



Dottorato di ricerca in Scienze Veterinarie [XXXVIII] CICLO - Anno di corso: 1°

Dott. Gentile Laura

Curriculum: Produzioni animali e sicurezza alimentare

Supervisor: Oliviero Mordenti

Cosupervisor(s): Maria Laura Bacci

Salvaguardia di *Anguilla anguilla*, specie a rischio di estinzione: ruolo dell'acquacoltura nel superamento dei principali colli di bottiglia

Objective: to increase knowledge of the ontogenic development of *A. anguilla* larvae and to be able to identify a diet that will improve their growth and survival in captivity until the completion of their life cycle.

1. testing of hatching and larval feeding systems with variations of abiotic factors (e.g. salinity, temperature)



2. selection of the best broodstock for good larval quality



3. first feeding trials with three different diets



Next activities: Identifying the diet that gives better results, testing the same diet with different abiotic conditions. Molecular analysis of the different tests

References: - Ayala, D. J., Munk, P., Lundgreen, R. B., Traving, S. J., Jaspers, C., Jørgensen, T. S., Riemann, L. (2018). Gelatinous plankton is important in the diet of European eel (*Anguilla anguilla*) -Miller, M. J. (2009). Ecology of anguilliform leptocephali: remarkable transparent fish larvae of the ocean surface layer. *Aqua-BioScience Monographs*, 2(4), 1-94
-Mordenti, M., Di Biase, A., Sirri, R., Modugno, S., & Tasselli, A. (2012). Induction of sexual maturation in wild female European eels (*Anguilla anguilla*) in darkness and light.
-Okamura, A., Sakamoto, Y., Yamada, Y., & Tsukamoto, K. (2018). Accumulation of hyaluronan in reared Japanese eel *Anguilla japonica* during early ontogeny. *Aquaculture*, 497, 220-225.