

## **Determination of acaricide resistance in the tick species of veterinary importance in Zimbabwe. A case study of resistance to amitraz in Mazoe district**

### **Abstract**

A study was conducted to determine the productivity and constraints of smallholder guinea fowl production in the Mberengwa and Gokwe districts of the Midlands Province in Zimbabwe. 250 households were randomly selected to respond to a standard questionnaire. The average flock size per household was 1.52 cocks, 5.6 hens and 1.89 keets. Sexual maturity was attained at – and - months among male and female birds respectively, with age at first egg at first egg ranging between – months. Egg hatchability varied between farmers with an overall mean of 64 %. Guinea fowls were acquired through purchase (88%), gifts (7%), or in exchange for labour. Scavenging was the major feeding system, seasonally supplemented with grains. 63% of the farmers provided birds with drinking water. Death of keets was prevalent (89%) and was mainly attributed to possibly Newcastle disease and adverse weather conditions, with most of the deaths occurring in the cold dry season. Survival of the guinea fowls was significantly affected ( $P < 0.001$ ) and strongly correlated ( $r = 0.$ ) with housing system. Guinea fowls and eggs are mainly used to generate household income and for home consumption.