

Accessory Reproductive Organs Dimension of Two Species of Giant African Land Snails *Archachatina marginata* and *Achatina achatina* at Three Liveweight Ranges

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Abstract

A comparative study of the reproductive tract of two species of Giant African Land Snails, *Archachatina marginata* and *Achatina achatina* was carried out. Three groups of snails weighing 80-100, 101-150 and 151-250 g were used in a 2x3 factorial design, with 5 replicates, involving a total of 30 snails. Dimensions and weights of retractor penile muscle, vas deferens, penis, vagina, oviduct, spermotheca, common duct, albumen gland and little hermaphrodite duct were taken. Results showed that *Archachatina marginata* had longer, wider and heavier accessory sex organs compared to *Achatina achatina* except for vas deferens width, vagina length, vagina width, and vagina weight, which were otherwise. Dimensions and weights of the accessory organs increased consistently with liveweight, except for retractor penile muscle width, which had attained maximum size by a body weight of 101-150 g. It can be concluded that *Archachatina marginata* had better reproductive tract dimension compared to their counterpart (*Achatina achatina*). It is however recommended that liveweight group 151-250 g be considered as group of choice when considering anatomical display of reproductive parts for demonstrative purpose and testing of manipulating tools for reproductive strategies in both species.