

## Abstract

Fifteen yearling goats of similar weight were used to evaluate the potential of *Zizyphus spina-christi* leaves as a supplement to goats fed on *Cynodon dactylon* grass. Animals were randomly assigned to five feeding regimes and individually stall-fed for a preliminary period of 14 days, followed by 14 days of feeding to determine dry matter intake and digestibility and a 3-month feeding period to determine body weight changes. The treatments were formulated based on leaf:grass ratios of 0%, 25%, 50%, 75% and 100%. *Z. spina-christi* leaves had higher crude protein and lower fibre content than *C. dactylon* grass ( $P < 0.05$ ). Dry matter intake, digestibility and body weight changes increased significantly ( $P < 0.05$ ) as the level of supplementation increased. Thus, *Z. spina-christi* foliage is a potential feed supplement in the dry season, as the dry season grasses are deficient in the required nutrients and cannot meet goat requirements.