

South Bohemian Research Center of Aquaculture and Biodiversity of Hydrocenoses

Large research infrastructure CENAKVA

Project name	South Bohemian Research Center of Aquaculture and Biodiversity of Hydrocenoses
Registration number	LM2023038
Realization date	1. 1. 2023 – 31. 12. 2026
Recipient	University of South Bohemia in České Budějovice
Grant program	LM - Large infrastructure projects for R & D & I
Responsible coordinator	Assoc. Prof. Dipl.-Ing. Vladimír Žlábek, Ph.D.

PROJECT ANNOTATION

The main mission of the center, the large research infrastructure of the Czech Republic, is the development and cooperation in the highest quality science, research and applications required for development of fisheries, aquaculture and sustainable management system of fresh waters in the Czech Republic and Europe.

PROJECT GOALS

CENAKVA serves a wide range of users in the Czech Republic and abroad, offering a flexible experimental background which is focused on biology and the quality production of freshwater fishes, including sturgeon aquaculture and conservation, long-term sustainable pond culture and intensive aquaculture, biology and the protection of crayfish and other invertebrates, and the management of water quality and aquatic environments; all of these are responsive to global environmental changes, and we are finally equipped to efficiently collect, analyse and manage experimental data. CENAKVA has unique



European pond facilities located in Vodňany, which encompasses an area of 40 hectares. Furthermore, CENAKVA has a large number of closed recirculation and aquaponic systems with biological and hydroponic water purification systems which can be used for production, as well as for artificial propagation and breeding. CENAKVA has expertise in the managed reproduction and breeding of nearly 30 species of freshwater fish and crustaceans; the artificial propagation of carp, tench, and catfish is world renowned and CENAKVA manages the largest sturgeon gene bank in the world. The biological, chemical and toxicological laboratories have state-of-the-art equipment. CENAKVA is a unique large research infrastructure in the Czech Republic, dealing with global processes in freshwater ecosystems and the cycling of substances in water, including the monitoring of new environmental pollutants. The unique ponds, experimental facilities and scientific background of the scientists at CENAKVA maintain close ties with the aquaculture community in the Czech Republic, Europe and the world; these connections allow to plan and verify modifications to pond management within the context of climate change. CENAKVA also organizes professional conferences for scientists and lectures for the public. Within the framework of the open sharing of research in the European community, it is a member of the AQUAEXCEL2020 (Aquaculture Infrastructures for Excellence in European Fish Research) European research infrastructure. CENAKVA is participating in a consortium of 22 partners from 12 European countries involved in AQUAEXCEL 2020, as well as in the management and classification of scientific data, and for data sharing within projects of the ELIXIR (European Life-Science Infrastructure for Biological Information) and EMBRC-ERIC (European Marine Biological Resource Centre) European research infrastructures. CENAKVA is also participating in the research of aquatic ecosystems which are connected to the basin of important European streams through close cooperation with the Academy of Sciences of the Czech Republic and the DANUBIUS-RI (International Center for Advanced Studies on River-Sea Systems) European research infrastructure.

PROJECT BUDGET

	Amount (thou. CZK)
Amount of subsidy from the Ministry of Education, Youth and Sports (2023-2026)	58 510

CONTACT



Assoc. Prof. Dipl.-Ing. Vladimír Žlábek, Ph.D./ **Responsible coordinator**

Tel.: +420 777 698 427, E-mail: vzlabek@frov.jcu.cz