

ABSTRACT

Voluntary food and water consumption of Kirk's dikdik (*Madoqua kirki*) and suni (*Nesotragus moschatus*) was determined under controlled laboratory conditions. Both species consumed large amounts of dried matter (lucerne hay leaves) per day. Dry matter consumption of dikdik accounted for $3.8 \pm 0.5\%$ and of suni for $3.5 \pm 0.2\%$ of body weight. Dry matter intake in one immature dikdik and one female dikdik during late pregnancy and lactation was considerably higher.

Dikdik drank very little water (278 ml/day, equalling $83 \text{ ml/kg}^{0.82}$) which is further proof of their adaptation to arid environment. Suni drank about twice as much (401 ml/day, equalling $155 \text{ ml/kg}^{0.82}$), but individual variation of water consumption was high. Thus, the forest-dwelling suni seems to be less adapted to dehydration than the dikdik.

There was no difference in the digestibility of dry matter and gross energy of lucerne hay leaves for dikdik and suni. The fraction of N-free extracts which consists mainly of soluble carbohydrates was digested very well (84% and 81%, respectively), whereas fibre and cellulose digestibility was poor. Suni digested crude protein, minerals and cellulose significantly better than dikdik.