

## Abstract

A study was carried out in Kakamega forest, in the western region of Kenya, to evaluate the effectiveness of the stingless bee *Hypotrigena gribodoi* (Magretti, 1884) on the pollination of green pepper. Three treatments were applied and consisted of self-pollination, pollination by feral pollinators in the open field and pollination by *H. gribodoi* in a net cage. The differences in fruit yield and seed quality were compared among treatments. Flowers pollinated by *H. gribodoi* produced the heaviest fruits with the highest seed numbers followed by feral pollinators and lastly self-pollinated flowers. Moreover, seeds were significantly bigger in size in fruits resulting from flowers pollinated by *H. gribodoi* compared to fruits obtained from self-pollinated flowers or flowers pollinated by feral insects. We, therefore, conclude that *H. gribodoi* is an efficient pollinator of green pepper in the tropical region of East Africa.