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Research Article

Diversity of Mosquito Larvae from Filaria Endemic Zone in Beed City (MS) India

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Abstract

Naturally occurring animal diseases have provided parallel perspectives on human disease. While some of them are caused by the same pathogens. More than 72 species of protozoan reach human by food and water most of these infections are zoonoses. Compared to the past when these disease were limited to defined endemic zones in the recent times. Geographical limits and populations at risk expending fast and changing demographics. Mosquitoes are nuisance to mankind spreading a variety of disease which, in some cases, many cause of death of the patients by transmitting different type of pathogen.Study area is supposed to be endemic for filarial infections. It has also shown to cause other vector borne diseases like malaria, dengue, chikungunya etc. As there were number of larval breeding grounds accumulated in and around this place. This work will be beneficial in drafting the genera specific mosquito larval control by health departments and first report of the mosquito larval prevalence to the sampling site area in Beed city.

INTRODUCTION

Mosquitoes are a family of culicide, although a few species are harmless, most are considered a nuisance because they, female mosquitoes, consume blood from living vertebrates, including humans. Mosquito borne disease are prevalent in more than 100 countries, infecting 300-500 million people and causing about 1 million deaths every year. In India more than 40 million people suffer from disease caused bymosquito annually. There are number of disease borne by mosquito. They are malaria, filarial dengue brain fever and yellow fever, chikungunya, in India there causes are more in number as the importance of hygiene and sanitation is ignored. The present study was carried out in a filarial endemic in Beed city to reveal the prevalence of mosquito larvae in order to meet the cause of genera specific mosquito control1) by the material Department – population of this2) endemic places follows different practices to3) prevent mosquito bite in order to keep the mosquito borne disease away.

MATERIALS AND METHODS

Study area: A filarial endemic places in Beed city was selected as study area for mosquito larval collection, bank of river Bindusara in Beed city, stagnant water in river small pounds in river Bindusara and production of mosquito breeding around observed. In this place drainage channels and mixed in river Bindusara. This stagnant water produces breeding places of mosquito. This stagnant water produce breeding place of mosquito. Which ultimately result in the outbreak of some serious diseases like chikungunya lymphatic filariasis, malaria, etc.These mosquito sampling sites were selected from the bank of river Bindusara

1) Near Someshwar temple
2) Bazar tal area of Bindusara.
3) Near Amardham.

METHODS OF COLLECTION

Mosquito larvae were collected using standard methods, (WHO, 1975) from the pre-selected for three sampling sites, from Bindusara river. With the help of plankton nets, and pipettes (Dass B. P. 2014) were temporarily stored in polythene bags and plastic Vilas. (10 ml) permanent mosquito larval mount were observed under the Olympus (x 211) binocular microscope with the help of Olympus digital camera E-PL1.following result were recorded. Collected mosquito larvae from different area of Bindusara River, were Culex, Anopheles, Aedes species

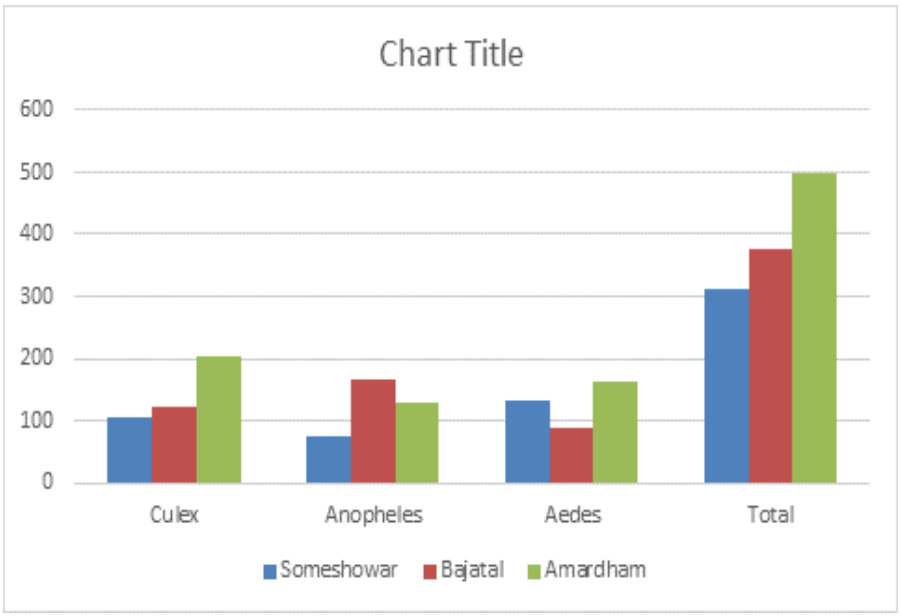
RESULTS AND DISCUSION

The current research work throws focus on the mosquito larval diversity of endemic in Beed city Culex mosquito larvae were found to be pre dominant in this sampling station to Anopheles and Aedes genera. Similar type of study was carried out by N.G.S. Raghavan (1957)**,** Lamme et. all, (2002), Sathe T. V. and Girhe B. E. (2002) ware studied biodiversity of mosquitoes from Kolhapur district Maharashtra**.** Dudhmal D. et. all, (2015) ware studied in mosquito prevalence in different region was studied. The maximum number of Culex and Aedes were found at Someshower tempale and Amardham sites where as maximum number of Anopheles abundance at Bajartal site. It can be concluded that in a filaria endemic zone of Beed city. Three sampling sites there is an abundance of culex mosquito which is most probably be the reason, of most filarial case observed.

Table 1. Prevaltance of mosquito larvae in Bindusara River in Beed city.

Sampling Sites	Total numberof sample collected.	Culex	Anopheles	Aedes
Near Someshwar temple	312	104	75	133
Near BazartalBindusara.	375	123	165	87
Near Amardham	498	204	130	164
Total	**1185**	**431**	**370**	**384**

Graph1. Mosquito larval prevalence in Bindusara River in Beed city.



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