Leishmaniases are neglected vector-born tropical diseases caused by more than twenty parasite species belonging to the Leishmania genus (Kinetoplastida: Trypanosomatidae) and transmit?ted to humans by the bite of Phlebotominae (Diptera: Psychodidae) sand flies [1].In this study, an epidemiological investigation of leishmaniasis was conducted in a new hypoendemic focus of HL, located in the province of Tipaza, northern Algeria.In Algeria, epidemiological surveillance of leishmaniasis infections was generally based on serological assays for human and canine leish?maniases, while vector incrimination was carried out by dissecting freshly caught or cryopre?served specimens for isolation and isoenzymatic characterization of Leishmania strains present in their midguts [10,11,23,24].Epidemiological investigations and entomological surveys have always been crucial to better understand endemicity of leishmaniasis foci as well as determining the relationship between thevector species and the reservoirs involved in the wild transmission cycle of Leishmania [21,22].Leishmania parasites have a digenetic life cycle, alternating between mammalian hosts, including humans, and female sand fly vectors belonging to the Phlebotomus genus in the Old World and the Lut?zomyia genus in the New World [2].It is noteworthy that Leishmania species reported in this region are the causes of two forms of leishmaniasis: sporadic cutaneous leishmaniasis, due to L. infantum MON-24 and visceral leishmaniasis (VL) due to L. infantum MON-1, with an average incidence of 200 and 150 cases per year, respectively [10-14].Recently, many PCR-based molecular approaches with a high degree of sensitivity and specificity have proven to be useful in species detection and identification of Leishmania parasites in sand fly vectors.Regarding this species, the suspected reservoir host is Masouretiera mzabi, a rodent close to the Ctenodactylus gundii that has been found naturally infected with L. killicki in Tunisia [20].Algeria is considered to be one of the ten most affected countries with a higher prevalence of cutaneous (CL) than visceral leish?maniasis (VL) [5].The wild rodents, Psammomys obesus and Meriones shawi are the main reservoir hosts of this species [6].L. killicki has recently been reported in several parts of Algeria (Ghardaia, Annaba, Tipaza) and is generally sympatric with L. major [15- 19].Indeed, such studies enable the identification of the potential mam?malian .reservoirs and vector feeding preferences [22].and identify their blood meal sources