



# Management of gametes and reproduction in the protection of genetic resources and the breeding program of common carp in the conditions of aquaculture in the Czech Republic

Project name	Management of gametes and reproduction in the protection of genetic resources and the breeding program of common carp in the conditions of aquaculture in the Czech Republic
Registration number	QK21010141
Realization date	1. 1. 2021 — 31. 12. 2025
Recipient	University of South Bohemia in České Budějovice Faculty of Fisheries and Protection of Waters
Other recipients	Rybářství Nové Hrady s.r.o.
Grant program	Applied "ZEMĚ" research programme of the Ministry of Agriculture for the period of 2017–2025
Responsible solver	prof. DiplIng. Otomar Linhart, Dr.Sc.

# **PROJECT ANNOTATION**

The purpose of the research of the project is to create practically oriented procedures for gametes of common carp. The procedures will be part of the methods used in the reproduction, breeding and protection of the carp gene pool, which will increase the capacity of existing hatcheries and contribute to reducing fish mortality,...

### **PROJECT GOALS**

The aim of the research will be to create in practice gametes of common carp practically oriented procedures enabling 1) sperm collection using nanoparticles minimizing the development of microflora; 2) storage of sufficiently fertile and diluted sperm in large volumes in an unfrozen state for 5-10 days and in 3) frozen state in liquid nitrogen; 4) short-term storage of eggs for up to 6 hours; 5) improvement of vitality and fertility of stored gametes. The aim will also be to verify the effect of spermatozoa treatment and its 6) damage at the molecular level and 7) the performance of the offspring when using frozen sperm. 8) The procedures will be also part of the methods used in the reproduction, breeding and protection of the carp gene pool.



# **PROJECT BUDGET**

	Amount CZK
Total approved costs	15 599 thou. CZK
Public financial support	13 257 thou CZK
Other public sources	0 thou. CZK
Non public and foreign sources	2 342 thou. CZK

### CONTACT



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