Options for stingless honey-beekeeping around Udzungwa Mountains National Park, Tanzania, and implications for biodiversity management

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Abstract
Resident stingless honey-bees in the Udzungwa area were investigated for a period of 1 year. Specimens of stingless honey-bees were captured on flowers and on natural nest entrances. Six local stingless honey-bee species, namely *Dactylurina schmidti*,*Plebeina hildebrandti, Axestotrigona erythra, Meliponula ogouensis, M. lendliana* and *M. ferruginea,* were found in the area, all of which are known to the local people. Honey productivity per colony in experimental hives varied according to species: *M. ogouensis*average 3.2 L, *M. lendliana* average 2.7 L, *D. schmidti* average 1.6 L and *P. hildebrandti*average 0.6 L. These findings indicate good potential for beekeeping in the lower altitude area at the foot of the Udzungwa Mountains, where the stingless honey-bee species diversity is greatest. The article discusses some options for intensification of management of the bee resources while maintaining natural biodiversity in the area.

Keywords:
Biodiversity, management, honey, stingless honey-bee species, Udzungwa