

ABSTRACT

ABSENCE OF *WOLBACHIA* SYMBIONTS IN PACIFIC COAST HARD TICKS (ACARI: IXODIDAE)

Wolbachia spp. are parasitic endosymbionts found in 20 to 75% of all insect species. The presence of *Wolbachia* in natural populations of arthropods is made possible by their wide host range and ability to manipulate the host's environment. There are several phenotypic effects that can result from infection with *Wolbachia*: cytoplasmic incompatibility (CI), feminization, parthogenesis induction (PI), and male-killing (MK). Within the Acari (mites and ticks) are many species which are known to be infected with *Wolbachia*. The purpose of this study was to evaluate the presence of, and if present, the prevalence of *Wolbachia* in *Ixodes* spp. and *Dermacentor* spp. ticks in Coastal California, an area where neither tick populations nor their endosymbionts had previously been investigated. The results of this study suggest that ticks from this geographic region do not harbor *Wolbachia*.

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