



The Mosquito Microbiome—Leveraging Basic Biology for Control

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Message from the Guest Editor

The insect microbiome is gaining increasing interest from biologists due to the biological role of the microbiome.

The mosquito microbiome, particularly the gut microbiome, is an attractive vector control target because of the critical role of the gut microbiome in mediating vector competence. The gut microbiome has therefore been a target for investigating potential paratransgenesis interventions.

Paratransgenesis would be best served by using microorganisms that can be transferred both vertically and horizontally. Therefore, the characterization of the microbiome goes beyond that of the gut microbiome to include the microbiota from other tissues. This factor, coupled with the increasing affordability of next-generation sequencing, is resulting in the exponential increase in publications on the subject.

The proposed topic has a range of avenues. The field of *Anopheles* and *Aedes* microbiota can be discussed in terms of the prevention of disease transmission. However, there are also a range of basic biological effects of the manipulation of mosquito microbiota that need to be investigated.

