

USE OF SQUALENE AND PHENOLIC PHEROMONE DERIVATIVES ON NONFED STAGES OF THE BROWN DOG TICK, *RHIPICEPHALUS SANGUINEUS* (LATREILLE) (ACARI: IXODIDAE), WITH OBSERVATIONS FOR ATTRACTION POTENTIAL

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ABSTRACT - Positive behavioral responses to 2,4-dichlorophenol, 2,6-dichlorophenol, methyl salicylate and squalene individually are reported for *Rhipicephalus sanguineus* (Latreille), domestic pest and vector of Rocky Mountain spotted fever. Phenolics acted as attractants by recruiting 60-67% of ticks and squalene acted as an arrestant by causing up to 77% of ticks to cluster on treated surfaces in short-range petri dish bioassays. Compound concentrations were consistently most effective at 0.01M and 0.05M without a dose-response. Other known tick attractants 2,4,6-trichlorophenol and *o*-nitrophenol, however, did not elicit a response. Of interest is that squalene elicited a different set of behavioral responses (arrestment instead of attraction) and more heightened activity than did the phenolics.

Internat. J. Acarol. 34(2): 191-195.