# Article information:

Full article: Assembly and phylogenetic analysis of the complete mitogenome of Devario interruptus (Teleostei, Cypriniformes, Danionidae)  
<https://www.tandfonline.com/doi/full/10.1080/23802359.2022.2151831?src=>

# Article summary:

1. Devario interruptus is a species of fish found in Southeast Asian countries and parts of China.

2. This study used high-throughput sequencing technology to sequence the whole mitochondrial genome of D. interruptus.

3. The DNA sample was extracted from a single adult specimen, and the sequences were assembled into contigs using metaSPAdes 3.13 with Betadevario ramachandrani MH817023 as reference.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides an overview of the assembly and phylogenetic analysis of the complete mitogenome of Devario interruptus (Teleostei, Cypriniformes, Danionidae). The article is well written and provides detailed information on the methods used for sequencing and assembly, as well as the results obtained from the analysis. However, there are some potential biases that should be noted when evaluating this article.

First, there is no mention of any potential risks associated with collecting specimens from their natural environment or euthanizing them for further study. This could lead to a lack of consideration for possible environmental impacts or ethical issues related to animal welfare that may arise from such activities. Additionally, it is unclear if any other species were collected during sampling or if any other specimens were discarded due to not meeting criteria for inclusion in the study.

Second, while the authors provide a detailed description of morphological characteristics for D. interruptus, they do not provide any evidence to support their claims about these characteristics or discuss how they might be relevant to understanding its evolutionary phylogenetic relationship within family Danionidae. Furthermore, there is no discussion about how these characteristics might vary between different populations or individuals within this species which could have implications for understanding its evolutionary history and relationships with other species in its family.

Finally, while the authors provide a reference image taken by Xiao Jiang CHEN on Jun 10 2021 (Figure 1), they do not provide any information about where this image was taken or what type of camera was used to take it which could be important when considering factors such as lighting conditions or resolution quality that may affect its accuracy as a representation of D. interruptus specimens in their natural environment.

In conclusion, while this article provides an overview of the assembly and phylogenetic analysis of the complete mitogenome of Devario interruptus (Teleostei, Cypriniformes, Danionidae), there are some potential biases that should be considered when evaluating its trustworthiness and reliability including lack of consideration for potential risks associated with specimen collection/euthanization; lack of evidence supporting morphological characteristics; and lack of information regarding reference image source/camera type used which could affect accuracy as a representation of D. interruptus specimens in their natural environment

# Topics for further research:

* Animal welfare risks associated with specimen collection
* Morphological characteristics of Danionidae
* Variation in morphological characteristics between populations
* Environmental impacts of specimen collection
* Ethical considerations for specimen collection
* Camera type and lighting conditions for reference images

# Report location:

<https://www.fullpicture.app/item/7ace12720b740791f615fd64b8e36036>