

Investigation of Some Sperm Quality Parameters of Farmed and Wild-Caught Meagre (*Argyrosomus regius* Asso, 1801)

Authors : Şefik Surhan Tabakoğlu, Hipolito Fernández-Palacios, Dominique Schuchardt, Mahmut Ali Gökçe, Celal Erbaş, Oğuz Taşbozan

Abstract : This study aimed to clarify some sperm quality parameters such as volumetric sperm quantity, motility, motility duration, sperm density, total number of spermatozoa and pH of meagre (*Argyrosomus regius* ASSO, 1801) individuals kept in farming conditions and caught from wild (las palmas, gran canary). The sperm was collected in glass tubes graded in millimetres and sperm volume registered immediately following collection by abdominal massage. The sperm quality parameters including motility, total number of spermatozoa and spermatozoa density were determined with computer assisted sperm analysis (CASA) program. The duration of spermatozoa movement was assessed using a sensitive chronometer (1/100s) that was started simultaneously with the addition of activation solution into the sample. Sperm pH was measured with standard pH electrodes within five minutes of sampling. At the end of the study, while amount of sperm (5.20 ± 0.33 ml), duration of motility (7.23 ± 0.7 m) and total number of spermatozoa ($131.40 \pm 12.22 \times 10^9$) were different statistically ($p < 0,05$), motility ($\% 81.03 \pm 6.59$), pH (7.30 ± 0.08), sperm density ($25.27 \pm 9.42 \times 10^9/\text{ml}$) and morphologic parameters were not significantly different between the two groups. According to our results, amount of sperm, duration of motility and total number of spermatozoa were better in farmed group than that of the other group.

Keywords : *Seriola rivoliana*, meagre, sperm quality, motility, motility duration

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020