

RESUMO - ENTOMOLOGIA E ACAROLOGIA

A NEW SPECIES OF ORNITHODOROS (IXODIDA: ARGASIDAE) FROM SINALOA, MEXICO

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Ticks are a diverse group of strictly hematophagous arthropods that parasitize all terrestrial classes of vertebrates. Soft ticks (Argasidae) comprise approximately 220 species. In Mexico, 24 species of *Ornithodoros* (Argasidae) have been recorded. In the present study, we report a new species belonging to the *Ornithodoros talaje* group, which is widely distributed throughout the Neotropical region. During surveys for vectors of relapsing fever group spirochetes, two females similar to *O. talaje* were collected inside a rodent burrow at El Fuerte, Sinaloa, Mexico. Both females were fed on mice and laid eggs. Ten unfed larvae were cleared in 25% KOH, washed with distilled water, and mounted on slides in Hoyer's medium. Larvae were photographed with optical microscope (Euromex, Netherlands) and measured with ImageFocus Plus v2 software. One

pool of 5 larvae was submitted to a PCR targetting the tick mitochondrial 16S rRNA gene with primers 16s+1 (5'-CTGCTCAATGATTTTTTAAATTGC-3') and 16s-1 (5'-CCGGTCTGAACTCAGATCATGTA-3'). PCR products (475 bp) visualized in 1% agarose gel were subjected to bidirectional sequencing. Consensus sequences were compared in GenBank using BLASTn. A maximum likelihood phylogenetic analysis was performed using IQ-TREE v2.4.0 under the optimal nucleotide substitution model selected with ModelFinder. The larval stage of this novel species exhibits a body subcircular, pyriform dorsal plate, 18 pairs of dorsal setae (7 anterolateral, 5 central, 6 posterolateral), hypostome with denticles arising from the base and pointed apically, dentition formula 3/3 in the apical third, then 2/2 to base, file one, two and three with 21–22, 19–20, and 9–10 denticles, respectively. The female has cheeks, large mammillae, posterolateral margins of body of three mammillae wide, and posteromedian line of disks merged with the median disk. A phylogenetic analysis further supports that the *Ornithodoros* sp., branches basally within the *O. talaje* group clade.

Palavras-chave: soft ticks; neotropical zoogeographical region; *ornithodoros talaje* group.