

Effect of Environmental Factors on Mosquito Larval Abundance in Some Selected Larval Sites in the Kintampo Area of Ghana

Authors : Yussif Tawfiq, Stephen Omari, Kwaku Poku Asante

Abstract : The abundance of malaria vectors is influenced by micro-ecology, rainfall, and temperature patterns. The main objective of the study was to identify mosquito larval sites for future larval surveys and possible intervention programs. The study was conducted in Kintampo in central Ghana. Twenty larval sites were surveyed. Larval density was determined per cm² of water from each of the various sites. The dipper was used to fetch larvae from the larval sites, and a global positioning system (GPS) was used to identify larvae locations. There was a negative linear relationship between humidity, temperature, pH, and mosquito larval density. GPS of larval sites was taken for easy larval identification. There was the presence of Anopheles mosquito larvae in all polluted waters with Culex larval presence. This shows that Anopheles mosquito larvae are beginning to adapt to survival in polluted waters. The identified breeding sites are going to be useful for future larval surveys and will also help in intervention programs.

Keywords : larvae, GPS, dipper, larval density

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