



ECOLOGICAL BEHAVIOR OF *Hannemania* MITES (ACARI: LEEUWENHOEKIIDAE): STRATIFIED PARASITISM IN THE STATE OF SÃO PAULO, BRAZIL

COMPORTAMENTO ECOLÓGICO DE ÁCAROS *Hannemania* (ACARI: LEEUWENHOEKIIDAE): PARASITISMO ESTRATIFICADO NO ESTADO DE SÃO PAULO, BRASIL

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Hannemania mites gather a genus of intradermical parasites of amphibians that belong to the Acari family Leeuwenhoekiidae. Scarce records are known of the species for the state of São Paulo, thus the host specificity as for recent studies only identified the presence of the genus without determining the species. Samples of recent field studies throughout the state of São Paulo of *Hannemania* mites deposited in the Acarology collection of the Butantan institute (IBSP) were examined as well as their hosts and ecological niches where they were collected. Mites were identified using light microscopy of mounted clarified specimens. Some of them were prepared for scanning electron microscopy (SEM). Three species of *Hannemania* of three anuran amphibians were identified: *H. yungicola* in *Fritzania fissilis* collected near the Serra da Bocaina at 1700 meters of altitude, *H. hepatica* in *Physalaemus spiniger* collected in a conserved área of Atlantic forest near Sete Barras municipality; and *H. minor* from *Leptodactylus latrans* collected in a intervened area with banana crops near Sete Barras municipality. These findings suggest that *Hannemania* mites are more likely to parasite ecological niches than having high host specificity. This parasitism depends on altitude (*H. yungicola* is known to occur at high altitudes as 1500 – 2300 m), type of environment and seasonality, thus host habits and preferred habitat may also be involved. This ecological behavior could help avoid competition between species of *Hannemania* as well as guarantee parasitic success of the genera.

Key words: anuran amphibians, *Hannemania*, parasitic behavior

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