

Abstract

A survey of the macro-mineral concentrations in herbage in the Mt Elgon region of western Kenya is described. A total of 135 samples of dry-season herbage from 84 farms covering 30 000 km² was analysed for calcium (Ca), phosphorus (P), magnesium (Mg), and sulphur (S). Mean (\pm standard deviation) concentrations were Ca, 1.5 (0.52); P, 1.4 (0.76); Mg, 1.6 (0.53); S, 1.5 (0.59) g kg⁻¹ dry matter. Calcium, P, and Mg concentrations were low compared with surveys in other tropical countries but this may partly reflect the mature stage at which herb-age was sampled. Comparisons with recent estimates of the mineral requirements of ruminants indicated that most of the samples were deficient in Ca and P while a minority was deficient in Mg and S. However, such deficits are not synonymous with constraints upon livestock production, and supplementation trials with grazing livestock should be conducted.