.  
6 Mauritian Wildlife Foundation, Solitude, Rodrigues. Present address: Tropical Marine Ecology Lab., Department of Biological Sciences, Simon Fraser University, 8888 University Drive, Burnaby, British Columbia, Canada, V5A 1S6.  
* Corresponding author: johngelewis@realemail.co.uk

Abstract
Biological observations on three species of Scolopendra (S. morsitans L., 1758; S. subspinipes Leach, 1815; S. abnormis Lewis & Daszak, 1996) were made in the field on Mauritius and Rodrigues and satellite islands. Data on behaviour, predators, parasites, food and the effect of bites are presented here. Remarks on colour variation are given. Scolopendra abnormis is confined to Round Island and Serpent Island. It showed no ritualised meeting reactions and cannot swim as do some other species and did not run off when exposed. The differences between the populations of this species on the two islands are discussed, as are its conservation prospects (it is classified as vulnerable). The large specimens of Scolopendra on Rodrigues will kill and feed on day old chicks and are attracted to strong smelling fish. A case of a centipede feeding on a baby is reported. Centipedes form the main diet of feral cats on the Rodrigues Île Frégate. The origin of the Scolopendra fauna of the islands is discussed and it is suggested that the introduction of the musk shrew [Suncus murinus (L., 1766)] may be responsible for the precipitous decline in the population of large centipedes on Rodrigues.
Key words
Chilopoda, Scolopendromorpha, Scolopendra, Mauritius, Rodrigues, Biology

Introduction

Six scolopendrid species are found on Mauritius and Rodrigues (Lewis 2002), three belonging to the genus Scolopendra L., 1758, namely: Scolopendra moritans L., 1758, S. abnormis Lewis and Daszak, 1996, and S. subspinipes subspinipes Leach, 1815. Mauritius is located at 20ºS and 57ºE in the Indian Ocean. Rodrigues is 574 km east of Mauritius.

Field observations were made on Round Island (151 hectares) and Serpent Island (40 hectares), two remnants of a volcanic cone some 21 km off the North-eastern shore of Mauritius. On Rodrigues observations were made at Solitude and Port Maturin Hill and also on Île aux Sables and Île Cocos (two small coral sand islets) and Île Frégate (14 hectares) off the west coast of Rodrigues (Fig. 1). Scolopendra abnormis is confined to Round and Serpent Islands.

Figure 1. Mauritius and Rodrigues showing localities where observations were made.