

Research Article

Relationship between the Prevalence of Ectoparasites and Associated Risk Factors in Free-Range Pigs in Kenya

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A cross-sectional study was undertaken to determine the prevalence of ectoparasites and possible risk factors in free-range pigs from 135 farms of Busia District, Kenya. Three hundred and six pigs were examined for presence of external parasites using standard parasitological methods. Data on management practices including housing and history of acaricide spraying were also collected. The ectoparasites found in the pigs were *Haematopinus suis* (96.1%), *Sarcoptes scabiei* (63.7%), and ticks (29.7%). The tick species included *Rhipicephalus appendiculatus* (70%), *Boophilus decoloratus* (31%), and *Amblyomma variegatum* (12%). The occurrence of the infestations was associated with age, being highest in sows (*S. scabiei*) and finishers (ticks and *H. suis*). Male pigs had highest prevalences of *H. suis* and ticks, while female pigs had highest prevalence of *S. scabiei*. The prevalence of the parasitic infestations was significantly ($P < 0.05$) associated with their origin being either lower (*H. suis* and *S. scabiei*) or higher (ticks) in pigs originating from divisions with high rainfall. Housed pigs had significantly ($P < 0.05$) lower prevalence of *H. suis* and ticks than those from households without pig housing. It is concluded that the free-range pigs have high prevalence of ectoparasites, and effective control strategies focussing on improved animal husbandry and acaricide use should be implemented.