

Genetic kits for freshwater fish management in Europe

Development status

Final Phase

The technology is routinely used.

IP protection status

know how

Partnering strategy

licensing



Institution



**Institute of Vertebrate Biology
CAS**

Challenge

At present, commercial design of this type of kit is completely lacking on the European market. It is suitable for conservation and breeding management, various monitoring: diversity/variability/resource differentiation, health status (on the background of population-genetic parameters), for differentiation of breed/individual purity and for hybrid identification, for evaluation of the trend of inbreeding level, for determination of the coefficient of genetic distance/relatedness of the breed/resource, for checking and verifying the correctness of the purchased source of breeding material and resistant line, for assessing the suitability of new sources for the renewal of the broodstock, for verifying the presence/absence of triploid individuals, for authenticity and adulteration of fish commodities, etc.

Description

A system for routine monitoring of freshwater fish in farms and open waters in Europe. The new STR Multiplex kit product line is designed for routine population analyses of various freshwater fish species in Europe. These are genetic kits with a robust microsatellite design and the ability to generate data in a coordinated and standardised manner. Allelic profiles can thus be calibrated using the calibration standards included in the kit, allowing more reliable comparisons of studies from different laboratories and at different times. A selection of kits from the STR Multiplex kit product line: STR Multiplex_OMident12 (rainbow trout, *Oncorhynchus mykiss*) STR Multiplex_SALVident11 (whitefish, genus *Salvelinus* - fontinalis, namaycush, alpinus, umbla) STR Multiplex_TRUTident12 Kit (sea trout, *Salmo trutta*) STR Multiplex_ASPident11 Kit (asp, *Leuciscus aspius*)

Commercial opportunity

The kits will be used by laboratories providing ecological contracts, universities, state institutions, scientific institutes, private companies, institutions dealing with nature conservation, ecology, agriculture, breeding, fishing associations, etc. in the Czech Republic and abroad.