ABSTRACT

ROLE OF MANGROVE FOREST ECOSYSTEM IN IMMUNITY TO MALARIA: STUDY IN SUB-DISTRICT LABUHAN MARINGGAI DISTRICT EAST LAMPUNG

By
Agung Kartika Putra

ABSTRACT

One of the ecological function of mangrove forests is a habitat for mosquitoes that cause malaria (Anopheles sp.). Epidemic of malaria could increased as a result of mangrove degradation. The damage of mangrove forests stimulate Anopheles sp. migrate to other habitats such as settlements, that become malaria vector. The purpose of this research was to determine the effect of mangrove forest ecosystems both intrinsic and extrinsic factors in immunity to malaria. This research was conducted on June 2014 in the Muara Gading Mas Village, Bandar Negeri, Sriminosari, and Margasari, Sub-district Labuhan Maringgai, District East Lampung. The data were collected through interviews and survey/observations method. The impact of each variable used binary logistic regression models. Parameter optimization used software Minitab16. The result of research have been demonstrated that there is influence both intrinsic and extrinsic factors in immunity to malaria in mangrove forest. Factors that increase resistance to malaria: (a) gender, male 37.42 fold of female, (b) age, getting old every 1 year doubled to 1.17 times of originally, (c) education, the higher it is reduced to 0.001 times the originally, (d) livelihood, besides fisher 0.001 fold of fisherman, (e) the distance settlements to the health facility, each reduced to 1 meter doubled to 0.09 times the originally, (f) the distance home to mangroves, each increase of 1 meter doubled to 1,001 times the originally, (g) the dustbin, there are bins 239.71 better than none, (h) the malaria program, multiply 3.71E+05 originally than none, (i) extensive mangrove, increasing 1 m² become 1,001 fold of originally, and (j) mangrove density, increasing 1 population/ha multiply 1.18 fold originally.

Keywords: Mangrove forest, immunity to malaria, Anopheles sp.