**ASSET Series A (2001) 1 (2): 1-8**

**ASSET**
**An International Journal**

# ASSESSING IMPACT OF PASTURE NUTRIENT QUALITY ON RESISTANCE TO TICKS OF GRAZING ZEBU CALVES

**[1]S.NOKOE AND [2]H. ORANGA**

[1]International Institute of Tropical Agriculture (IITA), P.M.B. 5320, Ibadan, Nigeria (Mailing address: IITA % L.W. Lamboum, 26 Dingwall Road, Crydon CR9 3EE, UK
[2]African Medical & Research Foundation (AMREF), P.O. Box 30125, Nairobi, Kenya

## ABSTRACT

This study was aimed at identifying feed nutrients from grazing pastures, which could be responsible for the induction of resistance of zebu calves to the major livestock ticks species on Rusinga Island, Lake Victoria in Kenya. Tick counts, as an indicator of host resistance, were obtained from 72 calves at monthly intervals for one year. Canonical correlation analysis revealed that calves with access to more crude protein, potassium and calcium developed greater resistance to *Rhipicephalus* appendiculatus and female *Boophilus decoloratus*, and reduced resistance to make ticks of *Amblyomma variegatum* and both sexes of R. *evertsi*

**Keywords:** Canonical correlation, host resistance, nutrients, ticks, zebu calves.