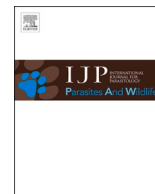


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Editorial

A smorgasbord of firsts: Taxonomy, morphology, and ecology of parasites in wildlife - Invited papers from the 4th International Congress on Parasites of Wildlife 2021/2022, Kruger National Park, South Africa



Following on from the success of the first three editions of the International Congress on Parasites of Wildlife (ICPoW) hosted in 1991, 2014 and 2017 by the Parasitological Society of Southern Africa (PARSA), the 4th ICPoW was planned for 2020 in the Kruger National Park (KNP), South Africa. As was the case with most conferences scheduled for 2020, ICPoW was unable to proceed due to the global Covid-19 pandemic and was postponed first to 2021 and now, with the ongoing travel restrictions, to 2022. Fortunately, as for the 2014 conference (see [Penzhorn and Smit, 2015](#)), a special issue consisting of invited papers that will be presented at the 4th ICPoW was published in the International Journal for Parasitology: Parasites and Wildlife during 2021 to provide wildlife parasitologists a brief synopsis of the variety of papers they can expect at the 4th ICPoW. The invited papers not only reflect the diversity of work on wildlife parasites that will be presented, but also the diversity in hosts studied and researchers (post graduate students, post-doctoral fellows, early career and established researchers representing at least 15 countries) working on these groups. Although diverse, the one thing that all these papers have in common is that they present a smorgasbord of firsts.

The majority of papers in this special issue provide us with new insights into parasite diversity of aquatic animals through the description of a total of 20 new taxa. This includes three new blood protozoans from anurans in Brazil ([Úngari et al., 2021](#)), five new species of polystome flatworms (Monogenea) from Madagascar tree frogs ([Landman et al., 2021](#)) and two new species of filarial nematodes from South African anurans ([Kuzmin et al., 2021](#)). Parasites from marine teleost fish hosts were also reported with [Christison et al. \(2021\)](#) describing a new *Gyrodactylus* monogenean from the South African mullet, [Van der Wal et al. \(2021\)](#) providing the first record of branchial attaching fish parasitic isopods from Nigeria through the description of two new species of *Mothocya* (Cymothoidae), and [Aneesh et al. \(2021\)](#) also describing a new fish parasitic isopod, in this case a species of *Anilocra* from India. Freshwater fishes as hosts were also represented in this special issue with the description of two new species of plagiorchid digeneans infecting turquoise killifish from Mozambique and globe fish collected in the Republic of Guinea ([Curran et al., 2021](#)). This special issue not only introduced new species to science but also new genera with the description of two new monotypic genera of fish blood flukes of the family Aporocotylidae infecting banded eagle rays in Borneo, Indonesia ([Warren and Bullard, 2021](#)). What is really positive from this special issue is that almost all the papers describing new species used an integrative approach, thus presenting morphological, morphometrical and molecular data.

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In addition to the new described taxa of fish parasites, new locality and hosts records as well as molecular characterisation were reported for two gnathiid isopods from the Philippine coral reefs ([Shodipo et al., 2021](#)), a branchiuran of the African endemic genus *Chonopeltis* (Argulidae) from South Africa ([Van As et al., 2021](#)), and a shark blood trypanosome ([Pretorius et al., 2021](#)), also from South Africa. The latter is also the first molecular data for any species of shark trypanosome globally. In the final paper on fish parasites, Honka and Sures (2021) used Japanese and European eels as hosts and Ponto-caspian acanthocephalans and swim bladder nematodes as parasites to demonstrate that a low degree of host-parasite adaptations leads to stronger host stress responses against the parasite.

Current research on parasites of Africa's enigmatic and endangered mammals are also showcased in this special issue. [Netherlands et al. \(2021\)](#) provided the first in-depth molecular data on the very high prevalence of *Hepatozoon* blood parasites in free-ranging African wild dogs from the KNP, South Africa, and [Zaffarano et al. \(2021\)](#) reported on the first case of cystic echinococcosis in the Southern white rhinoceros, also from KNP, South Africa's premier game park.

To conclude, this special issue clearly illustrates that, although the current Covid-19 global pandemic has impacted on our ability to host and attend in-person conferences and meetings, it did not stop the determination of researchers to publish excellent research on wildlife parasitology.

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