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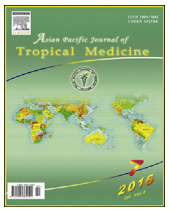

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Humidity that is appropriate for Zika virus infection: A summary from Thai cases

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Dear Editor,

Zika virus is a problematic arboviral infection at present. Its spreading and outbreaks in several areas of the world bring a big concern to the medical society. Dengue-like illness is the main clinical feature of Zika virus infection [1,2]. As a mosquito borne infection, climate parameter seems to be an important affecting disease suitability [3]. Temperature and humidity are the common climate parameters that are usually mentioned for the effects on the mosquito borne infectious disease epidemiology [3,4]. The interrelationship between 'climate and mosquito abundance' is well defined [4]. It is well-known that the Zika virus infection is common in tropical zone with hot temperature. However, it lacks for the information on appropriate humidity that promote emergence of disease. Here, the authors analyze the data on humidity at the sites where the Zika infections are detected in Thailand. The data on 7 cases in Thailand is appraised [5]. The data on humidity at each site is collected and used for further summative analysis. For analysis, average of humidity level is calculated by descriptive statistical analysis. According to this study, the average humidity is equal to (66.14% ± 19.86%) with min = 33% and max = 94%. The estimated range of humidity is between 51.30% and 81.15%. This estimated range is wider than that previously reported (80% ± 5%) in the publication by Diagne *et al.* [6]. The determined humidity level is also concordant with the previous report by Chouin-Carneiro *et al.* that the condition '16 h:8 h light:dark cycle and 80% humidity' could promote suitability of disease transmission in experimented mosquito vector [7]. Of interest, this range of humidity can be seen in several areas of the world including to non-tropical zones. Hence, the chance of worldwide epidemic of Zika virus infection can be expected.

Conflict of interest statement

We declare that we have no conflict of interest.

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