

A case of parasite-mediated competition? Phenotypic differentiation among hookworms *Uncinaria* sp.

George-Nascimento, M., Lima, M. & Ortiz, E. A case of parasite-mediated competition? Phenotypic differentiation among hookworms *Uncinaria* sp. (Nematoda: Ancylostomatidae) in sympatric and allopatric populations of South American sea lions *Otaria byronia*, and fur seals *Arctocephalus australis* (Carnivora: Otariidae). *Marine Biology* 112, 527–533 (1992). <10.1007/bf00346169> Accessed 09 Nov 2022.

Abstract

Hookworms in otariids are considered to meet the conditions and to fulfill the predictions set forth in the theoretical literature to define a likely case of host coexistence mediation by a shared pathogen. The intensity of infections, the prevalence of skin lesions and the morphometry of hookworms *Uncinaria* spp. were examined in South American sea lions and fur seals sampled along the Chilean and the Uruguayan coasts in spring and summer 1981 to 1991. In sympatric host populations from Uruguay, there were clear differences in intensity of infections, prevalence of skin lesions, and body size of the hookworms from the two host species. Sea lions from Chile, allopatric to fur seal populations, are less intensively infected and hookworms found in these sea lions have the smallest body size reported in otariids, while those from South American fur seals are the largest. Hookworms found in sea lion pups from populations sympatric to fur seals revealed intermediate values in intensity and in body size, and the sea lion pups had the highest prevalence of skin lesions. Other reports of hookworms in otariids show intermediate morphometry, following a general linear trend of differentiation in size. Consequently, they are considered to belong to the same, widely distributed species *Uncinaria lucasi* Stiles, 1901.