

DEVELOPMENT AND OVIPOSITION OF *Tetranychus evansi* AFTER ELIMINATION OF ENDOSYMBIONTS
DESENVOLVIMENTO E OVIPOSIÇÃO DE *Tetranychus evansi* APÓS A ELIMINAÇÃO DE ENDOSSIMBIONTES

A.M.G. Bernardo¹, F.R. Ribeiro¹, C.R. Dias¹, R.M.Oliveira¹, A. Pallini¹ & A. Janssen²

¹Departament of Entomology/ Laboratory of Acarology – UFV, Viçosa, MG; ²IBED, Section Population Biology, University of Amsterdam, The Netherlands.

Arthropods contain vast numbers and diverse types of bacterial endosymbionts. These associations may benefit the herbivores, and in some cases they are essential for completion of the life cycle of the host. In this context, the objective of this study was to evaluate whether the elimination of bacterial endosymbionts may affect the development and oviposition of the spider mite *Tetranychus evansi*. Spider mites were kept on leaf discs moistened with a 0.1% solution of tetracycline or on leaf discs moistened with distilled water, during one or two consecutive generations. The adult females from the first generation were individualized on foliar discs in each treatment. The females were removed after 24 hours. From the total of eggs, only one was allowed to be evaluating until the adult phase per disc. One 2-day-old mated female *T. evansi* from second generation of treatments were individually placed on each leaf disc to quantify the oviposition. The elimination of endosymbionts was confirmed with a PCR, which showed no amplification of bacterial DNA in the antibiotic treatments, in contrast to the control (water). There was no effect of antibiotic treatment on the oviposition rate and developmental rate. Apparently, the bacterial endosymbionts were not relevant for the performance of the mites.

Key-word: Tetracycline, herbivore and bacterial.

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