

**279 - Reinfestation of *Aceria guerreronis* Keifer
(Acari: Eriophyidae) on coconut trees**

J.W.S. Melo¹, C.A. Domingos¹, J.E. de M. Oliveira², A. Pallini³ & M.G.C. Gondim Jr.¹

¹Depto. Agronomia, UFRPE, 52171-900 Recife-PE, Brazil (wagnermelo@hotmail.com); ²Entomologia, Embrapa Semi-Árido, 56302-970 Petrolina-PE, Brazil; ³Depto. Biologia Animal, UFV, 36570-000 Viçosa-MG, Brazil.

Aceria guerreronis Keifer is considered a major pest of coconut trees in the Americas, Africa and Asia. In spite of its economical importance, little is known about many aspects of the ecology of this species. This study aimed to evaluate the mechanisms involved in the infestation of new bunches under natural conditions and when all bunches are removed from a tree, and the time spent in this processes in both cases. We then studied the population dynamics of *A. guerreronis* using a scale of damage intensity. Damage intensity was evaluated under four different conditions, using a diagrammatic scale: (i) plants with all bunches removed; (ii) plants with the distal portion of the spikelets removed; (iii) plants bimonthly sprayed with Vertimec 18CE (Abamectin) (9g/ha); and (iv) control plants. For each treatment, two fruits from each of bunches 1-6 were randomly collected every month during four months. The removal of spikelet had no effect on the damage level of new bunches, but the occurrence of peak populations was delayed by about a month. Removal of all bunches did not affect the population level of the pest; in two months, population density reached the same level it had before bunch removal. The bimonthly application of Vertimec was efficient in maintaining the infestation of *A. guerreronis* at low levels. Based on the results of this study, the most probable forms of dispersal of *A. guerreronis* are discussed.