

## Possibility study of sex reversal of groupr(*Epinephelus coioides*) by nonsteroidal aromatase inhibitor and effect on some blood biochemical parameters

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The effect of letrozole, a nonsteroid aromatase inhibitor in combination with steroid hormones 17 $\alpha$ -methyl testosterone (as compared 0.5 to 1 mg/kg/BW) on sex inversion in protogynous orange-spotted grouper, *Epinephelus coioides*, was investigated. Sex change in order to make a total of 6 fish (control and treated with hormone therapy) were considered. The trial in the spring of 1391 on Fisheries Development Center Caps Kolahi (Hormozgan) took place. And in three times 0, 15 and 30 to measured blood biochemical parameters (cholesterol, glucose, protein, calcium) and steroids (sex 17 $\beta$ -estradiol (E2), testosterone (T) and 11 - Ketotestosterone (11KT) as gonadal tissue for histological studies using catheter through the vagina gonadal tissue samples were obtained. The results showed that aromatase inhibitors work well in combination with sex steroid hormones are sex changing. And a change in the male gonadal tissue was treated well in fish. Also a significant increase in the levels of sex steroids T and 11KT in the treatment by capsule after 30 days. Biochemical parameters were observed with the calcium transport in male-phase fish has declined while that of protein, cholesterol, and glucose showed an increase after the sex change. In general we can say that blood metabolic parameters (Ca, Glo, CH) plus the sex steroids (T and 11KT) by changing the gender of the fish increased.

### Biography

Aida Khazaali have completed Master Aquaculture at the age of 25 years from Islamic Azad University. She work at Farmer Cage culture. She has published more than 10 papers in reputed journals and also very interesting in marine research specially marine Biotechnology and natural product with some researches in sea cucumbers, soft corals, Fish physiology.

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