

Effect of Moringa Oleifera on Liveweight Reproductive Tract Dimension of Giant African Land Snail (*Archachatina marginata*)

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Abstract : A study was conducted on the effect of Moringa oleifera on liveweight and reproductive tract dimension of Giant African Land Snail (*Archachatina marginata*). Thirty two snails (32) with weight range of 100 - 150 g were used for this study. Eight snails (8) were subjected to each of the four treatments which were: Concentrate only, concentrate + 100g of Moringa oleifera, concentrate + 200g of Moringa oleifera and concentrate + 300g of Moringa oleifera. Parameters monitored were: Shell length, shell width, shell circumference and weekly live weight. Reproductive tract dimension taken include: Organ weight (ORGWT), reproductive tract weight (REPTWT), reproductive tract length (REPTLNT), ovo-thesis weight (OVOWT), edible part weight (EDPTWT), albumen weight (ALBWT) and albumen length (ALBLNT). Shell dimensions and the live weight were measured and recorded on a weekly basis with a tape rule and a sensitive weighing scale. After nine weeks, six snails were randomly selected from each treatment and dissected. Their reproductive tracts were removed and dimensions were taken. The result showed that ORGWT, OVOWT, ALBWT, ALBLNT, REPTLNT and REPTWT were not significantly affected ($P>0.05$) by different levels of Moringa oleifera inclusions with concentrate. However, Moringa oleifera inclusion with concentrate at different levels had significant effect ($P<0.001$) on Live weight, shell length and shell diameters of the animal. Snails given 300 g of Moringa oleifera per kilogramme of concentrate gave the highest live weight and shell length together with shell diameter. It was however recommended from this study that inclusion of Moringa oleifera leave meal into snail feed at 300 g per kg of concentrate would enhance live weight and shell parameters (length and width).

Keywords : reproductive tract, giant African land snails, Moringa oleifera, live weight, shell dimension

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