Suppl. Mat. Fig. 1. Scheme of the defense mechanisms in triatomine. Bacteria. In response to Gram positive or negative bacteria and symbionts, the Antimicrobial peptides (lysozymes, defensins, cecropins and attacins) could be elucidated,in the anterior and posterior midgut. In the haemocoel the insects host pattern recognition (PRRs): Peptidoglycan recognition proteins (PGRPs) and Gram negative binding proteins (GNBPs) are usefull to recognize components of bacteria cell wall such as lipopolysacharides (LPS) and peptidoglycans (PGN). Virus. Triatomine virus (Trv) develop in gut cells, and posible immune components involved are phenoloxidase, nitric oxide and endosymbiotic bacteria. Fungi. These pathogen have different structures such as

appresorium, pentration plate, blastospores, hyphal bodies and mycotoxins that modulates melanization, phenoloxidase and phagocytosis. Parasites. *T. cruzi* and *T. rangeli* elicit different types of immune response like antimicrobial peptides, lectins and nitric oxide. *T. rangeli* in the haemocoel modulates phenoloxidase, nitric oxide and haemocytes.