A convolutional neural network for species identification of mosquitoes

BIOMATH 2024

Thabang Malapane¹

¹ Faculty of sciences, Tshwane University of Technology, South Africa thabangmalapane@gmail.com

Mosquito-borne illnesses pose a serious threat to public health, and efficient vector management depends on precise mosquito classification. Based on species, Convolutional Neural Networks have demonstrated potential in reliably categorizing mosquitoes. This work offers a novel method for classifying mosquitoes using CNN that entails gathering high-quality mosquito photos, creating a CNN model, and assessing the model's functionality. Vector control efforts are advanced as a result of the proposed CNN model's promising findings in discriminating between different mosquito species.

References

 Adhane, Gereziher and Dehshibi, Mohammad Mahdi and Masip, David, A deep convolutional neural network for classification of aedes albopictus mosquitoes, *IEEE Access*, olume=9:72681-72690, 2021.