

# **Taenia martis in a white-headed lemur (Eulemur albifrons) from a Zoological Park in North Rhine-Westphalia, Germany.**

*Tuesday, 10 October 2023 14:56 (1 minute)*

Taenia(T.) martis is a zoonotic tapeworm found in the small intestine of carnivores, mostly of the Martes genus. In zoos, T. martis eggs can find a comfortable shortcut to new (and old) hosts. We report an example of this in a white-headed lemur, which was found dead in a zoological park.

A 5-year-old female white-headed lemur without previous history of disease was unexpectedly found dead in her enclosure in a zoological park, where she lived in a group of five lemurs. A complete necropsy was performed and samples were taken for histological examination and DNA purification. After DNA purification, a PCR for the amplification of the 12S rRNA mitochondrial fragment was performed. Subsequently, the amplicons were sequenced using Oxford nanopore next-generation-sequencing techniques. A cysticercal larva was found inside a nodule adherent to the pleura. Sequences of the PCR amplicons identified the larva as T. martis.

This is the first report of T. martis infection in a white-headed lemur. The origin of the infection was not determined but direct contamination with martens from the vicinity or food contamination are possible. T. martis is a zoonotic parasite. Therefore, animal keepers, veterinarians and other zoo staff are at risk for infection. Finally, T. martis infection could be fatal in non-human primate species which makes this case report also relevant with regard to conservation efforts.

## **Keywords**

Taenia martis, zoonoses, wildlife, one health

## **Registration-ID code**

ZOO23-433

## **Professional Status of the Speaker**

Postdoc

## **Junior Scientist Status**

No, I am not a Junior Scientist.

**Primary authors:** Dr RENTERIA, Zaida (Institut für Parasitologie, Veterinärmedizinische Fakultät, Universität Leipzig); Dr MORMANN, Sascha (Chemisches und Veterinäruntersuchungsamt Westfalen); Mrs GIES, Nicole (Tierpark Hamm); Dr MARTIN, Peters (Chemisches und Veterinäruntersuchungsamt Westfalen)

**Presenter:** Dr RENTERIA, Zaida (Institut für Parasitologie, Veterinärmedizinische Fakultät, Universität Leipzig)

**Session Classification:** Lunch & Poster Viewing (P2)

**Track Classification:** Zoonoses & Wildlife