

## Abstract

Several arthropod pests including the hive beetles *Aethina tumida* and *Oplostomus haroldi* and the ectoparasite *Varroa destructor* have recently been identified as associated with honey bee colonies in Kenya. Here, we report the first documentation of *Oplostomus fuliginus* in Kenya, a related scarab of *O. haroldi*, and distribution, diversity and pattern of damage of the two scarab species on honey bee colonies. Sequence analyses of mitochondrial cytochrome oxidase I gene revealed that there was sufficient sequence divergence to separate both *Oplostomus* beetles. The same molecular marker separated *O. haroldi* according to place of origin in Kenya. We further show from analysis of feeding behavioural patterns that the two scarab species damaged honey bee combs similarly causing the most damage on brood through feeding; *O. haroldi* (80%), with *O. fuliginus* (100%). We discuss our results in relation to the threats these scarabs may pose to bee health in Kenya.