Abstract
Lutzomyia longipalpis is the most important vector of American Visceral Leishmaniasis (AVL) due to Leishmania chagasi in the New World. Despite its importance, AVL, a disease primarily of rural areas, has increased its prevalence and became urbanized in some large cities in Brazil and other countries in Latin America. Although the disease is treatable, other control measures include elimination of infected dogs and the use of insecticides to kill the sand flies. A better understanding of vector biology could also account as one more tool for AVL control. A wide variety of papers about L. longipalpis have been published in the recent past years. This review summarizes our current information of this particular sand fly regarding its importance, biology, morphology, pheromones genetics, saliva, gut physiology and parasite interactions.

Keywords
sand flies, vector biology, Lutzomyia longipalpis, Leishmania.