WEEK OF KNOWLEDGE THE USE OF ZEBRAFISH AS AN EXPERIMENTAL MODEL ORGANISN

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Resumo

The zebrafish has been gaining prominence in research laboratories, and the use of its embryos is considered an alternative to the use of vertebrate animals. Despite its anonymity, it is already the second most used animal in experimentation worldwide, with 75% of the same genes as humans, zebrafish replace rodents in laboratories. Genetic similarity, easy handling, and non-invasive analysis make the zebrafish ideal for research.
The embryos are large (1mm) and translucent, which favors the monitoring of their development in three or four days, the zebrafish already have all the organs formed. In addition, 70% of the human genes have an equivalent in the zebra fish, and 85% of the genes that are targets for drug studies are also present in it. It is a fish originating from rivers in South Asia, which quickly reaches sexual maturity (in 90 days of life) and the females can produce up to 200 embryos every ten days.
Something that contributes to the use of the zebrafish in scientific studies is its low maintenance cost, for example, it is up to five times cheaper to produce than a mouse. Mice, on the other hand, usually live up to two years.
In Brazil, the production of the zebra fish is still incipient and restricted to the South and Southeast regions of the country.
Despite the large number of alternative methods available, the use of vertebrates is still indispensable for some areas of science due to their high M complexity and similarity with humans