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Certificate

This is to certify that

Viktoria Vechorka

from
Sumy National Agrarian University (Ukraine)

participated in the training at
University of Dubrovnik (Croatia)

within the framework of the
AFISHE

“Development of Aquaculture and Fisheries Education for Green Deal in Armenia and Ukraine: from education to ecology”
Erasmus+ CBHE project on 26.02.2024 – 08.03.2024.
The training is 90 hours and 3 credits.

**Associate Professor Marijana Pećarević,
PhD**

**Vice-Rector for International Relations and
science
University of Dubrovnik**

Garegin Hambardzumyan

**AFISHE project coordinator
Head of International Relations Department
Armenian National Agrarian University**

08 March 2024



Topics of the training

Breeding Technologies in Mariculture

THEORETICAL TOPICS

- 1) OVERVIEW OF COURSE CONTENT
- 2) FISH REPRODUCTION (3 h)
- 3) REGULATION OF REPRODUCTION IN FISH
- 4) REPRODUCTION OF FISH IN CAPTIVITY

5) BROODSTOCK HUSBANDRY, SPAWNING AND EGG INCUBATION PROTOCOLS AND TECHNOLOGY FOR FRESHWATER FISH SPECIES

6) BROODSTOCK HUSBANDRY, SPAWNING AND EGG INCUBATION PROTOCOLS AND TECHNOLOGY FOR MARINE FISH SPECIES

7) LARVICULTURE AND CULTURE OF JUVENILE FISH - CRITICAL POINTS DURING EARLY DEVELOPMENT

8) LIVE FEED PRODUCTION

9) LAYOUT AND MANAGEMENT OF FISH HATCHERY

10) BREEDING OF CRUSTACEANS IN CAPTIVITY

11) REPRODUCTION OF COMMERCIALY INTERESTING CRUSTACEANS FOR AQUACULTURE

12) BREEDING OF BIVALVES IN CAPTIVITY

13) HATCHERY PRODUCTION OF COMMERCIALY INTERESTING BIVALVES

14) BREEDING TECHNOLOGIES FOR OTHER SPECIES IN AQUACULTURE

PRACTICAL CLASSES AND ACTIVITIES:

- Laboratory classes: dissection of fish (reproductive organs, comparison of juvenile and adult male and female, calculation of GSI), histology of gonads before, during and after gametogenesis, small-scale rotifer production, Artemia decapsulation, observing development of embryo and larvae in currently available aquatic species

- Visit to other in-house facilities: bivalve hatchery, bivalve farm and overview of wild bivalve spat collection process for the purpose of aquaculture

- Visits to external entities (fish farm and bivalve farm).