

STSM REPORT

COST-STSM-FA1205-20678



Description of the work carried out during the STSM

The optimal hormonal treatment was fixed in previous studies. We studied the evolution of the sperm quality through the spermiation period, trying to determine the weeks with the highest percentage of samples with high quality sperm.

Eel sexual maturation

A group of 80 farmed eels was installed in 3 aquariums equipped with aeration and water recirculation. During one week fresh water was replaced by salt water. After 10 days of being in sea water, we started the hormonal treatment (*human chorionic gonadotropin*) that was weekly administered (Pérez et al., 2000). Benzocaine was used as anesthesia (doses of 60 ppm).

The parameters of the water (temperature, oxygen, pH, ammonia, nitrous and nitrates) were measure weekly. 2/3 of the water was changed weekly.

The sperm was collected 24 h after the hormone injection, 10 weeks after the first treatment, by making an abdominal massage.

Description of the main results obtained

At this point of the experiment results were not achieved, since the eels need 10 weeks to mature.

Future collaboration with host institution

Since the aim of the study is to standardize a cryopreserving protocol for European eel, by standardizing the best cryoprotectant, volumes, freezing media, grade for dilution, temperature of frost and thawing of the samples, it would be an asset to continue the research project with the group.

As I referred before I will apply to the 5th STSM call of AQUAGAMETE in order to continue in the research project.

Confirmation by the host institution of the successful execution of the STSM

Dr. Juan F. Asturiano, as responsible researcher at the Instituto de Ciencia y Tecnología Animal (UPV) certifies that Ana Leonardo visited us as a guest researcher from August 28th to October 31th, thanks to a Short Term Scientific Mission funded by AQUAGAMETE COST Action FA1205.

Valencia (Spain), 5th November , 2014



Dr. Juan F. Asturiano



Ana Leonardo

Attachment



Fig. 1 Acclimatization of the aquaria



Fig. 2 Hormonal injection (hCG)