

Ground-dwelling insect species abundance and diversity in agricultural and non-disturbed landscapes at the University of Embu.

By Njiru Derrick Muthomi, B133/11199/2014

Supervisor: Dr. Franklin N. Nyabuga

ABSTRACT

Habitat transformations due to conversions of natural habitats to agricultural land are propelled by increasing human populations and demand for resources. While such changes have enabled man to optimally use available resources, they potentially undermine the capacity of ecosystems to perform their functions. Ultimately, it is the inhabitant populations and species of flora and fauna that suffer. However, little information and knowledge of insect species populations and composition makes reliable recommendation difficult. Our study surveyed insect species in two areas; agricultural and virgin landscapes using pitfall traps and revealed that the virgin landscapes had richer biodiversity. The composition of functional groups in the virgin landscape was also more balanced than that of the agricultural landscape showing better population regulation mechanisms. The findings reveal the linkages that exist between habitat characteristics and species composition as well as functional groups and population regulation.