Animal welfare, stress biomarkers and meat quality

Pre-slaughter stress, animal-related factors, stress biomarkers, nanostructure and technological properties of beef

Industry Sector: Cattle And Small Stock

Research Focus Area: The Economics Of Red Meat Consumption And Production In South Africa

Research Institute: Fort Hare

Researcher: Dr. Voster Muchenje PhD

The Research Team

<table>
<thead>
<tr>
<th>Title</th>
<th>Initials</th>
<th>Surname</th>
<th>Highest Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof</td>
<td>A</td>
<td>Hugo</td>
<td>PhD</td>
</tr>
<tr>
<td>Dr</td>
<td>A. Y</td>
<td>Chulayo</td>
<td>PhD</td>
</tr>
</tbody>
</table>

Final Report Approved: 23 August 2018

Aims Of The Project

- 3.1 To determine the expression of heat shock proteins, cortisol and glucose and the quality of beef in slaughtered bovine species. 3.2 To determine the activities of stress enzymes in relation to carcass and physico-chemical characteristics of beef from cattle slaughtered under practical 3.3 To determine the effects of pre-slaughter stress and inborn characteristics carcass of beef quality

Executive Summary
Please contact the Primary Researcher if you need a copy of the comprehensive report of this project – Dr. Voster, H.C.