

## **Enhancement of sturgeon aquaculture profitability through genetic selection**

---

The main objective of the project was the validation in the industrial environment of a technology for the selection, growth and improvement of sturgeon hybrid lines with superior morpho-productive characteristics in order to obtain a high degree of profitability Romanian sturgeon aquaculture.

The specific objectives for this project were as follows:

1. Testing different sturgeon growth models to monitor performance related to productive parameters and increase the quality of final products.
2. Establish an effective methodology for identifying sex using genetic and hormonal markers in sturgeons.
3. Identification and analysis of molecular markers correlated with the quality of meat in sturgeons.
4. Validation of a technology for the selection, growth and improvement of sturgeon hybrid lines in order to increase the efficiency of aquaculture activities and increase their profitability.
5. Stimulating the collaboration between the scientific environment and the private partners in order to facilitate the technological transfer activities and increase the competitiveness of the economic agents on the free market.

Following the development of the project, a selection, breeding and rearing technology was developed for the Best beluga sturgeon hybrid, resulting from the crossing of the great sturgeon male ( $\text{♂}$  *Huso huso*) with Bester females ( $\text{♀}$  *Huso huso* X  $\text{♂}$  *Acipenser ruthenus*). The aim was to increase the competitiveness and profitability of aquaculture activities. As a result of the implementation of the new technology, the companies involved as partners in the project estimated an increase in productivity and profitability over previous achievements.

The selected genitors and their descendants, obtained as a result of controlled reproduction under artificial conditions, have been characterized from a genetic, biochemical, physiological and technological point of view. Therefore, the optimal biotechnological and biomolecular parameters needed to increase adaptability,

improve the survival and growth rates of the hybrids in aquaculture conditions, were established.

More details: [www.inovtehnostur.com](http://www.inovtehnostur.com)