



## Reproduction and larval rearing of chub (*Leuciscus cephalus L.*): comparison between different broodstocks origin

O. Mordenti, A. Roncarati, A. Dees & P. Melotti

To cite this article: O. Mordenti, A. Roncarati, A. Dees & P. Melotti (2007) Reproduction and larval rearing of chub (*Leuciscus cephalus L.*): comparison between different broodstocks origin, Italian Journal of Animal Science, 6:sup1, 809-809, DOI: [10.4081/ijas.2007.1s.809](https://doi.org/10.4081/ijas.2007.1s.809)

To link to this article: <https://doi.org/10.4081/ijas.2007.1s.809>



Copyright 2007 Taylor & Francis Group LLC



Published online: 15 Mar 2016.



Submit your article to this journal [↗](#)



Article views: 12



View related articles [↗](#)

# Reproduction and larval rearing of chub (*Leuciscus cephalus* L.): comparison between different broodstocks origin

O. Mordenti<sup>1</sup>, A. Roncarati<sup>2</sup>, A. Dees<sup>2</sup>, P. Melotti<sup>2</sup>

<sup>1</sup> Dipartimento di Morfofisiologia Veterinaria e Produzioni Animali. Università di Bologna, Italy

<sup>2</sup> Dipartimento di Scienze Veterinarie. Università di Camerino, Italy

*Corresponding author:* Oliviero Mordenti. Dipartimento di Morfofisiologia Veterinaria e Produzioni Animali, Viale Amerigo Vespucci 2, 47042 Cesenatico (FC), Italy. - Tel. +39 0547 674944 - Fax: +39 0547 674941 - Email: omordenti@vet.unibo.it

## ABSTRACT

During 2006, trials about induced reproduction and larval rearing of chub were carried out with the aim to compare results obtained from broodstocks stocked in captivity with those of specimens caught in a river and immediately stripped. In Autumn 2005, a total of 35 chubs, were collected by electrofishing in an Apennine river and stocked in a 10m<sup>3</sup> outdoor basin supplied with well water. The fish were fed with natural and balanced feeds. During the month of May 2006, other 8 fluent and mature broodstocks (5 males and 3 females) were fished by hook in the same area of origin of the other chubs (water temperature = 19°C), and immediately stripped. After fertilization, the eggs were disagglutinated and transported to the hatchery. Incubation took place in Zugg bottles at the temperature of 20±1°C (C1). At the same time, broodstocks from the outdoor basin were transferred inside the hatchery subdividing them in 2-1.5m<sup>3</sup> tanks (C2, C3) connected with a closed circuit system. Water temperature was 17±1°C. All the males (12) were treated with carp pituitary (3mg/kg b.w.) (Lukovicz and Proske, 1971; Linhart *et al.*, 1995) in coincidence of the second injection of females. The females of the two sub-groups (C2, C3) were treated with two different dosages of carp pituitary (5 and 10 mg/kg b.w.) divided in two fractions (1/10 and 9/10), injected at 24 h interval. After stripping and fertilization, the same method of eggs incubation used for the wild chubs was applied. On day 4, hatching took place and ranged between 85% (C3) and 90% (C1). The larvae of the different groups were reared in 3-500l tanks connected to a closed circuit and fed with *Artemia salina* nauplii (420±20µm) until day 11 when a cold extruded micronized feed for marine larvae was also supplied. The total substitution took place on day 20. The number of larvae obtained per kg b.w./batch was between 15,817 (C2) and 18,441 (C3). On day 30, larvae had reached a mean length of 16mm in the three groups without significant differences and body weight ranged from 20.7mg (C2) to 21.5mg (C3) as found by Harzewili *et al.* (2003). The survival rate resulted 70% (C1), 69% (C2) and 71% (C3).

*Authors wish to acknowledge Dr. Filippo Gasparri by Skretting Italia for the larval feed suggestions.*