Zika: Probability of establishment of its vector, aedes aegypti, in Chile Zika: Probabilidad de establecimiento de su vector, aedes aegypti, en Chile

Alaniz Baeza, Alberto J.

Bacigalupo, Antonella

Cattan, Pedro E.

 The Zika virus has raised world alarm in recent years, representing a major public health problem. In this study we evaluated the potential risk of exposure to Zika virus in Chile, associated with the probability of establishment of the vector Aedes aegypti in the country. Niche modelling techniques were used to project the bioclimatic requirements of the vector (global niches), identifying zones of high suitability for the species within the country. Then, the potential distribution of the vector in Chile was overlapped with the human population density, estimating the risk associated to the potential co-occurrence of both in a spatially explicit manner. We identified bioclimatic suitability for A. aegypti in continental Chile, from the northern tropical area to temperate regions, mainly in coastal zones. The exposed population could reach 1.8 million people, with 1.3 million in a medium level of potential risk and 21,000