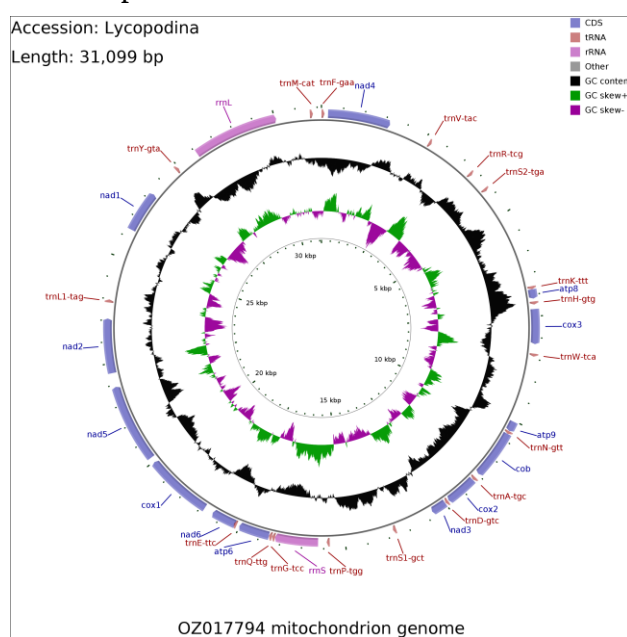


Sponges have a rather unique mitochondrial genome, distinct from that of other metazoans. This article describes a specific type of sponge, the carnivorous sponge, and its mitochondrial genome. It suggests that it may have three chromosomes, a feature seemingly multipartite into three chromosomes, which has not been reported in other sponge species. However, the author's analytical methods are deemed reasonable, and it is acknowledged that carnivorous sponges may indeed possess a relatively unique mitochondrial genome pattern. Nevertheless, there are still some areas where the author could make improvements.

1. Since the mitochondrial genome of *Lycopodina hypogea* has been previously reported (OZ017794), and this data is based on Nanopore Sequencing technology, which may be more accurate than the next-generation sequencing in this experiment. It is hoped that the authors can compare the differences between the two sequences. Based on the OZ017794 data, mitochondrial genome annotation was performed (see figure below), revealing some differences in results: (1) an additional trnC gene was found between the trnS2 and trnK genes of chrM1, (2) all tRNA genes within atp9, cob, cox2, and nad3 genes of chrM1 were identified as trnW(Figure 1 A), (3) chrM1 contained trnI(cau), while OZ017794 contained trnM. It is hoped that the authors can carefully compare these two mitochondrial genome datasets, and providing a reasonable explanation for the reasons behind these differences.



2, Please pay attention to all the captions in the article, and provide detailed explanations for A and B separately. For example: Figure 1 should be specifically labeled as A, ... B, ...

3, Please provide GenBank accession number XXXXXX for page 13, line 376.