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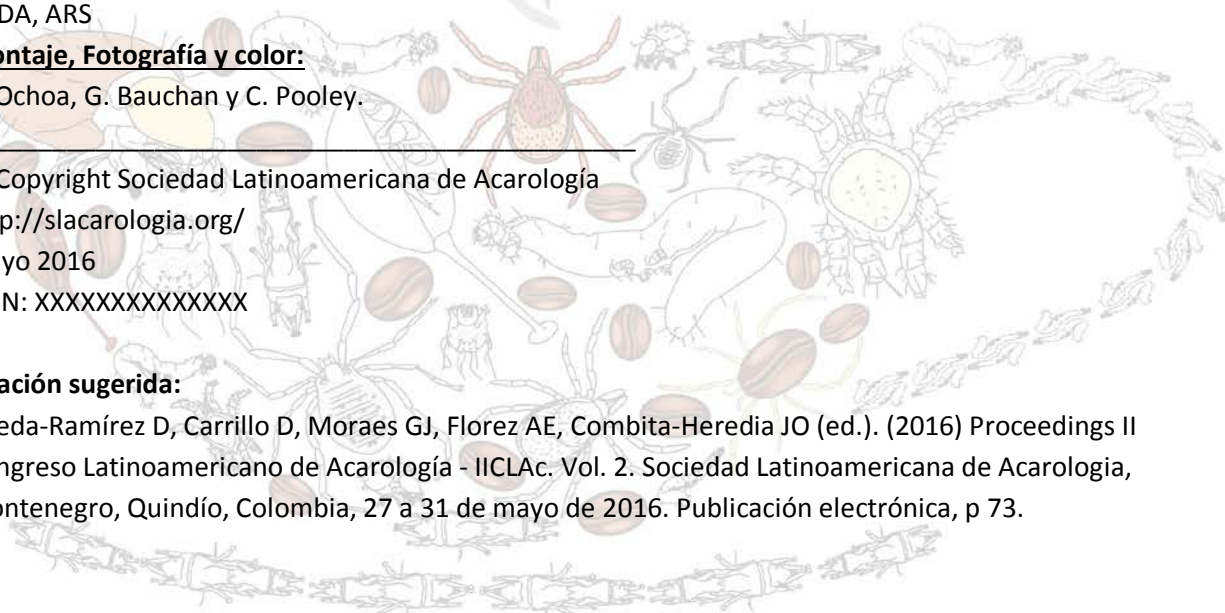
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**BECC9-P. Potential action of extract of *Acmella oleracea* (L.) R. K. Jansen to control *Amblyomma cajennense* (Fabricius, 1787) (Acari: Ixodidae) ticks**

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The *Amblyomma cajennense* (Fabricius, 1787) *sensu stricto* (Acari: Ixodidae) ticks, has great medical importance, mainly for being a vector of *Rickettsia rickettsii*, agent of the Brazilian spotted fever or Rocky Mountain spotted fever. There is a need to control these ectoparasites through less harmful methods, less aggressive to the environment and to non-target organisms as well as to the human health. In this way this study examined the ethanol crude extract of Jambu: *A. oleracea* (L.) R. K. Jansen on the susceptibility of *A. cajennense* s.s males and semi-engorged females exposed to different concentrations of the extract. Ticks were immersed in different concentrations of extract (treatment groups), in distilled water (control group 1) or 50% ethanol and 1% DMSO (control group 2) for 5 minutes and maintained in an incubator B.O.D. for 7 days. The results demonstrated the susceptibility and sensitivity of *A. cajennense* s.s males and semi-engorged females to higher doses of extract, indicating that the acaricide effect would probably be dose-dependent. In addition, the action of extract was slow and gradual, interfering in the development and growth of the individuals throughout the 7-day observation period. The lethal concentration 50% (LC50) of 29.4534 mg/mL (limits: 24.4467 – 41.3847 mg/mL) for males and LC50 = 17.6335 mg/mL (limits: 5.2506 – 23.5335 mg/mL) for semi-engorged females was determined using Probit analysis (95% confidence interval).