

Host range, host ecology, and distribution of more than 11 800 fish parasite species

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GIOVANNI STRONA,^{1,5} MARIA LOURDES D. PALOMARES,² NICOLAS BAILLY,³ PAOLO GALLI,¹ AND KEVIN D. LAFFERTY⁴

¹*Department of Biotechnology and Biosciences, University of Milano-Bicocca, Milan 20126 Italy*

²*Fisheries Centre, 2202 Main Hall, University of British Columbia, Vancouver, British Columbia V6T 1Z4 Canada*

³*Aquatic Biodiversity Informatics Office, Worldfish Center c/o IRRI, Khush Hall, Los Baños, 4031 Laguna, Philippines*

⁴*U.S. Geological Survey, Western Ecological Research Center, Marine Science Institute, University of California, Santa Barbara, California 93106 USA*

Abstract. Our data set includes 38 008 fish parasite records (for Acanthocephala, Cestoda, Monogenea, Nematoda, Trematoda) compiled from the scientific literature, Internet databases, and museum collections paired to the corresponding host ecological, biogeographical, and phylogenetic traits (maximum length, growth rate, life span, age at maturity, trophic level, habitat preference, geographical range size, taxonomy). The data focus on host features, because specific parasite traits are not consistently available across records. For this reason, the data set is intended as a flexible resource able to extend the principles of ecological niche modeling to the host–parasite system, providing researchers with the data to model parasite niches based on their distribution in host species and the associated host features. In this sense, the database offers a framework for testing general ecological, biogeographical, and phylogenetic hypotheses based on the identification of hosts as parasite habitat. Potential applications of the data set are, for example, the investigation of species–area relationships or the taxonomic distribution of host-specificity. The provided host–parasite list is that currently used by Fish Parasite Ecology Software Tool (FishPEST, <http://purl.oclc.org/fishpest>), which is a website that allows researchers to model several aspects of the relationships between fish parasites and their hosts. The database is intended for researchers who wish to have more freedom to analyze the database than currently possible with FishPEST. However, for readers who have not seen FishPEST, we recommend using this as a starting point for interacting with the database.

Key words: *FishPEST; host range; host specificity; parasite species richness.*

The complete data sets corresponding to abstracts published in the Data Papers section of the journal are published electronically in *Ecological Archives* at <http://esapubs.org/archive> (the accession number for each Data Paper is given directly beneath the title).