Prevalence and phylogeny of parasitic dinoflagellates (genus *Blastodinium*) infecting copepods in the Gulf of California

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Plankton samples collected from Bahía de La Paz, Baja California Sur, Mexico in June 2008 revealed infection of copepods by *Blastodinium* spp. Of eight copepod genera encountered in the samples, only one (*Paracalanus*) was parasitized by *Blastodinium*. Infection prevalence was low, 0.6 % to 2.0 %, with all parasitized individuals being females tentatively identified as *Paracalanus parvus*. All but one infected host examined during the study was parasitized by *Blastodinium crassum*, the sole exception being a *Paracalanus cf. parvus* infected by *Blastodinium contortum*. A phylogeny constructed using a dataset of ~1.3 Kb sequences of the small sub unit ribosomal DNA gene of *B. contortum* and *B. crassum* from Bahía de La Paz and 36 other dinoflagellate sequences available in Gen Bank, including all available for *Blastodinium*, placed *Blastodinium* as a monophyletic clade deep within the Dinokarota. Sequence divergence among *B. contortum* ex *Paracalanus* cf. *parvus* from Bahía de La Paz, *B. contortum* ex *P. parvus* from the Mediterranean Sea, *B. contortum* ex *Clausocalanus arcuicornis*, *B. crassum* ex *P. cf. parvus* from Bahía de La Paz, and *B. navicula* ex *Corycaeus giesbrechti* supported separation of the three parasites as distinct species.

Palabras clave: copepod, Blastodinium, dinoflagellate, parasite, molecular phylogeny

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