

DRY SEASON ECOLOGY AND SPECIES COMPOSITION OF MOSQUITO'S FAUNA IN WHITE NILE AREA CENTRAL SUDAN

Nagwa E Azrag¹ & Mostafa M. Mahgoub²

¹Department of Biology, University of Bahari, Collage of Applied and
Industrial Sciences, Khartoum, Sudan

²Department of Medical Entomology, Blue Nile National Institute for
Communicable Disease, Gezira University, Wad Medani, Sudan

²Department of Basic Science, Preparatory Year Deanship, Prince Sattam Bin
Abdulaziz University, Alkharj Kingdom of Saudi Arabia

ABSTRACT

This study carries out in Ed Dueim town, White Nile State Sudan from April, to June 2011 to update mosquito species, their ecology, and the resting places. Three methods adopted for mosquito survey: standard dipper for the larval survey, knockdown, and aspirator techniques for adult collection. Out of 916 adult mosquito collected by knockdown and aspirator collection, 591 (64.5%) were *Culex univittatus*, 129 (13.4%) were *Culex quinquefasciatus*, 144 (15.7%) were *Culex antennatus*, 48 (5.2%) were *Anopheles arabiensis* and four (0.4%) were *Anopheles pharoensis*. The percentages of emerged adult mosquitoes from the collected pupae were 46.8%, 41.4%, 11.2%, and 0.7% of *C. univittatus*, *C. quinquefasciatus*, *A. arabiensis*, and *An. pharoensis* respectively. Culicinae and Anopheline mosquito were be found throughout the study period, with *Culex* spp being more abundant. *Culex univittatus* was dominant over all mosquito species. *Anopheles arabiensis* was dominant, but *A. pharoensis* was rare. Jars water "Zeers" and water barrels found as resting places for mosquito species studied. The study revealed that the mosquito breeding sites were; Irrigation canals, leaking drinking water pipes, hoof print holes, cement basin. The main source of the breeding sites in was leakages of water pipes. Out of 3655, larvae collected from all breeding sites 1616 (44.2%) larvae, were collected from the latter site. All specimens of larvae and adults mosquitoes were identified morphologically in details

KEYWORDS: *Anopheles* Spp, *Culex* Spp., Dry Seasons, Mosquito Habitats, Sudan

Article History

Received: 23 Apr 2018 | Revised: 05 May 2018 | Accepted: 15 May 2018
