Abstract
Trypanosoma brucei is a parasite most frequently occurring in Sub-Saharan Africa that causes sleeping sickness in humans and various similar illnesses in animals. The bloodsucking tsetse flies (Glossina) transfer the parasite to humans, their final hosts. Throughout its complex life cycle, *Trypanosoma* occurs in different environments and undergoes various morphological and metabolic changes.

Iron is an important element for all living organisms, including *Trypanosoma*. The metal plays a crucial role in the host-parasite interaction since trypanosomes are dependent on the iron they acquire from the host or vector. Trypanosomes use iron in metabolic reactions, such as energy metabolism, respiration, nucleic acid synthesis, detoxification, and cellular homeostasis. It is an important element in the synthesis of iron-sulfur clusters which function as cofactors during the above-mentioned reactions. The understanding of iron metabolism in the cell can facilitate the development of new medicaments, an example being iron chelators.