Introduction
East Coast fever (ECF) is a lymphoproliferative disease caused by the protozoan parasite *Theileria parva*. It kills about one million cattle annually in Africa. The sporozoite stage of this parasite, harbored in the salivary glands of the tick *Rhipicephalus appendiculatus*, invades and establishes infection in the bovine lymphocytes during tick feeding. However, little is known about the parasite molecules involved in this infection process. It is therefore necessary to elucidate the protein composition of the sporozoites to identify novel targets for blocking invasion. Blocking this initial stage of invasion presents a promising vaccine strategy for the control of ECF.

Aim
To (i) establish the protein expression profile of *T. parva* sporozoites and (ii) identify proteins involved in host cell entry and invasion

Method

Results

Conclusion
In total 2006 *T. parva* sporozoite proteins have been confirmed to be expressed representing approximately 50% of the total predicted *T. parva* protein expression profile. Potential surface proteins and possible proteins involved in host entry and invasion have been identified using bioinformatic tools.