

## عنوان مقاله:

Influence of broodstock age on sperm quality traits in *Rutilus frisii* and its effect on fertilization success

## محل انتشار:

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## نویسندگان:

S.Z Fallah Shamsi

H Khara

## خلاصه مقاله:

In this study, age-dependent changes of sperm quality parameters in *Rutilus frisii* were investigated. Also, fertilization capacity of breeders was tested using two age groups of males (۳ and ۴ year old breeders) and one female group (i.e. ۴ year old breeders). For fertilization trials, the breeders were crossed randomly among age classes. Between the two age groups, spermatological parameters did not show vary significant differences. Some composition of the seminal plasma such as osmolality showed significant difference and was higher in older fish. Higher fertilization rate was observed when ova were fertilized with ۴ years old semen samples. Relationships between sperm motility characteristics (percentage and duration of sperm motility) and chemical properties of seminal plasma were investigated. In this regard, were found between the duration of sperm motility and Na<sup>+</sup>, and Cl<sup>-</sup>, respectively. Also, the percentage of motile spermatozoa had significantly positive relationships with the concentrations of Ca, Mg and pH of semen. On the other hand, osmolality of the seminal plasma was positively correlated with protein. Our results shows that selection of broodstock based on age can be used as a simple procedure to achieve higher results in fertilization process also understanding of such correlations can be useful to evaluation of sperm quality and make .media (extender) for dilution of semen and improving sperm motility parameters of kutum

## کلمات کلیدی:

Sperm traits, Fertilization success, Biochemical parameters, *Rutilus frisii*

## لینک ثابت مقاله در پایگاه سیویلیکا:

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