

ABSTRACT

Osthoff, G., Arno Hugo, S., de Wit, M. & T.P. Mai Nguyen, T.P. (2009) The chemical composition of milk from free-ranging African buffalo (*Syncerus caffer*) *South African Journal of Wildlife Research*, 39(1): 97 – 102.

Milk was obtained from five African buffalo (*Syncerus caffer*) cows located in the Pilanesberg Nature Reserve and the Phalaborwa district, South Africa. The average nutrient content was 62.9 ± 24.9 g protein, 133.9 ± 80.9 g fat and 51.6 ± 21.0 g lactose per kg milk. The protein fraction respectively consisted of 4.7 ± 3.2 g whey per kg milk and 58.9 ± 21.4 g casein proteins per kg milk. Electrophoresis and subsequent identification of protein bands showed a migrating sequence of proteins similar to that observed in cattle (*Bos taurus*) milk. The lipid fraction contained 587.1 ± 50.1 g saturated fatty acids per kg milk fat, and 313.1 ± 35.6 and 27.2 ± 5.8 g/kg mono- and poly-unsaturated fatty acids respectively. Compared to domesticated bovine species, a low content of short and intermediary chain length fatty acids were observed, while stearic and oleic acid concentrations were higher. Substantial concentrations of uneven carbon chain fatty acids were also observed.