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Emphasis on the effect of climate changes on the distribution of Tiger mosquito (*Aedes albopictus*) in the Northern part of Algeria

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Abstract

Anthropogenic activities, which have accelerated since the industrial revolution, have significantly altered the climate and stressed the environment, leading to the degradation of natural resources. All living organisms on the planet are deeply affected by climate change, which has caused the extinction of many species and created more favourable conditions for insects to thrive and spread diseases. Warmer temperatures can extend the period of mosquito activity, leading to outbreaks of diseases like dengue in non-endemic regions, while increased rainfall provides ideal breeding conditions for mosquitoes, contributing to the proliferation of diseases like malaria. The interplay between climate change and the distribution of pest insects, particularly mosquitoes, underscores the urgent need for collaborative efforts to address the increasing risk of mosquito-borne diseases in the context of a changing climate. The Tiger mosquito (*Aedes albopictus*), a product of climate change, originates from Southeast Asia. Climate change has facilitated its significant spread to various climatic zones worldwide, including Northern Algeria. The installation of this exotic and invasive species has been observed in our country for several years. The aim of this study is to underline the effect of the variability of natural environmental factors conditioning its distribution and to analyse its breeding sites in the Northern Algeria region.

Keywords: Climat changes, Anthropogenic stress, Tiger mosquito, vector borne diseases