The study examined meat quality and carcase haemorrhage in goats subjected to different methods of pre-slaughter electrical stunning or slaughtered without stunning. Thirty-two Boer crossbred bucks were randomly assigned to low-frequency head-only (LFHO; 1 A for 3 s at a frequency of 50 Hz), low-frequency head-to-back (LFHB: 1 A for 3 s at a frequency of 50 Hz) or high-frequency head-to-back (HFHB; 1 A for 3 s at a frequency of 850 Hz) pre-slaughter electrical stunning or slaughter without stunning (SWS). All the 32 animals were bled to drain excess blood from the carcase. The slaughter was performed by a licenced slaughter man by severing carotid artery, jugular vein, trachea and oesophagus. At 12 h post-mortem, LFHO, LFHB and HFHB had lower (p < 0.05) glycogen and higher lactate and glycolytic potential values than SWS. A faster (p < 0.05) rate of pH decline was found in LFHO, LFHB and HFHB compared to SWS. No physicochemical parameters except cooking loss differed between treatments. Cooking loss was higher (p < 0.05) in LFHO, LFHB and HFHB compared to SWS at 7 and 14 d post-mortem. Incidences of carcase haemorrhages in electrically stunned goats were higher than SWS. Nonetheless, HFHB had lower (p < 0.05) haemorrhages than LFHB and LFHO. Electrical stunning prior slaughter increased carcase haemorrhages and cooking loss but did not affect other meat quality traits in goats.

**Keyword:** Current frequency; Electrical stunning; Goats; Haemorrhage; Meat quality