Abstract

The responses of adult *Amblyomma variegatum* ticks released from various distances to different doses of the synthetic attraction-aggregation-attachment pheromone (AAAP) (made up of *ortho*-nitrophenol, methyl salicylate and nonanoic acid in paraffin oil), dispensed from the center of circular field plots, were studied in the presence or absence of elevated levels of CO_2. Up to 90% of the ticks released were attracted to the pheromone source in the presence of CO_2 within 3h. CO_2 alone was unattractive, similar to previous findings in Zimbabwe, but unlike results from a Caribbean *A. variegatum* population, which was significantly attracted to this signal. In the absence of CO_2, smaller but significant proportions of the released ticks were attracted to the pheromone, albeit more slowly, suggesting another variation in the responses of this bont tick to inter- and intra-specific signals. Our results are interpreted in the light of a study undertaken elsewhere demonstrating relatively high heterozygosity among tick populations. Possible directions of further research to explore the use of the pheromone in off-host control of the tick are also highlighted.