

Bacterial Flora of the *Anopheles fluviatilis* S. L. in an Endemic Malaria Area in Southeastern Iran for Candidate Paraterasgenesis Strains

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Abstract : Malaria is an infectious disease and considered most important health problems in the southeast of Iran. Iran is elimination malaria phase and new tool need to vector control. Paraterasgenesis is a new way to cut of life cycle of the malaria parasite. In this study, the microflora of the surface and gut of various stages of *Anopheles fluviatilis* James as one of the important malaria vector was studied using biochemical and molecular techniques during 2013-2014. Twelve bacteria species were found including; *Providencia rettgeri*, *Morganella morganii*, *Enterobacter aerogenes*, *Pseudomonas oryzihabitans*, *Citrobacter braakii*, *Citrobacter freundii*, *Aeromonas hydrophila*, *Klebsiella oxytoca*, *Citrobacter koseri*, *Serratia fonticola*, *Enterobacter sakazakii* and *Yersinia pseudotuberculosis*. The species of *Alcaligenes faecalis*, *Providencia vermicola* and *Enterobacter hormaechei* were identified in various stages of the vector and confirmed by biochemical and molecular techniques. We found *Providencia rettgeri* proper candidate for paratransgenesis.

Keywords : *Anopheles fluviatilis*, bacteria, malaria, Paraterasgenesis, Southern Iran

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020