Tropentag, September 15-17, 2021, hybrid conference

"Towards shifting paradigms in agriculture
for a healthy and sustainable future"

Effect of Plant Pathology and its Impact on Agriculture, Beekeeping and Food Security in Kwara State, Nigeria

Ajao Mufutau[1], Yusuf Oladimeji[2]

[1] *Kwara State University, Malete, Nigeria*
[2] *Ahmadu Bello University, Zaria, Dept. of Agricultural Economics and Rural Sociology„ Nigeria*

Abstract

Honey bee (*Apis mellifera*), the most domesticated western honeybee is faced with multiple factors and stressors affecting its health, productivity and survival leading to bee population decline and subsequently low agricultural production and food security. This work was therefore designed to identify, assess pest, predators and their effects on bees,agricultural production and suggest management strategies for pollinator conservation for sustainable food security.The method adopted involved a simple random sample of fifty-seven (57) beekeepers was chosen for questionnaire administration. This consisted of six (6) institution based,twenty-one (21) non-governmental and thirty (30) private/individuals bee farms from 10 Local Government Areas (LGAs) of Kwara State, North-Central, Nigeria. Furthermore, a field survey and sample collection of honey bee pests and predators was also conducted at the six apiaries at the study area. The results of views of respondents, field collection and laboratory analysis revealed ants as dominant pest and predators, 63.5 % in Asa; small hive beetle, 95.2 % Irepodun; termite 68.1 % in Moro; and wax moth 78.9 % in Ilorin South as arthropod of beekeeping practices, pollinators, hampering agricultural production and food security. The identified pests and predators manifest in low honey production, irritation and disease condition leading to hive abandonment, forced swarming, reduced pollination efficiency, colony population decline and death, hence food insecurity. Suggested coping strategies among others include providing the beekeeper with adequate training on bee health maintenance, pollination service and skilled management expertise needed to identify and combat these problems.This is imperative if its impact on agriculture, beekeeping and food security would be achieved.

Keywords: Bee survival, coping strategy, food security, pests

Contact Address: Ajao Mufutau, Kwara State University, Malete, PMB 1530, Ilorin, Nigeria, e-mail: adeyemi.ajao@kwasu.edu.ng