Leishmania spp. (Kinetoplastida: Trypanosomatidae) are protozoa related to the Trypanosoma genus that are causative agents of leishmaniasis. Their life cycle alternates between mammalian hosts and insect vectors. The principal vectors are phlebotomine sand flies (Diptera: Phlebotominae) that occur mostly in the tropics, however, several species range to the temperate regions. Various species of rodents serve as reservoir hosts of leishmania. In endemic localities, they represent most abundant mammals and their burrows are used as breeding sites of larval stages of sand flies. In this bachelor thesis I summarize available literature about rodents that serve as reservoir hosts of six human pathogenic leishmania species present in Africa. Several species of African rodents are regarded as reservoir host of *L. major* and one species (*Ctenodactylus gundi*) as a suspected reservoir host *L. tropica*. On the other hand, rodent infections caused by *L. aethiopica*, *L. infantum* and *L. donovani* should be still considered as accidental. In the case of *Leishmania* sp. from Ghana, reservoir hosts are still entirely unknown. All species of proven African rodent reservoir hosts share clustered distribution in colonies where animals live in high population densities.