

Abstract

The study was conducted to study the Fattening characteristic of two main sub types of western baggara cattle, namely Nyalawi and Messaria sub type. Twenty four bulls, they were divided in to two main sub groups. (Twelve animals for each sub type). With average initial weight were no significant different between them (219.167 ± 10 - 219.167 ± 8 Kg) respectively, each sub type was sub divided into three sub groups (four animals each). The animals were fed complete fattening diet of (Kenana natural animal feed). The animals are slaughtered when reached target slaughter weight (287.5 ± 4.18 Kg for Nyalawi and 283.33 ± 5.16 Kg for Messaria). The results of the study indicate that the Nyalawi sub type have a superiority on Messaria sub type, in daily gain, feed conversion ratio, period on fed days but not significant. And also feed intake of Nyalawi sub type did not deteriorate when ambient temperature raised. While feed intake of Messaria sub type deteriorated significantly by rise of ambient temperature. Data for this study explained that both sub type western baggara cattle had a high average weekly gain in week No.1, there after that the average weekly gain and feed conversion ratio deteriorated as the animal increased in weight that maybe the bulls reached the finishing but the Messaria reached finishing faster than

Nyalawi sub type. Under studied bulls showed that the optimum duration for fattening period of Messaria sub type is six weeks while that of Nyalawi sub type is eight weeks. No significant difference between the two sub types of western baggara cattle under studied for non carcass components. There was a high significant different in Neck percentage of lift side weight ($P < 0.0004$) with superiority for Nyalawi on Messaria sub type. According to body measurement this present study was revealed that the Nyalawi sub type is larger frame animal compared to Messaria sub type where is the significant deferent in Chest depth and Pelvic width ($P < 0.01$ and $P < 0.02$) respectively. And also there was a significant different in percentage of subcutaneous fat thickness ($P < 0.05$), which high in Messaria when compared to Nyalawi sub type.

Results of this study indicate that the Nyalawi sub type suitable for commercial production when compared to Messaria sub type that because the Nyalawi sub type had a higher dressing percentage based on live or empty weight, warm or child. Economical return for this study showed that the Nyalawi sub type had a higher net profit percentage proportion on total cost by (2.3%) more than Messaria sub type.

