

Malaria and Environmental Sanitation

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Abstract : A comprehensive study of malaria in 165 villages (hamlets) in Harur block, Dharmapuri district, has revealed the fact that there are distinct episodes of malaria due to *An. culicifacies*, the vector, causes persistent transmission in the revenue village called Vedakatamaduvu. A total of 300 household adult samples are randomly selected to study both quantitatively and qualitatively the vulnerability of malaria. On the basis of the response, the problem uncommon with groups was identified as the outdoor routine, particularly open defecation, with which the samples needed to be stratified into two major groups; users of toilets 21 and those who practice open defecation 279. Open defecation, as the habit-based vulnerability, is measured with the Pearson correlation coefficient to estimate the relationship between malaria and open defecation. It is also verified from the literature that plant fluids provide mosquitoes not only with energy but also with nutrition, to the extent that they can develop fertile eggs. In the endemic areas, the bushy *Prosopis Juliflora*, which naturally serves as a feeding and resting spot for mosquitoes, serves as a cover to practice open defecation as well. Eventually, those who get resort to *Prosopis* for open defecation have a higher chance of getting exposed to mosquito bites and being infected with malaria. The study concludes that the combination of bushy *Prosopis Juliflora* and open defecation leaves the place perpetually vulnerable to malaria.

Keywords : Malaria, open defecation, endemic, *prosopis juliflora*

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