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IRAQ

provided by Prof Dr Z. I. F. Rahemo, zohair_rahemo@yahoo.com

Prof Dr **Zohair I.F.Rahemo**, at the Department of Biology, College of Science, University of Mosul, Mosul, Iraq, continues his work on monogeneans from fish, including one study, recently published in *Trends in Parasitology Research*, which examined the arrangement of the nervous system associated with the clamps in the haptor of four polyopisthocotylean species.

Two students have completed their degrees under the supervision of Prof Dr **Shamall M. A. Abdullah** at the Department of Biology, College of Education, University of Salahaddin. **Samir J. Bilal** completed his PhD thesis entitled “*Ultra- and molecular study of some cestodes and nematodes parasitizing some freshwater fishes in the Kurdistan region, Iraq*”. The study documented the occurrence of three species of cestodes, namely *Khawia armeniaca*, *Postgangesia inarmata* and *Senga* sp., and three nematode species, including, *Rhabdochona (Globochona) kurdistanensis*, *Rhabdochona* sp. and *Procamallanus siluri*. Molecular sequences for *K. armeniaca* and *P. inarmata* were produced.

Younis Sabir Abullah (pictured right) recently completed his MSc thesis entitled “*Study on the parasites of some fishes from the Darbandikhan Lake in the Kurdistan Region, Iraq*”.

Prof. Dr. **Shamall M. A. Abdullah** continues his work on *Dactylogyrus* from the Kurdistan region in collaboration with **Kamran S. Mama**. He also recently described a new species of the nematode *Rhabdochona* in collaboration with Dr **František Moravec** and **Samir J. Bilal**



At the University of Basrah, Dr **Atheer Ali** continues his research on fish parasites in Southern Iraq. This work includes collaborations with Dr **Delane Kritsky** and **A. H. Khamees**, investigating Dactylogyridae and Gyrodactylidae from the gills of mugilid fishes. He has also described a new species of *Philometra* recently with **František Moravec** from the sin croaker *Johnius dussumieri* in the marine waters of Iraq.

MEXICO

provided by Miguel Rubio-Godoy, miguel.rubio@inecol.mx

The *Host-Parasite Interaction Lab* at the Instituto de Ecología (INECOL) studies many facets of Mexico's fish helminth fauna. **Miguel Rubio-Godoy** continues the study of gyrodactylids, collecting them from wild and cultured and feral fish, and all three sources of parasites have proved interesting. Following the infection of *Gyrodactylus cichlidarum* on farmed tilapia for one year, Miguel and collaborators **Germán Muñoz-Córdova**, **Mario Garduño-Lugo** and **Martha Salazar-Ulloa** (pictured below with Rubio), all from the Universidad Nacional Autónoma de México (UNAM), found evidence that parasite numbers are influenced by microhabitat use and not by temperature – as is usually the

case with gyrodactylids. Studying gyrodactylids collected from feral rainbow trout, Miguel and long-time collaborators **Andy Shinn**, **Giuseppe Palladini** (both University of Stirling, UK), **Mark Freeman** (University of Malaya, Malaysia) and **Adriana García-Vásquez**, ex-Stirling and ex-UNAM (but see below), characterised *G. salmonis* isolates that vary from the parasites found in Canada and the USA. The same international team found a new species of *Gyrodactylus* on endemic fish of the Mexican highlands which may have originally been a marine parasite that was caught “high and dry” when the country was uplifted.



Ulises Razo-Mendivil, a postdoc in Miguel’s lab, has been investigating trematodes infecting native fishes, and several new species were described in collaboration with **Gerardo Pérez-Ponce de León** (Instituto de Biología, UNAM), including members of the genera *Auriculostoma*, *Phyllodistomum* and *Tabascotrema*. **Ulises** also collected gyrodactylids infecting native fishes, such as *Astyanax aeneus*, *A. mexicanus* and *Heterandria bimaculata*. **Adriana García-Vásquez** recently joined Miguel’s laboratory to do a postdoc, during which she will embark on a nationwide survey to characterise *Gyrodactylus* infecting farmed tilapia and rainbow trout and wild fish (whatever she can net!) in Mexico. **Paloma Cano-Zúñiga**, a BSc student, started working with **Ulises** and has completed the life cycle of a yet undescribed trematode. She was hooked by parasites, and will do her thesis studying the helminths found in the invasive lionfish *Pterois volitans*, which has already reached the waters off Veracruz, in the Gulf of Mexico. **Ismael Guzmán-Valdivieso**, our technician, has cheerfully and consistently helped everybody in the laboratory and the field.



Finally, **Guillermo Salgado-Maldonado** (Instituto de Biología, UNAM) and **Miguel** compiled a list of invasive helminths found in freshwater fishes in Mexico; not surprisingly, they found that, of 40 invasive species, 33 are monogeneans. This will shortly appear in a book published by CONABIO (Mexico’s National Commission for the Study of Biodiversity); but, as a quick preview, we can tell you that the following five species can be considered as established invaders in the country: the monogeneans *Cichlidogyrus sclerosus*, *Dactylogyrus extensus* and *Gyrodactylus cichlidarum*; the trematode *Centrocestus formosanus*; and the cestode *Bothriocephalus acheilognathi*. Photo (left) with **Paloma Cano-Zúñiga**, **Adriana García-Vásquez**, **Miguel Rubio-Godoy** and **Ulises Razo-Mendivil**, at INECOL.